



**Comments on the Report on Implications for European Sites**

**for the  
Royal Society for the Protection of Birds**

**Submitted for Deadline 9**

**24 March 2022**

**Planning Act 2008 (as amended)**

**In the matter of:**

**Application by Alternative Use Boston Projects Limited for an  
Order Granting Development Consent for the  
Boston Alternative Energy Facility**

**Planning Inspectorate Ref: EN010095**

**Registration Identification Ref: 20028367**

The following table sets out the RSPB's comments on specific text within the Report on Impacts to European Sites (RIES). We have identified areas for comments where we consider they would be helpful to the ExA. We will review responses made by the Applicant and other Interested Parties at Deadline 9 and may have additional comments to make on their submissions.

Paragraph number	Report wording	RSPB comments
1.2.1	Applicant's screening Assessment concluded that was potential for likely significant effects (LSEs) on three European sites and therefore information to inform an appropriate assessment was provided in the HRAR,	We agree with the sites that have been identified for consideration due to LSEs; namely The Wash Special Protection Area (SPA), The Wash Ramsar site and The Wash & North Norfolk Special Area of Conservation (SAC).
1.2.1	The Applicant concluded that there would not be an adverse effect on the integrity (AEol) of any of the European sites and did not take the HRA any further at that stage.	The RSPB position is that it is not possible to conclude no AEol beyond reasonable scientific doubt and has been our position throughout discussions with the Applicant. This was the reason the Applicant was strongly encouraged to explore a range of compensation measures well in advance of the Examination. The need for a detailed derogation case was made by the RSPB and Natural England at meetings in February 2021 following the withdrawing of the original DCO application. This would have given the Applicant eight months prior to the start of the Examination to have progressed work to identify compensation measures. These concerns were raised further at the Preliminary Meetings in October 2021.
<b>European Sites considered</b>		
Table 2.1	The Wash SPA	We note that golden plover is not listed as a feature in its own right. As we highlighted in our submissions to date, the 2001 SPA Review Site Account for The Wash states clearly in Section 2 (Qualifying species): <i>"This site qualifies under Article 4.1 of the Directive (79/409/EEC) by supporting populations of European importance of the following species listed on Annex I of the Directive:</i> <i>During the breeding season;</i> <i>Common Tern Sterna hirundo, 152 pairs representing at least 1.2% of the breeding population in Great Britain (Count, as at 1993)</i> <i>Little Tern Sterna albifrons, 33 pairs representing at least 1.4% of the breeding population in Great Britain (5 year mean, 1992–1996)</i>

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		<p><i>Marsh Harrier Circus aeruginosus</i>, 15 pairs representing at least 9.4% of the breeding population in Great Britain (Count as at 1995)</p> <p>Over winter;</p> <p><i>Avocet Recurvirostra avosetta</i>, 110 individuals representing at least 8.7% of the wintering population in Great Britain (5 year peak mean 1991/2–1995/6)</p> <p><i>Bar-tailed Godwit Limosa lapponica</i>, 11,250 individuals representing at least 21.2% of the wintering population in Great Britain (5 year peak mean 1991/2–1995/6)</p> <p><b>Golden Plover <i>Pluvialis apricaria</i>, 11,037 individuals representing at least 4.4% of the wintering population in Great Britain (5 year peak mean 1991/2–1995/6)</b></p> <p><i>Whooper Swan Cygnus cygnus</i>, 68 individuals representing at least 1.2% of the wintering population in Great Britain (5 year peak mean 1991/2–1995/6)”</p> <p>(Text taken from p.216 of <a href="https://data.jncc.gov.uk/data/3634580a-cabc-4218-872f-8660a1760ad8/uk-spa-vol3-web.pdf">https://data.jncc.gov.uk/data/3634580a-cabc-4218-872f-8660a1760ad8/uk-spa-vol3-web.pdf</a>.)</p> <p>The text within the 2001 SPA Review states that (emphasis added) “<b>All migratory and Annex I waterbirds within an assemblage are qualifying species</b>” (para 4.3.1, p.10 of the UK SPA Review 2001 Rationale document at <a href="https://data.jncc.gov.uk/data/3634580a-cabc-4218-872f-8660a1760ad8/uk-spa-vol1-web.pdf">https://data.jncc.gov.uk/data/3634580a-cabc-4218-872f-8660a1760ad8/uk-spa-vol1-web.pdf</a>). Golden plover are Annex 1 species and therefore must be considered as a qualifying species.</p> <p>Our detailed comments on the status of golden plover have been set out in paragraphs 3.49 to 3.52 (pp.29-31) of our comments on the Applicant’s Ornithology Addendum (REP4-026). This has not been captured within the RIES.</p>
<b>The Wash SPA and Ramsar site – Disturbance effects on bird species - general</b>		

