

Date: 21 June 2023
Our ref: 425009
Your ref: TR030007



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BY EMAIL ONLY

Dear Inspector,

NSIP Reference Name / Code: TR030007

Title: Natural England's comments in respect of the Immingham Eastern Ro-Ro Terminal Project, promoted by Associated British Ports.

Examining authority's submission deadline 19 April 2023

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

As Natural England previously set out in its relevant representation dated 19 April 2023, we were unable to provide advice on impacts on benthic ecology of the Humber Estuary designated sites within the statutory timeframe. Natural England has now finalised its advice and provides this updated relevant representation to include this advice.

For any further advice on this consultation please contact the case officer Laura Tyndall [REDACTED] [@naturalengland.org.uk](mailto:[REDACTED]@naturalengland.org.uk) and copy to consultations@naturalengland.org.uk.

Yours faithfully,

Laura Tyndall

Lead Adviser

Yorkshire and Northern Lincolnshire Area Team

Natural England's Relevant Representations Version 1.2

PART I: Summary and Conclusions of Natural England's advice.

PART II: Natural England's detailed advice (starting on page 10)

PART III: Natural England's comments on the Development Consent Order (DCO) / Deemed Marine Licence (DML) (starting on page 63)

Part I: Summary and Conclusions of Natural England's advice

Summary of Natural England's Advice

Natural England considers that the applicant has provided insufficient evidence and is not yet satisfied that the following issues have been addressed:

- **Internationally designated sites**
 - Impacts from traffic / site plant / marine vessel emissions to air (construction and operational phases) ('amber').
 - Impacts from dust to designated habitat features (construction phase) ('amber')
 - Impacts of the presence of infrastructure on waterbird foraging and roosting (operation phase) ('amber')
 - Impacts of potential noise and visual disturbance on qualifying SPA/Ramsar bird species (construction and operation phases) ('amber')
 - Impacts of potential elevated SSC during capital dredge disposal on qualifying habitats and species (construction and operational phases) ('amber')
 - Impacts of underwater noise and vibration during piling on qualifying species (construction phase) ('amber')
 - Impacts of direct loss of qualifying intertidal and subtidal habitat (construction phase) ('amber')
 - Potential changes to qualifying habitats as a result of the removal of seabed material during capital and maintenance dredging (construction and operation phases) ('amber')
 - Impacts of elevated suspended sediment concentration (SSC) during capital dredge disposal on qualifying habitats and species (construction and operation phases) ('amber')
 - Impacts of the potential introduction and spread of non-native species on qualifying habitats (construction phase) ('amber')
 - Impacts of underwater noise and vibration on marine mammals during piling, capital dredging and dredge disposal (construction phase) ('amber')
 - Potential cumulative and in-combination impacts on marine mammals (construction phase) ('amber')
 - Changes to seabed habitats and species as a result of sediment deposition (operation phase) ('amber').
- **Nationally designated sites**
 - For the Humber Estuary SSSI, the features affected by this proposal are broadly the same as the internationally designated site features, so please refer to the points above. Any additional comments, and details of further advice pending, are specified further in section 2 and Table 1.
 - Impacts from traffic emissions to air on terrestrial SSSIs (construction and operation phase) ('amber')
- **Biodiversity net gain (BNG)**
 - Additional information is required in order to demonstrate a measurable 10% biodiversity net gain ('amber')
 - Additional information is required to demonstrate that the proposed off-site ecological enhancement measures are additional and would not be delivered regardless ('amber').
- **Natural England will provide detailed advice on the following in our Written Representations;**
 - Potential impacts on the Humber Estuary SSSI invertebrate assemblage (construction and operation) ('amber')
 - Potential impacts on the Humber Estuary SSSI bird assemblage feature (construction and operation) ('amber')

- 1.1. Natural England's advice in these relevant representations is based on information submitted by Associated British Ports in support of its application for a Development Consent Order ('DCO') in relation to Immingham Eastern Ro-Ro Terminal ('the project').
- 1.2. Part I of these representations summarises what Natural England considers the main issues¹ to be in relation to the DCO application as well as the Deemed Marine Licence contained therein and indicate the principal submissions that it wishes to make at this point. Natural England will develop these points further as appropriate during the examination process. It may have further or additional points to make, particularly if further information about the project becomes available.
- 1.3. Our comments are set out against the following sub-headings which represent our key areas of remit:
 - Internationally designated sites
 - Nationally designated sites
 - Protected species
 - Biodiversity net gain
- 1.4. Throughout our advice we will be using colour coding to denote the level of potential risk or significance of impact associated with our comments. They are as follows:
 - **Red** are those where there are fundamental concerns which it may not be possible to overcome in their current form.
 - **Amber** are those where further information is required to determine the impacts of the project and allow the Examining Authority to properly undertake its task and/or where further information is required on mitigation/compensation proposals in order to provide a sufficient degree of confidence as to their efficacy.
 - **Yellow** are those where Natural England does not agree with the Applicant's position or approach. We would ideally like this to be addressed but are satisfied that for this particular project it is unlikely to make a material difference to our advice or the outcome of the decision-making process. However, we reserve the right to revise our opinion should further evidence be presented. It should be noted by interested parties that whilst these issues/comments are not raised as significant concerns in this instance, it should not be understood or inferred that Natural England would be of the same view in other cases or circumstances.
 - **Green** are those which have been successfully resolved (subject always to the appropriate requirements being adequately secured).
 - **Grey** are notes for Examiners and/or competent authority.
- 1.5. Natural England has been working closely with Associated British Ports (ABP) to provide advice and guidance on the Immingham Ro-Ro project since 2021 through Natural England's Discretionary Advice Service. Natural England has agreed to attend meetings with the Developer with a view to progressing Statements of Common Ground as part of the Examination process and to try to resolve outstanding issues ahead of the Examination.
- 1.6. Part I of these representations provides an overview of the issues and a summary of Natural England's advice. Section 2 identifies the designated sites and natural features for which there may be impact pathways for this application. Section 3 summarises Natural England's overall view of the application and the main issues which it considers need to be addressed by the Secretary of State.

¹ PINS NSIP Advice Note 11 Annex C sets out Natural England's role in infrastructure planning.

https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2015/10/PINS-Advice-Note-11_AnnexC_20150928.pdf

- 1.7. Part II of these representations sets out all the significant issues which remain outstanding, and which Natural England advises should be addressed by ABP and the Examining Authority as part of the Examination process. These are primarily issues on which further information would be required in order to allow the Examining Authority to properly undertake its task or where further work is required to determine the effects of the project and to flesh out mitigation proposals and to potentially consider compensation proposals to provide a sufficient degree of confidence as to their efficacy.
- 1.8. Natural England will continue discussions with Associated British Ports to seek to resolve these concerns and agree outstanding matters in a Statement of Common Ground. Failing satisfactory agreement, Natural England advises that the matters set out in Section 4 will require consideration by the Examining Authority as part of the Examination process.
- 1.9. The Examining Authority may wish to ensure that the matters set out in these relevant representations are addressed as part of the Examining Authority's first set of questions to ensure the provision of information early in the examination process.

2. The natural features potentially affected by this application

Internationally designated sites

- 2.1 Natural England's position regarding impacts on internationally designated sites is summarised below. Further detail on our reasoning for this is given against each impact pathway within Part II.
 - 2.1.1 In relation to SPAs and SACs, the assessment provisions of the Conservation of Habitats and Species Regulations 2017 (and the Offshore Habitat Regulations) require that a competent authority may only agree to a plan or project of this nature after having ascertained, on the basis of an appropriate assessment, that it will not affect the integrity of the site(s). By this it is meant that such a plan or project may be granted authorisation only on the condition that the competent authority is certain, beyond reasonable scientific doubt, that it will not adversely affect the integrity of the site(s) concerned². On the basis of the information submitted, Natural England is not yet satisfied for 'amber' issues identified in the text below that it can be ascertained beyond reasonable scientific doubt that the project would not have an adverse effect alone or in-combination on the integrity of the following internationally designated sites:
 - Humber Estuary Special Area of Conservation (SAC)
 - Humber Estuary Special Protection Area (SPA)
 - Humber Estuary Ramsar
 - 2.1.2 Further information is required to assess the following impact pathways for the Humber Estuary designated sites:
 - 2.1.2.1 Further information is required in relation to the assessment methodology for air quality impacts from traffic and/or marine vessel emissions (construction and operation phases) ('amber')

² CJEU Case no. C-127/02. *Landelijke Vereniging tot Behoud van de Waddenzee & Nederlandse Vereniging tot Bescherming van Vogels –v- Staatssecretaris van ambouw, Natuurbeheer en Visserij* [2004].

