



Tween Bridge Solar Farm

A Nationally Significant Infrastructure Project in the Energy Sector

Preliminary Environmental Information Report

Technical Appendix 7.8 – Natural England Request for Discretionary Advice Note

October 2023



Visit: www.tweenbridgesolar.co.uk
Email: info@tweenbridgesolar.co.uk

Request for Discretionary Advice

11th July 2023.

Enclosures:

Figure 1: Site Location Plan

Figure 2: Winter Bird Survey Area

Dear Natural England Case Officer,

Re Proposed Tween Bridge Solar Farm. Planning Inspectorate Case Reference: EN010148

This letter presents a request for Natural England's (NE) advice in accordance with your Discretionary Advice Service (hereafter referred to as the 'DAS') and should be read in conjunction with the attached appendices and figures.

The DAS request is submitted under advice of the Planning Inspectorate ('PINS'). Reference is also made to the Planning Act 2008 Guidance on the pre-application process (March 2015) which identifies how applicants should seek technical input from statutory consultees in advance of any formal pre-application requirements. The guidance goes on to state how it's equally important that statutory consultees respond to a request for technical input in a timely manner.

Avian Ecology is working on behalf the Applicant ('RWE Renewables') for an application for development consent ('DCO application') for the above nationally significant infrastructure project ('NSIP').

The Environmental Impact Assessment ('EIA') Scoping Report was submitted to PINS on 31st January 2023. PINS adopted its EIA Scoping Opinion on 13th March 2023. Natural England provided its EIA Scoping response to PINS in a letter dated 1st March 2023 (Natural England reference 420998). Copies of these documents are available at the National Infrastructure Planning website¹. It is politely requested that Natural England refers to these documents to inform their understanding of the proposals and response to this DAS request.

Purpose of the DAS request

The advice provided by Natural England in its scoping response (letter reference 420998) is noted and has been considered in preparation of this note by the Applicant's ecological advisors (Avian Ecology).

In its Scoping Opinion, PINS and/or NE requested additional clarification in relation to the Applicant's position on a number of areas including determination of habitats of low sensitivity and/or conservation interest and survey requirements for the following species;

¹ National Infrastructure Planning (2023) Tween Bridge Solar Farm . Accessed at:
<https://infrastructure.planninginspectorate.gov.uk/projects/yorkshire-and-the-humber/tween-bridge-solar-farm/?ipcsection=docs>

- Breeding and Wintering/Passage Birds;
- Great crested newts (GCN);
- Invertebrates;
- Reptiles; and,
- Small mammals.

The Applicant would also like to discuss the ‘potential Impacts to functionally linked land’ namely impacts on the mobile qualifying feature Nightjar associated with Thorne and Hatfield Moors Special Protection Area (SPA) and species associated with the Humber Estuary SPA.

The Applicant wishes to confirm with Natural England the extent of baseline ecology and ornithology data required to inform the Environmental Statement (‘ES’), in support of the DCO application and corresponding Habitats Regulations Assessment (‘HRA’), if required. **Site and Project Description**

The Proposed Development is located to the east of the town of Thorne and west of the town Crowle (the ‘Site’), within the administrative areas of Doncaster Council (‘DC’) and North Lincolnshire Council (‘NLC’).

The Application comprises ‘a ground mounted solar park with an export capacity of over 50MW with associated development.’

A Site plan of the draft Order Limits is provided as **Figure 1**. The Site predominantly comprises agricultural land, consisting of fields used for arable cropping. Field boundaries consist of drainage ditches with a small amount of hedgerows, trees and adjacent woodland. The Site extends to over 1,500 hectares of land, spanning land on either side of the M180 motorway as well as High Level Banks road (A18) and Stainforth and Keadby Canal.

Works will be focussed within arable land, with ditches and watercourses within and adjacent to the Site retained and protected with minimum 5m ditch buffers.

It is requested that, in their responses to the questions posed later in this DAS request, Natural England considers and acknowledges that the Application will deliver a minimum Biodiversity Net Gain (BNG) of 10%, following the principles of the Environment Act 2021. This is relevant as, in our professional opinion, potential impacts (and therefore survey considerations) should take into account both design avoidance measures and the BNG benefits of the scheme.

Scoping Report

Chapter 5 of the Scoping Report provides details of the methodologies implemented for the collation of baseline data and assessment of potential effects. Initial baseline results (where available) are presented, along with details of statutorily designated sites for nature conservation within proximity of the Site (Scoping Report Table 5.1 and Figure 5.1).

Impacts on common and widespread habitats of low sensitivity and/or conservation interest – all phases

ID 3.6.6 in the Table on page 21 of the Scoping Report states:

‘The ES should explain how the classification of any habitat as ‘low sensitivity’ has been determined, with reference to baseline data, relevant guidance and professional judgement. The Applicant should make effort to agree its findings on sensitivity with the relevant local

planning authorities and NE. Subject to this, the Inspectorate is content to scope this matter out.'

Applicant's Response

For the purposes of the ES, habitats of low sensitivity will be defined as land under permanent agriculture (arable or intensive livestock grazing), which therefore support little biodiversity interest and subject to regular farming management, such as ploughing or the use of agricultural chemicals.

Applicant's Question

Does Natural England agree with the Applicant's above definition of habitat of low sensitivity, and that subsequently impacts on these habitats can be scoped out of assessment?

Breeding and Passage/Wintering Birds

ID 3.6.10 in the Table on page 23 of the Scoping Report states:

'Breeding bird surveys were completed during April to July 2022. The Scoping Report states that whilst areas of the site boundary have been omitted from the breeding bird surveys (due to the design evolution of the Proposed Development), the baseline data is considered sufficient "...to reliably inform an Ecological Assessment Process".

The Scoping Report states that wintering bird surveys are being undertaken from "September 2022 to March 2023 [ongoing]". The Inspectorate notes advice from NE (Appendix 2 of this Opinion) that the passage/ wintering bird surveys should cover different tidal states and consideration should be given to surveys during poor weather/ visibility conditions. NE advise that surveys at dusk and dawn should also be considered, if geese and swans on site have the potential to use the application site or surrounding area.

It does not appear that further breeding bird or passage/ wintering bird surveys are proposed to inform the ES. The ES should be based on sufficient baseline data to support a robust assessment of LSE as required by the EIA Regulations 2017. The Applicant should make effort to agree the approach to breeding bird surveys and passage/ wintering bird surveys with NE and to evidence this at the point of DCO application submission'.

Further breeding bird surveys have been undertaken between April and June 2023 on additional areas that were not surveyed in 2022. Results of all breeding bird surveys will be discussed within the ES.

It is the Applicant's position that the surveys as described will provide suitable information for assessment within the ES. Due to minor boundary adjustments, a survey coverage 'gap' within the overall wintering bird survey area relates to one area of land to the south of the Site, which is approximately 22.5ha in size. When compared to the entirety of the Site, this comprises 1.39% of the Site and is not considered to affect the overall survey findings. As a result, the Applicant considers this to be negligible and inconsequential to the assessment of the Proposed Development's likely impacts in the Biodiversity chapter of the ES.

For wintering/passage birds, it can be confirmed that in total fourteen survey visits (from September 2022 to March 2023 based on two surveys per month) were carried out during different tidal

conditions. Recorded bird activity was largely limited to small flocks of mainly farmland passerine species.

Three nocturnal surveys were carried out as part of these surveys, with one survey each in December, January and February. No surveys were carried out in unfavourable conditions such as poor weather/visibility and surveys were undertaken across a range of tidal states.

Of those species which form a qualifying feature of the Humber Estuary SPA and Ramsar (including assemblage species), golden plover was the only species recorded in numbers which exceeded 1% of the Humber Estuary SPA wintering population (based on most recently available 5 year mean²). This peak count was situated outside of the Site, in the wider survey area and was for 480 birds, which is 1.54% of the current SPA population. In addition, this occurred once (in fourteen visits) and so could not be considered regular.

The impacts on the integrity of any European site or other important winter bird population will be examined within the ES and accompanying HRA.

