



**Comments on Other Submissions
(submitted at Deadline 5)
for the
Royal Society for the Protection of Birds
and Suffolk Wildlife Trust**

**Submitted for Deadline 6
6 August 2021**

Planning Act 2008 (as amended)

In the matter of:

**Application by NNB Generation Company (SZC) Limited for an Order
Granting Development Consent for
The Sizewell C Project**

**Planning Inspectorate Ref: EN010012
RSPB Registration Identification Ref: 20026628
Suffolk Wildlife Trust Registration Identification Ref: 20026359**

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1. Terrestrial Ecology Monitoring and Mitigation Plan (the TEMMP)¹

- 1.1. In addition to the comments already made on the previous iteration of the TEMMP², the following comments are provided in light of the updated version of the TEMMP³ submitted at Deadline 5.

Marsh Harrier

- 1.2. We note that Table 2.1 states – “The target is to ensure that foraging activity for marsh harriers on the EDF Energy estate is **not materially different** than at present such that productivity of breeding marsh harriers of the SPA is maintained.” (emphasis added) and wish to repeat our concerns re different phrases being used for commitments such as this. As raised and set out in our Written summary of ISH7 (paragraph 1.24) the TEMMP [REP1-016] (DCO, Sch 2, requirement 4) page 27 states “in broad accordance with” and we flagged that there could be a difference with “in general accordance with” and definition for that phrase now included within the DCO, Schedule 2, paragraph 4 including phrases such as “substantially consistent” and “in a manner that does not give rise to any materially new or materially different environmental effects”. Whilst we welcome the Applicant’s agreement to define and explain “in general accordance with”, we are concerned that for the specific requirement of new marsh harrier compensation land we have the following:
1. The new DCO, Sch 2 Requirement 14C (which we welcome) stating the requirement for this marsh harrier compensation land but by way of:
 - a. an implementation plan being required to be agreed
 - b. this implementation plan must be “in general accordance with” the Marsh Harrier Compensatory Habitat Report
 2. The TEMMP then has:
 - a. Page 27 – for the creation of the compensatory habitats they must be “in broad accordance with” the Marsh Harrier Mitigation Area Feasibility Report and
 - b. Table 2.1 for the achievement of the maintenance of the marsh harrier population target which should be “not materially different to” the current marsh harrier population.
- 1.3. We wish to note that there are currently several reports with similar titles – the Marsh Harrier Mitigation Area Feasibility Report⁴, which is updated by the Marsh Harrier Habitat Report⁵, also the separate Marsh Harrier Compensatory Habitat Report⁶. This latter report, which is currently the only one named in Requirement 14C, only refers to the Westleton potential habitat creation, not the main compensation area at Abbey Farm, and therefore as currently drafted new Requirement 14C is incomplete. As we stated at ISH7⁷, we request that all relevant documents should be specifically referenced, however it may be helpful to provide one

¹ Terrestrial Ecology Monitoring and Mitigation Plan (TEMMP) [REP5-088]

² In our Comments on the Examining Authority’s First Written Questions (ExQ1) [REP3-075] and in our Transcript of Oral Contribution to Issue Specific Hearing 6 (ISH6) on Coastal Geomorphology [REP5-163] and Transcript of Oral Contribution to Issue Specific Hearing 7 (ISH7) Parts 1 and 2 on Biodiversity and Ecology [REP5-164]

³ Terrestrial Ecology Monitoring and Mitigation Plan (TEMMP) [REP5-088]

⁴ Marsh Harrier Mitigation Area Feasibility Report (APP-259)

⁵ Marsh Harrier Habitat Report [REP2-119]

⁶ Marsh Harrier Compensatory Habitat Report [REP3-053]

⁷ RSPB and SWT’s Transcript of Oral Contribution to Issue Specific Hearing 7 (ISH7) Parts 1 and 2 on Biodiversity and Ecology [REP5-164]

compendium report which combines all the updated information and could be cross-referenced in Requirement 14C.

- 1.4. Leaving aside both our concerns as to whether the proposed marsh harrier compensation land will be effective and also the inappropriateness of a target for a SPA designation species using “not materially different to”, and that the new Requirement 14C may lead to further changes within e.g. the TEMMP, we wish to raise the potential for requirements to be reduced due to the use of such phrases.
- 1.5. Taking a hypothetical *worst case scenario*, it would (due to current language) be possible to reduce compliance and achievement of the requirements at each point, since in each place it does not say *must achieve* instead it allows flexibility and as long as conditions are almost achieved that is sufficient. Added to this concern is the issue of the definition of “in general accordance with” (DCO Sch 2, para 4) only includes effects assessed, not targets or positive requirements.
- 1.6. Therefore we are concerned that it may be technically possible, despite the requirement being to address harm to an Internationally Important protected site’s designation species, for requirements to partially be fulfilled but still been deemed acceptable. For example, the quality of establishment of tussocky grassland will be important for prey populations and this can be difficult to establish (in terms of the tussocky structure) – could “in general accordance with” mean the right species are sown but may not establish fully or create the right structure? The same point could apply to the wild bird seed and nectar rich plots – again if the right species are sown but not all are fully established, this could mean insufficient food sources for key prey species, limiting numbers supported. And crucially even if full details were included within the final habitat creation proposals and implementation plan, the requirement wording might not ensure those full details were complied with.
- 1.7. These concerns added to the marsh harrier compensation target also including “not materially different to” current marsh harrier productivity adds to the issues discussed above.
- 1.8. As raised by the ExA during the hearing, we are also concerned regarding the question of what happens if marsh harriers do not use the compensation site and will comment further once the Applicant provides more on this.
- 1.9. SPA compensation requirements as clearly set out in both the EU and Defra Guidance⁸ are very clear that compensation proposals and measures must starting with the EU Guidance⁹
 - Be based on best scientific knowledge available alongside specific investigations for the location where the measures will be implemented.
 - Be feasible and operational in reinstating the conditions needed to ensure the overall coherence of the Natura 2000 network.
 - Not be measures where no reasonable guarantee of success should not be considered and the most effective option, with the greatest chance of success, must be chosen.

⁸ [EC \(2018\) Managing Natura 2000 sites – The provisions of Article 6 of the ‘Habitats’ Directive 92/43/EEC \(21/11/18\) C\(2018\) 7621 and Defra \(2012\) Habitats and Wild Birds Directives: guidance on the application of article 6\(4\). Alternative solutions, imperative reasons of overriding public interest \(IROPI\) and compensatory measures. Paras 28-36 <https://www.gov.uk/government/publications/habitats-and-wild-birds-directives-guidance-on-the-application-of-article-6-4>.](#)

⁹ EC (2018) guidance

- Require no irreversible damage to the site before compensation in place, compensation operational at the time damage occurs, time lags only allowed if they will not compromise objective of “no net loss” and the coherence of National Sites network; and
- All technical, legal or financial provisions must be completed before plan or project implementation starts to prevent unforeseen delays that compromise effective compensation measures.

1.10. The Defra guidance reinforces the points above, in particular by requiring¹⁰:

- Consideration of whether the measure is technically proven or considered reasonable. Measures for which there is no reasonable expectation of success should not be considered (paragraph 31)
- Compensation should be proportionate and no more than is needed to protect the coherence of the Natura 2000 network, having factored in the need to increase the compensation to deal with any uncertainty, time lag etc (paragraphs 32 and 33)
- The need to condition the consent to include [remedial] actions should the compensation prove to be less successful than anticipated (paragraph 33)
- Compensation must be sustainable – therefore it is necessary to secure medium to long term management (paragraph 34); and
- Compensation must be secured before consents are given for the proposal to commence i.e. must be satisfied all the necessary legal, technical, financial and monitoring arrangements are in place to ensure the compensation measures proceed. If it is not possible to secure adequate compensatory measures, a derogation allowing the proposal to commence must not be granted (paragraph 35).

1.11. We will comment further after the Applicant has provided further information (we believe at Deadline 6), however we do wish to highlight now that both the phrasing of requirements, conditions and targets as well as our ecological feasibility questions raise serious concerns and currently we do not believe the Examining Authority can have sufficient legal and ecological certainty to place reliance on the effectiveness of the marsh harrier compensation proposals.

Red-throated Divers

1.12. Table 2.2 – We support the proposal to produce a vessel management plan to address impacts on red-throated divers. However, our previous concerns around the value of boat-based surveys to detect displacement of divers still apply¹¹ and we query the potential limitations of drone surveys, such as the distance they can fly from the operator and the weather conditions under which they can operate and whether suitably robust coverage can be achieved. We also consider the monitoring proposed in this Table and the Outline Vessel Management Plan should sit under a Marine Environment Monitoring and Mitigation Plan rather than in the plan for the Terrestrial Environment.

¹⁰ Defra (2012) guidance

¹¹ Paragraph 2.2 of RSPB and SWT’s Transcript of Oral Contribution to Issue Specific Hearing 7 (ISH7) Parts 1 and 2 on Biodiversity and Ecology [[REP5-164](#)]

- 1.13. In addition, we continue to have concerns over the securing of these requirements as raised in ISH7¹² and the effectiveness of the measures proposed to avoid disturbance and displacement of these SPA species with currently no proposals to address should, following monitoring, effects be greater than predicted and reserve the right to comment further once we have reviewed the further plans to be produced e.g. the vessel management plan referenced above.

Recreation

- 1.14. Paragraph 3.2.9 – we note that it is stated that Aldhurst Farm is “proposed to form part of the recreational mitigation package for displaced exiting recreational users and also for campus residents”. We reiterate our concerns that Aldhurst Farm is not sufficient in area to provide a meaningful contribution to mitigation of both impacts of displaced visitors and construction workers. Given the facilities proposed focus on walkers, dog walkers and families, there is also in our view a gap in the type of facilities provided for construction workers who may take part in more active recreational activities (e.g. mountain biking, watersports). We will continue our discussions with the Applicant but may need to comment further following those discussions.

Coastal Processes

- 1.15. Further to our concerns as set out in our D3 submissions and during the ISH6¹³ about the lack of detail requirements in both the TEMMP and the Coastal Processes MMP, particularly for the coastal vegetated shingle (part of the Minsmere-Walberswick SAC, SPA, Ramsar & SSSI), there appears to be no further information nor proposals in the updated TEMMP¹⁴.
- 1.16. We are continuing to discuss the TEMMP with the Applicant as well as the updated the Coastal Processes MMP.

