From:
To:
Cleve Hill Solar Park

Subject: Natural England Deadline 2 submission

Date: 26 June 2019 19:29:37

Attachments:

Dear Cleve Hill case team,

Please find attached Natural England's submission for deadline 2 – our Written Representation and answers to the ExA's first written questions.

We would also like to notify you that we would like to attend the ISH on biodiversity and nature conservation.

Regards,

Alison Giacomelli Sussex and Kent Area Team Natural England Guildbourne House Chatsworth Road Worthing BN11 1LB

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www.gov.uk/natural-england

We are here to secure a healthy natural environment for people to enjoy, where wildlife is protected and England's traditional landscapes are safeguarded for future generations.

In an effort to reduce Natural England's carbon footprint, I will, wherever possible, avoid travelling to meetings and attend via audio, video or web conferencing.

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Date: 26 June 2019

Our ref: 286928 Your ref: EN010085



David Rose Lead Member of the Panel of Examining Inspectors Cleve Hill Solar Park Case Team The Planning Inspectorate

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

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BY EMAIL ONLY

Dear Mr Rose

NSIP Reference Name / Code: EN010085 Cleve Hill Solar Park
Natural England's submission for Deadline 2: Written Representation and Answers to the
Examining Authority's First Written Questions

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.

Written Representation

<u>Summary of Natural England's advice – designated nature conservation sites</u>

The main focus of Natural England's representations concern impacts on statutorily designated nature conservation sites, namely The Swale Special Protection Area (SPA), Ramsar site and Site of Special Scientific Interest (SSSI) and The Swale Estuary Marine Conservation Zone (MCZ). Progress has been made in addressing the issues and concerns Natural England raised in our Relevant Representation [RR-827], and can be summarised as:

Noise and visual disturbance – Mitigation measures are necessary to avoid an adverse impact on breeding and wintering SPA/Ramsar/SSSI birds during construction. These measures are set out in the Outline SPA Construction Noise Management Plan (CNMP) [APP-243], which the Applicant has indicated will be updated to include additional measures to avoid disturbance to the high tide roost at Castle Coote. Further measures are also Breeding Bird Protection Plan (BBPP) (Appendix B of the Outline Construction Environment Management Plan) [APP-205]. The Applicant has indicated that the relationship between the BBPP and SPA CNMP will be clarified.

Dust and water quality impacts – Standard construction mitigation measures, as set out in the Outline CEMP [APP-205], are sufficient to address potential dust emissions, and risks to water quality from the operation of plant and vehicles.

Loss of habitat for brent geese – In principle, lost arable foraging land for brent geese can be mitigated by provision of permanent pasture. Whether the Arable Reversion Habitat Management Area (AR HMA) will provide sufficient foraging resource will depend on its management. Natural England recommends

further detail on the management is set out in an updated Outline Landscape and Biodiversity Management Plan (LBMP).

Loss of habitat for lapwings and golden plovers – Natural England's view is that there is uncertainty over whether the AR HMA provides sufficient resource for foraging lapwings and golden plovers. We recommend the Applicant provides further clarity regarding whether the intensive management for brent geese is compatible with management for waders, and whether the bird days calculation has been applied appropriately.

Marsh harriers – Management of the ditches and adjacent grassland within the solar park will be necessary to maximise production of small mammals, and encourage marsh harriers to continue to forage in this area. Further detail is required in the Outline LBMP regarding grassland management for marsh harriers.

Our brief comments on protected species, landscape and access and recreation are also set out below.

Annex A - Natural England's answers to the ExA's first written questions [PD-004].

Natural England notes that an Issue Specific Hearing on biodiversity/nature conservation matters has been scheduled for 25 July 2019. We would like to notifiy the Examining Authority that we would like to attend that hearing.