Applicants Question

Does Natural England agree that no further wintering or passage bird surveys are required for the purposes of impact assessment and HRA?

Winter Bird Mitigation

ID 3.6.14 in the Table on page 24 of the Scoping Report states:

‘Wintering bird mitigation areas are proposed. Details of the location, extent, implementation (including specific timings) and management of these mitigation areas should be provided in the ES, with reference to available evidence on the requirements of relevant species. Effort should be made to discuss and agree these details with NE and other relevant consultation bodies’.

Wintering bird surveys were on-going at the time of submission of the Scoping Report. On completion of the surveys, it can be confirmed that there was no evidence of regular use of significant numbers of wintering waterbird (i.e., qualifying features of the Humber Estuary SPA and Ramsar).

Applicants Question

On the basis that the survey data confirms no regular use by significant numbers of qualifying bird species, does Natural England agree that, for the Proposed Development, no specific wintering or passage bird mitigation is required?

Nightjar

Page 6 of Natural England’s Scoping Comments states;

² Austin, G.E., Calbrade, N.A., Birtles, G.A., Peck, K., Shaw, J.M. Wotton, S.R., Balmer, D.E. and Frost, T.M. 2023. Waterbirds in the UK 2021/22: The Wetland Bird Survey and Goose & Swan Monitoring Programme. BTO/RSPB/JNCC/NatureScot. Thetford. Data (except for supplementary counts highlighted in orange[*]) released under the Open Government Licence v3.0. Contains Wetland Bird Survey (WeBS) data from Waterbirds in the UK 2021/22 © copyright and database right 2023. WeBS is a partnership jointly funded by the BTO, RSPB and JNCC, with fieldwork conducted by volunteers and previous support from WWT. [*]including supplementary counts from the Goose and Swan Monitoring Partnership (GSMP)

'In particular, we recommend you obtain the following information to support the HRA;

- *nightjar surveys to determine bird usage of the application site and adjacent areas by nightjar...'*

Nightjar surveys were carried out in June and July 2022 of Thorne and Hatfield Moors SPA. These surveys were carried out as part of monitoring for Tween Bridge Wind Farm. Surveys were focussed within the SPA's and did not extend into the Site. No churring nightjars were recorded immediately adjacent to the Site boundary. Whilst it is understood nightjars can use adjacent land to forage, land use within the Site is dominated by arable farmland which is of low value to invertebrates, and in turn nightjars. More suitable habitats including boundary features and aquatic environments such as ditches will be retained and protected during works. In addition, upon completion, habitat creation and enhancement measures, cessation of agricultural inputs and limited disturbance will benefit invertebrates and increase the prey provision for nightjars. With this in mind, it is considered that the 2022 survey data of Thorne & Hatfield Moors SPA alongside habitat information for the Site and with consideration of the habitat and feeding preferences of this species, is sufficient information to inform an HRA (alongside a desk-based assessment and consultations).

Applicants Question

Does Natural England agree that, for the Proposed Development, no further nightjar surveys are required?

Skylark

Breeding bird surveys were undertaken in spring 2022 and additional areas in spring 2023. Initial results show 249 skylark territories within the Site. A skylark mitigation strategy is currently being determined and will be agreed with the relevant LPAs.

Applicants Question

Is this something that NE would like to contribute at this negotiation stage?

Great crested newt eDNA survey extent

ID 3.6.13 in the Table on page 24 of the Scoping Report states:

'The Scoping Report states that ponds within 250m of the site will be surveyed for the presence of GCN. GCN can travel up to 500m from their breeding ponds. As such, the Inspectorate considers that ponds up to 500m from the site should be surveyed for the presence of GCN.'

GCN are protected in accordance with the Wildlife & Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Amendment (EU Exit) Regulations 2019. As a result, if GCN are found to be present then a licence will be required for legislative compliance. The Site falls within Natural England's District Level Licensing Scheme (DLL) and as a result surveys are not necessarily required. However, as a pragmatic approach and to assist NE with their assessment an eDNA survey of ponds within 250m (where access permits) has been undertaken. NE's standing advice states that 'if the developer has chosen not to use a DLL where one exists, you should ask them for a survey'. As a DLL process is in place and it is the intention of the Application to use this approach, if required then the proposed scope of works will provide adequate information to support a licence application which will protect GCN in the area.

In addition, it is acknowledged that most adult newts likely stay within around 250m of breeding ponds (English Nature, 2001; Langton et al., 20018). While the guidance states that surveys up to 500m may be required it also notes that: “The decision on whether to survey depends primarily on how likely it is that the development would affect newts using those ponds. For developments resulting in permanent or temporary habitat loss at distances over 250m from the nearest pond, carefully consider whether a survey is appropriate” ...and “Developments beyond 500m from the nearest pond would very rarely merit newt surveys”. Natural England’s Standing Advice also notes that that the likelihood of effects on terrestrial habitat more than 250m from breeding ponds is low. In this case, much of the land around the ponds is sub-optimal for GCN, with the dominant habitat within the Site consisting of arable farmland. More suitable boundary features such as ditches and hedgerows will be retained and protected. As a result, the potential for adverse effects are limited to the construction phase only. Overall, the Proposed Development will be enhanced for biodiversity, achieving a substantial biodiversity net gain which will benefit a range of species including GCN, with hedgerow/scrub planting and grassland creation.

As a result, the Applicant considers that the proposed survey area (accessible ponds up to 250m) is appropriate and proportionate, and impact of the Proposed Development on GCN will be not significant especially when considered alongside the commitment to biodiversity net gain. GCN, if present, will be protected through the implementation of a DLL, and surveys of ponds within 500m of the Site are not considered necessary. This approach will also be agreed with the Local Planning Authorities and Wildlife Trust during consultation.

Applicants Question

Does Natural England agree that, for the Proposed Development, great crested newt eDNA surveys of the Site and up to 250m distant (where access allows) will be sufficient for impact assessment and any subsequent licensing purposes?

Invertebrates

ID 3.6.5 in the Table on page 21 of the Scoping Report states:

‘Table 5.1 of the Scoping Report describes the Hatfield Chase Ditches SSSI (within the site boundary) as supporting rare invertebrates. The Thorne, Crowle and Goole Moors SSSI (adjacent to the site) and Hatfield Moor SSSI (in close proximity) are also described as supporting a range of invertebrates. The Inspectorate considers that impacts from the Proposed Development, such as changes in water quality, could result in significant effects on invertebrates. Therefore, this matter cannot be scoped out of the ES. The ES should assess impacts to invertebrates which are likely to result in significant effects. The assessment should be based on sufficient baseline survey data.’

Applicant’s Response

The need for further targeted invertebrate surveys is considered disproportionate, when compared to the likely impacts on invertebrates associated with the Proposed Development, which are not considered to be significant.

Most of the Site consists of intensively managed agricultural land, of which the majority is used for arable purposes. The current management of the land includes the regular application of herbicides and pesticides, along with soil exposure and disturbance during cultivation. Chemicals are used to prevent the growth of ‘non-crop’ vegetation which could potentially support invertebrates. In

addition, both herbicides and pesticides are directly toxic to invertebrates, causing fatality. Given the existing farming technique used across the Site, its suitability for a diverse suite of invertebrates is negligible.

Invertebrate species associated with the Moors SSSIs including the bog brush beetle, Thorne Pin-palp and large heath butterfly are typically associated with damp habitats, largely heathland and bog habitats found within the SSSIs. It can be confirmed that these heathland and bog habitats are not however present within the Site, which mainly comprises agriculturally managed fields, and as a result these species will not be impacted.

Linear habitats within, and surrounding the Site, such as hedgerows, ditches, ponds and woodland including the Hatfield Chase SSSI, will support a more diverse invertebrate community than arable fields, but such features will be retained and protected as part of the proposed development. Further, these features and associated communities are considered currently to be heavily impacted by existing land management practices, including herbicide and pesticide drift from agricultural fields, vegetation management and manure/fertiliser run-off impacting ditches and ponds.

Subsequently, it can be reasonably concluded that the current use of the Site as arable farmland precludes the presence of sensitive or important terrestrial invertebrate assemblages. Aquatic features (ditches) will be retained and buffered.