Main Development Site - Designated Sites (Nationally and locally designated sites) and habitat creation areas

a) Sizewell Marshes SSSI (and related compensation habitats)

i Retained areas of the SSSI

- 1.17. We note Table 3.1 states the Water Monitoring Plan defines the approach which will ensure water levels and water quality within the SSSI are maintained and secured through DCO, Schedule 2, Requirement 4¹⁵. We will comment further when the Plan is submitted to the Examination (we believe at Deadline 6).

ii Areas of the SSSI subject to temporary land take

- 1.18. It is stated at para 3.1.8 of the TEMMP that

“... approximately 3 ha of the Sizewell Marshes SSSI would be used temporarily during the construction of Sizewell C, primarily during the early years of construction to create the SSSI Crossing and the diversion of the Sizewell Drain to create the western edge of the new platform. These areas would be subject to varying degrees of disturbance but soil

¹² RSPB and SWT Transcript of Oral Contribution to Issue Specific Hearing 7 (ISH7) Parts 1 and 2 on Biodiversity and Ecology [REP5-164]

¹³ RSPB and SWT Transcript of Oral Contribution to Issue Specific Hearing 6 (ISH6) on Coastal Geomorphology [REP5-163]

¹⁴ Terrestrial Ecology Monitoring and Mitigation Plan (TEMMP) [REP5-088]

¹⁵ Which currently just secured the TEMMP to the DCO

*compaction would be minimised to ensure that the habitats can quickly recover or become re-established. **Method statements prepared for works in the retained areas of the SSSI would be the primary mechanism for controlling impacts** in these areas and would be reviewed and approved by the Environment Review Group. This commitment is **secured through Requirement 12C** (Doc Ref. 3.1(D)).” (emphasis added)*

- 1.19. We note the statement that method statements will be the *primary mechanism for controlling impacts* and the commitment is secured through DCO, Sch 2, Requirement 12C. Whilst potentially welcome, we request evidence based method statements are provided as soon as possible to the Examination for consideration by the Examination Authority and Interested Parties.

iv. Fen Meadow compensation sites

- 1.20. Para 3.1.14 states

*The measures to create fen meadow habitats will be defined in Fen Meadow Plans which are to be **developed in general accordance with the Fen Meadow Strategy [AS-209], as provided for by Requirement 14A.** (Doc Ref. 3.1(D)). (emphasis added)*

- 1.21. We request greater certainty over measures and will comment further when the Fen Meadow Plans are submitted to the Examination (we believe at Deadline 6).

Main Development Site – Protected Species

4.4 Natterjack toad

- 1.22. We note from paragraph 4.4.4, that an updated draft licence was submitted to Natural England in July 2021 (Doc Ref. 6.3.14C7B(A)) and have provided our initial comments on the Natterjack toad licence method statement below.

4.5 Bats

- 1.23. We note the Applicant has updated the proposed monitoring approach for bats. We reserve the right to comment at a future deadline should it be necessary once we have had time to review the detail.

Associated Development Sites

5.4 Bats

a) All Associated Development Sites

- 1.24. We note Table 5-2 states *The target is for the usage of the mitigation features designed for the crossing points to be no lower than the baseline levels of usage of the existing linear features crossed by the new road.*
- 1.25. We note the crossing point locations will be confirmed following targeted surveys in 2021 and stress the design and location of crossing points must follow best practice and be located on existing bat commuting routes as detailed in our written representations¹⁶. We request the

¹⁶ Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [REP2-506] paragraphs 3.737-3.740

survey results and crossing point locations are submitted to the Examination and reserve the right to comment at a future deadline when we have reviewed the detail.

2. Permanent and Temporary Beach Landing Facility and SSSI Crossing Plans- Plans Not for Approval - Part 2 of 2¹⁷

2.1. We provide comments on the updated SSSI Crossing Plans¹⁸. We welcome the increased height and the reduced operational width to improve ecological connectivity. We do still consider a 3 span bridge would be the preferred crossing option to minimise SSSI land take and habitat fragmentation. We note the plans are not for approval and query how they will be secured?

3. Temporary and Permanent Coastal Defence Feature Plans - Not for approval - Revision 2¹⁹

3.1. This document does provide changes to the designs presented in Revision 1 along with some additional cross sections of the design of the northern mound and associated infrastructure along the RSPB Minsmere boundary as follows:

- The changes as Drawing SZC-SZ0100-XX-000-DRW-100260 shows, include the temporary sheet pile defence moved to the south of the previous location, reducing the concerns raised in our Deadline 3 submission²⁰.
- The changes as Drawing SZC-EW0610-XX-000-DRW -100265 shows by providing a cross sections at what is presumably the closest construction location to the RSPB Minsmere boundary, however we would welcome clarification that this is indeed the case. This appears to show
 - the site security fence within one metre from the RSPB boundary and the Minsmere – Walberswick SPA, SAC, Ramsar and SSSI; and
 - the footings of defences less than five metres from the RSPB boundary and the Minsmere – Walberswick SPA, SAC, Ramsar and SSSI

3.2. However we still require further detail on the following to confirm it is feasible to construct without impacting on RSPB land and the designated sites and alleviate our concerns:-

- The proposed construction methods
- The location of the Sandlings path, currently not included, so clarity is required as to whether this will be relocated from the Applicant's to RSPB land remains unclear.
- Plans that illustrate the location of the new construction, the RSPB boundary and the current and future location of the Sandlings path route to resolve this question.

¹⁷ Main Development Site Permanent and Temporary Beach Landing Facility and SSSI Crossing Plans Part 2 [[REP5-010](#)]

¹⁸ Main Development Site Permanent and Temporary Beach Landing Facility and SSSI Crossing Plans Part 2 [[REP5-010](#)]

¹⁹ Temporary and Permanent Coastal Defence Feature Plans - Not for approval - Revision 2 [[REP5-015](#)]

²⁰ Deadline 3 Submission - Comments on Other Submissions (submitted at Deadline 2) for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [[REP3-074](#)] paragraphs 6.21 & 6.22

- We note that there are still no cross sections including the northern section of the SCDF, so the concerns raised in our Deadline 3 submission²¹ regarding how the SCDF curving east-west at the northern extent will align with the natural north-south shingle foreshore.
- 3.3. This is the first time it has come to our attention that it is intended to operate an unscreened haul road within 25m of the RSPB Minsmere boundary and Minsmere – Walberswick SPA, SAC, Ramsar and SSSI during the construction and operation period and we will need to consider in detail the potential implications of this and may provide further considerations at Deadline 7.
- 3.4. Finally, in relation to all our remaining concerns discussed above, we note that the drawings provided are illustrative designs ‘not for approval’. Have any parameter plans been amended to reflect the changes in approach? If not, we believe there remains a risk that our concerns have not been addressed by secure mechanisms and that the original concerns could still arise if designs are finalised in an amended form post-consent. We therefore request that parameter plans are amended to take account of the revised designs and are secured via the DCO.

4. Coastal Processes Monitoring and Mitigation Plan - Revision 2²²

- 4.1. Section 1.2 (pg 22) repeats the statement that “*Supra-tidal shingle was also previously recorded on the Minsmere to Walberswick Heaths and Marshes SAC frontage but was destroyed a decade or so ago (between 2010 and 2011) by natural coastal erosion.*” As per our Deadline 3 submission²³ this statement is incorrect and we request that it is removed from future versions.
- 4.2. We note that section 5.2 (pg 41) acknowledges that the further modelling work since Revision 1 has identified the potential for impacts *extending as far north as 460 m of the Minsmere-Walberswick SPA and Minsmere to Walberswick Heaths and Marshes SAC frontage* compared to the *short (100 m) section at the southern limit of the Minsmere-Walberswick SPA and Minsmere to Walberswick Heaths and Marshes SAC frontage* concluded in Revision 1.
- 4.3. Although we acknowledge, as per section 5.2 (pg 42) that the:
- “Measurable changes in the beach profile are very unlikely, even where the impacts are largest, and increasingly unlikely on the SPA and SAC frontages to the north and south of the impact zones where the impacts reduce”,*
- 4.4. We welcome the commitment to precautionary monitoring in section 5.2 (pg 42) and section 5.3.2 (pg 44). However, we remain unclear on what, if any, mitigation could be deployed should an unexpected impact affecting the supra-tidal shingle and the SAC, Ramsar and SSSI vegetation interest be identified by the monitoring. We are still unable to see any reference to a current UK example where the proposed mitigation methods have been deployed in close proximity to an SAC with designated annual vegetation of drift lines as an interest feature. The example of Slapton Sands in section 7.5 (pg 56) is a SSSI with a vegetated shingle interest feature and therefore may have some relevance, but this requires more detail being provided to be confident it is useful in informing the approach taken adjacent to the Minsmere frontage.

²¹ Deadline 3 Submission - Comments on Other Submissions (submitted at Deadline 2) for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [[REP3-074](#)] paragraph 6.18

²² Coastal Processes Monitoring and Mitigation Plan - Revision 2 [[REP5-059](#)]

²³ Deadline 3 Submission - Comments on Other Submissions (submitted at Deadline 2) for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [[REP3-074](#)] paragraph 5.10

4.5. We welcome the acknowledgement in section 7.1 (pg 47) that “*shingle starvation and erosion on either side of the exposed HCDF would be expected*” but are still to be convinced that this increased risk to the Minsmere frontage is adequately managed and controlled.

4.6. We note in section 7.5.5 (pg 59) the conclusion that “*some localised short-term beach accretion...which may enhance habitat over time e.g., the southern extent of the Minsmere frontage*” is somewhat speculative. As per our deadline 3 response²⁴, we have concerns that the material proposed for the SCDF could prevent the dynamic movement of the supra-tidal shingle on the Minsmere frontage, potentially impeding the formation of annual vegetation of drift lines and therefore having an adverse impact. We welcome the more confident assertion presented in Revision 1 that:

“Beach maintenance would result in some localised short-term beach accretion, limited in extent by the relatively small volumes being moved or introduced. Were added or moved shingle to subsequently deposit on the supra-tidal, it could increase its elevation and width, and potentially restore lost features such as the annual vegetated drift lines habitat on the Minsmere to Walberswick Heaths and Marshes SAC (i.e., a net ecological gain). This situation is most likely under beach recharge mitigation, as it would add new shingle to the system”

4.7. And note it has been removed from Revision 2. In addition, we note in section 7.5.5 (pg 59) that:

“in the cases of bypassing or beach recycling, sediment would not be extracted from statutory designated sites (unless sediments accumulating on these frontages were a direct effect of the Sizewell C Project i.e., mitigation or presence of the HCDF, and approval was given following demonstration that designated features would not be affected);”

is repeated from Revision 1 and we still require further information to understand how the Applicant would manage a scenario where an unexpected impact of sediments accumulating on the frontage could be managed if they could not demonstrate satisfactorily that the designated features would not be affected by proposed mitigation measures.

4.8. In section 8 (pg 61) we also note that the monitoring method that was promised in Revision 1 is now “*under development with final reporting due in 2021*”. We would welcome confirmation of when the subsequent version of the CPMMP containing the annex with the monitoring method will be submitted and whether this will be achieved within the DCO examination as this remains a key concern with regard the future viability of the County Wildlife Site and the linkage to the adjacent Minsmere – Walberswick SAC, Ramsar and SSSI feature.

4.9. In section 9 (pg 63) we note that:

“mitigation for coastal geomorphology is only proposed with respect to two potential interruptions to continuous longshore transport – (i) for maintaining a continuous shingle beach seaward of the HCDF and, (ii) sediment transfer at the BLF grounding pocket during the operations phase.”

4.10. We refer back to sections 5.2 and section 5.3.2 and the confirmation that precautionary monitoring of the Minsmere frontage will be included as part of the plan and section 7.5.5

²⁴ Deadline 3 Submission - Comments on Other Submissions (submitted at Deadline 2) for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [[REP3-074](#)] paragraphs 5.2 – 5.4

which speculates that some change may occur on the southern Minsmere frontage and some interventions may be required within the designated site if sediment accumulation was a direct effect of the Application. As stated above, we still do not believe sufficient detail has been presented to understand the mitigation approach in respect of the Minsmere - Walberswick designated site.