Yours sincerely

Alison Giacomelli Sussex and Kent Area Team

PART 1 INTRODUCTION

1.1. Purpose and structure of these representations

- 1.1.1. These Written Representations are submitted in pursuance of rule 10(1) of the Infrastructure Planning (Examination Procedure) Rules 2010 ('ExPR') in relation to an application under the Planning Act 2008 for a Development Consent Order ('DCO') for the construction and operation of a solar photovoltaic array, energy storage facility and associated infrastructure ('the Project') submitted by Cleve Hill Solar Park Ltd ('the Applicant') to the Secretary of State.
- 1.1.2. Natural England has already provided a summary of its principal concerns in its Relevant Representations, submitted to the Planning Inspectorate on 28 January 2019 [RR-827]. This document comprises an updated detailed statement of Natural England's advice, as it has developed in view of the common ground discussions that have taken place with the Applicant to date. In particular, this advice takes account of discussions through the Habitat Management Steering Group (HMSG), which is made up of the Applicant and their consultants, Natural England, the Environment Agency, Kent Wildlife Trust and the RSPB.

1.1.3. These representations are structured as follows:

- a. Section 2 describes the statutory conservation designations, features and interests that may be affected by the Project and need to be considered.
- b. Section 3 comprises Natural England's submissions in respect of the nature conservation issues that concern it.
- c. Section 4 comprises Natural England's submissions in respect of its statutory landscape role.
- d. Section 5 describes Natural England's role and comments in relation to access and biodiversity enhancements

Annex A is a dedicated section answering the Examining Authority's written questions which were asked on 7 June 2019, cross-referenced to the rest of this document.

2. CONSERVATION DESIGNATIONS, FEATURES AND INTERESTS THAT COULD BE AFFECTED BY THE PROPOSED PROJECT

The following is a brief summary of the interest features of the relevant designated areas of concern in this matter.

2.1. International conservation designations

The Swale Special Protection Area (SPA), which is designated for:

- Wintering dark-bellied brent geese
- Wintering dunlin
- Assemblage of wintering waterbirds (main component species: dark-bellied grent goose, European white fronted goose, shelduck, shoveler, wigeon, pintail, teal, little egret, oystercatcher, avocet, lapwing, golden plover, grey plover, curlew, bar-taile godwit, blacktailed godwit, knot, ruff, sanderling, dunlin, green sandpiper, greenshank.)
- Assemblage of breeding birds of damp grassland (main component and characteristic species: mallard, shelduck, moorhen, coot, lapwing, redshank, reed warbler, reed bunting, other breeding ducks and waders, yellow wagtail, marsh harrier.)

<u>The Swale Wetland of International Importance under the Ramsar Convention (Ramsar site)</u>, which is designated under:

- Criterion 2 the site supports nationally scarce plants and at least seven red data book invertebrates
- Criterion 5 assemblage of wintering waterfowl of international importance

The Ramsar Information Sheet also identifies five bird species for possible future inclusion under criterion 6. These species are considered in Natural England's answer to question 1.1.21 (see Annex 1 to this representation).

Natural England's view is that all other international conservation designations can be ruled out as being potentially affected.

2.2. National conservation designations

The Swale Site of Special Scientific Interest (SSSI), which is notified for:

- Aggregations of breeding birds (avocet, bearded tit, gadwall, lapwing, marsh harrier, pochard, redshank and shoveler)
- Aggregations of non-breeding birds (bearded tit, black-tailed godwit, brent goose, curlew, dunlin, gadwall, great-crested grebe, grey plover, hen harrier, knot, marsh harrier, oystercatcher, pintail, redshank, ringed plover, shelduck, shoveler, spotted redshank and teal.)
- Assemblages of breeding birds of lowland damp grasslands and lowland fen
- Invertebrate assemblages of saltmarsh and transitional brackish marsh, open water on disturbed sediments, and reed-fen and pools
- Vascular plant assemblage
- Habitats: brackish lakes, ditches, lowland fen, ponds, saltmarsh and standing waters.