- 2.1.2.2 Potential air quality impacts from traffic and/or marine vessel emissions on Humber Estuary designated features (construction and operation phases) ('amber')
- 2.1.2.3 Potential for air quality impacts to the Humber Estuary designated features from dust (construction phase) ('amber')
- 2.1.2.4 Further information is required in relation to SPA / Ramsar bird species data ('amber')
- 2.1.2.5 Potential changes in waterbird foraging and roosting (presence of infrastructure) (operation phase) ('amber')
- 2.1.2.6 Potential noise and visual disturbance on qualifying SPA / Ramsar bird species (construction and operation phases) ('amber')
- 2.1.2.7 Further information is required in relation to Tables 3, 4 and 5 of the HRA ('amber')
- 2.1.2.8 Further information is required in relation to the HRA in-combination / intra-project effects / cumulative assessment ('amber')
- 2.1.2.9 Potential effects of underwater noise and vibration during piling on qualifying species (construction phase) ('amber')
- 2.1.2.10 Potential effects of direct loss of qualifying intertidal habitat (construction phase) ('amber')
- 2.1.2.11 Potential effects of direct loss of qualifying subtidal habitat (construction phase) ('amber')
- 2.1.2.12 Potential effects of changes to qualifying habitats as result of the removal of seabed material during capital dredging (construction phase) ('amber')
- 2.1.2.13 Potential effects of changes to qualifying habitats as result of the removal of seabed material during maintenance dredging (operation phase) ('amber')
- 2.1.2.14 Potential effects of elevated suspended sediment concentration (SSC) during capital dredge disposal on qualifying habitats and species (construction and operation phases) ('amber')
- 2.1.2.15 Potential effects of the introduction and spread of non-native species during construction on qualifying habitats (construction phase) ('amber')
- 2.1.2.16 Potential impacts of underwater noise and vibration on marine mammals during piling, capital dredging and dredge disposal (construction phase) ('amber')
- 2.1.2.17 Further information is required in relation to the Zones of Influence (Zol) used for the assessment of underwater noise impacts on marine mammals (construction phase) ('amber')
- 2.1.2.18 Potential cumulative and in-combination impacts on marine mammals (construction phase) ('amber')

2.1.2.19 Further information is required in relation to the modelling approach taken on underwater noise impacts on marine mammals (construction and operational phase) ('amber')

2.1.2.20 Further information is required in relation to the HRA screening conclusion for the Wash and North Norfolk Coast SAC harbour seal feature ('amber')

2.1.2.21 Changes to seabed habitats and species as a result of sediment deposition in relation to maintenance dredging (operational phase) ('amber')

2.1.3 Natural England has also noted a number of 'yellow' issues in relation to the Humber Estuary designated sites. As stated in section 1, we would ideally like these to be addressed, but we are satisfied that for this particular project it is unlikely to make a material difference to our advice or the outcome of the decision-making process. Please refer to section 1 for the full definition for 'yellow' issues, and to Table 1 for an outline of each 'yellow' issue.

2.1.4 Natural England is satisfied that 'green' issues are unlikely to result in adverse effects on the integrity (AEoI) of the Humber Estuary designated sites, subject always to the appropriate mitigation / compensation as outlined in the application documents being secured adequately. Please find a summary of each 'green' issue below, and refer to Table 1 for further details:

2.1.4.1 Potential effects of changes to qualifying intertidal habitats as a result of the movement of Ro-Ro vessels (operation phase) ('green')

2.1.4.2 Potential effects of changes to qualifying habitats as a result of sediment deposition during capital dredge disposal (construction phase) ('green')

2.1.4.3 Indirect changes to qualifying habitats as a result of changes to hydrodynamic and sedimentary processes during capital dredge disposal (construction phase) ('green')

2.1.4.4 Potential effects of underwater noise and vibration during piling on qualifying species (construction phase) ('green')

2.1.4.5 Potential effects of underwater noise and vibration during capital dredge and dredge disposal on qualifying species (construction phase) ('green')

2.1.4.6 Potential effects of changes to qualifying habitats as a result of the removal of seabed material during maintenance dredging (operation phase) ('green')

2.1.4.7 Physical change of habitat and associated species beneath marine infrastructure due to shading (operation phase) ('green')

2.1.5 Natural England have also provided a number of 'grey' comments in relation to the Humber Estuary designated sites. Please refer to Table 1 for an outline of each 'grey' issue.

2.1.6 Natural England agree with the Applicant's conclusions that the Greater Wash SPA can be screened out of further assessment ('green').

Nationally designated sites

2.2 Natural England's position regarding nationally designated sites is summarised below. Further detail on our reasoning for this is given against each impact pathway in Part II.

2.2.1 On the basis of the information submitted in relation to these sites, Natural England is not yet satisfied that the project is not likely to damage features of interest of the following nationally designated sites:

- Humber Estuary SSSI
- North Killingholme Haven Pits SSSI
- Any terrestrial SSSIs that could be affected by air quality impacts from traffic emissions

2.2.2 We note that the Humber Estuary SSSI nationally designated site features that are affected by this proposal are broadly the same as the internationally designated site features. Please refer to the points in the 'Internationally designated sites' section above for all 'amber', 'yellow' and 'grey' issues, that also apply to the Humber Estuary SSSI. Alongside these issues, separate detailed advice is to follow on potential impacts to both Humber Estuary SSSI designated bird features and to the invertebrate assemblage feature, as noted in issue references 37 and 38 of Table 1.

2.2.3 Further information is required to assess the following impact pathways:

2.2.3.1 Potential impacts on the North Killingholme Haven Pits SSSI '*Aggregations of non-breeding birds - Black-tailed godwit*' feature (construction and operation phases) ('amber')

2.2.3.2 Potential impacts from traffic emissions on all relevant terrestrial SSSIs (construction and operation phases) ('amber')

2.2.4 Please refer to 2.1.4, and Table 1, for 'green' issues that Natural England consider are unlikely to damage or destroy the interest features for which the Humber Estuary SSSI has been notified, subject to the appropriate mitigation as outlined in the application documents being secured adequately.

2.2.5 Natural England agree with the applicant's conclusions that The Lagoons SSSI can be screened out of further assessment ('green').

Protected species

2.3 Natural England's position regarding European Protected Species is summarised below. Further detail on our reasoning for this is given in Part II, Table 1.

2.3.1 Natural England is satisfied with the general approach to further protected species survey as outlined in issue reference 42 (Table 1) subject to the recommendations detailed that the surveys are regularly updated, and that the relevant mitigation measures are agreed and implemented before construction work begins ('green').

Biodiversity Net Gain

2.4 Natural England's position regarding provision of biodiversity net gain is summarised below. Further detail on our reasoning for this is given in Part II.

2.4.1 Based on the information submitted, Natural England is not yet satisfied with the following Biodiversity Net Gain (BNG) issues:

2.4.1.1 Additional information is required in order to demonstrate a measurable 10% biodiversity net gain ('amber').

2.4.1.2 Additional clarification is required regarding ecological enhancements and Biodiversity Net Gain criteria ('amber').

General comments on approach

2.5 In addition to the above topic areas Natural England has the below comments on the overall approach of the submission:

2.5.1 General comments have been provided, alongside the details of further information outstanding, in relation to the assessment methodology for air quality impacts from construction and operational phase traffic and/or marine vessel emissions ('amber')

2.5.2 General comments have been provided, alongside the details of further information outstanding, in relation to SPA / Ramsar bird species data ('amber')

2.5.3 General HRA screening comments, and further information required, in relation to Tables 3, 4 and 5 of the HRA ('amber')

2.5.4 General comments have been provided, alongside the details of further information outstanding, in relation to the HRA in-combination / intra-project effects / cumulative assessment ('amber')

2.5.5 General comments have been provided, alongside the details of further information outstanding, in relation to the Zones of Influence (Zoi) used for the assessment of underwater noise impacts on marine mammals (construction phase) ('amber')

2.5.6 General comments have been provided, alongside the details of further information outstanding, in relation to the modelling approach taken on underwater noise impacts on marine mammals (construction phase) ('amber')

2.5.7 General comments have been provided, alongside the details of further information outstanding, in relation to the HRA screening conclusion in relation to the Wash and North Norfolk Coast SAC harbour seal feature ('amber')

3. Natural England's overall conclusions

Natural England's advice is that there are a number of matters which have not been resolved satisfactorily as part of the pre-application process that must be addressed by Associated British Ports and the Examining Authority as part of the Examination and consenting process before development consent can be granted, as summarised in Section 2 above and outlined in further detail in Part II below.

Some of these matters are important enough to mean that if they are not satisfactorily addressed it would not be lawful to permit the project due to its impacts on SAC, SPA, Ramsar and SSSI interests. The specific concerns in relation to each are detailed in Part II.

Natural England's Relevant Representations

4. Part II: Natural England's detailed advice

4.1 Part II, Table 1 of these representations expands upon the detail of all the significant issues ('red' and 'amber' issues) which remain outstanding, and includes our advice on pathways to their resolution where possible. Table 1 also shows 'yellow', 'grey' and 'green' issues. Please refer to Part I for definitions of these.

4.1.1 Natural England will continue engaging with the Applicant to seek to resolve outstanding concerns throughout the Examination. Natural England advises that the matters indicated as 'red' and 'amber' will require consideration by the Examining Authority during the Examination.

4.1.2 Detailed advice from Natural England regarding benthic ecology (Operation phase) on internationally and nationally designated sites has now been included in Table 1 (key issue references 45-47). Key issue reference 19 has now been changed from 'amber' to 'green' following the advice of NE's benthic ecology specialists.