During construction, works will proceed under a Construction Environment Management Plan, which will set out measures to protect water quality in ditches within the Site and wider area, ensuring that the potential for indirect impacts on neighbouring habitats (including waterways and aquatic habitats and associated species) will be avoided. The sensitivity of nearby designated sites will be an important consideration in the CEMP, with specific measures directed at the safeguarding of such areas.

The cessation of intensive arable farmland management resulting from the Proposed Development, particularly the regular use of herbicides and pesticides, is likely to improve conditions for invertebrate assemblages across the entirety of the Site. This, and the delivery of an minimum 10% BNG which is proposed, will very evidently benefit invertebrate species.

Consequently, the Applicant considers the need for specific invertebrate surveys to be unnecessary and disproportionate when considered in the context of the Site and the anticipated effects of the Proposed Development (including BNG), and as set out in the Scoping Report. The Applicant therefore proposes that a detailed assessment of the potential effects on invertebrates can be scoped out of the ES. Invertebrates will of course be considered in the context of the habitat assessment and in relation to statutory designated sites.

Applicants Question

Does Natural England agree that, for the Proposed Development, surveys for invertebrates are not required?

Specific surveys for reptiles and detailed assessment of impacts on reptiles – all phases

ID 3.6.6 in the Table on page 21 of the Scoping Report states:

'The Scoping Report proposes to scope out specific surveys for reptiles (para 5.45) and a detailed assessment of impacts (para 5.69), stating that baseline surveys have not identified the site as being sufficiently important to lead to the potential for significant effects. However,

Table 5.2 of the Scoping Report identifies reptiles as scoped into the assessment meaning the Applicant's proposed approach is unclear. The Inspectorate is therefore not in a position to agree that these matters can be scoped out. The ES should assess potential impacts on reptiles, supported by robust baseline survey data, unless otherwise agreed with relevant consultation bodies.'

The managed agricultural land across most of the Site provides limited habitat suitability for reptiles. Suitable reptile habitat is limited to field boundaries including ditches and hedgerows as well as woodland copses. These will be retained and protected. Works will be focussed within intensively managed farmland, which is subject to regular disturbance and pesticide/fertiliser applications and considered to be sub-optimal habitats for reptiles.

Enhancements for biodiversity on the Site will also benefit reptile species with the creation of habitats such as grassland and hedgerows and the change from intensive agriculture to biodiversity focused management. The Application's commitment to BNG is evidently a benefit to reptiles.

Common reptiles are protected in accordance with the Wildlife & Countryside Act 1981 (as amended) and they are also priority species under Section 41 of the NERC Act 2006. The impacts of the Proposed Development are considered to be not significant for reptiles, however, they were scoped in so as to ensure legislative compliance and on the understanding that Reasonable Avoidance Measures (RAMs) will be proposed. Whilst it is considered unlikely that reptiles will be present within dominant habitats within the Site, the implementation of RAMs will ensure that individuals are not harmed and compliance with legislation. Baseline data has been sought from Local Record Centres and will be considered along with the impacts of the Proposed Development. Subsequently the Applicant considers that reptile surveys would be disproportionate to the likely effects (especially when BNG is implemented) and unnecessary to ensure legislative protections are implemented.

Applicants Question

Does Natural England agree that, for the Proposed Development, surveys for reptiles are not required?

Detailed assessment of impacts on small mammals (including brown hare, polecat, harvest mouse and hedgehog) – all phases

ID 3.6.7 in the Table on page 22 of the Scoping Report states:

'Paragraph 5.69 of the Scoping Report proposes to scope out a detailed assessment of impacts on these species, stating that baseline surveys have not identified the site as being sufficiently important to lead to the potential for significant effects. The Inspectorate notes that the Applicant has not yet undertaken ecological surveys of the study area (with the exception of a Walkover Survey and bird surveys) and that the site may potentially support these species. Without certainty on the extent and presence of these species, the Inspectorate does not agree that a detailed assessment of impacts on brown hare, polecat, harvest mouse and hedgehog can be scoped out. The ES should address potential impacts on these species, supported by robust baseline survey data, unless otherwise agreed with relevant consultation bodies.'

Small mammals including hedgehog, brown hare, polecat and harvest mouse are listed as priority species under Section 41 of the NERC Act 2006. Field boundaries such as hedgerows and woodland habitat have the highest value to these species in relation to the overall suitability of the Site, and these will be retained and protected. Arable and pastoral grassland can be used by small mammals,

largely brown hare. However, the availability of these habitats are largely determined by farming practices from year to year and they are subject to regular disturbance with activities such as pesticide and fertiliser applications etc.

Biodiversity enhancements on the Site (under BNG), will benefit small mammal species, such as the creation of grassland and hedgerow planting. Upon completion the Site will be managed with selected areas sensitivity managed for biodiversity and largely remain undisturbed compared to current arable regimes. Small mammal gates/gaps in fences will ensure connectivity is maintained around the Site and into the wider area. Further species enhancements will also benefit small mammals such as the installation of insect hotels and habitat piles which will increase prey provision and sheltering opportunities within the Site.

Baseline data will be gathered using records provided by the Local Record Centres. There is no standard survey guidance for the small mammals listed. As works are focussed within areas of low suitability and biodiversity enhancements will benefit the species, then impacts of the Proposed Development are considered to be not significant, with positive outcomes for such species predictable over the long term. The Applicant therefore proposes that a detailed assessment based on surveys for effects on brown hare, polecat, harvest mouse and hedgehog can be scoped out of the ES.