The Swale Estuary Marine Conservation Zone (MCZ), which is designated for:

- Estuarine rocky habitats
- Intertidal coarse sediment
- Intertidal mixed sediments
- Intertidal sand and muddy sand
- Low energy intertidal rock
- Subtidal coarse sediment
- Subtidal mixed sediments
- Subtidal mud

Subtidal sand

2.3. European and nationally Protected Species

Great crested newts and water voles are present within the application site. Natural England is in discussion with the applicant regarding these species. Once we receive satisfactory draft licence applications, we will supply a Letter of No Impediment.

2.4. Landscape designations

Kent Downs Area of Outstanding Natural Beauty (AONB)

The proposal is around 7.6km from the AONB, and so there will be distant views of the solar park from the AONB. The distinctive landform and dramatic views are one of the special qualities of the Kent Downs AONB. The Management Plan for the AONB includes Policy SD8: "Proposals which negatively impact on the distinctive landform, landscape character, special characteristics and qualities, the setting and views to and from the AONB will be opposed unless they can be satisfactorily mitigated."

3. NATURAL ENGLAND'S NATURE CONSERVATION CONCERNS AND ADVICE

3.1. The principal issues in relation to statutorily designated nature conservation sites

- 3.1.1. Natural England identified the following main issues in its Relevant Representations:
 - a. Noise and visual disturbance to birds during construction
 - b. Dust and water quality impacts
 - c. Loss of habitat

These issues will be discussed in corresponding sections below along with any updates on the progress or resolution of issues.

3.2. Noise and visual disturbance during construction

3.2.1. The birds for which The Swale SPA, Ramsar site and SSSI are designated are susceptible to noise and visual disturbance. Natural England's supplementary advice on the conservation objectives for the SPA¹ states that: "Disturbance should be judged as significant if an action (alone or in combination with other effects) impacts on (water)birds in such a way as to be likely to cause impacts on populations of a species through either

I.changed local distribution on a continuing basis; and/or

II.changed local abundance on a sustained basis; and/or

III.the reduction of ability of any significant group of birds to survive, breed, or rear their young."

Wintering birds on intertidal habitat

- 3.2.2. Table 9.6 of the Environmental Statement (ES) Ornithology chapter [APP-039] summarises the SPA component species using the intertidal area to the north of the proposed solar park. This indicates that significant numbers of SPA (and SSSI) species use this area.
- 3.2.3. Whilst Natural England does not agree with the use of noise thresholds to predict whether there will be adverse impacts (as impacts are site and species specific), we agree they are helpful in assessing potential for impacts. Figure 3 in the Report to Inform an Appropriate Assessment (RIAA) [APP-026] shows that the 70dBL_{Amax} noise contour does not reach the intertidal area. However, the 55dBL_{Amax} contour extends 320m from the source of the piling, and hence extends into the intertidal. Therefore, there is the potential for wintering birds to be impacted. This applies particularly to birds roosting at Castle Coote, as options for alternative high tide roosts are more limited than foraging areas, and birds are pushed closer to the source of disturbance by the high tide.
- 3.2.4. Disturbance mitigation measures are set out in the Outline SPA Construction Noise Management Plan (CNMP) [APP-243], which are welcomed. However, in our Relevant Representation [RR-827] Natural England raised concerns that these were not sufficient to be certain that adverse impacts would be avoided at high tide. This issue has been discussed through the Habitat Management Steering Group (HMSG) and the group agreed that timing of piling works closest to Castle Coote should take place outside the core wintering period (November to February)