Natural England's (NE) Relevant Representations, Part II, Table 1

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
1	International designated site <ul style="list-style-type: none"> • Humber Estuary SAC • Humber Estuary SPA • Humber Estuary Ramsar 	<p>General comments and further information required in relation to the assessment methodology for air quality impacts from construction and operational phase traffic and/or marine vessel emissions</p> <p>(O) and (C)</p>	<p>Natural England recommends that the assessment of potential air quality impacts from construction and operational phase traffic is undertaken in-line with our guidance note NEA001. The assessment should clearly define the plans and/or projects that have been scoped in, and the same screening thresholds (see Step 4 of NEA001) should be used as for impacts of the project alone, in-line with the Wealden Judgement for any projects which will not be reflected in the background level. For any process contributions (PC) that exceed 1% of the critical load or level of the relevant environmental benchmark alone or in-combination, the results will need to be considered in the context of the predicted environmental concentration (PEC), which also takes into account background levels. Please see Step 4b of guidance note NEA001 for further details.</p> <p>It is currently unclear as to why the receptor points in the SAC detailed in Table 20 have been chosen, or on what basis nearer habitat types have been excluded. The justification provided is that these are “<i>predominantly water based</i>”, however, even where this is the case, the impact of pollutants on these habitat types should be considered in the appropriate assessment if a PC of more than 1% either alone or in combination is predicted. Additionally, Table 2 of the HRA appears to suggest there could be sensitive</p>	N/a: Further information required	‘Amber’

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
			<p>habitat types, including H1130 ‘Estuaries’, H1110 ‘Sandbanks which are slightly covered by seawater all the time’ and H1140 ‘Mudflats and sandflats not covered by seawater at low tide’, in or closer to the footprint of the project. Therefore, these should also be considered.</p> <p>At present, the identification of the critical levels (CLe) and critical loads (CLo) for relevant habitat types is unclear, and these are currently referred to as “air quality standards”. Although the nitrogen oxides (NOx) CLe is currently correct at 30ug/m³, the CLe for ammonia (NH₃) is given as a range rather than than stating if either 1 or 3 has been used depending on whether bryophytes and/or lichens are integral to the habitat. The CLe used for ammonia should therefore be more clearly stated. Chapter 13 also does not clearly define the CLo used for nitrogen (N) deposition, with Table 13.4 indicating that the relevant habitat at the SAC is saltmarsh with a critical load of 20-30kgN/ha/yr, whereas Table 13.11 indicates a range of "Air Quality Standards" with the footnote for the SAC linking to a range of 10-20kgN/ha/yr. Further clarification is therefore required around the N deposition CLo used.</p> <p>At present, there appears to only be an assessment of onsite traffic NH₃ emissions, with no consideration of NH₃</p>		

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
			<p>for either construction or operational traffic. Please provide further assessment in relation to this.</p> <p>The current assessment of marine vessels (construction and operational phases) uses the same guidance as for road traffic emissions and assumes that impacts of these emissions should only be considered 200m from the route. Please provide further reference to evidence and/or guidance that this is a reasonable distance to use.</p> <p>Alongside consideration of potential impacts of NO_x, NH₃ and N deposition, assessment is also required of acid deposition impacts to relevant designated sites.</p> <p>It is also currently unclear how in-combination impacts on designated sites have been assessed. Chapter 20 ('Cumulative and In-combination Effects') states the following: <i>'It should be noted that the assessment provided in the Traffic and Transport chapter (Chapter 17 of this ES) is inherently a cumulative assessment.'</i> The assessment does not currently specify which plans and/or projects have been considered in the "future baseline" for traffic, or whether any other emitting projects have been included, such as industrial or energy sites. Therefore, it is unclear in the current assessment as to which sources have been scoped in, and in-line with the HRA process, the effects on</p>		

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
			<p>European sites should be considered alone and in-combination.</p> <p>It is generally well-established that the scope of an in-combination assessment is restricted to plans and projects which are ‘live’ at the same time as the assessment being undertaken. These can potentially include:</p> <ul style="list-style-type: none"> • <i>The incomplete or non-implemented parts of plans or projects that have already commenced</i> • <i>Plans or projects given consent or given effect but not yet started</i> • <i>Plans or projects currently subject to an application for consent or proposed to be given effect</i> • <i>Projects that are the subject of an outstanding appeal</i> • <i>Ongoing plans or projects that are the subject of regular review</i> • <i>Any draft plans being prepared by any public body</i> • <i>Any proposed plans or projects published for consultation prior to application</i> <p>Please also see 4.4 of NEA001 for our guidance on what should be considered as part of the in-combination assessment.</p>		

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
2	International designated sites Humber Estuary SAC Humber Estuary SPA Humber Estuary Ramsar	Potential air quality impacts from construction traffic and/or marine vessel emissions on Humber Estuary SAC/SPA/Ramsar designated features (C)	<p>The HRA screening assessment (Table 3, page 43) rules out likely significant effects (LSE) for potential air quality impacts from construction phase traffic. However, we advise further assessment of these impacts are required as detailed below.</p> <p>Section 13.3.12 currently indicates that site plant emissions will emit NO₂, PM₁₀ and PM_{2.5}, however, these also emit and contribute to NO_x and NH₃ emissions, and N deposition. Additionally, site plant emissions are not quantified but are instead noted as <i>"transient and intermittent"</i>. As the plant that will be used has been quantified and an indication of the days of usage provided in Table 13.13 of Chapter 13, we would consider that a more robust approach would be to include this in the overall model. This is as the site plant emissions could potentially have substantial effects, even if this is only for a limited time.</p> <p>Construction traffic is currently excluded with the reasoning that on average there will be fewer than 200HDVs per day. However, there will be peaks where 200HDVs per day is exceeded, therefore we advise an precautionary approach is used and further assessment of construction traffic is provided.</p>	N/a: Further information required	'Amber'

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
3	International designated site <ul style="list-style-type: none"> • Humber Estuary SAC • Humber Estuary SPA • Humber Estuary Ramsar 	Potential air quality impacts from operational traffic and/or marine vessel emissions to air on Humber Estuary SAC/SPA/Ramsar designated features (O)	<p>Natural England requires further information to determine whether we concur with the HRA conclusion in 4.7.12 of no adverse effect on integrity (AEOI) on the Humber Estuary designated sites as a result of the deposition of airbourne pollutants during the operational phase. Further detail around the additional information required is provided below.</p> <p>Table 20 of the HRA states that the Process Contributions (PC) of the development exceed the critical level for annual mean nitrogen oxides (NOx) at three sections of saltmarsh (SAC3: 1.6%, SAC4: 1.7% and SAC5: 1.0%) within the Humber Estuary designated site. To justify ruling out AEOI due to these exceedances, the following is stated in 4.7.9: “...annual mean NOx concentrations remain below 70% of the air quality standard and therefore the effect of emissions on coastal saltmarsh with the Humber Estuary SAC is considered negligible.” It is currently unclear as to what value the ‘air quality standard’ refers to in this statement. Natural England advise that the predicted environmental concentration (PEC) should be provided, and the percentage of the PEC to the environmental benchmark should be calculated and included in the report. The environmental benchmark should be the critical level for NO_x.</p>	N/a: Further information required	‘Amber’

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
			<p>Additionally, it is currently unclear whether the above exceedances for NOx are associated with road traffic or marine vessels. Natural England therefore require further details around the emission source(s) associated with these exceedances.</p> <p>The mitigation currently proposed is generic and unquantified. Although it is currently stated that there is no requirement for mitigation in the HRA, this is not clearly set out at present. For example operational onsite emissions currently appear to lead to an exceedance of NH₃ and NOx at several SAC receptors, so mitigation should be considered within the HRA.</p>		
4	International designated sites <ul style="list-style-type: none"> • Humber Estuary SAC • Humber Estuary SPA • Humber Estuary Ramsar 	Potential for air quality impacts to the Humber Estuary SPA, SAC and Ramsar from construction dust (C)	Table 3 of the HRA states that LSE on the Humber Estuary can be ruled out for potential air quality impacts of construction dust. The reasoning given for this is as follows: <i>“The majority of the SAC habitats closest to the construction site are marine habitats and are therefore not sensitive to changes in air quality due to dust smothering”</i> . Section 13.8.20 of Chapter 13 of the ES also states the following: <i>“...the areas of the SAC/ SPA that are within 20 m of the construction site boundary are tidal mudflats and such habitat is not considered sensitive to air quality or construction dust</i>	N/a: Further information required	‘Amber’

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
			<p><i>impacts, because the tidal nature of the estuary will regularly wash deposited dust away.</i>" We advise that although it is reasonable to highlight this, such further assessment should be provided in the appropriate assessment, where further descriptions of the habitats should be made. For instance, Table 2 of the HRA indicates that the SAC feature H1140 <i>'Mudflats and sandflats not covered by seawater at low tide'</i> are within the footprint of the project, but this habitat type does not appear to be recognised in the assessment.</p>		
5	<p>International designated sites</p> <ul style="list-style-type: none"> • Humber Estuary SPA • Humber Estuary Ramsar 	<p>General comments / further information required in relation to SPA / Ramsar bird species data</p> <p>(C) and (O)</p>	<p>Table 2 of the HRA uses phrases such as <i>'low numbers'</i> to describe numbers of SPA/Ramsar bird species found. We consider terms such as <i>'low/lower numbers'</i> to be comparative and open to interpretation. We advise that bird numbers should be quantified through specific references to the data. For example, through referring to the numbers of birds in relation to their estuary population, with phrases such as <i>'numbers [less/more than] 1% of the estuary population (five year mean)'</i>.</p> <p>Table 4 of the HRA details potential impacts that could result in LSE on features of the Humber Estuary SPA. We would advise that bird data should be presented prior to</p>	N/a: Further information required	'Amber'

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			<p>this table, in particular tables 9.19 and 9.20 from the ES. Additionally, combining the wintering and passage data for 2022 would provide a clearer picture of bird usage across the year. At present, all wintering data is summarised to give peak counts in each year, with key months identified. Presenting bird usage data by month would provide a more useful summary of this information.</p> <p>In the justification section of Table 4 of the HRA, we would prefer to see a list of which species have been recorded in internationally, nationally and regionally important numbers. As described for Table 2, we consider terms such as <i>'low/lower numbers'</i> to be comparative and open to interpretation. For example, turnstone are described as being in <i>'relatively low'</i> numbers, but are present in regionally important numbers at the application site. Additionally, Table 4 describes black-tailed godwit as being <i>'regularly recorded'</i>, however, this species occurs in internationally important numbers at the application site, and this should be considered as highly significant.</p> <p>In section 3.3.2, page 120 of the HRA, a list of features screened in for further assessment is included. We would advise that for the 'Waterbird assemblage' section, the species that occur in numbers over 1% of the estuary population are listed.</p>		