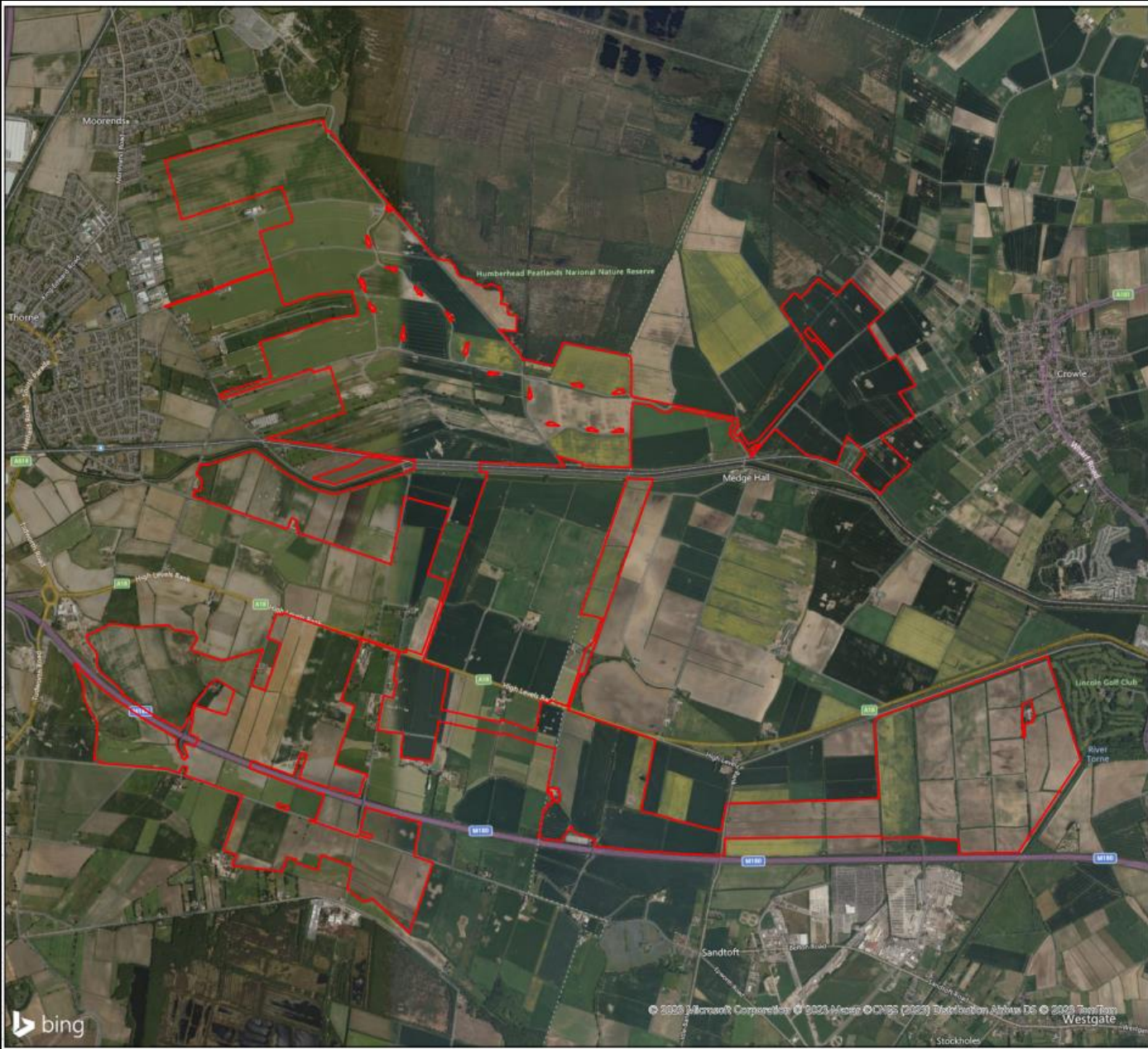
Applicants Question

Does Natural England agree that, for the Proposed Development, desk study information is sufficient to make an assessment and further surveys for brown hare, polecat, harvest mouse and hedgehog are not required?

Prepared by: B Walker MSc MCIEEM

Reviewed by: H Fearn MSc MCIEEM

Figure 1: Site Location Plan



KEY
 DRAFT ORDER LIMITS (REV P - 13/06/23)

- REVISIONS**
- A - 21/09/22 - ADDED EASEMENTS
 - B - 29/08/22 - ADDED EASEMENTS & PARCELS
 - C - 8/10/22 - REMOVED PARCEL
 - D - 21/10/22 - ADDED PARCELS
 - E - 25/10/22 - ADDED AND REMOVED PARCELS
 - F - 29/11/22 - REMOVED PARCEL
 - G - 19/12/22 - ADDED ACCESS TRACK & AMMENDED BOUNDARY
 - H - 05/04/23 - ADDED AND REMOVED PARCELS
 - I - 12/04/23 - REMOVED PARCELS
 - J - 13/04/23 - REMOVED PARCEL & ADDED ACCESS
 - K - 19/04/23 - ADDED ACCESS TRACK
 - L - 04/05/23 - REMOVED PARCEL
 - M - 23/05/23 - ADDED AND REMOVED PARCELS
 - N - 25/05/23 - REDUCED CABLE EASEMENT
 - O - 08/06/23 - MULTIPLE EDITS
 - P - 13/06/23 - REMOVED PARCELS

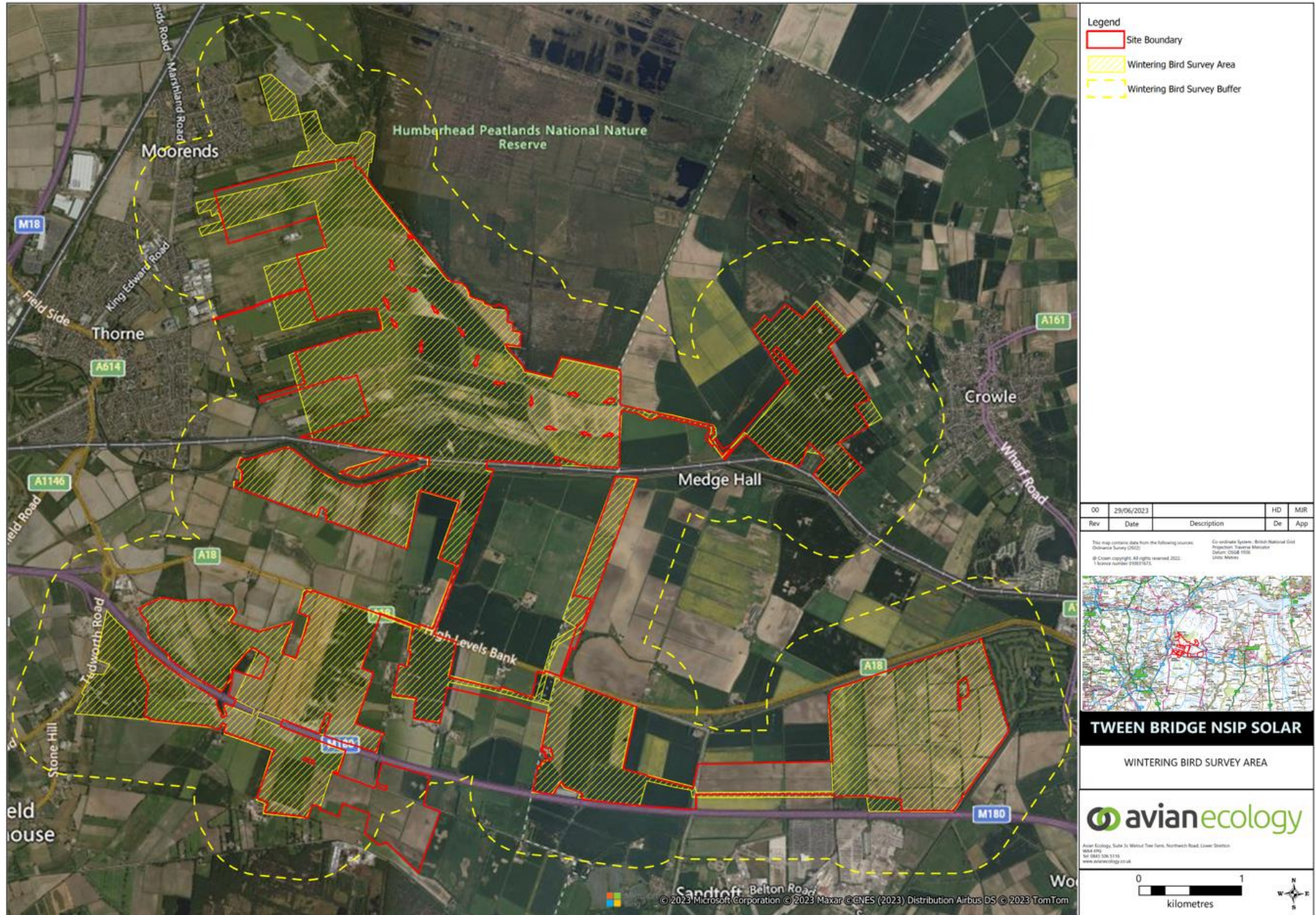
**SITE BOUNDARY PLAN
 TWEEN BRIDGE SOLAR**

CLIENT
 RWE

DATE	DRAWN	APPROVED	SCALE
13/06/2023	RL	HS	1:32,000@A3
SHEET	REVISION	DRAWING NUMBER	
-	P	P21-3484_06	

↑ N 0 1 km

Figure 2: Winter Bird Survey Area



Legend

- Site Boundary
- Wintering Bird Survey Area
- Wintering Bird Survey Buffer

Rev	Date	Description	HD	MIR
00	29/06/2023			

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Geospatial Systems: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Metres