¹ Supplementary advice on Conservation Objectives can be found on Natural England's designated sites view website: <a href="https://designatedsites.naturalengland.org.uk/Marine/SupAdvice.aspx?SiteCode=UK9012011&SiteName=swale&SiteNameDisplay=The+Swale+SPA&countyCode=&responsiblePerson=&SeaArea=&IFCAArea="https://designatedsites.naturalengland.org.uk/Marine/SupAdvice.aspx?SiteCode=UK9012011&SiteName=swale&SiteNameDisplay=The+Swale+SPA&countyCode=&responsiblePerson=&SeaArea=&IFCAArea="https://designatedsites.naturalengland.org.uk/Marine/SupAdvice.aspx?SiteCode=UK9012011&SiteName=swale&SiteNameDisplay=The+Swale+SPA&countyCode=&responsiblePerson=&SeaArea=&IFCAArea="https://designatedsites.naturalengland.org.uk/Marine/SupAdvice.aspx?SiteCode=UK9012011&SiteName=swale&SiteNameDisplay=The+Swale+SPA&countyCode=&responsiblePerson=&SeaArea=&IFCAArea="https://designatedsites.naturalengland.org.uk/Marine/SupAdvice.aspx?SiteCode=UK9012011&SiteName=swale&SiteNameDisplay=The+Swale+SPA&countyCode=&responsiblePerson=&SeaArea=&IFCAArea="https://designatedsites.naturalengland.org.uk/Marine/SupAdvice.aspx?SiteCode=&responsiblePerson=&r

inclusive). The Applicant has indicated, through our common ground discussions, that an updated SPA CNMP will be submitted that will include timing restrictions on piling to avoid disturbance to birds using the high tide roost at Castle Coote. Subject to the detail contained in an updated SPA CNMP, Natural England confirms this is an acceptable approach to mitigating disturbance to wintering birds.

Breeding birds of grazing marsh and reedbed

- 3.2.5. The grazing marsh and reedbed to the north and west of the solar farm site supports breeding birds which form components of the breeding bird assemblage of the SPA (and SSSI notified features, including bearded tit). These birds are susceptible to disturbance, which may affect their productivity, and so mitigation measures are necessary.
- 3.2.6. In our Relevant Representation [RR-827], Natural England raised concerns as to whether the mitigation measures set out in the Outline SPA CNMP [APP-243] and the Breeding Bird Protection Plan (BBPP) (Appendix B of the Outline Construction Environment Management Plan) [APP-205] gave sufficient certainty that impacts would be avoided. In particular, the BBPP states (paragraph 158) that 'where practicable' construction activities closest to The Swale will be avoided. Through our common ground discussions, the Applicant has confirmed that the intention of this statement was to avoid restricting activities that do not exceed the noise threshold, and has agreed to review the wording of the BBPP to provide greater certainty and clarity.

Breeding marsh harriers

3.2.7. Marsh harriers are an important component of the SPA breeding bird assemblage. Therefore, Natural England welcomes the specific commitment to a 500m exclusion zone around any marsh harrier nest (paragraph 165 of the Breeding Bird Protection Plan) [APP-205], in order to avoid noise and visual disturbance.

Wintering brent geese, lapwings and golden plovers

- 3.2.8. Surveys undertaken in support of the proposal indicate that large numbers of brent geese, lapwings and golden plovers use the arable land within the development site in the winter. Natural England agrees with the statement (in paragraph 163 of the RIAA) [APP-026] that these species will not be adversely impacted in the first winter of construction as there will be sufficient undeveloped area for them to continue to forage. However, there will be an impact in the second (and third) winter as the Arable Reversion Habitat Management Area (AR HMA) will be subject to construction disturbance.
- 3.2.9. As this disturbance is temporary, Natural England's view is that construction disturbance and displacement, alone, is not likely to lead to an adverse effect on wintering geese and plovers. However, it will be necessary to create the AR HMA grassland as early in the construction timetable as possible, to ensure that the habitat is established and available as soon as construction finishes. Natural England recommends adding detail on the timing of the arable reversion to the Outline Landscape Biodiversity Management Plan (LBMP) [APP-203].

3.3. Dust and Water Quality Impacts

3.3.1 Habitats and species that make up the special interest of the Ramsar site, SSSI and MCZ in the vicinity of the proposal are susceptible to smothering from dust, and changes in water quality. However, Natural England's advice is that standard construction mitigation measures, as set out

in the Outline CEMP [APP-205], are sufficient to address potential dust emissions, and risks to water quality from the operation of plant and vehicles.