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			<p>Currently the bird data referenced is mainly sector B of the long term data set collected by ABP for the Immingham frontage. It would also be useful to provide some context for bird usage in Immingham Sectors A and C as well as across the frontage between Goxhill and Pyewipe by referencing the Wetland birds Survey data. This will be particularly helpful in identifying whether the mitigation measures proposed will be effective.</p>		
6	<p>International designated sites</p> <ul style="list-style-type: none"> • Humber Estuary SPA • Humber Estuary Ramsar 	<p>Potential changes in waterbird foraging and roosting due to operation (presence of infrastructure)</p> <p>(O)</p>	<p>We advise that Table 10 (4.3.9, page 139) provides a more detailed assessment of the impacts on key species, particularly black-tailed godwit that occurs in internationally important numbers at the application site. This could include an assessment of whether key species feed around port infrastructure at present. An assessment should also be made of whether the same bird species are likely to utilise the area during the operational phase, and whether the numbers are likely to be comparable to present. Evidence from other construction activities that have taken place in the port could be provided to demonstrate typical bird usage before and after construction has been completed. This should then be used to assess potential effects of the project on the conservation objectives for these bird species.</p>	N/a: Further information required	'Amber'

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			<p>The HRA also states that some species will approach structures ‘relatively closely’, therefore, additional information around observed approach distances is required. The assessment should consider whether avoidance of structures will result in loss of supporting habitat for SPA / Ramsar birds, for those species that have been recorded as approaching structures ‘<i>relatively closely</i>’.</p>		
7	<p>International designated sites</p> <ul style="list-style-type: none"> • Humber Estuary SPA • Humber Estuary Ramsar 	<p>Potential noise and visual disturbance during construction on qualifying SPA / Ramsar bird species.</p> <p>(C)</p>	<p>Section 4.10 of the HRA provides an assessment of airborne noise and visual disturbance during construction on qualifying bird species.</p> <p>Natural England does not support the use of IECS 2013 ‘<i>Waterbird disturbance mitigation toolkit</i>’ as we do not consider the evidence to have been collected in a rigorous way, and the results have not been peer reviewed. Therefore, any assessment that relies on the toolkit may be inaccurate. Table 27 makes frequent reference to the IECS 2013 toolkit. We advocate a precautionary approach to assessing disturbance to waterbirds on mudflats, using a 300m as an initial disturbance zone and then reducing this where mitigation measures allow.</p> <p>In addition, Table 27 should identify the bird species that occur in significant numbers in the proposed construction</p>	N/a: Further Information Required	‘Amber’

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			<p>area. For example, limited data was identified for black tailed godwit, therefore a precautionary approach should be taken.</p> <p>Additionally, the section on shelduck in Table 20 currently contains several contradictions that should be addressed. As requested for issue reference 5, provision of a summary of bird usage across the wintering and passage months for 2022, with peak counts for each month for each species, would help to inform mitigation measures.</p> <p>We also that advise that Footnote 21 of 4.10.16 is important to the assessment and should be given more prominence. We advise that reference is made to Figure 9.10, with the areas marked which are most important for roosting and feeding SPA / Ramsar birds from the data collected (Sector B). Additionally, an assessment should be made of the potential reasons why Sector B is important for SPA / Ramsar birds. Factors contributing to this could be a lack of existing disturbance from recreation, available intertidal mud, or could relate to invertebrate loads in this area. The HRA should assess whether this is likely to change when the development is operational.</p> <p>We also request that the expected noise levels during piling and other construction activities at 200m and 300m</p>		

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			<p>from the source are provided. At present, only noise levels at 600m and 1.8km are provided in 4.10.19.</p> <p>The HRA should indicate the expected number of passage and wintering seasons for SPA birds that will be affected by the construction period. It would be helpful if the HRA could set out the expected period of each of the main construction activities (e.g. capital dredge, construction of jetties etc.)</p> <p>Section 4.10.23 (page 221) states that <i>“The near shore environment in the Port of Immingham area is already subject to large numbers of vessel movements...”</i>. We require further definition around the term <i>‘large numbers’</i> here, and further information around how this project might add to that figure.</p> <p>Section 4.10.24 (page 221) mentions that there will be less than one week where noise levels are likely to be disturbing. However, detail has not been provided around when this is expected to occur, and whether this is occurring outside of the most sensitive period.</p> <p>Section 4.10.29 states that birds that are disturbed from intertidal areas by construction works can use other areas beyond 200m of works (Figure 9.10 of the ES), or could</p>		

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			<p>feed at night around the construction zone (once work has stopped). If birds are already feeding at night, this does not represent an additional feeding period to make up for the effects of construction disturbance. Further assessment is required around the potential energetic costs to birds as a result of this level of disturbance.</p> <p>Section 4.10.30 identifies the percentage of intertidal mudflat affected by the development (within 200m) compared to the estuary resource. Natural England consider that the area of habitat relevant to the estuary resource is not as relevant as the number of birds, and if an area supports important numbers of any SPA / Ramsar bird species, it should be considered of high importance. In this section, shelduck are missing from off the important species list, despite approximately 2% of the Humber Estuary population having been recorded. It should also be recognised that areas of mudflat vary in terms of prey availability and disturbance levels, and therefore vary in their importance as SPA bird feeding areas. Birds disturbed from important feeding areas are not necessarily able to find alternative mudflats with additional feeding capacity at the relevant times.</p>		

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			<p>Natural England supports the following statement in section 4.10.31: “...there is a degree of uncertainty as to whether such areas could accommodate displaced birds”.</p> <p>The HRA should also assess impacts on feeding birds and roosting birds separately. In particular, there should be an assessment of the impact on birds roosting on structures in the intertidal zone identified in Fig 9.10. This should include consideration of whether there are other suitable structures for the birds to use, and whether additional mitigation measures are required.</p> <p>Section 4.10.35 states that mitigation measures have been discussed with Natural England. Although this is correct, mitigation measures have not been fully agreed with us at this stage.</p> <p>Comments on proposed mitigation measures for construction disturbance</p> <p>In general, Natural England would expect to see a greater focus on the SPA / Ramsar species that occur in very high numbers on this site (including black tailed godwit, turnstone, redshank, shelduck and dunlin), and how effective the mitigation measures will be in addressing the potential impact on these species in particular.</p>		

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			<p>A cold weather construction restriction has been proposed which involves the temporary cessation of all construction activity following seven days of freezing weather. This is based on JNCC wildfowling restrictions. Natural England advise that work should stop after three days of freezing weather. However, long periods of freezing weather on the Humber Estuary are uncommon, so it is unlikely this restriction will be needed.</p> <p>We note that winter marine construction is proposed to be restricted from 01 October to 31 March for construction activities within 200m of SPA/Ramsar bird feeding areas, unless screens/acoustic barriers have been installed. We advise that the dates of restricted winter working should be related to the dates that significant numbers of birds are present on the mudflats. Winter working restrictions should also be focused on the activities that are most likely to be disturbing to birds, such as piling. Additionally, the winter bird data is currently only presented as an annual summary (Table 9.19 of the ES). Data for each month will be required to support the winter restriction proposal. For the passage period (Table 9.20 of the ES) several species are shown occurring in significant numbers, including black tailed godwit, redshank and</p>		

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			<p>turnstone, the assessment should state how impacts on these species will be addressed.</p> <p>Natural England agrees that the proposed noise suppression system for piling on outer finger pier would be helpful, but the effectiveness of this measure should be assessed in further detail.</p> <p>Natural England agrees that the proposed acoustic barrier/ screening on marine construction barges would be helpful, but the effectiveness of this measure should be assessed in further detail.</p> <p>We note that a soft start for any piling required has been stated as a mitigation measure to address the impacts on SPA/Ramsar birds. Further evidence should be presented that this is effective mitigation for birds (as well as fish and marine mammals) .</p> <p>The section on mitigation measures should also assess the certainty that the mitigation measures proposed will be effective with reference to the SPA/Ramsar bird species that occur in significant numbers within the working area. This should identify whether mitigation measures will address all expected impacts throughout the period that</p>		

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			<p>birds occur in significant numbers in the construction area, across both winter and passage periods.</p> <p>Natural England advise replacing phrases such as ‘<i>occur in relatively large numbers</i>’ in Table 29 with statements derived from the data. This could include phrasing such as “<i>occurs in numbers over 10% of the estuary population which is nationally significant</i>”.</p> <p>Natural England also expect that Table 29 will be amended once our advice has been considered, so we will provide further comments at that stage.</p>		
8	International designated sites <ul style="list-style-type: none"> • Humber Estuary SPA • Humber Estuary Ramsar 	Potential noise and visual disturbance during operation on qualifying SPA / Ramsar bird species. (O)	<p>Section 4.10.46 (page 237) of the HRA notes that “<i>Birds are regularly recorded feeding nearby or below port structures such as jetties or pontoons and appear to be relatively tolerant to normal day-to-day port operational activities</i>”. Further information should be provided around which bird species this is referring to.</p> <p>Section 4.10.49 details mitigation measures proposed during operation, including screening on the foreshore, phased removal of screens after 2 years, and screening for the linkspan and approach jetty. NE agrees that this mitigation will be helpful in reducing bird disturbance of birds that continue to use the site, however, further information is required around the reasons that the</p>	N/a: Further information required	‘Amber’