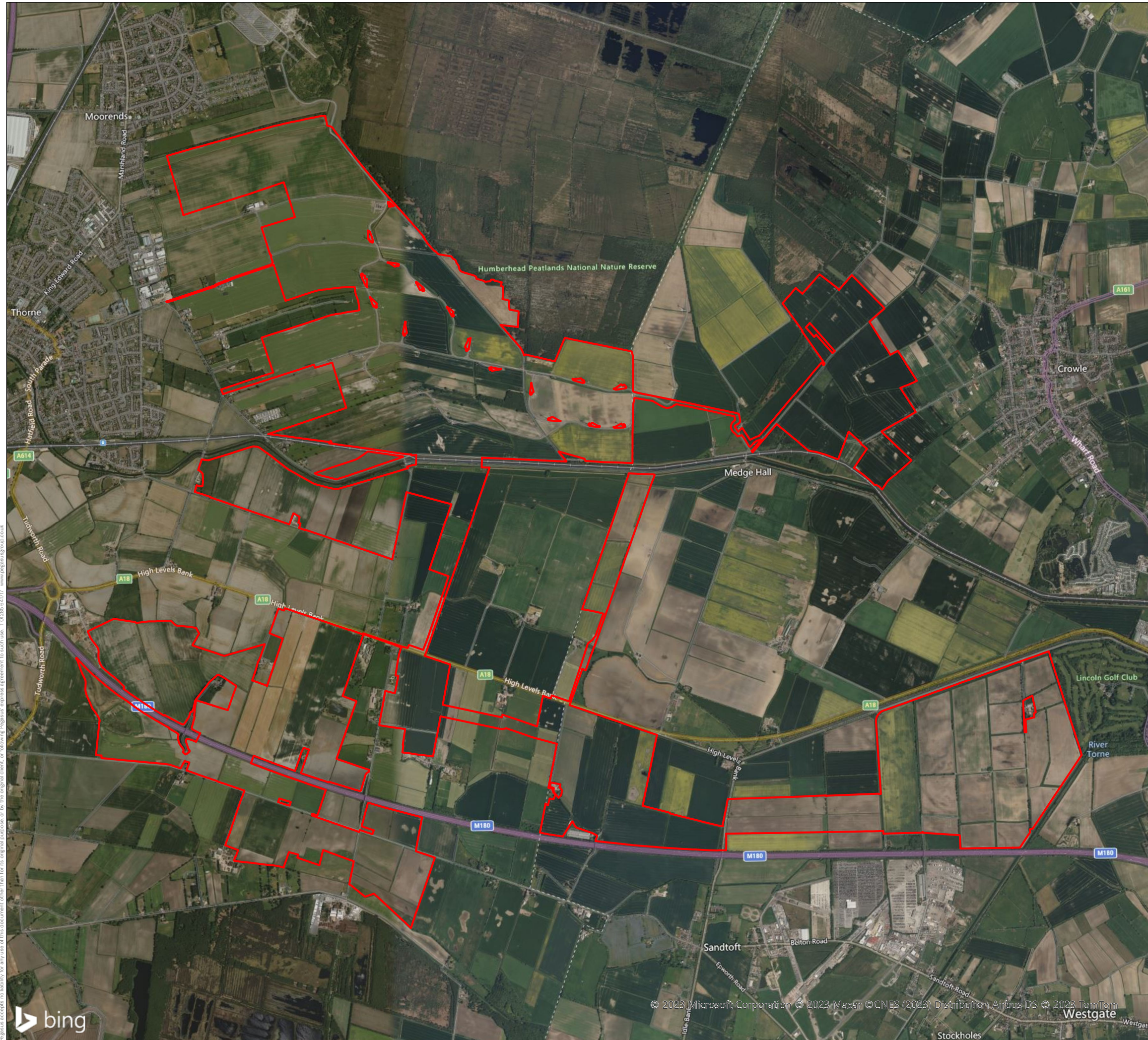


TWEEN BRIDGE NSIP SOLAR

WINTERING BIRD SURVEY AREA

Avian Ecology, Suite 10, Wilton Tree Farm, Northwick Road, Liss, Station
 Hants GU24 0PL
 Tel: 01534 756 1110
 www.avianecology.co.uk





KEY

DRAFT ORDER LIMITS (REV P - 13/06/23)

- REVISIONS:
- A - 21/09/22 - ADDED EASEMENTS
 - B - 29/09/22 - ADDED EASEMENTS & PARCELS
 - C - 11/10/22 - REMOVED PARCEL
 - D - 21/10/22 - ADDED PARCELS
 - E - 25/10/22 - ADDED AND REMOVED PARCELS
 - F - 29/11/22 - REMOVED PARCEL
 - G - 19/12/22 - ADDED ACCESS TRACK & AMMENDED BOUNDARY
 - H - 05/04/23 - ADDED AND REMOVED PARCELS
 - I - 12/04/23 - REMOVED PARCELS
 - J - 13/04/23 - REMOVED PARCEL & ADDED ACCESS
 - K - 19/04/23 - ADDED ACCESS TRACK
 - L - 04/05/23 - REMOVED PARCEL
 - M - 23/05/23 - ADDED AND REMOVED PARCELS
 - N - 25/05/23 - REDUCED CABLE EASEMENT
 - O - 08/06/23 - MULTIPLE EDITS
 - P - 13/06/23 - REMOVED PARCELS

SITE BOUNDARY PLAN

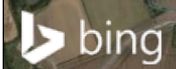
TWEEN BRIDGE SOLAR

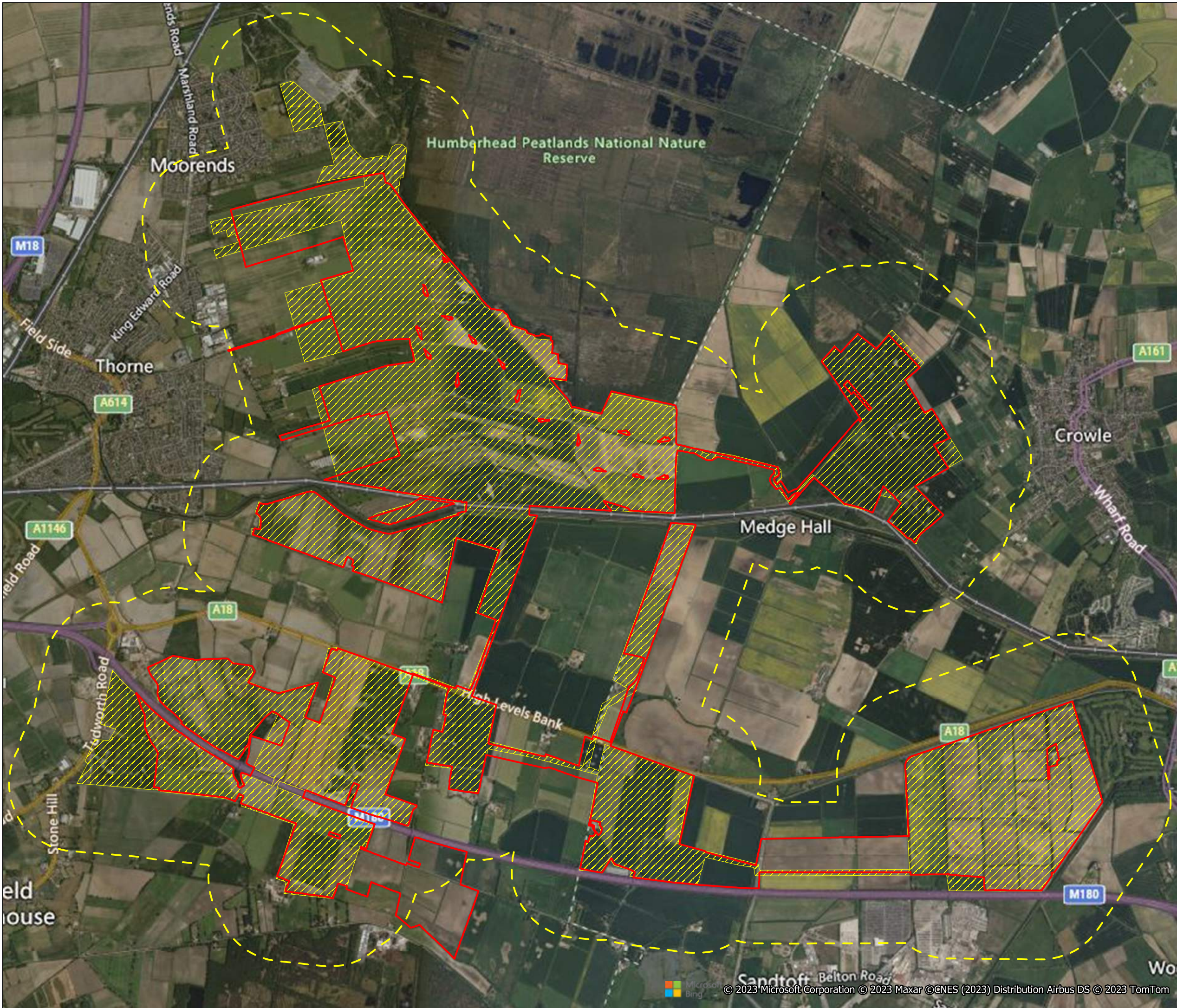
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DATE	DRAWN	APPROVED	SCALE
13/06/2023	RL	HS	1:32,000@A3
SHEET	REVISION	DRAWING NUMBER	
-	P	P21-3484_06	