- 3.3.2 Paragraph 3.9 of Natural England's Relevant Representation [RR-827] requested information on the current level of pesticide, fertiliser and herbicide use so that the benefit of ceasing the current arable operation can be quantified. This would also be helpful in determining whether the proposed application on the AR HMA is less than the amount of nitrogen currently applied, and hence whether this represents a benefit to the Ramsar and SSSI ditch plant species.
- 3.3.3 Through our common ground discussions, the Applicant has confirmed that it has not been possible to identify the levels of application for each individual field, or for the CHSP area as a whole, and that the information is only available at a whole farm scale. Nevertheless, the level of fertiliser applied will be less than the current baseline, as the proposal is to only fertilise the AR HMA rather than the whole CHSP site. Natural England accepts this is likely to be the case. However, in order to avoid nutrient run-off into the ditches surrounding the AR HMA, and to ensure a significant improvement on the current situation, Natural England recommends application of 12 tonnes organic manure/ha/year, leaving a 10m buffer between the ditch and the fertiliser application. We understand the Applicant will include details of the fertiliser application in an updated LBMP.

3.4. Loss of Habitat

- 3.4.1. The development site supports significant numbers of brent geese, golden plovers and lapwings in the winter. Numbers fluctuate according to the type of crop planted and other factors, including time of year, but at times the number of birds on site is large, and a significant proportion of the respective SPA populations. The applicant's surveys, and data from the Kent Wildlife Trust (Table A9.6 of the Ornithology Technical Appendix) [APP-223], demonstrate that the development site is regularly used by wintering geese and plovers, and hence is functionally linked to the SPA/Ramsar. Natural England's view is that, in order to have sufficient certainty that an adverse effect on integrity will be avoided, there should be no net loss of foraging resource as a result of the proposal. This has, therefore, been the prime focus of our discussions with the Applicant, through the HMSG.
- 3.4.2. As set out in our Relevant Representation [RR-827], Natural England is satisfied that the 'bird-days' metric described in the Ornithology Technical Appendix [APP-223], is an appropriate method for calculating gains and losses of functional land. The bird surveys in support of the application were carried out during a representative period in the cropping cycle, and therefore the inter-annual mean of the intra-annual mean of the peak monthly counts (as described at paragraph 104 of the Ornithology Technical Appendix) is an appropriate way to calculate bird days.

Brent Goose Functionally Linked Land

3.4.3. Natural England has advised the applicant that the AR HMA should maximise its production of grass for brent geese. This is because geese are more site faithful and have a shorter foraging distance than lapwings or golden plovers. Experimental manipulation² of management prescriptions for brent geese and accurate survey has shown that grass cut five times and

² Vickery, Sutherland & Lane (1994) The management of grass pastures for brent geese. J. Appl. Ecol. 31. 282-290.

fertilised with 50kgN/ha can support 2097 goose-days/ha. The study by Vickery *et al.* (1994) also demonstrated that there was no significant difference in goose usage of plots that were cut or grazed, the most important factor was that a short sward (<5cm) was achieved in October when the geese arrive. However, grazing (as opposed to cutting), and fertilising, both increased the protein content of grass.

- 3.4.4. The Outline LBMP [APP-203] describes the management of the AR HMA in terms of grazing at a low stocking density to achieve a sward height of <10cm. Natural England would welcome further discussion with the Applicant as to whether the management set out in the Outline LBMP will achieve the precise number of goose-days (ie 2097 per ha) that have been used in the caclulations in the RIAA [APP-026]. In particular, the goose-days in the Vickery *et al.* study were based on cutting to achieve a shorter sward than suggested in the Outline LBMP; and although it is noted that there was no significant difference between goose usage on cut or grazed plots, the paper does not give a goose-days figure for grazed land.
- 3.4.5. The Outline LBMP [APP-203] states (paragraph 295) that organic fertiliser may be applied in the autumn. Natural England agrees that an adaptive approach is appropriate to managing the AR HMA, however, we recommend that fertiliser is applied every year, given the evidence that this increases the nutritional value of the grass. It is also likely to benefit lapwings and golden plovers by increasing the biomass of soil invertebrates (see below for further information). As noted at paragraph 3.3.3 of this representation, Natural England recommends application of 12 tonnes organic manure/ha/year, leaving a buffer of 10m between the application and the edge of any ditches. As fertiliser application achieves greater goose-days but should be avoided within 10m of ditches to avoid impacting other designated features, we recommend calculating whether this has any impact on the sufficiency of the AR HMA for brent geese.

