Date: 08 February 2024

Our ref: 465529

Your ref: EN020002/20041359

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#### BY EMAIL ONLY



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Dear Sir/Madam

NSIP Reference Name / Code: National Grid: Bramford to Twinstead Reinforcement /

EN020002

**Registration Identification Number: 20041359** 

Title: Natural England's Comments on Document 8.5.9: Technical Note on Noise Levels at Hintlesham Woods

Examining Authority's submission deadline 8: 9 February 2024.

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

For any further advice on this consultation please contact the case officer Emma Hurrell and copy to consultations@naturalengland.org.uk.

Yours faithfully,

Emma Hurrell, Lead Adviser, Norfolk and Suffolk Area Team

# 1) Purpose

- 1.1. This letter is to provide clarity on Natural England's outstanding matters in relation to impacts to Hintlesham Woods Site of Special Scientific Interest (SSSI) Assemblages of breeding birds Mixed: Scrub, Woodland interest feature. Natural England has previously made comment in our Relevant Representations (dated 18 July 2023, our ref: 437197), Written Representations (dated 11 October 2023, our ref: 450715) and detailed in our Statement of Common Ground (most recent version submitted at deadline 8 (9 February 2024)).
- 1.2. The Applicant has provided document 8.5.9: Technical Note on Noise Levels at Hintlesham Woods (October 2023) (further referred to as the 'technical note'), which was submitted by the Applicant at deadline 3 (31 October 2023). It was produced to, "provide details of the peak or maximum noise levels that would be anticipated during construction in the vicinity of Hintlesham Woods Site of Special Scientific Interest (SSSI) and the effects of this on breeding birds using the SSSI" (p1). Natural England has reviewed the technical note and provides the following comments:

#### 2) Comments on the technical note

- 2.1 The focus of the report has been on nightingale, owing to the issue being raised in Natural England's Relevant Representations that disturbance from noise could be of particular concern for this species. This is because surveys reported in the Species Baseline Report (document 6.3.7.2) identified nightingale are located primarily at the edge of the woodland, which they are know to habitually use, and this is the side closest to where the works will occur. Along with the nightingale identified within the maintenance swathe, this leaves the entire known population of nightingale at Hintlesham Woods SSSI vunerable to disturbance from the construction works. If disturbance resulted in failed breeding attempts, this could lead to them being lost from the woodland. It is important to note that whilst impacts to nightingale are of particular concern, they are but one of a number of species identified in the 'Assemblages of breeding birds - Mixed: Scrub, Wood' notified feature of Hintlesham Woods SSSI. This feature also includes species such as Woodcock, Nightingale, Tawny Owl, Nuthatch and Whitethroat, which may also be impacted by noise. For this reason, Natural England consider it important for the Applicant to undertake monitoring of the schedule 1 bird species, which includes nightingale, pre and post construction.
- 2.2. The Technical Note does review a number of published works on birds and disturbing activities/acoustics but it does not include any specific studies on Nightingale. Some of the comparisons made are fairly general, e.g.:

"Blumstein et. al. (2005)<sup>1</sup> identified that across 150 avian species, that larger species had greater alert distances than smaller species".

"A study on the effects of construction noise for waterbirds identified 70dB and above as generating an impact on bird activity (Cutts et. al., 2009<sup>2</sup>)".

<sup>&</sup>lt;sup>1</sup> Blumstein, D.T., Fernández-Juricic, E., Zollner, P.A. & Garity, S.C. (2005) Inter-specific variation in avian responses to human disturbance Applied Ecology 42 950 pp943-953

<sup>&</sup>lt;sup>2</sup> Cutts, N., A. Phelps, and D. Burdon (2009) Construction and Waterfowl: Defining Sensitivity, Response, Impacts and Guidance, Report to Humber INCA. Institute of Estuarine and Coastal Studies University of Hull.

"Goodship and Furness (2022)<sup>3</sup>, while not publishing the size of disturbance buffer zones required around nightingale nests, do provide indicative distances for nightjar Caprimulgus europaeus which are similarly ground nesting and summer migrant birds that breed in this region of the UK. The advised buffer zone for nightjar is 150m".

The above studies relate to environments (e.g. an open, estuarine environment) which are dissimilar to Hintlesham Woods (a closed woodland canopy) or to a species such as the nightjar which, while having a similar nesting site, relies heavily on camouflage for concealment and response (which the Nightingale does not).

- 2.3. Natural England has previously advised that "the noise assessment should be revised to include peak values as well as average sound power values. This is because sudden, unpredictable loud noises are more likely to startle birds and cause an escape flight response" (Natural England's Relevant Representations, dated 18 July 2023, our ref: 437197). The applicant has committed to not using percussive piling for pylon erection in sensitive areas near the SSSI during the breeding season (commitment EM-AB14 has been added to the Register of Environmental Actions and Commitments submitted at Deadline 3 (Document 7.5.2 (B)). This will mean that there is reduced noise disturbance, which is welcomed. Whilst expectedly, the report focuses on the impact of noise arising from construction activities (including pylon removal and cable pulling), there is potential that these activities to be disturbing in other ways. For example, the presence of contractors and vehicles will be novel and perhaps unexpected. This could be disturbing to the birds compared to the existing 'background' noise and activity such as the field cultivation example quoted in the Technical Note, which continues year-round and is already present when the Nightingales arrive from Africa in the Spring.
- 2.4. Paragraph 6.1.3 states, "Noise levels associated with the conductor and transposition works are estimated to be less that 60dB at the edge of the SSSI and would not exceed the threshold. Therefore, no further assessment or mitigation is proposed." Following further correspondence with the Applicant, Natural England have been informed that a further commitment in the REAC has been added to ensure the contractor will undertake noise monitoring at the woodland boundary during construction of the foundation of temporary pylon RB12T to check that noise levels remain below 70dB (email received 26 Janaury 2024). Whilst Natural England welcome this commitment, we advise that monitoring alone cannot be considered mitigation and consideration should be given to what mitigation will be provided should noise levels be found to exceed 70dB.

### 3) Summary

3.1. Natural England welcomes the use of alternative construction techniques to percussive piling for pylon erection in sensitive areas near the SSSI during the breeding season. We also welcome the proposed noise monitoring at the woodland boundary during the construction of the foundation of temporary pylon RB12T. However, Natural England advise further detail is required of what mitigation measures would be implemented should the noise monitoring at the woodland boundary exceed 70dB.

3.2. Natural England notes that the noise disturbance has been assessed within the parameters of published work on other environments and bird species and critically, in the absence of specific Nightingale studies. Therefore due to the limitation of the evidence available, the conclusions drawn for Nightingale are only general and there is

<sup>&</sup>lt;sup>3</sup> Goodship, N.M. and Furness, R.W. (MacArthur Green) (2022) Disturbance Distances Review: An updated literature review of disturbance distances of selected bird species. NatureScot Research Report 1283.

uncertainty around the extent of disturbance that nightingale as part of the breeding bird interest feature at Hintlesham Woods SSSI will experience. In the absence of specific studies/information on breeding Nightingale and woodland bird species more widely (as identified in paragraph 2.3.2 of the report), Natural England advise that the monitoring of schedule 1 bird species during and post construction should be implemented. In addition to safeguarding the Nightingale population on Hintlesham Woods SSSI the specific information will be of value in other situations (as identified in the *Goodship and Furness* (2022) report referenced in the Technical Note there are "knowledge gaps" in the area of bird disturbance studies).