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4.2.38	NE disagreed with the Applicant's characterisation of the period of disturbance being limited to 1-3.5 hours around high tide as minimising risk, and conversely considered that this period is when alternate sites will be most limited and therefore the most critical for roosting birds. They also considered that increased disturbance by a minimum of 20-25% due to a move to daily boat traffic, including an increase of 34% of days in the key winter period, was not insignificant and therefore should not be dismissed. NE and the RSPB [RR-024] also raised concerns that the effects of pilot boat movements had not been fully considered in the assessment.	The RSPB agrees fully with Natural England's position.
4.2.40	NE considered [RR-021] that the Applicant's assumption that when redshank, oystercatcher, black-tailed godwit and shelduck leave the roost they are no longer disturbed was unsupported as there had been no monitoring of receiver roosts to understand disturbance risks and it could not be assumed that birds are able to occupy nearby alternate roosts or that they are not subject to additional energy depletion as a consequence of relocation. NE also considered that the characterisation by the Applicant of the anticipated increase in energy expenditure (from movement as a result of disturbance) as trivial for lapwing, golden plover and black-tailed godwit was an unsupported conclusion without supporting evidence that birds are easily able to compensate for the additional energy needed. The RSPB also raised concerns about the potential effects of energy depletion [RR-024].	The RSPB agrees fully with Natural England's position.
4.2.46	The Applicant noted that the central part of The Haven (ie, between the application site and the MOTH) was not covered by WeBS counts and acknowledged that there was therefore a data gap in relation to its usage by waterbirds [REP2-006].	We responded on the Applicant's position that there was no need to survey the central section of The Haven was unfounded in our comments on the Applicant's response to our Written Representation (Paragraph 2.10, pp.6-8; REP4-025). The RIES does not capture the RSPB's comments on the

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	<p>However, it considered that the lack of WeBS coverage and lack of inclusion within the SPA designation reflected low ornithological importance. As it had not been identified as an area for which there were potential concerns about bird disturbance bird surveys had not been commissioned. The Applicant also noted that it is narrow, does not have extensive areas of saltmarsh, is not recognised by any designations for its bird interest and has a footpath extending along the stretch which has the potential for causing disturbance, particularly to roosting birds.</p>	<p>Applicant's reasons for not conducting ornithological surveys along the central part of The Haven.</p> <p>In the summary of our position, we highlighted in section 2b (p.4; REP5-018) the species for which additional data needed to be collected to understand the full importance of The Haven and how they used the different areas. We have since further clarified this in Appendix 1 of our response to Third Written Questions (REP7-031), especially those species for which there was data deficiency. This is important given the presence of features of The Wash SPA and Ramsar site at the mouth of The Haven and in the area adjacent the Application site and the clear ability for features of The Wash SPA and Ramsar to move along the entire length of The Haven.</p> <p>We set out in our response on the Applicant's comments on our Written Representations (Paragraph 2.10, p.6; REP4-025) why the Applicant's position that the central part of The Haven was not of ornithological interest were unfounded. The SPA and Ramsar boundaries would have been set on the available information at the time of designation. This knowledge has since developed, and species abundance and distribution have changed over time. WeBS sectors will have been aligned to the SPA and Ramsar boundaries as a pragmatic approach to providing coverage for long-term monitoring of waterbird trends over time and in a way that would provide reasonable certainty that enough volunteer WeBS counters could be secured for sectors to be surveyed. WeBS has been established in order to achieve the long-term monitoring of species trends within The Wash. It is useful in assessing the ornithological importance of sites, but will not on their own provide the level of information needed to inform the Habitats Regulations Assessment without being supplemented by appropriate site-specific data collected for the purposes of assessing the DCO Application. This is borne out when looking at the Final Waterbird Survey Report (Tables 4-2 &amp; 4-3; REP8-018) where surveys by the Applicant have recorded black-</p>

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		<p>tailed godwits, redshanks, golden plovers, and lapwings in numbers greater than recorded in WeBS sectors alone.</p> <p>Critically, the Applicant stated that <i>“During the initial development of the survey there was no information to indicate that there were any additional areas of importance for birds.”</i> The fact that no information was available for areas functionally linked to The Wash SPA and Ramsar site within the central section of The Haven should have triggered the need for survey work as a high priority to ensure there would be no evidence gaps in their assessments, but the Applicant chose not to collect this information. This had been highlighted to the Applicant as far back as August 2019 when we responded to their Preliminary Environmental Information Report:</p> <p><i>“Irrespective of the age of the data, if no bird data is currently held for the area of intertidal habitat that will be directly impacted by the development the RSPB expects additional data to be collected in advance of a DCO application to ensure any decisions are based on up-to-date and appropriate evidence”</i> (as set out in paragraph 7.84 of our Written Representations, p.70; REP1-060).</p> <p>The Applicant’s data have only served to justify the concern that ornithological surveys are essential to understand waterbird use along the whole of The Haven and that the current evidence base is insufficient to conclude that there would not be an adverse effect on integrity of The Wash SPA and Ramsar site beyond reasonable scientific doubt.</p>
4.2.47	In response to ISH2 Item 5 a) (as set out in REP3-023) the Applicant confirmed that there were three locations where birds using The Haven could be disturbed by vessels at high tide: the MOTH, the application site and the central part of the channel. It considered that the greatest potential for vessel disturbance was at the MOTH, which lies within the SPA	The Applicant’s response further supports the need for the central section of The Haven to have been surveyed. The Applicant maintains that <i>“there was a lack of evidence to demonstrate that the central part of The Haven had more than negligible value to waterbirds”</i> . This is the same position they held regarding the area around the Application site which meant they commissioned no ornithological surveys for the Preliminary Environmental