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			<p>screening cannot be permanent. Permanent screening would make it more likely that birds might habituate and lessen the uncertainty detailed in section 4.10.48. Further detailed assessment of proposed mitigation measures will identify whether permanent screens are likely to be needed.</p> <p>The monitoring and annual report proposed in 4.10.52 (page 238) is welcomed, but Natural England do not consider this a mitigation measure in itself. Additionally, it is unclear as to the next steps that would be taken if the monitoring showed a significant decrease in bird numbers to the point where a species would no longer be considered to be in numbers that are locally, regionally, nationally, or internationally important.</p> <p>Further information is also required on the route that vessels are likely to take in and out of the dock, and whether this is within 300m of birds that roost on the water, especially shelduck. Additional information should also be provided around how this compares with the current and forecasted numbers of vessels utilising the area.</p>		

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9	International designated sites <ul style="list-style-type: none"> • Humber Estuary SAC • Humber Estuary SPA • Humber Estuary Ramsar 	General HRA comment (C) and (O)	Section 4.2.1 - It would be clearer to organise the assessment: all construction effects, then all operational effects as per PINS advice note 10 quoted in 4.1.4.	N/a – Comment for examining authority	'Grey'
10	International designated sites <ul style="list-style-type: none"> • Humber Estuary SAC • Humber Estuary SPA • Humber Estuary Ramsar 	General HRA screening comments	<p>Table 3 does not include the potential for LSE for the impact pathway 'Direct loss or changes to migratory fish habitat', with regard to the project activity 'Dredge disposal' on sea and river lamprey.</p> <p>Table 3 screens out underwater noise impacts from vessel operations including maintenance dredging and dredge disposal for sea lamprey, river lamprey and marine mammals, stating that "<i>only mild behavioural responses in close proximity to the Ro-Ro or dredging vessels are anticipated with noise levels unlikely to be discernible above ambient levels in the wider Humber Estuary area</i>". Natural England advise that this is not sufficient justification</p>	N/A – Further information required. Provide more information on the existing maintenance dredge licence as well as an up to date maintenance dredging protocol.	'Amber'

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			<p>for screening out this impact pathway for lamprey and grey seal as ambient noise levels have not been provided. We advise that this impact pathway should be screened in and ambient noise levels should be provided to be assessed further in the AA.</p> <p>Table 4 - It is not clear why the impact of capital dredge disposal on SPA features has not been included and assessed, when it is assessed against Ramsar features in Table 5. This pathway could have the ability to impact on the supporting habitats of SPA waterbirds. Therefore, capital dredge disposal should be included and assessed against SPA features in Table 4.</p> <p>Table 4 - See above for the impact pathway “<i>Indirect loss or change to seabed habitats and species as a result of changes to hydrodynamic and sedimentary processes</i>”.</p> <p>Table 4 - The impact pathway “Changes in water and sediment quality” should be included and assessed against SPA features.</p> <p>Table 4 - The supporting habitats (both intertidal and subtidal) have been omitted from the LSE screening table for impacts to the SPA yet have been included and assessed for the potential impacts to Ramsar features in</p>		

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			<p>Table 5. Furthermore, it is not clear why the supporting habitats have then been taken through to AA (section 4.2.1) which are assessed in terms of the Humber Estuary SPA. The effects on supporting habitat need to be included and assessed within Table 4.</p> <p>Artificial lighting has not been considered in the assessment for impacts, during construction and operation, on designated site features. This impact pathway should be included and assessed for LSE in Tables 3, 4 and 5.</p> <p>Section 3.3.2 states “Considering all impact pathways as detailed in Table 3 the proposed development has the potential to result in an LSE on the following European/Ramsar sites and features, and these have been taken forward into the Appropriate Assessment stage”. Natural England advises that this section should be revised as all of the features listed are detailed in Tables 3, 4 and 5, not just Table 3 as stated. We advise that the features taken through to AA should be set out in a table format which clearly identifies the designated feature and its corresponding European site they are a part of.</p> <p>Section 3.3.3 - Natural England notes that the maintenance dredging activity for this project will be carried out under the existing marine licence for the disposal of dredged</p>		

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			material from the Port of Immingham (L/2014/00429/2). However, we advise that an updated Maintenance Dredging Protocol should be provided to ensure all information on maintenance dredging is captured and the activity across the estuary is robustly assessed.		
11	International designated sites <ul style="list-style-type: none"> • Humber Estuary SAC • Humber Estuary SPA • Humber Estuary Ramsar 	General HRA in-combination / intra-project effects / cumulative assessment comments and further information required (C) and (O)	<p>Table 3 (consideration of in combination effects) appears to be missing from this table. Natural England would expect consideration of likely significant effects alone and then for effects that are small but not significant alone these should be considered in combination with other relevant plans or projects. A list of projects that are relevant for consideration in combination at the screening stage should be provided.</p> <p>Section 4.13 (Consideration of combined effects) –We note that information relating to the in-combination assessment is provided for the appropriate assessment stage. However, an in-combination assessment at the HRA screening stage has not yet been completed (as described above).</p> <p>Section 4.13.1 (Intra-project effects) states that intra-project effects would be negligible with mitigation measures. However, as more information is required on the appropriate assessment and mitigation, we may wish to comment further on this aspect. Additionally, we request</p>	N/a: Further information required	'Amber'

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			<p>that this section is separated into construction effects and operation effects for ease of reference.</p> <p>Tables 36 and 37 frequently refer to ‘in-combination’ and ‘cumulative’ impacts. However, we advise that each of these should be covered in separate assessments. This is because an in-combination assessment is to assess whether any effects which are not adverse alone could act in-combination with other plans or projects to result in an adverse effect, whereas cumulative impacts are the effects of the same types of impacts against the baseline environment. For example, this could include the cumulative build up of contaminants, where a threshold for adverse effect is identified.</p>		
12	International designated sites <ul style="list-style-type: none"> • Humber Estuary SAC • Humber Estuary SPA • Humber Estuary Ramsar 	HRA assessment - The potential effects of underwater noise and vibration during piling on qualifying species	<p>NE are aware that CEFAS have raised comments/concerns regarding some technical aspects of the noise modelling presented in the ES. As this modelling underpins the information presented in the HRA we are unable to comment in detail on any conclusions derived from the modelling information. However, we have the following comments.</p> <p>4.11.39 - We note that, in line with Industry Best Practice vibro-piling will be used where possible, and that soft start procedure will be deployed to allow lamprey to move away</p>	N/A: Further information required.	‘Amber’

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		(C)	<p>from the affected area. We also note that percussive piling will be restricted within the waterbody between 1 March to 31 March, 1 June to 30 June and 1 August to 31 October inclusive after sunset and before sunrise on any day. It is unclear why these dates have been identified as important for migratory lamprey species (please refer to conservation advice for lamprey seasonality tables). The HRA should clearly identify how the proposed mitigations, in this case piling restrictions, demonstrate a reduced impact on the feature for which it is intended.</p> <p>If the values change as a result of CEFAS advice the HRA should re-assess using the updated information to determine if the proposed mitigation remains sufficient.</p> <p>We note that vibro-piling may occur overnight and therefore may have an impact on migratory Lamprey. This should also be considered within the HRA.</p>		

13	International designated sites <ul style="list-style-type: none"> • Humber Estuary SAC • Humber Estuary SPA • Humber Estuary Ramsar 	HRA assessment - Potential effects of direct loss of qualifying intertidal habitat (C)	<p>Section 4.3.3 - Natural England notes that due to project design changes the total loss of intertidal habitat has been reduced from 0.35 ha to 0.012 ha. It is stated that 0.006 ha of intertidal habitat will become subtidal habitat due to the capital dredging and 0.006 ha of intertidal habitat will be lost due to piling.</p> <p>Natural England advises that it is not possible to agree with the conclusion of no AEOI for this impact pathway on intertidal habitat. However, it is likely that the conclusion of no AEOI may be drawn for the small loss of SAC habitat at the 'alone' stage of the assessment, nonetheless this still represents an appreciable but minor effect on the habitat. Such an effect would need to be considered in-combination with the effects likely to arise from other plans or projects also being proposed and considered simultaneously. The current HRA does not provide a sufficient in-combination assessment and requires further additional work to address the outstanding issues. Once the in-combination assessment is sufficiently revised, it will provide Natural England with the necessary information required in order to come to a reliable conclusion.</p> <p>Please note that the conservation objective for the feature 'mudflats and sandflats not covered by seawater at low tide' is set to 'restore' and this should be considered in the assessment. Please refer to Supplementary Advice on Conservation Objectives.</p>	N/A: Further information and a revised in-combination assessment required	A m b e r
14	International designated sites <ul style="list-style-type: none"> • Humber Estuary SAC • Humber Estuary SPA 	HRA assessment - Potential effects of direct loss of qualifying subtidal habitat	Natural England advise that it is not possible to agree with the conclusion of no AEOI for this impact pathway on subtidal habitat. The loss of habitat may be considered small and inconsequential 'alone', however it will nonetheless still represent an appreciable but minor effect on the habitat. Such an effect would need to be considered	N/A – Revised in-combination assessment required	'Amber'