5. Monitoring and Mitigation Plan for Minsmere – Walberswick European Sites and Sandlings (North) European Site²⁵

5.1. We welcome the updates to the Monitoring and Mitigation Plan for Minsmere – Walberswick European Sites and Sandlings (North) European Site (and which are also described in paragraph 11.2.6 of the Applicant’s Comments on submissions at earlier deadlines²⁶), including some of those recommended in our comments at Deadline 3²⁷. In summary, our comments on the changes proposed are as follows:

- We welcome the proposed update to the title (to the Monitoring and Mitigation Plan for Minsmere – Walberswick European Site and Sandlings (North) European Site) although the title page of the document still uses the old title of Minsmere Monitoring and Mitigation Plan.
- We welcome the inclusion of Suffolk Wildlife Trust in the named land managers.
- We note the proposal that a 5% increase in visitors is used as an initial trigger to investigate the need for mitigation. We are pleased that evidence of impacts will also be included as potential triggers as it is possible that small increases (under 5%) in use could have negative impacts if that use is particularly damaging (e.g. use of motor vehicles, fires). We also note the need to ensure that the baseline monitoring is robust to ensure that the 5% increase trigger level can be accurately identified.
- We welcome the acknowledgement that impacts do not have to relate solely to the Application, but that where the Application makes a significant contribution to change and potential damage, even in-combination with other factors and/or activities, such impacts must be mitigated.
- We welcome the increased flexibility around any potential need to continue with monitoring in the operational period if usage does not return to previous levels and patterns immediately post-construction.
- We consider that alignment of the visitor and habitat surveys as now proposed will aid detection of impacts.
- We welcome the clarification of the scope of wardening roles, although note our query around resourcing levels, below.

5.2. We consider that the following points still require addressing:

²⁵ Monitoring and Mitigation Plan for Minsmere – Walberswick European Sites and Sandlings (North) European Site [REP5-105]

²⁶ Comments on submissions at earlier deadlines [REP5-119]

²⁷ See p26 - 31 of RSPB and SWT’s Comments on Other Submissions (submitted at Deadline 2) [REP3-074]

- We query how mitigation and monitoring of impacts on species and habitats other than those that are features of the European sites, as required by the EIA²⁸, will be addressed and secured.
- As beaches in the area could see increased footfall, we consider that this impact is likely to require mitigation and that little terns should therefore be included in the primary list of ‘species and habitats of concern’. Little terns should also be included in the species monitored (covered in Table 4.3)
- We note that the process by which the need for additional mitigation measures would be agreed and such measures implemented is outlined in Section 3 Governance. We have previously queried whether it will be possible to implement additional mitigation in a timely manner based on this process²⁹. Given the importance of putting mitigation in place before potentially significant impacts occur, we recommended that consideration is given to streamlining this process as far as possible. We note that paragraph 5.2.3 states that a strategy will be developed to avoid delays in this process and consider that this will be important to ensure that no adverse effects on integrity of the Minsmere-Walberswick or Sandlings SPAs arise. We therefore recommend that further consideration is given to this strategy during the Examination and would be pleased to engage in discussions of potential options.
- Given the breadth of the monitoring and reporting remit of the two wardening staff (described in paragraph 5.3.1), we query whether the initial resourcing of two wardens will be sufficient to also enable adequate provision of the educational and engagement roles described in Table 5.1?
- We remain of the view that in order to fully mitigate impacts of the Application on the designated sites, proposals for alternative greenspace should be developed alongside this mitigation and monitoring plan.

6. Monitoring and Mitigation Plan for Sandlings (Central) and Alde-Ore Estuary European Sites³⁰

- 6.1. We welcome the production of a monitoring and mitigation plan for the Alde-Ore Estuary and Sandlings South SPAs. We note that this follows similar principles to the plan for the Minsmere-Walberswick and Sandlings North SPAs, with the exception that no initial mitigation measures are proposed, and therefore our comments on the governance procedures, visitor monitoring and additional mitigation measures for that plan will also be relevant here. However, we wish to reiterate our concerns around the lack of mitigation and monitoring of impacts on species and habitats required by the EIA. The shingle beach between Aldeburgh and Thorpeness forms part of the Leiston-Aldeburgh SSSI and hosts important shingle flora which are sensitive to trampling. As yet, we have not seen plans to address these potential impacts at the EIA level.
- 6.2. In relation to Section 2 Scope – we have previously queried the omission of the Orfordness to Shingle Street SAC from this plan and the Applicant responded to this in paragraph 11.2.5 of

²⁸ Potential impacts are acknowledged in paragraph 14.12.156 of ES Volume 2 Main Development Site Chapter 14 Terrestrial Ecology and Ornithology ([AS-033](#)), with the need for a mitigation plan stated in 14.12.163

²⁹ See paragraph 7.31 of the RSPB and SWT’s Comments on Other Submissions (submitted at Deadline 2) [[REP3-074](#)]

³⁰ Monitoring and Mitigation Plan for Sandlings (Central) and Alde-Ore Estuary European Sites [[REP5-122](#)]

their Comments on submissions at earlier deadlines³¹ stating that access to Orfordness from Slaughden (south of Aldeburgh) is prohibited. We understand that non-permitted access is however an issue to the south of Slaughden and any increase in such access could affect the vegetated shingle feature along this coastline (noting the proximity of the SAC to the parking to the south side of Aldeburgh). We would therefore support provision of monitoring in this location and consideration of what measures might be needed and possible should the monitoring show an increase in use.

- 6.3. In relation to both recreation draft MMPs, we are grateful for the continuing discussions with the Applicant but reserve the right to comment further if necessary.

7. Aldhurst Farm Technical Note³²

- 7.1. We welcome the access improvements being proposed for Aldhurst Farm, and in particular the attention being given to the provision of suitable facilities and education aimed at dog walkers with the aim of contributing to a reduction in impacts on the designated sites and their features from displaced visitors. We note the ecological aims of the Aldhurst Farm site and the need for access to be carefully managed in order to ensure that the dual purposes of the site (ecological functionality and recreational use) remain compatible and are not compromised. We are pleased to see that this has also been considered in the report.
- 7.2. We acknowledge that the Applicant has stated that they are not promoting Aldhurst Farm as formal Suitable Alternative Natural Green Space (SANGS) but note that the aim to apply Natural England's best practice principles from the SANGS guidance is stated in paragraph 1.1.4 of the Aldhurst Farm Technical Note. We have therefore made a comparison of Aldhurst Farm against the Natural England criteria³³ to inform our understanding of the extent to which the provision at Aldhurst Farm has taken account of these criteria and 'best practice'. Please note we have used the term 'alternative greenspace' in this document rather than the formal term 'SANGS' as we accept the important point of needing to ensure that mitigation of the specific impacts of the Application (from both construction workers and displaced existing recreational users) is provided, and, whilst alternative greenspace is required, it may or may not need to be formally considered SANGS. However, we do wish to repeat that since the construction period is for around 12 years and therefore construction workers will be present for this period as well as the displacement of existing recreational users. Displacement of existing users may also persist beyond that point as new habits may have formed over this time period. This is a substantial amount of time from an ecological standpoint and resulting disturbance or damage could cause long-term changes to breeding populations and species distributions and persistent change to habitats within designated sites.

Extent of recreational provision

- 7.3. With regard to the extent of the site, we note that "*Aldhurst Farm provides 27ha of new Open Access Land which, at the rate of 8ha per 1000 people would provide for 3,375 permanent residents*" as stated in paragraph 1.6.2. 3000 new residents are proposed during the construction period and therefore if considered as alternative greenspace for construction

³¹ Comments on submissions at earlier deadlines [REP5-119]

³² Aldhurst Farm Technical Note [REP5-126]

³³ Available at <https://www.bracknell-forest.gov.uk/sites/default/files/documents/suitable-accessible-natural-green-space-guidance.pdf>

workers and using the 8ha per 1000 new residents recommendation from the Natural England guidance, Aldhurst Farm would be considered sufficient in terms of extent. However, the extent is not likely to be sufficient to provide mitigation for impacts from both construction workers and displaced existing recreational users.

- 7.4. Whilst we acknowledge the significant progress being made with the mitigation and monitoring plans for impacts of displaced recreational users³⁴, we consider that the mitigation hierarchy requires measures first of all to reduce impacts as far as possible. The Applicant predicts a total of over 244,000 additional recreational visits per year to the Minsmere-Walberswick, Sandlings and Alde-Ore Estuary designated sites as a result of the Application displacing existing recreational users, and whilst the metric above cannot be applied in this context, we consider that it is clear that additional alternative greenspace is required in order to achieve sufficient reduction of impacts of both displaced recreational users and construction workers.

Features of the recreational provision

- 7.5. Table 1 below compares the proposals within the Aldhurst Farm Technical Note to Natural England's SANGS criteria and is used to inform our understanding of the level to which the recreational features provided meet best practice guidelines. From the Table, it can be seen that Aldhurst Farm generally meets most of these guidelines and we welcome the recreational features proposed within the Technical Note. One main exception is the proximity of the site to the Leiston Sewage Treatment Works. We query whether smells from this site could affect levels of usage of the site and whether there is potential to consider path routing to minimise these effects (noting that views are screened by tree cover)? Other points relate to the multiple uses of the site and the need to ensure that recreational use does not compromise ecological objectives. This has resulted in a need for some access management measures (e.g. fencing of paths) and further consideration to optimise design may be needed.

³⁴ Monitoring and Mitigation Plan for Minsmere – Walberswick European Sites and Sandlings (North) European Site [REPS-105] and Monitoring and Mitigation Plan for Sandlings (Central) and Alde-Ore Estuary European Sites [REPS-122]

Table 1. Comparison of Aldhurst Farm proposals within the Technical Note to Natural England’s SANGS Guidelines to inform assessment of extent to which Aldhurst Farm follows best practice.