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	<p>and Ramsar site boundary, followed by the application site, and then the central channel. It considered that there was a lack of evidence to demonstrate that the central part of The Haven had more than negligible value to waterbirds but recognised that there were data gaps and had undertaken an initial survey of non-breeding birds there.</p>	<p>Information Report. Following commissioning of ornithological surveys at the Application site, significant numbers of redshanks and ruffs, as well as the presence of other features of The Wash SPA and Ramsar, have been observed. This highlights the importance of undertaking surveys along all areas of The Haven. The absence of evidence is not an excuse to do nothing, rather it reflects the need to ensure that a suitable evidence base has been collected upon which robust conclusions regarding impacts to The Wash SPA and Ramsar can be made. This is in line with the evidence needed to meet the tests of the Habitats Regulations. The issue of the evidence gap has been noted in our various submissions, notably our Written Representations (REP1-060) and comments on the Ornithology Addendum (REP4-026).</p>
4.2.48	<p>The Applicant considered that it had demonstrated through its surveys that under baseline conditions a moderate number of birds roosting at the MOTH (mostly qualifying interests of the SPA and Ramsar site) and the application site (mostly redshank and SPA assemblage waterbirds such as ruff and gull species) were regularly disturbed by cargo vessels and pilot vessels transiting The Haven. It stated that these birds exhibited small-scale behavioural responses, either moving to an alternative roost location up to a few hundred metres away or returning to the original location a minute or so after a vessel had passed.</p>	<p>We note that the Applicant in their Written Summary of the Applicant's Oral Case for Issue Specific Hearing 2 (p.16; REP3-023), that "<i>...the magnitude of the existing vessel disturbance that occurs at the MOTH was not fully appreciated by anyone...</i>" Given that the surveys at the mouth of The Haven observed significant baseline levels of vessel disturbance on waterbirds, this further highlights the need to understand the full impact of disturbance along the length of The Haven, as stated in our Written Representations (Section 7e, pp.64-77; REP1-060) and comments on the Ornithology Addendum (e.g. paragraph 2.23, p.13; REP4-026).</p> <p>We have also identified that the Applicant's position ignores the vessel activity out to the Port of Boston anchorage area. The RIES records our comment at paragraph 4.2.45, but not mentioned again with respect to features of The Wash SPA and Ramsar site. It remains unclear how many vessels use the anchorage, what increase in use would be expected from the Application, and what impact could arise from the increased vessel movements on features of The Wash SPA and Ramsar. The Applicant has submitted no additional evidence to consider impacts to SPA features known to use that area of The Wash, namely, common scoter, eider,</p>

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		goldeneye and red-throated diver (a feature of the waterbird assemblage). This significant issue therefore remains outstanding.
4.2.50	<p>The Applicant addressed NE's and the RSPB's concerns about energy usage by birds disturbed by vessel movements in Section 7 of its D5 HRA Update [REP5-006]. Section 7.2 provides estimates of worst case energy budget expenditure arising from the Proposed Development for redshank, black-tailed godwit, dark-bellied brent goose, lapwing and golden plover at high tides. Based on research by Collop et al. (2016), redshank were predicted to expend an additional 0.186% of their daily energy requirement as a result of displacement from vessel disturbance at the MOTH, and 2.19 to 2.46% at the application site. Black-tailed godwit, dark-bellied brent goose, lapwing and golden plover were expected to expend an additional 0.29%, 0.077%, 1.77% and 1.78%, respectively, as a result of displacement at the MOTH. It was determined that the Proposed Development would place energetic demands of less than an additional 1% of daily energy requirements (but on an additional 25% of tides) on species prone to one-off displacement (redshank, black-tailed godwit and dark-bellied brent goose at the MOTH); and energetic demands of an additional 1-2% of daily energy requirements on species prone to repeat displacement (redshank at the application site and lapwing and golden plover at the MOTH). It was concluded that the energetic demands of responses to disturbance arising from the Proposed Development would not be sufficiently severe or apply to a sufficient number of individuals to impact survival or subsequent breeding success of the SPA waterbird populations.</p>	<p>Having reviewed the Applicant's evidence, we note that the approach adopted to assessing the effect of disturbance by the Applicant is mechanistic and does not account for the full ecological impact that disturbance can have on waterbirds. The issue has not been satisfactorily addressed and remains unresolved. We have provided comments on this issue in our cover letter submitted at D8 (REP8-028). This remains an outstanding issue.</p>
<b>The Wash SPA and Ramsar site – Disturbance to birds at the MOTH</b>		