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- Legend
- Site Boundary
 - Wintering Bird Survey Area
 - Wintering Bird Survey Buffer

00	29/06/2023		HD	MJR
Rev	Date	Description	De	App

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Co-ordinate System - British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Metres



TWEEN BRIDGE NSIP SOLAR

WINTERING BIRD SURVEY AREA



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Date: 06 September 2023
Our ref: DAS A010619 / 441464
Your ref: EN010148



Customer Services
Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ

0300 060 3900

BY EMAIL ONLY

Dear Bethany Walker
CC Howard Fearn

Discretionary Advice Service (Charged Advice) UDS A010619

Development proposal and location: EN010148 Tween Bridge Solar Farm, land to the east of Thorne & west of Ealand, South Yorkshire.

Thank you for your consultation on the above dated 09 August 2023, which was received on the same date.

This advice is being provided as part of Natural England's Discretionary Advice Service. Avian Ecology Ltd has asked Natural England to provide advice upon:

- Designated sites
- Adequacy of available survey data

This advice is provided in accordance with the Quotation and Agreement dated 16 August 2023.

The following advice is based upon the information within:

- *Request for Discretionary Advice: Re Proposed Tween Bridge Solar Farm. Planning Inspectorate Case Reference: EN010148 (dated 11 July 2023)*
- *Technical Appendix 7.3: Non-Breeding Bird Survey Report – 2022/23 (dated 31 July 2023)*

1. Request for Discretionary Advice: Re Proposed Tween Bridge Solar Farm. Planning Inspectorate Case Reference: EN010148 (dated 11 July 2023)

The following section provides comments and responses to the questions presented in the *Request for Discretionary Advice: Re Proposed Tween Bridge Solar Farm. Planning Inspectorate Case Reference: EN010148 (dated 11 July 2023)*.

The advice is based on the information provided. Natural England may have additional comments to make when further information is provided in the Habitats Regulations Assessment (HRA) and Sites of Special Scientific Interest (SSSI) impact assessment.

Please note that we have not provided a detailed response to certain questions, where topics fall outside the scope of Natural England's remit, responsibilities and geographical extent in relation to Nationally Significant Infrastructure Projects, as set out in *The Planning Inspectorate's Advice Note 11, Annex C – Natural England and the Planning Inspectorate*.

Impacts on common and widespread habitats of low sensitivity and/or conservation interest – all phases: Does Natural England agree with the Applicant's above definition of habitat of

low sensitivity, and that subsequently impacts on these habitats can be scoped out of assessment?

Natural England has no comments to make on the definition of low sensitivity habitat as this does not fall within our remit and responsibilities.

Breeding and Passage/Wintering Birds: Does Natural England agree that no further wintering or passage bird surveys are required for the purposes of impact assessment and HRA?

Please refer to Section 2 of this letter for further detailed advice relating to this question and the Non-breeding Bird Survey Report. Due to the reasons set out below, Natural England does not agree that no further wintering or passage bird surveys are required for the purposes of the impacts assessment and HRA.

Winter Bird Mitigation: On the basis that the survey data confirms no regular use by significant numbers of qualifying bird species, does Natural England agree that, for the Proposed Development, no specific wintering or passage bird mitigation is required?

As detailed in Section 2, Natural England advises that there is currently insufficient survey information to assess the requirements for wintering/passage bird mitigation.

Nightjar: Does Natural England agree that, for the Proposed Development, no further nightjar surveys are required?

Natural England does not consider that the justification regarding previous surveys recording “No churring nightjars... immediately adjacent to the Site boundary” is appropriate in assessing potential impacts on foraging nightjar associated with Thorne and Hatfield Moors SPA. We note the information provided regarding the suitability of the arable farmland for foraging nightjar; however, we do not consider that this is sufficient to conclude the assessment. We advise that potential impacts from construction/operational disturbance to nightjar and changes to connectivity of habitats etc. should also be included in the assessment.

We advise that the applicant should determine whether there is sufficient existing available information to inform the assessment, in the absence of targeted nightjar surveys. The Supplementary Advice for Thorne & Hatfield Moors may be helpful in informing the assessment: [European Site Conservation Objectives for Thorne & Hatfield Moors SPA - UK9005171 \(naturalengland.org.uk\)](https://www.naturalengland.org.uk). Natural England has also been involved in nightjar tagging studies in the area, which we can discuss with the applicant upon request. We highlight that results from the ‘LIFE+ - ‘That’s Life’ Monitoring of European Nightjar 2015 – 2017’ project showed that tagged nightjars foraged within the proposed application site boundary. Nesting nightjar were also recorded in proximity to the site boundary.

Therefore, we consider that impacts to nightjar from the proposed development cannot be ruled out at this stage, and further assessment should be included at the appropriate assessment stage of the HRA. Information provided regarding retention of hedgerows and habitat creation/enhancement areas may inform this assessment, in the context of mitigation measures at the appropriate assessment stage where relevant. Should it be determined through the assessment that mitigation for nightjar is required, Natural England can provide additional advice. We highlight that Policy 30(E) of Doncaster Local Plan (2015-2035) states: “In order to ensure development does not negatively impact on nightjar populations, proposals located within 3km of Thorne and Hatfield Moors Special Protection Area, that impact habitats that nightjars may use for feeding on, will only be supported where they deliver a net gain in nightjar foraging habitat.”

Skylark: Is this something that NE would like to contribute at this negotiation stage?

Natural England has no comments to make on the skylark mitigation strategy as this does not fall within our remit and responsibilities.

Great crested newt eDNA survey extent: Does Natural England agree that, for the Proposed Development, great crested newt eDNA surveys of the Site and up to 250m distant (where access allows) will be sufficient for impact assessment and any subsequent licensing purposes?

Please note that we will not be able to provide detailed advice on great crested newt district level licencing through this request. Please follow the link for more information and to submit an enquiry form: [How to join the great crested newt district level licensing scheme - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/how-to-join-the-great-crested-newt-district-level-licensing-scheme).

Invertebrates: Does Natural England agree that, for the Proposed Development, surveys for invertebrates are not required?

Natural England advises that the SSSI impact assessment should include assessments of potential impacts of the proposed project on the invertebrate assemblages for Thorne, Crowle & Goole Moors SSSI and Hatfield Moors SSSI. These assessments should consider the sensitivity of the invertebrate assemblages to relevant impact pathways, including water quality impacts etc., and assess suitable mitigation measures, where appropriate. We note that the information provided regarding proposed water quality mitigation measures in the Construction Environment Management Plan (CEMP) may inform the assessment; however, potential operational impacts should also be assessed.

Natural England does not have a position on the requirement for targeted invertebrate surveys within the proposed development site. However, we do not consider that the applicant's justification - that the current management of the application site is not suitable to support a diverse invertebrate assemblage - is relevant/sufficient in the context of assessing impacts on the relevant designated sites from water quality impacts etc. The applicant should therefore determine whether existing information is sufficient to inform a robust assessment of potential impacts on the designated features of the relevant sites. Natural England recommends referring to the relevant SSSI condition assessments, which can be found at: <https://designatedsites.naturalengland.org.uk/>.

We note that the invertebrate assemblage is not a feature of special interest for Hatfield Chase Ditches SSSI. However, potential impacts on the feature of special interest - Lowland ditch systems - should be included in the assessment of impacts. Invertebrates are known to utilise the SSSI so these may be considered as part of any potential impacts upon wider biodiversity.