SANGS Guidelines		Aldhurst Farm Provision ³⁵
‘Essential’		
1	Parking on all sites larger than 4ha (unless the site is intended for use within 400m only)	20 spaces provided
2	Circular walk of 2.3-2.5km	Circular route of 3.5-4km stated – this is not one completely route but has out and back sections linking circular routes around the three sections of the site
3	Car parks easily and safely accessible by car and clearly sign posted	Easily accessible (road signage not covered in the Aldhurst Farm Technical Note)
4	Access points appropriate for particular visitor use the SANGS is intended to cater for	Accessible gates and/or wide gaps throughout. Direct access for construction workers staying at LEEIE and link via Bridleway 19 to accommodation campus
5	Safe access route on foot from nearest car park and/or footpath	Car park linked to main open access areas by footpath
6	Circular walk which starts and finishes at the car park	No - car park connected to other routes via an out and back section
7	Perceived as safe – no tree and scrub cover along part of walking routes	Paths pass along edges of tree belts but not within tree cover.
8	Paths easily used and well maintained but mostly unsurfaced	East-west path surfaced, the rest are mown paths
9	Perceived as semi-natural with little intrusion of artificial structures	Only artificial structures on site are benches and bird hide but likely to have views of artificial structures surrounding site. Also, the main-east west route is fenced on either side making it feel less natural. This is required to protect the habitat areas but reduces the quality of the natural green space access experience.
10	If larger than 12 ha then a range of habitats should be present	27ha - primarily grassland but with scattered scrub and views to wetland
11	Access unrestricted – plenty of space for dogs to exercise freely and safely off the lead	Stock proof perimeter and internal fencing to create a secure environment for off lead dog walking
12	No unpleasant intrusions (e.g. sewage treatment smells etc)	Site surrounds Leiston Sewage Treatment Works – views screened by trees but smells possible/likely
13	Clearly sign posted or advertised in some way	Road signage not mentioned within the Aldhurst Farm Technical Note, but local newsletters planned
14	Leaflets or website advertising their location to potential users (distributed to homes and made available at entrance points and car parks)	Local newsletters to be circulated over the summer and autumn to promote the site
‘Desirable’		
15	Can dog owners take dogs from the car park to the SANGS safely off the lead	All areas safe for off lead exercise, except car park itself
16	Gently undulating topography	Yes
17	Access points with signage outlining the layout of the SANGS and routes available to visitors	Habitat information boards, orientation and en-route signage
18	Naturalistic space with areas of open (non-wooded) countryside and areas of dense and scattered trees and shrubs. Provision of open water is desirable	Primarily grassland but with scattered scrub, marginal tree belts and views to wetland and open water (no access to wetland/open water as this is SSSI compensation)
19	Focal point such as a view point or monument within the SANGS	Bird hide with views over the wetland habitat and (non-accessible) grassland

³⁵ Based on details in the Aldhurst Farm Technical Note [\[REP5-126\]](#)

- 7.6. We note that these criteria are focused on ‘typical’ residential recreational users and hence the comparison of Aldhurst Farm to these guidelines may be more relevant to the displacement of existing recreational users, who are more likely to be accompanied by children and/or dogs. Construction workers from the accommodation campus and caravan site are not likely to be accompanied by dogs³⁶ or children, and due to their profile, may be more likely to take part in active recreational activities (e.g. mountain/off-road biking, watersports). As we explained in our Response to the Applicant’s Comments on Responses to AR.1.12³⁷:

“MENE data for 2018/19 indicates that health and exercise is now the most common reason for people to spend time outdoors³⁸ and therefore, whilst most construction workers may not have dogs, it should be considered that the Suffolk Coast has many opportunities for more active recreation e.g. mountain biking and watersports which may be more attractive to the workforce and have the potential to affect designated sites.

Whilst we also acknowledge that provision for indoor sporting recreation for the workforce has been made, it is also worth noting that 44% of (indoor) gym users have stated they would prefer to be outdoors³⁹. We therefore consider that the access improvements and recreational facilities proposed at present will not address the need for outdoor active/sporting recreation.”

- 7.7. As with the extent of the site discussed above, we again conclude that Aldhurst Farm will provide some beneficial mitigation but is not sufficient in terms of the recreational features provided to mitigate impacts of both construction workers and displaced existing recreational users.

Conclusion

- 7.8. As explained above, we accept that Aldhurst Farm is likely to provide alternative greenspace which will provide a contribution to a reduction of recreational impacts of the Application. However, we do not consider it sufficient in extent or recreational features provided to provide acceptable mitigation of impacts of **both** construction workers and displaced existing recreational users. Given the recreational features accommodated by Aldhurst Farm, we recommend that its development for families, walkers and dog walkers is continued with the aim of reducing recreational visits to designated sites by displaced existing recreational users and that alternative outdoor ‘active’ recreational provision is sought for construction workers in addition to this.
- 7.9. Monitoring of recreational usage of the Aldhurst Farm will be important to determine the success of the site as mitigation and we note that paragraph 3.2.9 of the TEMMP⁴⁰ commits to such monitoring. We recommend that this includes visitor surveys and engagement with user groups to seek to continue to refine recreational provision and design to ensure usage is maximised.

³⁶ We would request the Applicant provides clarity on whether dogs (and possibly cats) are banned within the accommodation campus and caravan site

³⁷ See p5 of the RSPB and SWT’s Comments on Other Submissions Submitted at Deadline 3 [[REP5-165](#)]

³⁸ [MENE Headline Report 2018-2019](#)

³⁹ [Sport England \(2015\) Getting Active Outdoors: A study of Demography, Motivation, Participation and Provision in Outdoor Sport and Recreation in England](#)

⁴⁰ Terrestrial Ecology Monitoring and Mitigation Plan (TEMMP) [[REP5-088](#)]

8. White fronted goose survey report⁴¹

8.1. We welcome the provision of a survey report aiming to understand the movements of European white-fronted geese between Minsmere and North Warren, although we have some concerns about limitations of the survey schedule and aspects of the analysis in the report as discussed below.

8.2. The Applicant has established that the construction site lies on the flight line of a nationally important population of wintering European White-fronted Goose, which relates to one of only 15 sites in the UK that supports nationally important numbers⁴². The report states (in 2.0 Summary) that:

“It has been noted that during the 2020/21 winter, up to four times the normal numbers of Greater White-fronted Geese were reported in Suffolk when compared to the previous winters”

8.3. However, we note that no evidence is provided to support this statement. WeBS data indicate the most recent 5 year mean peak is 205⁴³ birds at North Warren and Thorpeness Mere, although peak counts of over 300 on WeBS surveys were recorded in 2011/12, 2012/13 and 2016/17 and over 400 birds were recorded in 2010/11. Recent peak counts for North Warren are 280 in 2020⁴⁴ and c.650 in 2021⁴⁵. Therefore, whilst we agree that there was an influx of birds in winter 2020/21, we consider that this is part of the known annual fluctuation in the North Warren population in response to weather-related movements of geese from the continent⁴⁶.

8.4. Section 1.0 Introduction explains that recordings of bird activity took place between December 2020 and March 2021. Following heavy rain in early 2021 water levels rose and the geese then frequently roosted at North Warren, which explains why they were not picked up in numbers after early January. This may mean the surveys have missed white-fronted goose activity earlier in the winter.

8.5. Section 4.0 Constraints notes that approximately half of the survey nights were affected by rain and/or wind and states that:

“During the surveys some nights were affected by rain and or wind which impaired the ability to hear or see the calls on sonograms. During these conditions birds tend not to migrate as it is more energy consuming.”

8.6. We note that whilst it is correct to assume that most birds will not embark on a migration journey in wet or windy conditions, this is not pertinent to the purposes of the study which was to establish if birds made a nocturnal roost flight from North Warren to Minsmere. This section

⁴¹ White fronted goose survey report [REP5-125]

⁴² see WeBS Report Online <https://app.bto.org/webs-reporting/numbers.jsp?speciescode=51> (Note: select European white-fronted goose from the drop-down menu). Note that 21 birds = 1% of the current UK wintering population for European White-fronted Goose

⁴³ Mean peak of 205 birds for North Warren and Thorpeness Mere for 2015/16 to 2019/20. WeBS Report Online <https://app.bto.org/webs-reporting/numbers.jsp?speciescode=51> (Note: select European white-fronted goose from the drop-down menu).

⁴⁴ Peak count for 2020 is 280 on 02.01.2020 (D. Thurlow, pers. comm.)

⁴⁵ c.650 were reported on north marsh North Warren at dusk on 15.01.2021 (per [Suffolk Birding with BINS - January 2021 \(webs.com\)](#))

⁴⁶ see p27 of [wituk-2018-19-web.pdf \(bto.org\)](#) for more information on recent trend for short-stopping on the continent with higher influxes to UK in response to weather conditions

goes on to explain that at least some groups of geese were detected on rainy/windy nights, but we query whether some movements (perhaps particularly of smaller numbers of birds) may have been missed.

8.7. The report concludes by stating that:

“It is my opinion that the majority, if not all, of the Greater White-fronted Geese record moving over the site were part of the influx and not part of the normal North Warren RSPB population. There was not a regular movement every night as would be expected with birds going to roost. Wildfowl will generally use the same roost site and there are few bodies of water that are suitable for this species in the area.”

8.8. We have observed that birds regularly fly from North Warren to roost at Minsmere but will not necessarily always use the same roost site. There are several water bodies that are suitable at Minsmere including those on the Scrape, South Levels and North Levels, as indicated by reserve records of roosting birds⁴⁷. We acknowledge that birds from North Warren birds may not roost at Minsmere every night, but frequently do during the winter. As explained above, changes in water levels at Minsmere meant birds primarily roosted at North Warren in the latter part of winter 2020/21. However, the late December/early January recordings will almost certainly be roost flights. We therefore consider that the report has unduly considered movements to relate to migration rather than feeding and roost flights, which will in our view represent the majority of sounds recorded.

8.9. We also note the reference to waterfowl activity in the first paragraph of section 3.0 of the report:

“Due to the volume of dabbling ducks feeding on the Sizewell Belts every night, not all of the calls of ducks were marked. For example, during the 15 nights in December 2020 over 12,000 calls were logged.”

8.10. The diurnal distribution of waterfowl on the Minsmere South Levels and Sizewell Marshes does not necessarily fully reflect how birds are using the wetlands, as many dabbling ducks make evening flights to feeding sites. The statement above raises the concern that the Applicant’s current assessment of impacts on waterfowl overlooks the potential for the construction site to have a very significant impact on birds moving between Minsmere and Sizewell Belts⁴⁸ at night. Given the significant overlap of the daytime 70dB peak noise contour with the eastern area of Sizewell Marshes during construction Phases 1 and 2 in particular⁴⁹, the limited understanding of bird movements around and usage of these areas during dark hours means impacts could have been significantly underestimated.

8.11. We therefore conclude that the report provides further evidence that adverse effects on the integrity of the Minsmere-Walberswick SPA arising from impacts on wintering white-fronted geese, gadwall and shoveler cannot be ruled out and we may need to consider this further and reserve the right to provide more comments at a future deadline.

⁴⁷ Roosting records from 2011-13 include 215 roosting on the North Levels in February 2011, 340 on the North Levels and 240+ on the Scrape in January and February 2012 respectively and 180+ on the South Levels in February 2013.

⁴⁸ Note that ‘Sizewell Belts’ is usually used to refer to the SWT-managed nature reserve which forms part of Sizewell Marshes SSSI

⁴⁹ Shadow HRA Report Addendum Appendices 1A-10A Part 5 of 5 [[REP4-004](#)]

9. Acoustic Fish Deterrent Report⁵⁰

- 9.1. We note the provision of further information around the technical feasibility of installing an Acoustic Fish Deterrent (AFD) system at Sizewell C. Although we do not have technical expertise in this area and therefore cannot comment in detail on the contents of this report, we note that there is debate amongst those Interested Parties with such expertise around the justification for the Applicant's position that installation of AFD is not feasible on grounds of safety with regard the maintenance regime and whether these concerns could be overcome through technical progress before such a system would be required. We therefore welcome the continued dialogue around this option and note our support for consideration of technical solutions to the Applicant's concerns which may enable AFD to be included. We may comment further on these discussions at a future Deadline.
- 9.2. Our concern is around the HRA implications of the limited mitigation of fish mortality currently proposed and the effects of potential prey depletion on bird species of designated sites (the Minsmere-Walberswick, Alde-Ore Estuary and Outer Thames Estuary SPAs). At present, we do not agree that there is sufficient certainty around the effectiveness of the mitigation currently proposed (the Low Velocity Side Entry intakes and Fish Recovery and Return system) and the prediction of fish mortality arising from entrainment and impingement to rule out adverse effects on integrity of these populations. We therefore continue to request that, in addition to discussions of technical feasibility, further assessment is provided showing the level of mitigation of fish mortality achievable both with and without an AFD to inform the HRA. We note that paragraph 1.3.14 of Written Summaries of Oral Submissions made at ISH7: Biodiversity and Ecology⁵¹ commits to providing "*information as to the impact with and without an AFD*" at Deadline 6 and we look forward to the opportunity to review this.