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4.2.52	<p>NE stated [RR-021] that they had significant concerns about the feeding/roosting area at the MOTH. They considered that disturbance to roosts at the MOTH could affect 24 of the SPA species including eight at greater than 1% of site population. This included over 20% of the SPA population of golden plover and black-tailed godwit and 7.5% of the lapwing SPA population. They also noted that significant numbers of the SPA/Ramsar waterbird assemblage use this area at low tide, including up to 28% of the black-tailed godwit SPA population. NE highlighted that risk pathways arising from repeated boat movements would be likely to result in changes to bird use behaviours in this area and usage of this area at high tide. They considered that the data suggested that this results from visual/noise disturbance from the boats rather than from their wake.</p>	<p>The RSPB agrees with Natural England's position.</p> <p>However, it is possible that impacts from vessels wake is greater along The Haven for foraging and roosting birds than in the approaches to the mouth of The Haven. This issue has become even more significant following confirmation that vessel speeds along The Haven cannot be regulated to the proposed 6 knots and can be approximately 12 knots (as set out in our cover note at Deadline 8; REP8-028). The increased speeds could have implications for the Applicant's Habitats Regulations Assessment with respect to direct impacts on waterbirds and indirect impacts due to erosion impacts of intertidal mudflat and coastal saltmarsh. This remains an outstanding issue.</p>
4.2.56	<p>NE stated at D2 [REP2-045] that it was agreed that the risk at the MOTH was to roosting birds subject to disturbance by increased vessel traffic, and that this could result in species being displaced from roosts to alternative sites and individuals of some species being subject to repeated disturbance because they do not relocate. They noted that Appendix A1 Table 2 of the Ornithology Addendum indicated that, of the SPA waterfowl assemblage, some 29,395 birds of at least 22 species are at risk of exposure to disturbance, with 20,208 birds of 22 species in the most sensitive area. Disturbance at high tide would increase from approximately 75-80% to 100% for those species that relocate in response to large vessel disturbance events, and for those species that return to the roosts and are subject to repeated disturbance the number of events per annum would rise from the current baseline of 840 to approximately 1160. NE noted that the majority of</p>	<p>The RSPB agrees with Natural England's position.</p> <p>We also have concerns that at lower tidal states some additional waterbird foraging and bathing activity could be affected by vessel disturbance.</p> <p>This remains an outstanding issue with the Applicant.</p>

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	<p>disturbed individuals abandon the roosts in response to vessel passage and do not return for the rest of the high tide period. They considered therefore that the site's conservation objectives could be affected in respect of birds' individual fitness as a consequence of increased energy expenditure, and in relation to the distribution objective as a consequence of the loss (as a result of disturbance events occurring on 100% of tides) of a significant roost (at the MOTH).</p>	
4.2.59	<p>NE also advised that the titles within Table 5-1 (Screening of SPA qualifying species for further assessment) suggested that the calculated % level of disturbance was based on the number of birds recorded as being displaced during the surveys as a proportion of WeBS counts. NE considered that this approach was incorrect (unless the surveys reliably matched local WeBS populations) and that the analysis needed to look at the number of birds disturbed as a proportion of those recorded in the bird surveys and then consider how this proportion of the population compared to WeBS counts from the survey area. NE sought clarification and stated that any changes may result in a change to the species to be taken forward for appropriate assessment. They also noted that a number of species not taken forward had a high percentage disturbance response and considered that impacts on these species should be considered further.</p>	<p>This is a really important point and we support fully Natural England's position.</p> <p>As for paragraph 4.2.46 above, we note that for some SPA features the Applicant's counts are actually greater than the WeBS counts, for example, black-tailed godwits, redshanks, golden plovers and lapwings (Tables 4-2 &amp; 4-3 of the Final Waterbird Survey Report; REP8-018). This reflects the fact that WeBS counts are undertaken on a monthly basis and over a long-term period, which allows an adequate assessment of the trends in bird numbers over time. However, WeBS data alone does not provide the full picture. The fact that the Applicant's surveys have recorded species in numbers greater than previously recorded, also demonstrates the need to ensure site-specific surveys of a suitable duration and focus are undertaken in support of the DCO Application.</p> <p>It is also important that the cumulative impact of vessel disturbance along the whole of The Haven is assessed. The combined number of birds affected along the length of The Haven must be considered to provide an accurate reflection of how significantly SPA features are impacted. This impact will be from vessel movements in-combination with disturbance from other activities that also cause disturbance such as dog-walking, jet skis, aircraft etc. We set out our position on the need to consider impacts along the length of The Haven out to the Port of Boston anchorage area in our Written</p>