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	<ul style="list-style-type: none"> Humber Estuary Ramsar 	(C)	in-combination with the effects likely to arise from other plans or projects also being proposed and considered simultaneously. The current HRA does not provide a sufficient in-combination assessment, which requires further details to address the outstanding issues. Once the in-combination assessment is sufficiently revised, it will provide Natural England with the necessary information required to come to a reliable conclusion.		
15	International designated sites <ul style="list-style-type: none"> Humber Estuary SAC Humber Estuary SPA Humber Estuary Ramsar 	HRA assessment - The potential effects of changes to qualifying habitats as result of the removal of seabed material during capital dredging (C)	Natural England advise that it is not possible to agree with the conclusion of no AEOI for this impact pathway on subtidal habitat. The loss of habitat may be considered small and inconsequential 'alone' however it will nonetheless still represent an appreciable but minor effect on the habitat. Such an effect would need to be considered in-combination with the effects likely to arise from other plans or projects also being proposed and considered simultaneously. The current HRA does not provide a sufficient in-combination assessment, which requires further detail to address the outstanding issues. Once the in-combination assessment is sufficiently revised, it will provide Natural England with the necessary information required to come to a reliable conclusion.	N/A – Revised in-combination assessment required.	'Amber'

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16	International designated sites <ul style="list-style-type: none"> • Humber Estuary SAC • Humber Estuary SPA • Humber Estuary Ramsar 	HRA assessment - The potential effects of changes to qualifying intertidal habitats as a result of the movement of Ro-Ro vessels during operation (O)	Potential ship wash and vessel propulsion impacts (to local flow speeds) would be limited in extent to the deeper offshore areas on the estuary-side of the proposed project area. Vessels approaching the floating pontoons will be approaching at very slow speeds in order to allow berthing, which is anticipated to keep any shipwash to a minimum. Natural England is satisfied that vessel movements during operation is unlikely to cause an adverse effect on integrity of the Humber SPA/SAC.	N/A	'Green'
17	International designated sites <ul style="list-style-type: none"> • Humber Estuary SAC • Humber Estuary SPA • Humber Estuary Ramsar 	HRA assessment – The potential effects of changes to qualifying habitats as a result of sediment deposition	Natural England notes that deposition in the wider area surrounding the disposal ground is expected to be in the order of millimetres based on the Physical Processes assessment set out in Chapter 7 of the ES (Application Document Reference number 8.2.7). Sedimentation of this scale is unlikely to result in significant smothering effects to most faunal species with recoverability expected to be high. It is acknowledged in 4.4.15 that full recolonisation is expected to take 1-2 years and for some species a few months.	N/A	'Green'

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		during capital dredge disposal (C)	<p>Local changes to the bathymetry (as a result of material disposal to the bed) within the disposal site will be small in the context of the existing depths. As is currently the practice, disposal activity will be targeted to the deeper areas within the site, ensuring that bed level changes are not excessive in any one area, thus minimising the overall change.</p> <p>We also note that ongoing monitoring of depths within the disposal site (an activity already undertaken to assess bed level changes as a result of existing dredge disposal activities) will continue into the future.</p> <p>Natural England agree that the impacts will be small scale or short lived and is not likely to cause an adverse effect on integrity of the Humber SPA/ SAC.</p>		
18	International designated sites <ul style="list-style-type: none"> • Humber Estuary SAC • Humber Estuary SPA • Humber Estuary Ramsar 	HRA assessment - Indirect changes to qualifying habitats as a result of changes to hydrodynamic and	<p>Local changes to the bathymetry (as a result of material disposal to the bed) within the disposal site will be small in the context of the existing depths.</p> <p>Natural England agrees that changes to bathymetry at the dredge disposal site will be small and is not likely cause an adverse effect on integrity of the Humber SPA/ SAC.</p>	N/A	'Green'

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
		sedimentary processes during capital dredge disposal			
19	International designated sites <ul style="list-style-type: none"> • Humber Estuary SAC • Humber Estuary SPA • Humber Estuary Ramsar 	HRA assessment - The potential effects of changes to qualifying habitats as result of the removal of seabed material during maintenance dredging (O)	Natural England is satisfied that the impact of disturbance from the action of maintenance dredging on the extent and distribution of qualifying habitats is unlikely to cause an adverse effect on integrity of the Humber SPA/SAC.	N/A	'Green'

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
20	International designated sites <ul style="list-style-type: none"> • Humber Estuary SAC • Humber Estuary SPA • Humber Estuary Ramsar 	HRA assessment - The potential effects of elevated SSC during capital dredge disposal on qualifying habitats and species (C & O)	Natural England previously advised that water quality impacts derived from dredging/dredge disposal activities and operational berth vessel movements on marine mammals should be assessed and included in the ES. This issue has not been addressed either in the ES or the HRA.	N/A – Further information required	‘Amber’
21	International designated sites <ul style="list-style-type: none"> • Humber Estuary SAC • Humber Estuary SPA • Humber Estuary Ramsar 	HRA assessment - The potential effects of the introduction and spread of non-native species during construction on qualifying habitats	Natural England notes that a Biosecurity plan will be prepared and implemented to minimise the risk of introducing non-native species during construction. The measures will be included within the CEMP. We would encourage that an overall biosecurity management plan including the operational facility is produced and we welcome further discussion.	N/A	‘Green’

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
		(C)			
22	International designated sites <ul style="list-style-type: none"> • Humber Estuary SAC • Humber Estuary SPA • Humber Estuary Ramsar 	HRA assessment – Mitigation measures, risk of injury to marine mammals during piling (C)	4.11.39 - Natural England is supportive in principle of the mitigation outlined here to reduce the risk of injury to marine mammals during piling. We welcome continued engagement on the mitigation protocol.	N/A – To note.	'Green'

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
23	International designated sites <ul style="list-style-type: none"> • Humber Estuary SAC • Humber Estuary SPA • Humber Estuary Ramsar 	HRA assessment– The potential effects of underwater noise and vibration during piling on qualifying species (C)	Table 31 - Natural England agree with the Applicant's justification for no AEol to the grey seal feature of the Humber Estuary SAC from the project 'alone', considering the short-term, temporary nature of the barrier effects from this project. This is also applicable to the grey seal feature of the Humber Estuary Ramsar site.	N/A	'Green'
24	International designated sites <ul style="list-style-type: none"> • Humber Estuary SAC • Humber Estuary SPA • Humber Estuary Ramsar 	HRA assessment – The potential effects of underwater noise and vibration during capital dredge and dredge disposal on qualifying species	Table 32 - Whilst the likelihood of injury may be marginally higher than presented by the Applicant (see Cefas' response), we agree with the conclusion of no AEol on the grey seal feature of the Humber Estuary SAC and Ramsar due to underwater noise during dredging. We agree that no mitigation is needed for this pathway specifically.	N/A	'Green'

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
		(C)			
25	International designated sites <ul style="list-style-type: none"> • Humber Estuary SAC • Humber Estuary SPA • Humber Estuary Ramsar 	HRA assessment – The potential for an AEOI on qualifying habitats and species of the Humber Estuary SAC due to in-combination effects (C)	The following relates to Chapter 20 Cumulative and In-combination effects (Table 20.5). We consider that cumulative underwater noise disturbance and barrier effects to grey seal feature of the Humber Estuary SAC and Ramsar site have not been considered in sufficient detail. The mitigation listed is primarily aimed at reducing the risk of injury; it will have limited benefit to reducing barrier effects/disturbance. Therefore it is not appropriate to rely on mitigation to conclude that the in-combination impact will not be significant. We request that more detail is provided on the nature of this impact from IERRT (piling, dredging and dredge disposal combined) plus the 7 (or more) projects which may cause disturbance through underwater noise and vibration. The worst-case for disturbance and barrier effects, on a temporal and spatial basis, should be presented. Further mitigation may need to be considered to support a conclusion of no Adverse Effect on Site Integrity.	Provide a more detailed assessment of in-combination disturbance/barrier effects to the grey seal feature of the Humber Estuary SAC. If needed, consider further mitigation of this impact.	'Amber'
26	Environmental Statement	Chapter 9: Nature Conservation	Table 9.1 - Natural England does not agree that marine mammal sensitivity to all levels of impact from underwater noise pathways is moderate. Specifically, we consider that	N/A - Revise the assessment to reflect a	'Yellow'

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
		and Marine Ecology Marine mammals (C)	sensitivity to Permanent Threshold Shift (PTS) is High . If marine mammals are exposed to noise levels that are high enough to cause PTS, then they are not likely to tolerate or resist it and PTS will occur. Furthermore, PTS is an unrecoverable injury. We do not consider it appropriate to take into account the size of the PTS zone when determining an individual's sensitivity to it (as mentioned in Footnote 26). This should be considered in the magnitude.	High sensitivity to PTS impacts.	
27	Environmental Statement	Chapter 9: Nature Conservation and Marine Ecology Implications of policy legislation and guidance – Conservation of Seals Act 1970 (CoSA) (C & O)	9.5.24 - Please note that the Conservation of Seals Act 1970 was amended in 2021. The killing of seals is now prohibited.	N/A – To note.	‘Grey’

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
28	Environmental Statement	<p>Chapter 9: Nature Conservation and Marine Ecology</p> <p>Underwater noise and vibration during piling, capital dredging and dredge disposal</p> <p>(C)</p>	<p>9.8.199 - The Applicant has assessed underwater noise effects as a single impact. As raised at the PEIR stage, we consider that injury and disturbance should be assessed as separate pathways. These pathways may have different probabilities of occurrence, magnitudes, and marine mammals have different levels of sensitivity to them. To illustrate, we consider that marine mammal sensitivity to injury should be High, whereas sensitivity to disturbance is Medium. In addition, industry-standard mitigation is available for injury, but not disturbance, so there is a difference in the options to reduce residual risk of the two pathways.</p> <p>Whilst Natural England does not agree with the sensitivity to PTS, the availability of industry-standard mitigation to reduce the risk of this pathway should be sufficient to conclude no significant residual risk.</p> <p>The assessment of disturbance itself is limited. The Applicant acknowledges that it is not possible to provide a conclusion assessment of the significance of potential disturbance effects (Table 9.7). As the Immingham area is not a key area for harbour porpoise and harbour seal, disturbance/displacement from this area is not likely to be significant. However, the site is of greater importance for grey seals as it lies within the Humber Estuary SAC, of</p>	<p>Undertake separate assessments of injury (PTS and TTS) and disturbance pathways to marine mammals.</p> <p>Consider revising the assessment of disturbance in line with comments, by adding more detail, and/or considering further mitigation or monitoring of this pathway specifically.</p>	'Amber'