10. Sizewell Link Road Landscape and Ecology Management Plan (OLEMP)⁵²

- 10.1. We note the provision of bat boxes in Table 5.3 and query whether bird boxes should also be included here. Table 6.1 notes monitoring of bat and bird boxes will be included in the five year survey and review.
- 10.2. As stated in our Written Representations⁵³ we have concerns over long-term management and establishment of the habitats, and it is expected that the LEMP would contain long term management objectives.

⁵⁰ Acoustic Fish Deterrent Report [REP5-123]

⁵¹ Written Summaries of Oral Submissions made at ISH7: Biodiversity and Ecology Parts 1 and 2 (15-16 July 2021) [REP5-112]

⁵² Sizewell Link Road Landscape and Ecology Management Plan (OLEMP) [REP5-076]

⁵³ Paragraph 5.101

11. Two Village Bypass Landscape and Ecology Management Plan (OLEMP)⁵⁴

- 11.1. We note the provision of bat boxes in Table 5.3 and query whether bird boxes should also be included here. Table 6.2 notes monitoring of bat and bird boxes will be included in the five year survey and review.
- 11.2. As stated in our Written Representations⁵⁵ we have concerns over long-term management and establishment of the habitats, and it is expected that the LEMP would contain long term management objectives.

12. Natterjack toad licence method statement⁵⁶

- 12.1. We welcome the updated Natterjack toad licence method statement⁵⁷ proposing the Water Management Zone (WMZ) avoid the rabbit warrens used by the natterjack toads and the proposed creation of additional ponds and landscaping to provide foraging, refuge and overwintering habitat within Retsoms Field. We provide our initial comments below. We will review the method statement and the specific proposals for habitat creation in detail and provide further comment at a future deadline.

Comments on Part 1

- 12.2. We note that paragraph 1.2.18 acknowledges the sub-optimal weather conditions during some of the 2020 surveys could have accounted for the toad counts recorded (which were low).
- 12.3. Paragraph 1.2.23 notes the low tadpole count in 2020 has been attributed to corvid predation and notes measures are being explored to prevent this in 2021 which may include netting. We query whether pond N1 was netted and when the 2021 survey results will be submitted to the Examination.

Comments on Part 2

- 12.4. Paragraph 1.1.2 considers lighting of the WMZ and notes it is unlikely that operational lighting would be required for the WMZ, although this would be determined by detailed design. If required operational lighting should minimise disturbance towards Retsoms Field.
- 12.5. We welcome paragraph 1.1.3 which states

The precise extent of the WMZ is to be determined by ongoing water management studies but the design will be cognisant of the locations of the rabbit warrens within the area, which are close to the breeding pond, and are used as hibernation sites by the natterjack toads. The design layout of the WMZ will exclude the rabbit warrens and incorporate buffer zones (see Figure B in Appendix A).

⁵⁴ Two Village Bypass Landscape and Ecology Management Plan (OLEMP) [[REP5-077](#)]

⁵⁵ Paragraph 5.101

⁵⁶ Natterjack toad licence method statement [[REP5-053](#)]

⁵⁷ Volume 2 Main Development Site Chapter 14 Terrestrial Ecology and Ornithology Appendix 14C Protected Species - Appendix 14C7B: Natterjack Toad Draft Licence [[REP5-053](#)]

- 12.6. However we note that Figure B shows the WMZ parameter fence appears to encroach into the 10m buffer zone and request the Applicant confirms the buffer zone around the rabbit warrens.
- 12.7. We also welcome the final bullet of paragraph 1.3.3 confirming *Subject to agreement with the RSPB, a land bridge between N3 in Retsoms field and N4 in Minsmere would be installed* and Figure C shows the proposed location of the land bridge.
- 12.8. Paragraph 1.4.6 notes ponds will be monitored annually for the duration of the WMZ operation and the biennially for 6 years. In our view annual monitoring should be continued to detect residual impacts from the development.

13. Comments on submissions at earlier deadlines

The RSPB and SWT Written Representations ⁵⁸ reference and concern	Applicant's Comments on Submissions from earlier deadlines ⁵⁹ and appendices ⁶⁰ reference and response re our Written Representations	Comments from the RSPB and Suffolk Wildlife Trust
Land take from Sizewell Marshes SSSI (including impacts of the SSSI crossing)		
3.31-3.49 SSSI crossing	[REP5-120] Appendix J Future adaptation of the SSSI crossing in the DCO submission	As the Applicant acknowledges (2.3.3) the National Planning Policy Framework ⁶¹ states <i>that the development should be made safe for its lifetime without increasing flood risk elsewhere</i> . We note the proposal in section 2.4 to raise the height of the SSSI crossing and install a vertical wall as a flood defence and query whether there could be flood risk implications for the RSPB Minsmere reserve.
3.83-3.86 Potential impacts from the Benhall Fen Meadow site on the Abbey Farm compensation site	[REP5-120] Appendix L Abbey Farm Compensation Site	We note the Applicant states that there would be no water taken from the River Fromus and no water control structure placed in the River (1.2.4) and fen meadow habitat will rely on ground water management (1.2.5), however the draft Fen Meadow Plan will be submitted at Deadline 6 to provide more detail of the works (1.2.2 and 1.2.4). We reserve the right to comment further once we have reviewed the Plan.
Coastal Geomorphology		
3.113 – 3.115 Minsmere – Walberswick SAC feature	Paragraph 11.2.8 of SZC Co. Comments on Written Representations [REP3-042] notes the comments made in relation to the reported presence of annual vegetation of drift lines and perennial vegetation of stony banks along the Minsmere shoreline immediately to the north of the proposed order limits. SZC Co. will provide a detailed response at Deadline 7.	Noted.

⁵⁸ Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [\[REP2-506\]](#)

⁵⁹ Applicant's Comments on Submissions from earlier deadlines (Deadlines 2-4) [\[REP5-119\]](#)

⁶⁰ Comments on Submissions from Earlier Deadlines (Deadlines 2-4) Appendices [\[REP5-120\]](#)

⁶¹ [National Planning Policy Framework](#) (2021) paragraph 159

The RSPB and SWT Written Representations ⁵⁸ reference and concern	Applicant's Comments on Submissions from earlier deadlines ⁵⁹ and appendices ⁶⁰ reference and response re our Written Representations	Comments from the RSPB and Suffolk Wildlife Trust
Hydrology		
3.226 mitigation	Paragraph 11.2.7 of SZC Co. Comments on Written Representations [REP3-042] An updated version of the Outline Drainage Strategy is to be submitted at Deadline 6, taking account of comments from RSPB and SWT.	Noted.
3.258 Detailed monitoring and mitigation plan	11.34 Table 14.1, Line 3.258 of SZC Co. Comments on Written Representations [REP3-042] advises that a monitoring plan will be submitted [at Deadline 5] and this will now be provided at Deadline 6.	Noted.
Noise and Visual Disturbance (waterbirds)		
3.275 – 3.276 Definitions of daytime and night-time	[REP5-120] Appendix N Evening noise and bird disturbance	See our detailed comments on this Appendix below
3.285 Uncertainty regarding noise impacts during construction Phase 5	[REP5-120] Appendix U - Figure 1 revised noise contours	We welcome the provision of the revised noise contours for Phase 5 of the construction period in Figure 1, which now includes the previously missing noise contour representing 64-70dB. This shows that the extent of this contour on the Minsmere South Levels is similar to construction Phases 1 and 2, although the extent on Sizewell Marshes is smaller than in Phases 1 and 2. We therefore remain concerned regarding noise effects on breeding birds on the South Levels during Phase 5 of the construction period.
Noise and Visual Disturbance (marsh harriers)		
3.366 – 3.489 Noise and visual disturbance to marsh harriers of the Minsmere-Walberswick SPA and Ramsar site	[REP5-120] Appendix M Marsh harrier and marine birds	See our detailed comments on this Appendix below
Marine Ecology		
3.516 – 3.621 Marine ecology	[REP5-120] Appendix P – Marine Ecology	See our detailed comments on this Appendix below

The RSPB and SWT Written Representations ⁵⁸ reference and concern	Applicant's Comments on Submissions from earlier deadlines ⁵⁹ and appendices ⁶⁰ reference and response re our Written Representations	Comments from the RSPB and Suffolk Wildlife Trust
Bats		
3.622-3.762	[REP5-120] Appendix D	We note Figure 2 includes the revised WMZ with the proposed 'dark corridor'. We defer to East Suffolk Council and reserve the right to comment at a future deadline.
3.665 and 3.735-3.740 Sizewell Link Road	[REP5-120] Appendix Q Potential combined impact of the MDS and SLR on bats	The Applicant has presented no new information. The concerns detailed in our Written Representations ⁶² submitted at Deadline 2 remain.
Natterjack toads		
3.763-3.795 and Appendix 3	[REP5-120] Appendix D MDS WMZ summary	We welcome Figure 1 includes the revised WMZ to avoid the natterjack toad hibernation site.
Biodiversity Net Gain		
Section 5	[REP5-120] Appendix O Response to RSPB and SWT on BNG	<p>We note the Applicant has provided a detailed response in a 50-page table.</p> <p>Our main concerns remain including the current policy guidance on BNG e.g. National Planning Policy Statement, BNG Good Practice Principles for Development⁶³ as well as the latest draft of the Environment Bill⁶⁴ (as set out in detail in our written representations submitted at deadline 2⁶⁵) namely:</p> <ul style="list-style-type: none"> • The Environment Bill is an outline piece of legislation, not near Royal Assent, nor have the BNG secondary legislation and guidance required been drafted (we are confident the regulations will not be finalised

⁶² Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [\[REP2-506\]](#)

⁶³ [Baker, J., Hoskin, R. and Butterworth, T. \(2019\) Biodiversity net gain. Good Practice Principles for Development. A practical guide.](#)

⁶⁴ <https://bills.parliament.uk/publications/42243/documents/555>

⁶⁵ Section 5 of Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [\[REP2-506\]](#)