Specific surveys for reptiles and detailed assessment of impacts on reptiles – all phases: Does Natural England agree that, for the Proposed Development, surveys for reptiles are not required?

Smooth snakes, sand lizards and pool frogs are designated and protected as European protected species protected under The Conservation of Habitats and Species Regulations 2017 (as amended).

For all licensing matters, applicants should consult [Natural England's licensing guidance for the relevant species](#) and decide whether a mitigation licence is required. Applicants are able to use [Natural England's charged Pre-submission Screening Service \(PSS\)](#) for review of a draft wildlife licence application.

Natural England has produced standing advice to help authorities understand the impact of particular developments on [protected species](#) and [reptiles](#). Whilst this advice is primarily designed to assist authorities better understand the information required when assessing the impact of developments upon protected species, it also contains a wealth of information to help applicants ensure that their applications comply with good practice guidelines and contribute to sustainable development. Natural England will only provide bespoke advice on protected species where they form part of a Site of Special Scientific Interest or in exceptional circumstances. Please refer to this Standing Advice for further information on what information the authority may require in terms of

survey and mitigation proposals.

A survey may be required if:

- there's suitable habitat on the site to support protected species
- it's likely that protected species are present and may be affected by the proposed development
- protected species are present but you're not sure if they'll be affected

A detailed survey may not be required if protected species are unlikely to be affected even if they are on or near a development site. This could be demonstrated by explaining:

- the working methods
- the timing of development
- the life cycle and sensitivity of the specific species

Natural England has no comments to make on other native reptiles as this does not fall within our remit and responsibilities.

Detailed assessment of impacts on small mammals (including brown hare, polecat, harvest mouse and hedgehog) – all phases: Does Natural England agree that, for the Proposed Development, desk study information is sufficient to make an assessment and further surveys for brown hare, polecat, harvest mouse and hedgehog are not required?

Natural England has no comments to make on brown hare, polecat, harvest mouse and hedgehog as this does not fall within our remit and responsibilities.

2. Technical Appendix 7.3: Non-Breeding Bird Survey Report – 2022/23 (dated 31 July 2023)

We have provided our comments below on the bird survey methodology based on the bird survey results. The development will require production of a Habitats Regulations Assessment (HRA), and as wintering and passage bird surveys have been undertaken the potential impacts which may occur to these features should be considered at the appropriate assessment stage, with an assessment of the suitability of any proposed mitigation. Therefore, we have provided the following advice based on the principles of the design; however, please note our comments are subject to the production of the HRA.

Survey Methodology

Natural England advises that there are a number of limitations with the wintering/passage survey methodology:

- We note that walkover surveys were used rather than the recommended vantage point (VP) surveys. It is Natural England's opinion that VP surveys are preferable for observing behaviour of birds on the ground (i.e., whether they are foraging/loafing etc.), and if birds are flushed due to movement of a surveyor, then this cannot be recorded. Also, birds which may have landed in the field during the survey period may be unlikely to do so with the presence of a moving surveyor.
- The information provided shows that two surveys were carried out per month between September 2022 and March 2023. However, we note from 2.2.14 of the non-breeding bird survey report that one of the two surveys per month between December 2022 to March 2023 was carried out at night. Nocturnal surveys should be additional to the diurnal surveys, not as an alternative. Natural England considers that one diurnal survey per month is not sufficient to determine usage of the proposed site by SPA birds between December to March.
- Based on the methodology provided, it is also currently unclear as to which fields have been surveyed on which dates. For example, the report states the number of hours of survey

carried out on each date, but does not currently state whether each of these covered the whole site, or covered a section of the site each time. This will help us to understand the level of survey effort in each area.

- We note the full spring passage period was not covered by the survey period. We recommend that passage surveys should also cover the period of March to mid-May.
- We note from the *Request for Discretionary Advice: Re Proposed Tween Bridge Solar Farm. Planning Inspectorate Case Reference: EN010148 (dated 11 July 2023)* that there is a bird survey coverage 'gap' of 22.5ha. However, we do not agree that this can be considered 'negligible and inconsequential to the assessment.' Although the 'gap' reflects 1.39% of the proposed development site, 22.5ha is considered a large area, within which significant numbers of SPA species may be present (or numbers may contribute to significant numbers across the whole site). Surveys of this area are considered important to determine bird usage of the whole site and inform assessments of suitable mitigation provision, where required.

Based on the information provided, we advise that 2 years' worth of surveys would provide a more robust understanding of the bird use on site and better inform the HRA. We provide this advice for the following reasons:

- There are limitations in the existing survey methodology and frequency, as outlined above;
- The proposed development has a very large footprint, and therefore has potential for a significant loss of land in proximity to the Humber Estuary;
- To provide information on potential year on year variation of bird use, which will inform the assessment of potential impacts and suitable design and extent of potential mitigation for loss of functionally linked land, where required.

Natural England therefore advises that the information which has already been collected using walkover surveys can still be used to inform the HRA, but we recommend this is paired with a year of vantage point surveys which span the autumn passage period, through the wintering period to the end of the spring passage. We note that some of this year's (2023-24) autumn passage period (August) has passed prior to the issuing of this advice. Therefore, we would accept passage survey results without August surveys in this instance. However, consideration should be given in the HRA as to whether peak counts may have been missed, using available information such as Wetland Bird Survey (WeBS) counts.

Survey results

Natural England notes that there are a number of discrepancies between the information provided in the *Request for Discretionary Advice: Re Proposed Tween Bridge Solar Farm. Planning Inspectorate Case Reference: EN010148 (dated 11 July 2023)* and *Technical Appendix 7.3: Non-Breeding Bird Survey Report – 2022/23 (dated 31 July 2023)*. For example, the Request for Discretionary Advice describes a count of 480 golden plover outside the site boundary to be the "only species recorded in numbers which exceeded 1% of the Humber Estuary SPA wintering population" on one occasion. Whereas, the Non-Breeding Bird Survey Report Table 3.2 also includes a count of 365 golden plover during September. In addition, Table 3.2 appears to show peak counts of lapwing and pink-footed goose within the Development Consent Order (DCO) order limits which exceed 1% of the Humber Estuary SPA population of these species (although only percentages of the Great Britain (GB) populations are included in the assessment; comments on this below).

We therefore advise that the non-breeding bird survey report should be revised to provide further clarity on the survey results and assess the findings in more detail.

Please note that Natural England has generally advised that if $\geq 1\%$ of a Humber Estuary bird species population could be affected by a proposal, alone or in combination with other plans or projects, then further consideration is required. However, where species are particularly vulnerable due to declines in the Humber population, then it may not be appropriate to rely on the 1% of the estuary population as the critical threshold. Mitigation measures may be required where lower

numbers of vulnerable species are using a site that is proposed for development.

In particular, we recommend the following revisions:

- The results should be assessed in the context of percentages of the Humber Estuary SPA population according to the most recent Humber Estuary WeBS 5-year average count (currently 2017/18 - 2021/22), not the GB population. We note reference to a Natural England 2021 study from the North West of England that used the GB population to determine significance of functionally linked land; however, this approach is not used around the Humber Estuary SPA.
- The results tables should therefore be amended to include peak counts and corresponding percentage of the Humber Estuary SPA population.
- It appears that all component species of the Humber Estuary SPA waterbird assemblage have not been assessed as 'target species' in the report. Therefore, we recommend that the relevant tables and sections are updated in line with Annex B Humber Estuary Special Protection Area: non-breeding waterbird assemblage (Version 1.2, June 2023) (attached).
- The figures provided should be checked for accuracy and consistency between the relevant sections of the report.

At this stage, Natural England advises that it is not possible to complete a robust assessment of the potential loss of functionally linked land, due to the lack of clarity in the survey results and the survey methodology limitations, as detailed above. Therefore, the recommended additional surveys and report revisions should be completed before a final assessment of potential impacts is completed. However, we highlight that the results appear to show significant numbers of Humber Estuary SPA species within the DCO order limits. Therefore, we consider that mitigation for loss of functionally linked land may be required. The assessment of mitigation requirements should be informed by the additional surveys completed, as outlined above.