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		Representations (REP1-060), comments on the Ornithology Addendum (REP4-026) and our comments on the Third Written Questions (REP8-029). Whilst we recognise that our concerns about recreational activities have been noted within the RIES, this remains an outstanding issue.
4.2.63	The Applicant provided an assessment of effects on the SPA/Ramsar site bird assemblage based on the WeBS counts and the Applicant's high tide baseline observation sessions (November 2019 – March 2021) in its D5 HRA Update [REP5-006]. It anticipated that 1% of the 5-year mean peak assemblage count were likely to be disturbed on approximately 12.5% of high tides, up from approximately 9% under baseline conditions. The Applicant concluded that the potential additional vessel disturbance resulting from the Proposed Development would not compromise the conservation objectives for the assemblage. This was based on the premise that the assemblage birds that use the MOTH during the high tide period, when they would potentially be at risk from vessel disturbance, formed only a small proportion of the assemblage, and that disturbed birds relocate to a nearby alternative location (within 1km) or 'quickly' (within approximately two minutes) return to the original roost site once the vessel has passed. Notwithstanding, the provision of one or more artificial roost sites in the vicinity of the MOTH as part of the proposed BNG measures was highlighted as a measure that would benefit the waterbird assemblage.	See comment on paragraph 4.2.59 above.  The Applicant has asserted that there are alternative roost sites and that they would be able to accommodate any displaced birds. The Applicant has not addressed the concerns identified by Natural England in paragraph 4.2.40 of the RIES. The RSPB also raised similar concerns in our Written Representations (REP1-060) and comments on the ornithology Addendum (REP4-026).  This remains an outstanding issue that has not been addressed by the Final Waterbird Survey Report (REP8-018).
4.2.65	The results are set out in Section 4 of the survey report. Table 2 presents the peak count for all species where a behaviour change was observed. 21 bird species changed their behaviour due to the presence of boats or boat wash. Based on the latest available WeBS data six species were observed	These results further highlight the importance of The Haven for features of The Wash SPA and Ramsar. The more survey work that is completed the more species are identified to be affected by disturbance from vessels in significant numbers.

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	<p>to be disturbed at levels over 1% of The Wash 5-year average; dark-bellied brent goose (8.49%), ruff (65.22%) lesser black backed gull (8.21%), common sandpiper (8.11%), oystercatcher (4.03%), lapwing (3.70%) and great crested grebe (1.16%). Changes in behaviour were seen to be caused by boat presence for 99.88% of the total birds across all the surveys (stated as three rather than five surveys) with disturbance from boat wash disturbing 0.12% (100% of which was from pilot boats). Large cargo ships, pilot boats and small fishing vessels were responsible for disturbance of 52.90%, 47.04% and 0.06%, respectively of all birds. 100% of the birds present were disturbed by the large cargo ships. The report recommended that the main focus on mitigation should be for disturbance to wading birds, dark-bellied brent goose and ruff.</p>	<p>The additional surveys demonstrate ongoing disturbance impacts and further justifies the importance of having agreed and suitably detailed plans to demonstrate that the criteria for designing compensatory measures will be met (as set out in Table 12 of our Written Representations (REP1-060) and paragraph 4.3 of our comments on the in-principle compensation measures (REP4-028)). It is essential that measures will be targeted, effective, technically feasible, of suitable extent, appropriately located, have sufficient time to be developed, and have legal and financial security for their long-term implementation. The RIES does not highlight the compensation measures criteria, which would be helpful.</p> <p>The latest Without Prejudice Habitats Regulations Assessment Derogation Case: Compensation Measures document (REP8-005) does not address the RSPB's concerns, as significant detail needed to demonstrate the compensation measures criteria will be met is being left until post-consent. This is not acceptable as it gives no confidence that the integrity of the National Sites Network will be maintained. This remains an outstanding issue.</p>
<b>The Wash SPA and Ramsar site – Disturbance to birds at the application site</b>		
4.2.69	<p>The Applicant responded within REP1-035 that the buffer zones for works to avoid and minimise disturbance to species were taken from Cutts et al (2008), which provides peer reviewed data on disturbance distances for waders, but that site-specific surveys were also used to provide site-specific information on actual disturbance levels.</p>	<p>It remains unclear if 250m would be appropriate. Impacts from vessel movements have generated displacement out to at least 800m. More certainty is needed that the 250m buffer would work and be enforceable.</p> <p>There has been no response from the Applicant that demonstrates works could be stopped and restarted if numbers of birds present exceeded any thresholds that might be set. We raised this concern in our Written Representations (para 7.49, pp.59-60; REP1-060) and Summary of comments on Issue Specific Hearing 2: Environmental Matters (paragraph 3.9, p.4; REP3-035). The RIES does not highlight our concern regarding the enforceability of such a mitigation measure. We have not seen a direct response on this issue by the Applicant to confirm how such a measure</p>