The RSPB and SWT Written Representations ⁵⁸ reference and concern	Applicant's Comments on Submissions from earlier deadlines ⁵⁹ and appendices ⁶⁰ reference and response re our Written Representations	Comments from the RSPB and Suffolk Wildlife Trust
		<p>before the end of the Examination or DCO decision) and therefore the new system a long way from being up and running.</p> <ul style="list-style-type: none"> • In addition both the Environment Bill and current Policy and Guidance presumes projects damaging protected features cannot claim to be delivering net gain, therefore some of the technical arguments within in the Applicant's response may be deemed not relevant. <p>We provide comments on a few specific points below and we reserve the right to comment further at a future deadline.</p>
<p>5.2 We do not agree the Application can achieve net gain due to direct adverse impact on Sizewell Marshes SSSI</p>	<p>Appendix O: The calculations demonstrate an increase in biodiversity units post development. In the most recent calculations, this distinction is clear, with an increase in biodiversity units highlighted, the client is not claiming 'biodiversity net gain' as a statutory requirement but to evidence the efficacy of the mitigation, compensation and enhancement proposed. Sizewell Marshes SSSI has been excluded from the calculation.</p>	<p>We note the Applicant states it is not claiming 'biodiversity net gain' as a statutory requirement but to evidence the efficacy of the mitigation, compensation and enhancement proposed.</p> <p>We consider the use of Biodiversity Metric 2.0 is an interesting voluntary exercise that should not be mis-used to make claims of biodiversity net gain from an Application that is damaging protected sites and their features.</p> <p>We are concerned the Applicant has claimed a 19% net gain in biodiversity in the Sizewell C Community Newsletter⁶⁶ published in early May 2021</p> <p style="text-align: center;"><i>The measures we are taking will protect and enhance nature and, in the long run, will lead to a 19% net gain in biodiversity.</i></p> <p>And in Sizewell C and the Environment⁶⁷</p> <p style="text-align: center;"><i>A net gain in biodiversity of 19%. The biodiversity net gain has been assessed using the latest Natural England Biodiversity</i></p>

⁶⁶ [Sizewell C Community Newsletter](#)

⁶⁷ [Sizewell C and the Environment](#)

The RSPB and SWT Written Representations ⁵⁸ reference and concern	Applicant's Comments on Submissions from earlier deadlines ⁵⁹ and appendices ⁶⁰ reference and response re our Written Representations	Comments from the RSPB and Suffolk Wildlife Trust
		<i>Metric (2.0). It does not include replacement habitat for the 6ha of Sizewell Marshes SSSI needed for construction. The assessment was carried out by consultants on behalf of Sizewell C and was independently peer-reviewed.</i>
5.3 We...agree the Application should take account of the requirements the new net gain system will include once established	Appendix O: We will consider the value of undertaking additional work using the Biodiversity Metric 3.0 published in July 2021.	As we have said previously and above, the use of Biodiversity Metric 2.0 is an interesting voluntary exercise that shows the Application is not delivering the biodiversity gain expected for a multibillion-pound Application. The Biodiversity Metric 3.0 is published but there is no specific secondary legislation nor guidance on it as yet and therefore we do not consider the Applicant should undertake additional work using the Biodiversity Metric 3.0.
5.13 Paragraph 1575 of the Environment Bill's explanatory notes broadly excludes any development from BNG if it has a direct adverse impact on a protected site.	Appendix O: The Biodiversity Unit calculations and demonstration of biodiversity net gain using the metric were carried out to demonstrate the biodiversity value of the post development site and the efficacy of the mitigation proposed. The Sizewell Marshes SSSI and any mitigation and/ or compensation relating to them were excluded from the calculation.	Please see response to 5.2

14. Comments on submissions at earlier deadlines – Appendices⁶⁸

Appendix M Marsh harrier and marine birds

- 14.1. We have the following comments regarding the Applicant's response to our comments on the assessment of noise and visual impacts on marsh harriers⁶⁹ (noting that marine birds are covered in Appendix P rather than this section as stated).
- 14.2. In paragraph 1.2.32 the Applicant states that the RSPB and SWT are broadly supportive of the habitat components proposed for the compensation area at Abbey Farm. This is correct, but we consider that further details are still required regarding species mixes and establishment of the proposed habitats to enable robust monitoring of the quality of the establishment of these components, are required by the TEMMP⁷⁰ and as previously commented, within the specific marsh harrier creation and implementation reports, clearly linked to the DCO by way of Requirement 14C (please see comments above).
- 14.3. Given the importance of habitat structure for foraging marsh harriers (particularly with regard e.g. the tussocky grassland component) and the food sources available to prey e.g. in the wildbird seed and nectar rich plots, we consider that finalised details of mixes, species proportions and establishment methods should be included as specific compensation targets with monitoring to check for achievement. This will help enable compliance with the habitat creation and implementation plans to be assessed.
- 14.4. In paragraph 1.2.33 the Applicant describes the potential for the wetland habitats proposed to be created in the first winter of construction to provide some limited functionality in terms of marsh harrier prey provision before the habitats are fully established. Whilst we agree that limited numbers of prey may be available in these habitats in the early stages of their establishment, we do not agree that there is sufficient certainty that the significant level of prey uplift required for compensatory purposes is likely to be achieved in these early stages. We also note the potential for work to stretch into a second winter should any delays (e.g. weather related access issues) occur and for functionality to therefore be delayed further. Hence, we maintain our position that these habitats should be created prior to construction given the need for them to provide compensatory foraging habitat (which should be available in advance of impacts occurring).
- 14.5. We acknowledge the error described in paragraph 1.2.34 relating to the upper 95% confidence interval for rabbit densities for tussocky grassland given in Table 4 of our Written Representations and taken from Mathews *et al.* (2018)⁷¹. However, as our calculations were based on the medians (as confidence intervals were not available for all species) this did not affect our overall totals. We maintain our concern that the predictions of small mammal density in Wood (2019)⁷² are at or beyond the upper levels based on Mathews *et al.* (2018) and therefore, as stated in our Written Representations, that "*the high small mammal*

⁶⁸ Comments on Submissions from Earlier Deadlines (Deadlines 2-4) Appendices [\[REP5-120\]](#)

⁶⁹ See p73 – 99 of the Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [\[REP2-506\]](#)

⁷⁰ Table 3.3 of the Terrestrial Ecology Monitoring and Mitigation Plan (TEMMP) [\[REP5-088\]](#)

⁷¹ [Mathews, F., Kubasiewicz, L.M., Gurnell, J., Harrower, C.A., McDonald, R.A. & Shore, R.F. \(2018\) A Review of the Population and Conservation Status of British Mammals. A report by the Mammal Society under contract to Natural England, Natural Resources Wales and Scottish Natural Heritage. Natural England, Peterborough](#)

⁷² ES Volume 2 Main Development Site Chapter 14 Terrestrial Ecology and Ornithology Appendix 14C5 Marsh Harrier Mitigation Area Feasibility Report ([APP-259](#))

*densities applied have the effect of significantly overestimating small mammal abundance for the compensatory habitats and exaggerating the uplift from baseline conditions*⁷³.

- 14.6. We note that in the comments on the constraints affecting the marsh harrier compensation area, the Applicant states that the footpath at the northern end of the site will not cause disturbance “due to the very low visual and noise intrusion associated with footpath use” (paragraph 1.2.39). However, we note that paragraph 1.2.67 of the Applicant’s Written Summaries of Oral Submissions made at ISH7 notes the “*Preference to avoiding popular footpath and other rights of way, which might dissuade harriers from using these areas*”⁷⁴ and given the potential for increases in use of this route by displaced recreational visitors and construction workers during the construction phase, we do not agree that potential impacts will not occur and therefore can be disregarded.

Appendix N Evening noise and bird disturbance

- 14.7. We welcome the consideration of our concerns around the potential for ecological impacts of ‘daytime’ construction noise levels during the hours of darkness. This additional assessment has covered one of our areas of concern – that of changes to bird perception of ‘daytime’ noise levels when background noise levels are lower during dark hours. However, it does not consider the potential for different bird behaviour and changes in their distribution when it is dark. In particular, we are concerned about birds which roost on the Minsmere South Levels and whose flights between daytime and roosting locations would take them close to or over the construction site, and those birds which may feed in different locations at night. We have also commented on the survey report for white-fronted geese⁷⁵ at this deadline and raised concerns about the effects of high (daytime) noise levels on the movements of white-fronted geese moving to roost sites at Minsmere from North Warren and duck species moving from Minsmere to feed at Sizewell Marshes. Given the significant overlap of the daytime 70dB peak noise contour with the eastern area of Sizewell Marshes during construction Phases 1 and 2 in particular⁷⁶, the limited understanding of bird movements around and usage of these areas during dark hours means impacts on wintering waterbirds of the Minsmere-Walberswick SPA and Ramsar site could have been significantly underestimated.

Appendix P – Marine Ecology

- 14.8. We are grateful for the Applicant’s response to our concerns around impacts on marine ornithology. Due to the limited time available for this deadline and our limited resources, we have had to limit our comments in response to three of our key areas of concern - fish impingement and entrainment, vessel impacts on red-throated diver and combined marine impacts. We will update our position on all aspects of marine ornithology via the forthcoming update to our Statement of Common Ground with the Applicant and reserve the right to comment further at a future deadline should it be necessary once we have had more time to review the details.

⁷³ Paragraph 3.447 of the Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [REP2-506]

⁷⁴ Written Summaries of Oral Submissions made at ISH7: Biodiversity and Ecology Parts 1 and 2 (15-16 July 2021) [REP5-112]. This was in the context of the selection of contingency compensation sites.

⁷⁵ White fronted goose survey report [REP5-125]

⁷⁶ Shadow HRA Report Addendum Appendices 1A-10A Part 5 of 5 [REP4-004]

Fish impingement and entrainment

- 14.9. We note the Applicant's intention to submit further information regarding the assessment of fish mortality at Deadline 6, including an update to the local effects assessment (SPP103), further analysis of the efficiency of the Fish Recovery and Return (FRR) system and a technical note on the use of Equivalent Adult Values (EAVs). We will comment further on the issues around potential fish depletion and impacts on birds following the submission of these documents. At this stage, we note again our support of the Environment Agency's points around the adequacy of the assessment of impingement and entrainment (including use of EAVs, need for local scale assessment, under-estimation of impingement due to sampling limitations (loss of large samples) and concern regarding the level of mitigation achievable by Low Velocity Side Entry intakes) and our concerns about the implications for bird species of the Minsmere-Walberswick, Outer Thames Estuary and Alde-Ore Estuary SPAs. We also support the points made by the Environment Agency at ISH7 around the need for AFD to be considered as best practice mitigation⁷⁷.
- 14.10. We also note the Acoustic Fish Deterrent (AFD) Report⁷⁸ provided at Deadline 5 and have briefly responded at this Deadline and may comment further at a future Deadline but given that inclusion of AFD represents best practice mitigation, we continue to request that further assessment is provided showing the level of mitigation of fish mortality achievable both with and without an AFD to inform the HRA. We note that paragraph 1.3.14 of Written Summaries of Oral Submissions made at ISH7: Biodiversity and Ecology⁷⁹ commits to providing "information as to the impact with and without an AFD" at Deadline 6 and we look forward to the opportunity to review this.