Lapwing and Golden Plover Functionally Linked Land

- 3.4.6. Lapwings and golden plovers feed on soil and surface invertebrates. Therefore, they do not compete for the same food as brent geese and can potentially be accommodated on the same piece of land. Whether the mitigation land can provide for all the geese, lapwings and golden plovers necessary will depend on:
 - a) Whether there is physically enough space for the geese and waders to feed, as they tend to form separate flocks;
 - b) Whether management of a dense grass sward to feed the geese means that soil invertebrates are less available to the waders.
- 3.4.7. The bird-days calculations for these species (described at paragraph 131 of the Ornithology Technical Appendix) come from work by Gillings *et al* (2007) on arable land in Norfolk³. We understand the Applicant has not been able to find a bird-days calculation for plovers on permanent pasture in the scientific literature. Therefore, it is not clear that grassland will support an equivalent number of bird-days to arable land. Whilst grassland can support a greater biomass of earthworms than arable, it is not certain that a dense sward will allow the birds the same access to the food as arable habitat (as noted above). In addition, Gillings *et al* (2007) calculated their bird-days based on the fields that actually held plovers as they were concentrated into a few fields. Calculating the density of birds across the whole Norfolk study

³ Gillings, Fuller & Sutherland (2007) Winter field use and habitat selection by Eurasian Golden Plovers Pluvialis apricaria and Northern Lapwings Vanellus vanellus on arable farmland. Ibis. 149, 509-520.

area would have produced much lower bird-days. It is, therefore, not clear from that study why the plovers were aggregating in the fields they did, and whether those conditions will be replicated in the AR HMA.

- 3.4.8. Using the bird-days calculations from Gillings *et al* (2007) indicates that 56ha of mitigation land is required for lapwings and 18.5ha for golden plovers, ie there is a small shortfall for lapwings, but over-provision for golden plovers. The Applicant suggests, in their Ornithology Technical Appendix, that the shortfall in lapwing capacity can be made up by the over provision for golden plovers, as the two species feed in the same areas, and the mitigation requirements are not additive.
- 3.4.9. Natural England is not certain that the bird-days figures can be used in this way, as it implies that there is competition between the two species for the same food resources, and that unused resource for golden plover can be used by additional lapwing. Therefore, we recommend that the Applicant provides further information on whether the lapwings and golden plovers were found foraging together in the Gillings et al (2007) study, whether competition for the same resources is likely, and hence whether it is appropriate to add the bird-days for the different species into a combined plover-days figure.

Marsh Harrier Functionally Linked Land

3.4.10. Marsh harriers are an important component of the breeding bird assemblage and forage along the ditches within the development site. There is some uncertainty as to whether individuals will continue to forage within the solar park site as there are no equivalent sites with which to compare, regarding the response of marsh harriers. However, the setting back of panels to a minimum of 15m from the ditch is helpful in reducing the risk that 'pinch points' will deter birds. Natural England's view is that creating rough grassland to maximise the production of small mammals is crucial in encouraging marsh harriers to continue to forage in the area.

3.5. Future land uses

3.5.1 In our Relevant Representation [RR-827], Natural England noted that the Environment Agency's Medway Estuary and Swale Coastal Flood and Erosion Strategy (MEASS) included the Cleve Hill site as a location for managed realignment in the 2nd epoch of that strategy. The Habitats Regulations Assessment for MEASS requires that intertidal habitat is created to compensate for losses due to sea level rise and coastal squeeze. Natural England understands that the Applicant is drafting an additional Requirement for the DCO to address the Environment Agency's request for a time limit on the consent. We will comment on the draft DCO when submitted, but we welcome the steps taken to resolve this issue.