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		would affect construction activities and be enforceable. This information is essential to determine whether such an approach would be practical and effective. This remains an outstanding issue.
4.2.72	The RSPB commented [REP3-033] that it was unclear whether the activities proposed by the Applicant would be of a similar nature to the GI works undertaken by the EA and requested more detail on the similarities and differences between the works, such as the scale and duration of the works and the equipment required.	We have seen only more information about noise levels. This is not the same as addressing our query about the nature and scale of the proposed works and whether they are similar to the Environment Agency's ground investigation works. This query has not been addressed by the Applicant and remains an outstanding issue.
4.2.86	It was considered apparent that there were alternative roost sites available to some of the assemblage species, (ie bar-tailed godwit, cormorant, curlew, herring gull, lesser black-backed gull, ruff and shelduck), which relocated 200-400m away from the application site, within Sections A and B (where disturbance had been recorded). Roosting cormorant and shelduck that were disturbed by vessels moved 500m or more to a new roost site. In a significant proportion of instances gull species and ruff returned to their original location after having taken flight, so there was a likelihood of repeat disturbance within a tide. It was considered that the flight distances to alternative locations were short and would not have a significant effect on the birds' energy usage.	<p>The Applicant has asserted that there are alternative roost sites and that they would be able to accommodate any displaced birds. The Applicant has not addressed the concerns identified by Natural England in paragraph 4.2.40 of the RIES. The RSPB also raised similar concerns in our comments on the Ornithology Addendum (Sections 2l, 2n, and 3, and the Appendix Table; REP4-026). We particularly highlight paragraph 2.53 of our comments on the Ornithology Addendum which highlights that roost site availability will vary with the height of the tide. The smaller, neap tides may allow more areas for roosting and even leave some areas for foraging, whereas the higher, Spring tides may leave very few roost sites available and mean that space becomes limited to accommodate all birds. This highlights the importance of understanding the behaviour of birds across all tidal states and throughout the year in order to fully understand the ecological effect of disturbance and displacement from vessel movements alone and in combination with wider activities.</p> <p>We also highlighted in our Written Representations (paragraph 7.87 of Written Representations, p.70; REP1-060) the need to consider the impact of displacement against a wider set of criteria than has been considered by the Applicant:</p>

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		<ul style="list-style-type: none"> <li>• <i>The additional distance birds will need to move to return to their preferred feeding location. This will likely be as close to the roost site as possible, especially in winter when the ability for birds to be able to get back out feeding as soon as the mudflats re-emerge is critical.</i></li> <li>• <i>The impact that the displacement away from preferred foraging areas could have overall fitness through the winter and for the breeding season. We highlight the importance of this for redshank and Natural England have highlighted the importance of this for black-tailed godwit in their Relevant Representation/Written Representation.</i></li> <li>• <i>The ability of additional roost sites to accommodate displaced birds without adding pressure to birds already using it.</i></li> <li>• <i>The needs of birds to use different roost sites in different conditions (for example at different times of the day/night, in different seasons, or in different weather conditions) such that a range of roost sites are needed for birds to survive the whole winter and allow resilience to changing conditions.</i></li> <li>• <i>The season when disturbance occurs. Impacts during the winter will be more severe than during the summer.</i></li> </ul> <p>We highlighted the significant impact this could have on the fitness of features of The Wash SPA and Ramsar. This is still an outstanding issue that has not been addressed by the limited reporting on roosts in the Final Waterbird Survey Report (REP8-018). It is not clear that this has been fully reflected in the RIES.</p> <p>In our Written Representations (paragraphs 7.59 and 7.107; REP1-060), we also queried about the time between vessel movements, what frequency will they occur and how will large vessels overlap with smaller vessels. Clearly along The Haven small and large vessels have an impact and it remains unclear how this in-combination impact has been accurately</p>

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		<p>assessed to understand the full duration of disturbance along the whole of The Haven prior to, and after, high tide. It is the additional disturbance, in combination with existing disturbance, that must be assessed and no vessel modelling has been undertaken to consider this issue in detail. It is not clear that this has issue been fully reflected in the RIES. This also remains an outstanding issue.</p>
4.2.95	<p>The Applicant responded [REP6-032] that at the application site ringed plover, lapwing, cormorant, mallard, black-headed gull, herring gull, lesser black-backed gull and great black-backed gull, which formed part of the SPA non-breeding waterbird assemblage, had been considered in the (shadow) appropriate assessment. Dunlin, turnstone, oystercatcher, black-tailed godwit, curlew, grey plover and shelduck (SPA features) had not been included as counts had recorded them infrequently and in small numbers.</p>	<p>Although small numbers of features may have been recorded it remains important that such species are still included in the assessments. This is important to ensure a full assessment of the waterbird assemblage. For species such as shelducks and turnstones this is even more important as they are SPA features which have restoration targets; declines being due to site-specific issues, as reported in our Written Representations (Sections 4d and 4e, pp.39-43; REP1-060). It is not clear that the RIES references the Supplementary Advice on Conservation Objectives that define specific targets for each of the features of The Wash SPA and Ramsar.</p> <p>We again reiterate that any assessments must undertake a cumulative assessment of impacts along the entirety of The Haven in order for the full impact of vessel disturbance, alone and in combination with other activities, to be accurately assessed. We refer to our detailed comments on paragraphs 4.2.46, 4.2.47, 4.2.48 and 4.2.59 of the RIES above.</p>
<b>The Wash SPA and Ramsar site – Disturbance to birds along The Haven</b>		
4.2.99	<p>The Applicant addressed the concerns about impacts on birds using The Haven between the application site and the MOTH, ‘the central part’ of The Haven, at D5 [REP5-006]. It explained that as data for this stretch of The Haven was not available it was undertaking Winter 2021/2022 counts of SPA and assemblage waterbirds. It stated that in the absence of information on whether SPA populations would be impacted it had assumed that this stretch of The Haven qualified as SPA functionally linked land. It concluded that the proposed</p>	<p>Whilst the Applicant has responded to the RSPB’s comments about the lack of surveys along the central part of The Haven this does not mean that they have been “addressed”, for the reasons outlined in response to paragraphs 4.2.46, 4.2.47, 4.2.48 and 4.2.59 of the RIES above. The additional information does not adequately address the outstanding concerns regarding gaps in survey coverage. This remains an outstanding issue.</p>