Natural England welcomes that the desk study results have been included in the report and 3.1 provides a summary of the data search. However, we recommend that further information is provided in the main report regarding the results returned, including number of birds recorded for each record and the location of results, including a visual representation and / or map if possible, to allow for others to review the results.

Disturbance impacts to birds using functionally linked land

In addition to assessing impacts on the Humber Estuary SPA/Ramsar from direct loss of functionally linked land, we also advise that the wintering/passage results should be assessed in the context of construction and operational disturbance/displacement impacts to birds using surrounding functionally linked land.

Natural England advises that two peak counts of >1.75% of the Humber Estuary SPA population of golden plover should not be considered infrequent in the context of the level of survey effort in this case, particularly as golden plover were recorded during every visit, albeit in lower numbers on other occasions. Therefore, these results should be assessed in more detail in the context of disturbance impacts to birds using surrounding areas of functionally linked land.

In-combination assessment

As highlighted in our letter dated 01 March 2023, the assessment should also consider the potential impacts of the proposed project in-combination with other relevant plans and projects.

3. Other advice

Natural England's Humberhead Peatlands National Nature Reserve (NNR) Team and wider Yorkshire and Northern Lincolnshire Area Team would be happy to provide further advice around other topics relevant to assessing and mitigating for potential impacts on the relevant designated sites and opportunities for nature recovery, including (but not limited to):

- a potential hydrological/habitat buffer zone between the proposed solar panels and the

- designated site boundary;
- potential mitigation for impacts on nightjar;
- assessment of potential impacts from increased fire risk;
- design of suitable habitat provision areas through Biodiversity Net Gain (BNG).

Please let us know if you would like to organise a meeting to discuss such topics.

The advice provided in this letter has been through Natural England's Quality Assurance process

The advice provided within the Discretionary Advice Service is the professional advice of the Natural England adviser named below. It is the best advice that can be given based on the information provided so far. Its quality and detail is dependent upon the quality and depth of the information which has been provided. It does not constitute a statutory response or decision, which will be made by Natural England acting corporately in its role as statutory consultee to the competent authority after an application has been submitted. The advice given is therefore not binding in any way and is provided without prejudice to the consideration of any statutory consultation response or decision which may be made by Natural England in due course. The final judgement on any proposals by Natural England is reserved until an application is made and will be made on the information then available, including any modifications to the proposal made after receipt of discretionary advice. All pre-application advice is subject to review and revision in the light of changes in relevant considerations, including changes in relation to the facts, scientific knowledge/evidence, policy, guidance or law. Natural England will not accept any liability for the accuracy, adequacy or completeness of, nor will any express or implied warranty be given for, the advice. This exclusion does not extend to any fraudulent misrepresentation made by or on behalf of Natural England.

Yours sincerely,

Alice Megaw
Yorkshire and Northern Lincolnshire Area Team

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Annex B: Humber Estuary Special Protection Area: non-breeding waterbird assemblage (Version 1.2, June 2023)

The Humber Estuary Special Protection Area (SPA) qualifies under article 4.2 of the European Commission Bird Directive (79/409/EEC) in that it supports an internationally important assemblage of waterbirds. Confusion can arise concerning which species to consider when assessing the Humber Estuary SPA non-breeding, waterbird assemblage feature.

Natural England recommends focusing on what are referred to as the 'main component species' of the assemblage. Main component species are defined as:

- a) All species listed individually under the assemblage feature on the SPA citation (i.e. the species that qualified in 2007 when the site was designated).
- b) Species which might not be listed on the SPA citation but occur at site levels of more than 1% of the national population according to the most recent Humber Estuary Wetland Bird Survey (WeBS) 5-year average count (currently 2017/18 - 2021/22).
- c) Species where more than 2000 individuals are present according to the most recent Humber Estuary WeBS count.

The assemblage qualification is therefore subject to change as species' populations change. It should be noted that species listed on the citation under the assemblage features, whose populations have fallen to less than 1% of the national population, retain their status as a main component species and should be considered when assessing the impacts of a project or plan on the Humber Estuary SPA.

Natural England advises that the main component species of the Humber Estuary SPA non-breeding waterbird assemblage include (June 2023):

a) *Species listed individually under the assemblage feature on the SPA citation:*

- Avocet, *Recurvirostra avosetta* (non-breeding)
- Bar-tailed godwit, *Limosa lapponica* (non-breeding)
- Bittern, *Botaurus stellaris* (non-breeding)
- **Black-tailed godwit, *Limosa limosa islandica* (non-breeding)¹**
- **Brent goose, *Branta bernicla* (non-breeding)¹**
- **Curlew, *N. arquata* (non-breeding)¹**
- **Dunlin, *Calidris alpina alpina* (non-breeding)¹**
- **Golden plover, *Pluvialis apricaria* (non-breeding)¹**
- Goldeneye, *Bucephala clangula* (non-breeding)
- Greenshank, *T. nebularia* (non-breeding)
- Grey plover, *P. squatarola* (non-breeding)
- Knot, *Calidris canutus* (non-breeding)
- **Lapwing, *Vanellus vanellus* (non-breeding)¹**
- **Mallard, *Anas platyrhynchos* (non-breeding)¹**
- Oystercatcher, *Haematopus ostralegus* (non-breeding)
- Pochard, *Aythya farina* (non-breeding)
- **Redshank, *Tringa totanus* (non-breeding)¹**
- Ringed plover, *Charadrius hiaticula* (non-breeding)
- **Ruff, *Philomachus pugnax* (non-breeding)¹**
- Sanderling, *Calidris alba* (non-breeding)

¹ Species known to use off-site supporting habitat / functionally linked land (FLL) in the non-breeding season

- Scaup, *Aythya marila* (non-breeding)
- **Shelduck, *Tadorna tadorna* (non-breeding)¹**
- **Teal, *Anas crecca* (non-breeding)¹**
- Turnstone, *Arenaria interpres* (non-breeding)
- **Whimbrel, *Numenius phaeopus* (non-breeding)¹**
- **Wigeon, *Anas Penelope* (non-breeding)¹**

And

b) Species which are not listed on the SPA citation but occur at site levels of more than 1% of the national population according to the most recent Humber Estuary Wetland Bird Survey (WeBS) 5-year average count:

- Green sandpiper, *Tringa ochropus* (non-breeding)
- **Greylag goose, *Anser anser* (non-breeding)¹**
- **Little egret, *Egretta garzetta* (non-breeding)¹**
- **Pink-footed goose, *Anser brachyrhynchus* (non-breeding)¹**
- Shoveler, *Anas clypeata* (non-breeding)
- **Crane, *Grus grus* (non-breeding)¹**

As stated above, the assemblage qualification is subject to change as species' populations change; therefore, the appropriate WeBS data should be considered in any assessment and the above list should be used as a guide only.

Please note, the advice set out above should be considered when assessing potential impacts on the waterbird assemblage feature. You will also need to consider potential impacts on species which are not considered to be non-breeding waterbirds but are listed on the citation qualifying under article 4.1 and 4.2 of the Directive. These include:

- **Hen harrier, *Circus cyaneus* (non-breeding)¹**
- **Marsh Harrier, *Circus aeruginosus* (breeding)¹**
- Little tern, *Sterna albifrons* (breeding)
- Avocet, *Recurvirostra avosetta* (breeding)
- Bittern, *Botaurus stellaris* (breeding)

The species marked ¹ **in bold text** are known to use off-site supporting habitat / functionally linked land (FLL) (e.g. arable farmland, grassland/pasture, and/or non-estuarine waterbodies) in the non-breeding season and may therefore be the most relevant for assessing potential impacts of a proposed plan/project on birds using FLL associated with the Humber Estuary SPA. However, please note that this list should be used as a guide only; usage may depend on factors such as the habitats available on the site and distance to the Humber Estuary etc. Therefore, assessments of potential impacts on birds using functionally linked land should consider all relevant species and clear justification should be provided if any species are excluded from the assessment.

¹ Species known to use off-site supporting habitat / functionally linked land (FLL) in the non-breeding season