Vessel displacement of red-throated diver

- 14.11. The Applicant states that the comparison of the effects of vessel disturbance from the Application are not comparable with those of vessel disturbance relating to offshore windfarm construction. However, the evidence of displacement of red throated diver is not limited to offshore windfarms and associated traffic, it is for all vessels (e.g. Schwemmer *et al.*, 2011⁸⁰, and Burger *et al.*, 2019⁸¹). Furthermore, these papers indicate that the disturbance effect from ship traffic can last for several hours so 2.7 vessel movements per day have the potential to cause significant disturbance, particularly when daylight hours are limited. Any resulting changes to the distribution of red-throated divers have the potential to result in adverse effects on the integrity of the Outer Thames Estuary SPA as we note the Supplementary Advice on Conservation Objectives⁸² include a target regarding disturbance which highlights potential effects on distribution.

⁷⁷ Environment Agency Post Hearing submission of oral case for Issue Specific Hearing 7 (Biodiversity and Ecology), Part 1 and 2 [REP5-150]

⁷⁸ Acoustic Fish Deterrent Report [REP5-123]

⁷⁹ Written Summaries of Oral Submissions made at ISH7: Biodiversity and Ecology Parts 1 and 2 (15-16 July 2021) [REP5-112]

⁸⁰ Schwemmer, P., Mendel, B., Sonntag, N., Dierschke, V., & Garthe, S. (2011). Effects of ship traffic on seabirds in offshore waters: implications for marine conservation and spatial planning. *Ecological Applications*, 21(5), 1851-1860.

⁸¹ Burger, C., Schubert, A., Heinänen, S., Dorsch, M., Kleinschmidt, B., Žydelis, R., Morkūnas, J., Quillfeldt, P. and Nehls, G., 2019. A novel approach for assessing effects of ship traffic on distributions and movements of seabirds. *Journal of environmental management*, 251, p.109511.

⁸² [Supplementary Advice on Conservation Objectives \(SACOs\) for the Outer Thames Estuary SPA](#)

- 14.12. The Applicant also refers to a study of red-throated diver in the German North Sea⁸³ and states that this did not find a decline in population arising from the construction of 20 windfarms. However, this is different from saying there has not been additional mortality - the population could have increased if there were no wind farms and has been prevented from doing so by the additional mortality caused by the disturbance. In any case, mortality is used in displacement analysis as a surrogate for a variety of other impacts, such as changes in productivity. Negative changes in such fitness related traits will take a number of years to manifest on a population level, and as we have mentioned above, such disturbance would not be consistent with the SPA's Conservation Objectives and the more detailed requirements as set out in the Supplementary Advice.
- 14.13. We also note that the Applicant has previously made reference to Dorsch *et al.* (2020) "casting doubt" over the findings of Mendel *et al.* (2019) regarding vessel disturbance⁸⁴. It is completely wrong to say Dorsch *et al.* (2019)⁸⁵ cast doubt on the findings of Mendel *et al.* (2019). As highlighted by Dorsch, Mendel used pre and post construction data whereas Dorsch only used post construction data, and for methodological reason Mendel's data were at a courser scale. Despite these differences, Dorsch describes the results as "highly similar" with a similar displacement distance recorded.
- 14.14. In conclusion we do not agree that it is clear that impacts can be mitigated at this stage, but we welcome the Applicant's commitment to develop a vessel management plan. As we stated at ISH7⁸⁶, we consider this should be incorporated into a wider Marine Monitoring and Mitigation Plan, which should include the confirmed vessel corridor, noting that only an indicative corridor has been provided so far⁸⁷. It should also include a calculation of uplift in vessel activity, commitments regarding best practice with regard vessel movements, details of vessel activity by season and details of how any restrictions on activity that might be required could be managed and enforced.

Combined marine impacts

- 14.15. In our Written Representations⁸⁸, we raised the concern that the combined Application impacts of disturbance and changed fish distribution from dredging, piling and vessel movements, impingement and entrainment of fish, the thermal, bromoform and hydrazine plumes and increased organic matter and suspended sediment and the resulting total displacement of marine birds have not been fully considered as these impacts were considered not significant alone and therefore were also considered not to contribute to a total potential Application effects. We disagreed with this approach. The Applicant's response to this concern does not address our point that the potential for interactions should be

⁸³ [Vilela et al. \(2021\) Use of an INLA latent Gaussian modelling approach to assess bird population changes due to the development of offshore wind farms. *Frontiers in Marine Science*, 8: 701332. doi: 10.3389/fmars.2021.701332.](#)

⁸⁴ Paragraph 11.21.22 of Comments on Written Representations [REP3-042]

⁸⁵ The reference to Dorsch et al. (2020) by the Applicant is incorrect – the correct reference is [Dorsch, M., C. Burger, S. Heinänen, B. Kleinschmidt, J. Morkūnas, G. Nehls, P. Quillfeldt, A. Schubert, R. Žydelis \(2019\): DIVER – German tracking study of seabirds in areas of planned Offshore Wind Farms at the example of divers. Final report on the joint project DIVER, FKZ 0325747A/B, funded by the Federal Ministry of Economics and Energy \(BMWi\) on the basis of a decision by the German Bundestag.](#)

⁸⁶ Written Summaries of Oral Submissions made at ISH7: Biodiversity and Ecology Parts 1 and 2 (15-16 July 2021) [REP5-112]

⁸⁷ Fig. 8A.12 in Shadow HRA Report Addendum Appendices 1A-10A Part 5 of 5 [REP4-004]

⁸⁸ Paragraphs 3.614 – 3.616 of the Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [REP2-506]

covered through consideration of potential effects' timelines and seasonality and a discussion of the consequences for the fitness and survival of the Minsmere-Walberswick, Alde-Ore Estuary and Outer Thames Estuary SPAs designation species. We therefore remain concerned that the large number of impacts considered minor by the Applicant, could add up to a significant effect on these populations when considered together (cumulatively).

- 14.16. We also note the recent consultation regarding a potential future Change Request to include a desalination plant for the construction phase of the Application⁸⁹. Whilst we understand the details of this are not yet before the Examination, we note that these proposals could form another source of marine impacts and add further to the concerns above.

15. Comments on Applicant Written Summaries of Oral Submissions made at ISH5: Landscape and Visual Impact and Design (13 July 2021)⁹⁰ and Written Submissions Responding to Actions Arising from ISH5: Landscape and Visual Impact and Design (13 July 2021)⁹¹

- 15.1. We provide comments on the Applicant Written Summaries of Oral Submissions made at ISH5: Landscape and Visual Impact and Design (13 July 2021) and Written Submissions Responding to Actions Arising from ISH5: Landscape and Visual Impact and Design (13 July 2021).
- 15.2. As stated in our Written Representations⁹², we are concerned the Application will have a significant visual impact on visitor experience and the views available at RSPB Minsmere.
- 15.3. We welcome the Examining Authority requesting and the Applicant agreeing at ISH7⁹³ to consider providing better visualisations

Agenda Item 3: Landscape and Visual Impact Assessment (LVIA):

"1.31 b) Mr Kratt committed to taking instruction from SZC Co. regarding whether to provide to the examination additional visualisations to support understanding but reemphasised that this was not considered necessary by ESC/SCC to inform the acceptance of judgements relating to significance of effects."

Agenda Item 6: Main development site design considerations

G - Coastguard Cottages – adequacy of LVIA and proposed mitigation:

"1.6.34 iii. The Applicant has agreed to provide construction phase visualisations for Viewpoint 17 to aid the National Trust to better understand the effects on Coast Guard Cottages."

⁸⁹ The ExA [Notification](#) of the changes and [Notice](#) from the Applicant

⁹⁰ Written Summaries of Oral Submissions made at ISH5: Landscape and Visual Impact and Design (13 July 2021) [[REP5-110](#)]

⁹¹ Written Submissions Responding to Actions Arising from ISH5: Landscape and Visual Impact and Design (13 July 2021) [[REP5-117](#)]

⁹² Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [[REP2-506](#)] 3.87-3.91

⁹³ Written Summaries of Oral Submissions made at ISH5: Landscape and Visual Impact and Design (13 July 2021) [[REP5-110](#)] 1.31 b) and 1.6.34 iii

- 15.4. We note the Applicant intends to submit additional visualisations at Deadline 8⁹⁴ (24 September) namely:

“1.5.3 SZC Co. has given careful consideration to this request and proposes to produce illustrative day and night-time photomontage visualisations from the following Representative Viewpoints:

- *Representative Viewpoint 9: Sizewell Gap south of Greater Gabbard sub-station*
- *Representative Viewpoint 10: Suffolk Coast Path and Sandlings Walk east of Hill Wood*
- *Representative Viewpoint 14: Suffolk Coast Path at Minsmere Sluice*
- *Representative Viewpoint 17: National Trust Dunwich Coastguard Cottages”*

- 15.5. And welcome the production of these, however we are disappointed and very concerned the Applicant proposes to only submit the visualisations at Deadline 8⁹⁵ (24 September). This is far too late in the Examination and we request the Applicant submits the visualisations at Deadline 7 at the latest for consideration by the Examining Authority and Interested Parties.

16. Written Summaries of Oral Submissions made at ISH7: Biodiversity and Ecology Parts 1 and 2 (15-16 July 2021)⁹⁶

Agenda Item 2:0 Terrestrial Ecology

[b the Sizewell Marshes SSSI](#)

ii. Fen meadow replacement, mitigation, monitoring and fallback

- 16.1. The Applicant stated the Fen Meadow Plan will be submitted at Deadline 6 to provide further details for the fen meadow compensation sites namely:

“1.2.29 provide further details of the proposals at the three selected sites in Suffolk and no measures will be undertaken that might detrimentally affect the water levels at Pakenham SSSI.”

- 16.2. We look forward to that and will comment at a future deadline when we have reviewed the details.

iv. Water level monitoring

Response to points raised by ExA

- 16.3. The Applicant stated the Minsmere Sluice prevents drainage of Sizewell Marshes SSSI when it is closed:

⁹⁴ Written Submissions Responding to Actions Arising from ISH5: Landscape and Visual Impact and Design (13 July 2021) [\[REP5-117\]](#) section 1.5

⁹⁵ Written Submissions Responding to Actions Arising from ISH5: Landscape and Visual Impact and Design (13 July 2021) [\[REP5-117\]](#) section 1.5

⁹⁶ Written Summaries of Oral Submissions made at ISH7: Biodiversity and Ecology Parts 1 and 2 (15-16 July 2021) [\[REP5-112\]](#)

“1.2.37 Mr Lee explained that the Sizewell Marshes is a very passively managed system with respect to water levels. The control structures are not actively managed, beyond routine maintenance, and there is not regular intervention to modify water levels. In contrast, the RSPB reserve to the north is more actively managed by people changing levels, and opening/closing sluices to keep water levels within an optimal range.

1.2.38 Mr Lee stated that the proximity of the SSSI to the Minsmere Sluice exerts a control on water levels within the Sizewell Marshes. The sluice is tide locked twice daily, causing water levels to back up the low gradient Leiston Drain into the Sizewell Marshes and restricting the outflow of water. The low lying, low gradient nature of the system means that localised restrictions can affect water levels upstream, as noted by Mr Collins with respect to the current high water levels in the Sizewell Marshes.

1.2.39 Mr Lee confirmed that the fen meadow in the SSSI is wetter than it would normally be at this time of year. This is a result of a blockage in the Leiston Drain downstream of the SSSI.”