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	<p>biodiversity BNG/compensation measures would provide alternative habitat for any birds that were displaced by any additional disturbance. It confirmed that the winter bird abundance and distribution surveys were being undertaken from December 2021 to March 2022 and the data would be made available during late March 2022. It acknowledged in REP5-008 that there was a lack of data for this area and highlighted that it was not included in the WeBS counts.</p>	
<b>Habitat mitigation area</b>		
4.2.107	<p>The Applicant agreed [REP1-035] that ongoing maintenance would be necessary and explained that it would be detailed further in the updated OLEMS to be submitted at D2. It stated that there would be no change in the footpath adjacent to the HMA and it would not be any closer to the works area than previously, when the area has been used as a roosting site. Therefore, it was not expected that there would be any additional disturbance.</p>	<p>The Applicant has not undertaken any survey effort to assess the level of disturbance at different times of day and year to determine if there would be significant impacts that would need to be managed. This remains an outstanding issue.</p>
4.2.111	<p>The Applicant also stated that recent analysis of the Ornithology Addendum had raised questions about whether the redshank at the application site were all part of the SPA assemblage and that although there was likely to be some mixing of populations the extent was unknown. It agreed that the distance between The Wash SPA boundary and the application site, combined with individual redshanks' winter site fidelity once a successful daily and seasonal strategy has been established, meant that redshanks present at the application site during high tide roosting could include individuals which foraged within the SPA, and conversely that redshanks foraging at the application site when mudflats are exposed could include individuals which roosted within the SPA. The Applicant stated that on this basis it had assumed in</p>	<p>The RSPB has addressed this in our comments on response to Q3.3.1.31 in the Third Written Questions (pp.16-23; REP8-029). We highlighted a number of inaccuracies in the Applicant's presentation of the two studies it used in support of its position that the Application site is not functionally linked to The Wash SPA and Ramsar site. Both studies clearly demonstrate that redshanks can readily move along The Haven from the Application site to the mouth of The Haven. We also disagreed with the Applicant's suggested conditions for determine whether a site is functionally linked land, as they do not apply the Habitats Regulations approach correctly.</p>



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	the HRA and the Ornithology Addendum that redshanks present at the application site have connectivity with the SPA.	
<b>Worst case scenarios and in combination effects</b>		
4.2.173	The Applicant responded [REP6-032] that its use of decimalised values enabled a more accurate estimation of average daily rates of disturbance. The arrival of vessels associated with the Proposed Development at the Port Of Boston would be at evenly spaced intervals, as occurred with commercial vessels currently. The assessment was based on a worst case scenario of 5 vessels (total)/high tide on 100% of high tides, although that was considered to be unrealistic and it was anticipated that vessels would actually continue to utilise 75-80% of high tides as currently. The assessment had assumed a worst case of 100% usage of high tides at night by vessels associated with the Proposed Development.	<p>The RSPB also disagrees with the averaging of vessel movements along The Haven. We set out our position in our comments on the Ornithology Addendum (Section 2m, pp.16-17; REP4-026). Overall we consider the approach overly simplistic and fails to consider the full scale of impact. Any assessment must be based on the worst-case scenario of 5 vessels per tide.</p> <p>As mentioned for paragraph 4.2.86 of the RIES above, in our Written Representations (paragraphs 7.59 and 7.107; REP1-060), we also queried about the time between vessel movements, what frequency will they occur and how will large vessels overlap with smaller vessels. Clearly along The Haven small and large vessels have an impact and it remains unclear how this in-combination impact has been accurately assessed to understand the full duration of disturbance along the whole of The Haven prior to, and after, high tide. It is the additional disturbance, in combination with existing disturbance, that must be assessed and no vessel modelling has been undertaken to consider this issue in detail. It is not clear that this has issue been fully reflected in the RIES and remains an outstanding issue.</p>
4.2.176	The Applicant acknowledged that night-time observations on baseline vessel disturbance were desirable but pointed to the practical difficulties of observing birds during the hours of darkness [REP2-006]. It confirmed that the assessment assumed that night-time disturbance was similar to that during the daytime.	<p>Whilst there may be challenges to night-time assessment, technology and the ability to survey sites at night has become easier. The key factors are:</p> <ul style="list-style-type: none"> <li>• can specific species be identified, and</li> <li>• whether disturbance can be assessed.</li> </ul> <p>Both of these are possible.</p> <p>Whilst it may prove more difficult to assess all species observed, key species are identifiable at night and infra-red surveys are becoming a more regular part of development surveys in locations where species such as golden plovers and lapwings and other waders that can forage at night occur.</p>