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
			<p>which grey seal is a feature. Changes in seal behaviour have been observed (from larger piles) up to 33-36 km away; this is greater than the distance to Donna Nook, the key grey seal breeding site of the SAC. It is of concern that displacement effects could occur in the waters immediately adjacent to the breeding site, during the breeding season. Also, that grey seals could be displaced from the majority of the SAC during piling activity. The Applicant should consider whether more detail could be included in the assessment to determine the possibility of significant effects occurring; or they could consider further mitigation and/or monitoring.</p>		
29	Environmental Statement	<p>Chapter 9: Nature Conservation and Marine Ecology</p> <p>Underwater noise and vibration on fish and marine mammals as a</p>	<p>9.9.3 - For clarity, on the mitigation procedures outlined:</p> <ul style="list-style-type: none"> • Any individual undertaking the role of Marine Mammal Observer (MMO) must have received training through a JNCC-approved MMO course. • A break in piling of 10 minutes should lead to the mitigation process being implemented. • Start-up of piling should not occur if the mitigation zone is not fully visible (e.g. fog, dusk). In this case piling should be delayed until conditions are conducive for marine mammal observations. 	<p>Undertake mitigation in accordance with Natural England advice.</p> <p>Consider developing a MMMP to capture all mitigation measures committed to, including the proposal to cease percussive piling operations if marine</p>	'Yellow'

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
		<p>result of construction</p> <p>(C)</p>	<p>The above will ensure compliance with the JNCC Guidance.</p> <p>9.9.3 - The Applicant has proposed that marine mammal observations will continue during percussive piling and that piling will cease whilst any marine mammals are within the mitigation zone. This [ceasing operations] is not a standard measure in the JNCC Guidance but provides an additional level of mitigation which we welcome. It is important that this additional commitment is relayed to those undertaken the construction activities. This could be in a project-specific Marine Mammal Mitigation Protocol (MMMP) or similar.</p>	<p>mammals enter the mitigation zone.</p>	

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
30	Environmental Statement	<p>Chapter 20: Cumulative and in-combination effects</p> <p>Table 20.2 - Overview of Zones of Influence</p> <p>(C)</p>	<p>Table 20.2 - The screening distance used for the CEA is smaller than we would normally advise for marine mammals (see Natural England’s Best Practice Advice for Offshore Wind Marine Environmental Assessment Phase III report).</p> <p>However, due to the nature of the development, the smaller screening distances are sufficient for highly localised impact pathways (e.g. injury from underwater noise).</p> <p>With regards to disturbance from underwater noise, the Applicant has not provided sufficient evidence to demonstrate that 15km is sufficient to capture the full extent of the impact range/zone of influence. Indeed, distances of 33-36 km have been listed for disturbance to seals. Therefore the screening distance should be reviewed in the context of this specific impact pathway.</p>	Review screening distance in the context of underwater noise disturbance.	‘Amber’
31	Environmental Statement	<p>Chapter 20: Cumulative and in-combination effects</p> <p>Table 20.5 – Review of other projects, developments</p>	The Applicant has identified a suite of projects, within 10km, that could produce underwater noise at levels that could lead to disturbance, and or/injury, of marine mammals. The Applicant has assumed that standard mitigation will be undertaken by other projects which present an injury risk to marine mammals. We agree with this in principle and indeed would advise that such mitigation is undertaken where risk of injury to marine	Provide a more detailed assessment of in-combination disturbance/barrier effects to the grey seal feature of the Humber Estuary SAC.	‘Amber’

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
		and activities on the short list (C)	<p>mammals is likely. If each project listed undertakes marine mammal mitigation where needed, we agree with the Applicant's conclusion that there will be no residual cumulative effect from injury.</p> <p>There is no equivalent standard mitigation to reduce the risk of significant disturbance. Indeed, the Applicant identifies 7 projects occurring within 10km that may cause underwater noise disturbance to marine mammals (and indeed, more projects may need consideration in line with our comment above re appropriate screening distances). The implications of this on the possible disturbance and barrier effects to marine mammals have not been considered in detail. For example, insufficient detail has been provided to determine whether the cumulative barrier effects can still be considered short-term and temporary, and so constitute no significant residual cumulative effect.</p> <p>When considering cumulative disturbance/barrier effects, the Applicant should consider the intra-project activities of piling, capital dredging and dredge disposal.</p>		

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
32	Environmental Statement	<p>Volume 3, Chapter 9.2: Underwater noise assessment</p> <p>Marine mammals (C)</p>	<p>General comment: Natural England defers to Cefas' response on technical and specialist matters related to underwater noise modelling. However, we may provide comments where underwater noise affects nature conservation features.</p> <p>Natural England has received Cefas' response and we note the below, which are of particular importance to marine mammal receptors:</p> <ul style="list-style-type: none"> • The use of multiple piling rigs (up to 4) may lead to increased SELcum over a 24 hour period compared to that presented by the Applicant. • The simple modelling approach taken can only provide an indication of the order of magnitude of the potential effects, rather than definitive ranges and percentages. • The predictions of noise impacts from dredging and vessel movements look smaller than expected, and that TTS effect ranges for harbour porpoise, based on a 24-hour exposure period, should be larger (over part of the estuary). <p>Natural England agrees with Cefas on the above points and consider that these should be addressed by the</p>	N/A – Further information required	'Amber'

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
			Applicant where Cefas recommend. We may review our comments in light of any such revisions of the underwater noise modelling.		
33	Environmental Statement	Schedule of Mitigation – Marine mammals (C)	Natural England welcomes the Applicant’s commitment to undertake vibro piling where possible. We note that, at present, vibro piling is only proposed to occur for up to 20 minutes in day, compared to 180 minutes of percussive piling in a day, therefore only comprising 10% of total piling time. Natural England would welcome further detail on how much of the piling could be achieved using vibro-piling, thereby understanding how much this mitigation measure could be applied across the piling campaign.	N/a	‘Yellow’

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
34	International designated sites <ul style="list-style-type: none"> North Norfolk Coast SAC 	HRA assessment – Screening conclusion	<p>Section 3.3.2 - Natural England considers that the harbour seal feature of the Wash and North Norfolk Coast SAC should be screened in for Likely Significant Effect (LSE). There is the potential for harbour seal from the Wash and North Norfolk Coast SAC to be present within the zones of impact of the project. The project is within the known foraging range of harbour seals from this SAC (Sharples et al. 2012). Indeed, harbour seals is listed by the Applicant as a species that could be found in the study area, and it is highly likely that any harbour seals in the study area would be connected to the Wash and North Norfolk Coast SAC, as this key haul-out site supports most harbour seals in the Southeast England Seal Management Unit. Whilst the project does not directly overlap with the SAC, the harbour seal feature should be considered throughout its range, as detailed in the Supplementary Advice on Conservation Objectives (SACOs) for the site.</p> <p>We acknowledge that the inclusion of the North Norfolk Coast SAC has not been raised previously however on further review, we advise that it should be included in the HRA for assessment.</p>	N/A - Screen the Wash and North Norfolk Coast SAC harbour seal feature into Stage 2 of the HRA.	'Amber'

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
35	International designated sites <ul style="list-style-type: none"> Greater Wash SPA 	Potential impacts on the Greater Wash SPA (C) and (O)	Natural England agrees that this can be screened out.	N/a	'Green'
36	National designated sites (biodiversity & geodiversity) <ul style="list-style-type: none"> Humber Estuary SSSI 	Potential impacts on Humber Estuary SSSI designated features (C) and (O)	Our advice regarding impacts on the Humber Estuary SSSI coincide with our advice regarding the potential impacts upon the Humber Estuary SAC/SPA/Ramsar, as detailed above. For features which do not overlap please see details below.	N/a: Further information required	'Amber'

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
37	National designated sites (biodiversity & geodiversity) <ul style="list-style-type: none"> Humber Estuary SSSI 	Potential impacts on the Humber Estuary SSSI invertebrate assemblage (C) and (O)	Detailed advice from Natural England is to follow in relation to this impact pathway.	N/a: Further information required	'Amber'
38	National designated sites (biodiversity & geodiversity) <ul style="list-style-type: none"> Humber Estuary SSSI 	Potential impacts on the Humber Estuary SSSI bird assemblage feature (C) and (O)	Detailed advice from Natural England is to follow in relation to this impact pathway.	N/a: Further information required	'Amber'

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
39	National designated sites (biodiversity & geodiversity) <ul style="list-style-type: none"> North Killingholme Haven Pits SSSI 	Potential impacts on the SSSI <i>'Aggregations of non-breeding birds - Black-tailed godwit'</i> feature (C) and (O)	Chapter 9 (Table 9.7) of the ES states that <u>direct</u> impacts on North Killingholme Haven Pits SSSI are unlikely. However, black-tailed godwit are a non breeding feature of this SSSI, and if the project is determined to have an overall negative impact on this species for the Humber Estuary SPA / Ramsar, <u>indirect</u> impacts to this SSSI should also be considered in the assessment.	N/a: Further information required	'Amber'
40	National designated sites (biodiversity & geodiversity) <ul style="list-style-type: none"> The Lagoons SSSI 	Potential impacts on The Lagoons SSSI (C) and (O)	Natural England agree that impacts on The Lagoons SSSI can be screened out. The features of this SSSI are breeding little tern, sand dunes and saline lagoons, and none of these features are currently anticipated to be impacted by this application.	N/a	'Green'