- 16.4. The description of Minsmere Sluice preventing drainage of Sizewell Marshes SSSI when it is closed is inaccurate. The Minsmere Sluice is only closed for a few hours around each high tide and does not cause water levels to back up and prevent drainage of the SSSI. Drainage of Sizewell Marshes SSSI is prevented by a blockage in the Leiston Drain, which is an Environment Agency Main Drain on RSPB Minsmere. We are in full support that this is resolved, but we do not have powers to manage the Main Drain. The blockage is not directly related to the Application and should be resolved by the Applicant, the Environment Agency and other stakeholders to ensure favourable condition of Sizewell Marshes SSSI outside of the DCO process.

Response to points raised by SWT (and the RSPB)

- 16.5. The Applicant stated:

“1.2.44 In response to Mr McFarland’s statement setting out that SWT agree water levels can be managed as proposed but there may be changes to water chemistry, Mr Lee clarified that Appendix B of [REP3-043] contains a paper drafted specifically to address the concerns around changing the water balance in the SSSI. Mr Lee explained that the paper sets out in detail why the concerns raised by Mr McFarland are not supported by the evidence. Mr Lee explained that there is already a mix of sources of water within the Sizewell Marshes, including surface water, groundwater, direct rainfall and overland flow. The paper sets out the current water balance in the SSSI, and the small degree by which it changes during construction and operation.

1.2.45 Mr Lee explained that the management of water levels is not about introducing more nutrient rich water at the upstream end of the system, which would be potentially detrimental to the supported ecology. Mr Lee reiterated that water levels can be managed by retaining water already within the SSSI at the downstream end of the system.”

- 16.6. We disagree with this, confirm the concerns outlined in our Written Representations⁹⁷ and those of Friends of the Earth as set out in experts' Written Representations to Deadline⁹⁸, remain.

Response to points raised by Dr Rob Low

- 16.7. The Applicant stated:

"1.2.46 Mr Lee stated that there is a well-established monitoring network both within the Sizewell Marshes SSSI and the surrounding area. Mr Lee advised that the suitability of the monitoring network was agreed with stakeholders, including the Suffolk Wildlife Trust, Natural England and the Environment Agency, early in the characterisation of the site and the data collected from it underpins the conceptualisation of the groundwater and surface water regime."

- 16.8. We dispute the assertion that the suitability of the monitoring network was agreed by the Suffolk Wildlife Trust - the locations were agreed with SWT from a management point of view but not the technical suitability.

[c\) Minsmere – marsh harrier, including proposed compensatory measures at Upper Abbey Farm \(including wetland\) and discussion of the land at Westleton](#)

- 16.9. We note the proposed provision of further information regarding the selection of the Westleton site and the expected marsh harrier usage of the compensatory habitats at Deadline 6 and will comment further following the submission of these documents. Despite the discussions at ISH7, please note we maintain our position that the proposed wetland habitat component of the Abbey Farm compensation area should be created prior to the construction period given the need for it to provide compensatory foraging habitat (which should be available in advance of impacts occurring) as soon as that construction starts.

[d\) HRA - disturbance/displacement effects on breeding and non-breeding waterbirds using functionally-linked land to Minsmere-Walberswick SPA/Ramsar site due to noise and visual disturbance](#)

- 16.10. With regard the functional linkage of breeding shoveler and gadwall occurring on the Minsmere South Levels and Sizewell Marshes, we acknowledge that these birds are "additional breeding birds on these nearby habitats outside the designated site" as stated by the Applicant (in paragraph 1.2.79). However, we do not consider it possible to affect such significant proportions of the populations associated with the SPA and on the functionally-linked habitats (11% of gadwall and 7% of shoveler) without the potential for adverse effects on the integrity of the Minsmere-Walberswick SPA.

- 16.11. Regarding non-breeding waterbirds, we disagree with the Applicant's statement that "the issue is specifically for the birds on the Sizewell Marshes that are predicted to be displaced, as opposed to those that are on the Minsmere South Levels" (paragraph 1.2.80). As wintering birds mostly use flooded areas in winter, usage of the South Levels in a wet winter can extend from the north-east corner to the southernmost of the three eastern fields and to the west side of the central ditch meaning that potential for impacts on birds using these areas exists.

⁹⁷ Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [[REP2-506](#)] 3.229-3.260

⁹⁸ Written Submission of Oral Case (ISH7) and Expert Comments on the Applicant's response to our Written Representation [[REP5-271](#)]

However, we agree that impacts on Sizewell Marshes are likely to be more significant but again disagree with the assertion that all potential adverse effects on the integrity of the Minsmere-Walberswick SPA can be ruled out.

- 16.12. We therefore disagree with the Applicant's assertion in paragraph 1.2.82 that there is no significant difference of opinion with the RSPB and SWT regarding impacts on waterbirds. Whilst there are "points of difference [which] relate to survey data and precaution" as acknowledged by the Applicant, we also disagree with the Applicant's conclusions ruling out the potential for adverse effects on the integrity of the Minsmere-Walberswick SPA given the levels of waterbird displacement predicted.

i. To understand the differences between IPs and the Applicant on the effects of recreational pressure on European sites and to discuss the monitoring, mitigation and management proposed to conclude no adverse effects on integrity

- 16.13. For clarity and in response to the Applicant's position regarding the need for mitigation stated in paragraph 1.2.85, please note our position that the measures proposed in the Monitoring and Mitigation Plan for Minsmere – Walberswick European Sites and Sandlings (North) European Site⁹⁹ are necessary to enable potential adverse effects on the integrity of the Minsmere-Walberswick designated sites and the Sandlings SPA to be ruled out. We welcome the production and continued development of this plan and the accompanying Monitoring and Mitigation Plan for Sandlings (Central) and Alde-Ore Estuary European Sites¹⁰⁰.

- 16.14. Please note we have made further comments on the contribution made by Aldhurst Farm to mitigation of recreational pressure on designated sites in our comments on the Aldhurst Farm Technical Note¹⁰¹ (also submitted at this deadline), but in summary our key points are that Aldhurst Farm is not sufficient in area to provide a meaningful contribution to mitigation of both impacts of displaced visitors and of construction workers. The facilities proposed at Aldhurst Farm focus on walkers, dog walkers and families, and whilst this is welcomed, there is also in our view a gap in the type of facilities provided for construction workers who may take part in more active recreational activities (e.g. mountain biking, watersports).

[h\) The Sizewell Link Road – mitigation for loss of watercourses, mammal and invertebrate surveys](#)

- 16.15. The Applicant stated:

"1.2.116 By way of example on survey coverage, Mr Lewis stated that the main development site is probably one of the best studied development sites in the country. The baseline ecology surveys started in 2012 and as well as the very extensive surveys undertaken by SZC Co., SWT has undertaken annual surveys of birds and plants. There is a huge volume of ecological information."

⁹⁹ Monitoring and Mitigation Plan for Minsmere – Walberswick European Sites and Sandlings (North) European Site [REPS-105]

¹⁰⁰ Monitoring and Mitigation Plan for Sandlings (Central) and Alde-Ore Estuary European Sites [REPS-122]

¹⁰¹ Aldhurst Farm Technical Note [REPS-126]

16.16. We respectfully disagree the main development site provides a good example of survey coverage. Our Written Representations¹⁰² highlight examples where the Application fails to¹⁰³^[06], best practice guidelines¹⁰⁴ and good practice guidelines for bat ¹⁰⁵ ¹⁰⁶.

16.17. The Applicant stated that at the project-wide level, the Application will create additional habitats for skylarks:

“1.2.119 In relation to a comment on the loss of arable habitats for skylarks along the Sizewell link road, Mr Lewis noted the former arable areas on the main development site which have been transformed to grassland and have now got a high density of skylarks. There is no doubt, that at the project-wide level, SZC Co will create additional habitats for skylarks.”

16.18. The Applicant’s claims of increased skylark habitat creation do not take account of the fact that much of the grassland for skylarks will not be available and functional until the operational phase which will be 10-12 years after the loss of the arable habitats from the main development site. Replacement skylark habitat should be provided before the habitat loss not 10-12 years later.

Agenda Item 3: Marine Ecology

a) HRA, European and other designated sites

iii. Birds – Disturbance/displacement of the red-throated diver qualifying feature of the Outer Thames Estuary SPA due to vessel movements/traffic

16.19. Whilst we do not agree that it is clear that impacts of vessel traffic on red-throated divers can be mitigated at this stage, we welcome the proposal to produce a vessel management plan and look forward to the opportunity to contribute to those discussions including further measures to minimise possible disturbance to this SPA species.

b) Cooling water system, acoustic fish deterrents

16.20. We note that further evidence regarding biofouling, ‘thin fish’ and sensitivity analysis for the FRR and for AFD will be provided at Deadline 6 and we look forward to reviewing this information. We particularly welcome the commitment to providing “*information as to the impact with and without an AFD*” at Deadline 6 and we look forward to the opportunity to review this.

¹⁰² Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [REP2-506] paragraphs 3.776, 5.32-5.33, 5.47-5.49, 5.25, 3.674

¹⁰³ CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester

¹⁰⁴ Bird Survey & Assessment Steering Group. (2021) Bird Survey Guidelines for assessing ecological impacts, v.0.1.0. <https://birdsurveyguidelines.org>

¹⁰⁵ Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn)*. The Bat Conservation Trust, London.

¹⁰⁶ Written Submission for the Royal Society for the Protection of Birds and Suffolk Wildlife Trust [REP2-506] paragraphs 3.233-3.239, 3.503, 3.629-3.638, 3.666-3.679

17. Documents requiring further time to review

- 17.1. As mentioned and predicted at the end of ISH7, the RSPB and Suffolk Wildlife Trust are unable to review and provide detailed comments on all relevant new information submitted by the Applicant at Deadlines 4 and 5 in time for Deadline 6. Whilst we have reviewed and commented on the majority of the documents, the volume of material is unfortunately too great for us to review in detail and provide comments on all of it. We respectfully request the right to provide comments at a later deadline when we have had time to fully review the following documents

Deadline 5 submissions:

- SZC Co Comments on Responses to ExQ1s Submitted at Deadline 3 [[REP5-121](#)]
- SZC Co. Comments on Submissions from Earlier Deadlines (Deadlines 2-4) Appendices [[REP5-120](#)] - we have commented on some elements of REP5-120 but not all
- Terrestrial Ecology Monitoring and Mitigation Plan [[REP5-088](#)]- we may have more comments to make for example on updates to proposed monitoring approach for bats
- Updated Code of Construction Practice (CoCP) Tracked Changes Version [[REP5-079](#)]
- Written Summaries of Oral Submissions made at ISH6: Coastal Geomorphology (14 July 2021) [[REP5-111](#)]
- Written Submissions Responding to Actions Arising from ISH6: Coastal Geomorphology (14 July 2021) [[REP5-118](#)]
- Draft Development Consent Order - Clean Version [[REP5-029](#)]
- Draft Deed of Obligation – Clean Version [[REP5-082](#)]
- Revision: 2.0 Coastal Processes Monitoring and Mitigation Plan [[REP5-059](#)] - we may have more comments to make

Deadline 4 submission:

- Fen Meadow Compensation Study 2018 Phase 1 Report [[REP4-007](#)]