3.6. The Swale SSSI and The Swale Estuary MCZ

- 3.6.1. Natural England's view is that the mitigation measures set out in section 3.2 to 3.4, above, are sufficient to address potential impacts on the notified features of The Swale SSSI.
- 3.6.2. As noted in section 2.2 above, the proposed works, are sited adjacent to The Swale Estuary MCZ, which is designated for a number of habitats including low energy intertidal rock, intertidal coarse sediment; intertidal mixed sediments; intertidal sand and muddy sand; estuarine rocky habitats; subtidal coarse sediment; subtidal mixed sediment; subtidal sand; and subtidal mud. Good examples of estuarine rocky habitats have been found in the area around Cleve Marshes and good examples of subtidal course sediment are present around Faversham Creek, near Nagden Marshes.

3.6.3. Eutrophication has not currently been noted to be significant. However it should be ensured that there are no increases in nutrients. Furthermore contaminants may impact the ecology of the Marine Protected Area by having a range of biological effects on different species within the habitat, depending on the nature of the contaminant. Therefore contractors should adhere to pollution prevention best practice guidelines including use of materials that are non-toxic to the marine environment.

3.7. Protected Species

3.7.1. The development site supports populations of great crested newts and water voles. The Applicant has consulted Natural England on draft licences for these species, and we are in the process of reviewing them. Once this is complete we will supply a Letter of No Impediment.

4. NATURAL ENGLAND'S ADVICE ON PROTECTED LANDSCAPES

4.1 Kent Downs AONB

- 4.1.1 Natural England has a number of specific statutory powers and duties in relation to protected landscapes (AONBs and National Parks). These encompass:
 - designation and any variation of boundaries
 - monitoring effectiveness in respect to the purpose of designation
 - advising Ministers on management and governance.
- 4.1.2 Our role is also to bring to the attention of the Secretary of State and local planning authorities the effect of developments that are likely to be prejudicial to the natural beauty of National Parks or AONBs. We are a statutory consultee under a range of planning and transport legislation and we provide landscape advice on land use planning including development plans, nationally significant infrastructure proposals, Strategic Environmental Assessments and Environmental Impact Assessments (involving assessment of landscape/seascape and visual impacts).
- 4.1.3 Given our statutory landscape role, described above, Natural England's landscape advice focuses on the potential impacts on the Kent Downs AONB. The potential impacts of the proposal on views from the Kent Downs Area of Outstanding Natural Beauty (AONB) have been assessed in Chapter 7 of the ES [APP-037]. Viewpoint 20, at Shepherd's Hill in the AONB, is around 7.6km from the development site, and as such there are only distant views of it. Therefore, Natural England concurs with the assessment (at paragraph 414) that the proposal would result in moderate/minor effects on the AONB which are not significant.