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
41	National designated sites (biodiversity & geodiversity) <ul style="list-style-type: none"> Any relevant terrestrial SSSIs 	Construction and operational phase traffic impacts on all relevant terrestrial SSSIs (C) and (O)	<p>Natural England consider that further assessment is required of construction and operational traffic impacts on all relevant terrestrial SSSIs.</p> <p>In the current assessment, construction traffic has not been considered as on average there will be less than 200HDV movements per day. However, as there are predicted to be peaks of over 200HDV movements per day, we advise that a precautionary approach is taken in the assessment of this for any relevant terrestrial SSSIs.</p> <p>Their current operational traffic assessment does not appear to have included assessment of certain SSSIs. For example, Hatfield Chase Ditches SSSI. Additionally, an in-combination exceedance is noted at identified SSSIs such as Edlington Wood SSSI, where the predicted in-combination NOx change (16.9ug/m3) is an addition of over 50% of the NOx critical level, and causes the site to exceed its critical level (Table 13.19 in the Chapter 13 of the ES). This is currently dismissed as insignificant for unclear reasons.</p>	N/a: Further information required	'Amber'

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
42	Protected Species	<p>General approach to further protected species surveys</p> <p>(O) and (C)</p>	<p>Natural England has produced standing advice to help competent authorities and developers better understand the impact of development on protected or BAP species.</p> <p>We note that an Extended Phase 1 habitat survey has been undertaken as part of the Preliminary Ecological Appraisal (PEA), (Appendix 6.1 of the PEIR) and that no further protected species surveys are proposed. Whilst lower quality habitats are proposed to be impacted, they could still provide potential ecological habitat opportunities for protected species. On-site conditions can change over time and as such the site could become more suitable for Protected Species.</p>	<p>It is recommended that surveys are regularly updated to ensure certainty in proceeding in the absence of a licensable solution.</p> <p>We welcome the proposed avoidance/ mitigation measures and pre-construction checks set out in Section 4 of the PEA. Mitigation measures should be agreed and implemented before construction work begins.</p>	‘Green’
43	Biodiversity net gain	<p>Information to demonstrate a 10% Biodiversity Net Gain</p> <p>(C)</p>	<p>It is stated within Table 9.7 of the ES (APP-045) that “<i>The ecological improvements do not constitute compensation, neither do they constitute formal BNG provision</i>” in reference to the proposed ecological enhancements delivered by the project.</p>	<p>Natural England advise that to address this concern, clarification on the purpose of ecological enhancements</p>	‘Amber’

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
			<p>Natural England broadly welcomes the principle of the “Environmental enhancement” outlined within the ES (APP-038), however notes that our previous advice in the scoping opinion (Dated 13 October 2021) regarding a commitment to a 10% biodiversity net gain (BNG) measured utilising the Biodiversity Metric has not been taken into account.</p> <p>Although it is acknowledged that NSIP applications are not yet subject to mandatory Biodiversity Net Gain as required by the Environment Act 2021, as per the Government response to the consultation on biodiversity net gain regulations and implementation (updated 21 February 2023) it is anticipated that this requirement will be “<i>in place no later than Nov 2025.</i>” In accordance with our previous response, the project should incorporate BNG and adhere to BNG Good Practice Principles and BS 8683 (Process for designing and implementing biodiversity net gain) to demonstrate the proposed enhancement measures (at Long Wood and Outstrays to Skeffling) are suitable and sufficient to achieve a target of 10% net gain for all habitat types identified across the DCO limits.</p> <p>Further assessment utilising the Biodiversity Metric 4.0 should be undertaken. The Biodiversity Metric has been developed as a tool for ‘Biodiversity accounting’ and should</p>	(referred to in Table 9.7) is provided.	

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			<p>be used to assess the biodiversity value of all habitats (up to mean low water) pre -and post-development in order to demonstrate a biodiversity net gain has been achieved.</p> <p>In addition, it is stated within Table 9.7 of the ES (APP-045) that “<i>the Defra metric (used to calculate net gain) should not be used to assess impacts and calculate compensation for habitat damage or loss in designated sites or irreplaceable habitat</i>” which is agreed.</p> <p>Natural England highlight that a net gain for all habitats within the DCO boundary, including those which are part of a designated site are still subject to achieving the biodiversity net gain objective. This approach is confirmed with Government response to the consultation on biodiversity net gain regulations and implementation (updated 21 February 2023)</p>		
44	Biodiversity Net Gain	Additionality of Biodiversity Net Gain (c)	It is noted that the Applicant intends to provide off-site enhancements “ <i>generated by an area of one hectare of intertidal habitat that is being created through an already approved (and currently under construction) realignment scheme known as the Outstrays to Skeffling Managed Realignment Scheme (OtSMRS)</i> ”. Whilst this may be acceptable, Natural England recommends this should be	Natural England’s advice regarding the mechanism for securing relevant BNG measures in the DCO coincides with the above advice (Natural	‘Amber’

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
			<p>subject to the same assessment outlined above utilising the Biodiversity Metric to clearly demonstrate the proposed enhancement.</p> <p>Natural England understands that the sections of Outstrays to Skeffling Managed Realignment Scheme owned by ABP will be used as a ‘habitat bank’ of intertidal habitat that can be used as compensation/ mitigation/ BNG as required for port developments. Most of the managed realignment site is owned by the Environment Agency and this organisation is leading on site construction.</p> <p>Any habitat enhancement contributing towards an overall biodiversity net gain in relation to the Immingham Eastern Ro-Ro Terminal should be clearly outlined, including details on the future management, monitoring and remedial measures required.</p> <p>In addition, it is not clear from the information submitted whether the proposed enhancements are additional to those which would be occurring as part of the already consented OtSMRS works. Any habitat enhancement contributing towards an overall biodiversity net gain in relation to the Immingham Eastern Ro-Ro Terminal should be clearly outlined, including details on the future management, monitoring and remedial measures required.</p>	<p>England key issue reference 43).</p> <p>It is noted that it is stated within the ES (APP-038) that “<i>Whilst not part of the IERRT DCO application, it should be noted that ABP also intends to allocate or ‘ring fence’ the environmental benefits and enhancements generated</i>” at OtSMRS. Whilst this commitment is acknowledged, this will need to be appropriately secured by requirements in the draft DCO or via a Section 106 Agreement.</p>	

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
45	International designated sites <ul style="list-style-type: none"> • Humber Estuary SAC • Humber Estuary SPA • Humber Estuary Ramsar 	HRA assessment – general comment	<p>The HRA frequently refers to impoverished benthic communities being present at both the dredge and disposal sites i.e., 4.4.47, 4.6.5 and Table 15.</p> <p>Natural England agrees that the disposal site is impoverished, however we disagree with the dredge site being classified as impoverished. Although less diverse in nature, the intertidal and subtidal benthic communities at the Immingham RoRo terminal dredge site are of low to moderate ecological value, which is consistent with other similar biotopes previously sampled by the Institute of Estuarine and Coastal Studies (IECS) in 2015 and Environment Agency (EA) in 2016 within the Humber Estuary SAC.</p>	N/A	‘Yellow’
46	International designated sites <ul style="list-style-type: none"> • Humber Estuary SAC • Humber Estuary SPA • Humber Estuary Ramsar 	HRA assessment – Table 3 Potential changes to seabed habitats and species as a result of	The HRA screening assessment (Table 3, Page 56 & 57) rules out LSE for ‘Changes to seabed habitats and species as a result of sediment deposition’ with regard to maintenance dredging. However, it is Natural England’s opinion that likely significant effect cannot be ruled out and we advise that further assessment of these impacts are required as detailed below in the Appropriate Assessment.	N/A: Further information required	‘Amber’

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
		sediment deposition from maintenance dredging (O)	<p>Although the amount of smothering from the maintenance dredging is considered low, it is still an estimation and there is still a potential pathway for the maintenance dredging to cause changes for some species as a result of sediment deposition.</p> <p>Furthermore, the use of the phrase “<i>some deposition</i>” has been used to describe the amount of sediment deposition benthic organisms present in that area can tolerate. We consider this term to be open to interpretation and advise that sedimentation tolerance levels for benthic organisms typically found in the area should be quantified through specific references to the data.</p>		
47	International designated sites <ul style="list-style-type: none"> • Humber Estuary SAC • Humber Estuary SPA • Humber Estuary Ramsar 	HRA assessment – Physical change of habitat and associated species beneath marine	Natural England is satisfied that due to the Humber estuary being naturally turbid with high levels of suspended sediment, this means that there is already reduced amounts of light naturally reaching the benthos and there are no benthic species present which rely on direct sunlight to survive. Therefore shading due to infrastructure is unlikely to cause an adverse effect on integrity of the Humber SPA/SAC.	N/A	‘Green’

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Natural England commentary and advice on the further information required to enable assessment	Natural England comment on the mechanism for securing mitigation/ compensation measures in the DCO/ deemed marine licence	Risk (RAG)
		infrastructure due to shading (O)			

Natural England’s Relevant Representations

5. PART III: Natural England’s comments on the Development Consent Order (DCO)/Deemed Marine Licence (DML) and associated documents

5.1 Due to the number of outstanding issues highlighted in Table 1, the additional information required to address these may result in changes to the Draft DCO/DML. Natural England will provide comments on this aspect of the application at the Written Representations Stage when the outstanding information has been provided by the Applicant.