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		<p>Tagging of birds using GPS transmitters also allows an assessment of the use of different areas by birds during the day and night (e.g. paragraph 2.33 of our comments on the Ornithology Addendum, pp.14-15; REP4-026).</p> <p>We have already highlighted a number of species that could forage at night, including redshanks and black-tailed godwits (Section 2i of our comments on the Ornithology Addendum, pp.14-15; REP4-026). A number of ecological consultancies also actively promote the fact that nocturnal surveys close to estuaries and the coast may be required. Academic surveys also have considered nocturnal activity of waders (e.g. Lourenco et al. 2008<sup>1</sup> and Burton &amp; Armitage 2005<sup>2</sup>, as outlined in our comments on the Ornithology Addendum; REP4-026).</p> <p>This all highlights that securing evidence to determine bird use at night of The Haven would be possible.</p> <p>Assuming that day-time disturbance is the same as night-time disturbance risks underestimating impacts, as birds may be more sensitive to disturbance at night (e.g. paragraph 2.32 of our comments on the Ornithology Addendum; REP4-026). This remains an outstanding issue.</p> <p>The RIES does not identify that we responded to this point.</p>
4.2.197	Table 4.1 below identifies the features of the SPA, Ramsar site and SAC for which, at the time of writing of this RIES, IPs did not agree with the Applicant's conclusion of no AEol.	We refer to Appendix 1 of our response to third written questions (REP8-029) that sets out the species of concern for each section of The Haven.
<b>Compensation Measures</b>		

<sup>1</sup> Lourenço, P.M., Silva, A., Santos, C.D., Miranda, A.C., Granadeiro, J.P., & Palmeirim, J.M. (2008) The energetic importance of night foraging for waders wintering in a temperate estuary. *Acta Oecologica* 34: 122-129.

<sup>2</sup> Burton, N.H.K, & Armitage, M.J.S (2005) Differences in the diurnal and nocturnal use of intertidal feeding grounds by Redshank *Tringa totanus*. *Bird Study* 52: 120-128

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5.0.22	<p>It is stated that, given the limited time period available to investigate compensatory measures, the options discussed had only been developed in outline but consultation had been progressed with relevant land owners/managers to ensure that the options were capable of implementation. Initial consultation had been held with the following organisations with a positive initial response received: North Sea Camp Prison, Boston; local landowner/farmers; and Boston Borough Council (for sites within the Havenside Local Nature Reserve (LNR)). Other options had been identified and would be put forward and discussed with the relevant stakeholders.</p>	<p>Discussions regarding mitigation and compensation measures took place through 2020 and 2021. No details had been developed by the time the Applicant submitted its initial DCO Application in December 2021.</p> <p>Following the withdrawal of the initial DCO application, meetings with stakeholders including the RSPB and Natural England on the 8 and 26 February 2021 included discussions on the need for the Applicant to prepare a derogation case. This was noted to be in line with the requirements for Offshore Wind Farm cases that were currently being considered by the Secretary of State. No apparent work was progressed by the Applicant following those meetings. The Applicant then chose to resubmit its Application (without compensation proposals) in March 2021.</p>
5.0.41	<p>The Applicant stated [REP6-032] that the level of detail that could be provided on the compensation options was limited by the amount of information and survey that could be undertaken on sites before they were secured, which could only occur post-decision if the Proposed Development was granted consent. They explained that landowners had been approached in relation to two sites and had given in principle agreement for long-term leases of agricultural fields. They also stated that the proposed works to the Havenside LNR related more to BNG than compensation measures.</p>	<p>It was confirmed in the RSPB's Relevant Representations in June 2021 that our reserves would not be available for use by the Applicant to deliver mitigation or compensation measures. Again, no further action was taken by the Applicant.</p> <p>The Applicant has therefore had ample warning and time to develop a suitably detailed package of compensation measures yet they have actively chosen not to address this until the Examination had started. Consequently the Applicant is seeking to address the detail of their Compensation Measures post-consent. We have set out in our comments on the DCO commentary and the DCO Schedule 11 (REP7-032) why this approach is not compatible with the Habitats Regulations. We also refer back to our comments on paragraph 4.2.65 of the RIES above regarding the need to ensure that Compensation Measures will be targeted, effective, technically feasible, of suitable extent, appropriately located, have sufficient time to be developed, and have legal and financial security for their long-term implementation.</p>

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		<p>We see no reason why the Applicant should be allowed to benefit from its failure to develop a detailed package of compensation measures to be submitted with its application as was clearly being signalled by the Secretary of State BEIS and was advised by various stakeholders prior to March 2021 (see 1.2.1 above) when it chose to resubmit its application against that advice.</p> <p>Notwithstanding this position, the Applicant has had over 12 months since its resubmitted application to develop a detailed and comprehensive package of compensation measures for discussion with interested parties but has failed to do so. We do not consider the current outline proposals acceptable or in any way adequate.</p> <p>It is the RSPB's conclusion that there is not an adequate package of compensation measures in front of the Examining Authority that would meet the ecological requirements of the impacted SPA/Ramsar species such that the coherence of the National Site Network for those species would be protected.</p>