5. NATURAL ENGLAND'S ADVICE ON OTHER, NON-STATUTORY, ISSUES

5.1 Access and Recreation

- 5.1.1 Natural England has a duty to provide coastal access on foot around the whole of the English coast and is aiming to complete this by 2020. This is a new National Trail with an associated margin of land predominantly seawards of this, for the public to access and enjoy. Natural England takes great care in considering the interests of both land owners/occupiers and users of the England Coast Path, aiming to strike a fair balance when working to open a new stretch. We follow an approach set out in the approved Coastal Access Scheme⁴.
- 5.1.2 Natural England submitted proposals for the Whitstable to Iwade stretch of the England Coast Path, for approval by the Secretary of State for Environment, Food and Rural Affairs, in June 2017. In the vicinity of the development site, the proposal is for the England Coast Path to follow the route of the Saxon Shore Way.
- 5.1.3 Natural England's concerns regarding the England Coast Path and new developments centre on ensuring they do not affect the ability of people to exercise their coastal access rights with respect to continuing along the proposed route. As set out in the Coastal Access Scheme (section 5.5.5) our role is to work with developers to ensure that proposals take account of our objective to provide the England Coast Path, and include provision for the trail on the seaward side wherever practicable. In this case, the route along the seaward side of the proposal will not be compromised. With respect to the wider visual and landscape aspects of the development and its accordance with relevant planning policies, it is not Natural England's role to provide detailed comments on these issues when responding to planning proposals, but they are nevertheless key issues to consider when determining the application.
- 5.1.4 Notwithstanding the comments above, Natural England notes that Chapter 7 of the ES [APP-037] includes an assessment of the visual impact of the proposal on the Saxon Shore Way (and hence the England Coast Path once opened), concluding that the proposal would have a major (years 1-10) and major/moderate (10 years onwards), negative, visual impact on users which is significant.
- 5.1.5 Natural England recognises the attempts made by the applicant to mitigate this visual impact by softening the edges of the solar park, as indicated in the Outline LBMP [APP-203]. We defer to other Interested Parties to comment on the success of this. In our Relevant Representation, Natural England suggested that some of the scrub proposed could be replaced with reedbed, which would be preferable from a nature conservation point of view and more in keeping with the marsh landscape. We have discussed this suggestion with the Applicant through our common ground discussions, and understand that an updated LBMP will be submitted, which will provide more detail on the locations and type of scrub and reedbed proposed.

⁴ http://publications.naturalengland.org.uk/publication/5327964912746496

Annex A

NATURAL ENGLAND'S ANSWERS TO THE EXAMINING AUTHORITY'S FIRST WRITTEN QUESTIONS

Q NO	QUESTION TO:	QUESTION:	NATURAL ENGLAND'S RESPONSE
1.1.1.	Natural England Kent Wildlife Trust RSPB Local	Are Natural England, Kent Wildlife Trust, RSPB and the Local Authorities content with the approach to defining study areas for wildlife surveys and assessment in Chapter 8 of the Environmental Statement [APP-038] and the appended survey reports?	Natural England has produced <u>standing advice</u> ⁵ for protected species, including on survey requirements. We would expect the Applicant to follow this, and would only provide bespoke advice on protected species where they form part of a SSSI or in exceptional circumstances.
	Authorities	Are the same parties content with the explanation of how the zone of influence for ornithological study and assessment was determined, especially in relation to the functional linkage identified between affected habitats on the development site and interest features of the Swale SSSI, SPA and Ramsar site (Chapter 9 of the Environmental Statement [APP-039] and the RIAA [APP-026])?	In this case, we will provide bespoke comment on the draft licences for great crested newts and water voles, but refer the Examining Authority to our standing advice for all other (non-SSSI) species. In relation to the ornithological assessment, Natural England is content with approach to defining study areas and the explanation of how the zone of influence was determined, as set out in section 9.2.2 of Chapter 9 of the ES [APP-039].
1.1.4.	Natural England Kent Wildlife Trust RSPB Local Authorities	Are Natural England, Kent Wildlife Trust, RSPB and the Local Authorities content that the various 2015 protected species surveys, some of which were carried out in accordance with subsequently updated guidance, and the 2016 breeding bird and flight activity surveys are sufficiently up to date to facilitate an accurate assessment, noting the timing and results of the updated phase 1 habitat survey in February 2018?	Natural England is currently reviewing the draft licences the Applicant has produced for great crested newts and water voles. This will include comment on whether the survey information presented is sufficiently up-to-date. Once this review has been concluded, we will issue a Letter of No Impediment (LONI), and, therefore, have no further comment to make at this time

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⁵ https://www.gov.uk/protected-species-and-sites-how-to-review-planning-proposals

1.1.8.	The Applicant Natural England Kent Wildlife Trust RSPB Local Authorities	A Natural England review of the impacts of solar farms on birds is referred to in the non-technical summary of the Environmental Statement (paragraph 158 of APP-249]. Could the Applicant confirm the full reference and submit a copy into the Examination? In relation to potential bird mortality or injury through collision with solar panels or fences, are the Applicant, Natural England, Kent Wildlife Trust, RSPB or the Local Authorities aware of any relevant monitoring studies at existing solar farm sites?	Natural England understands the Applicant will submit the review of the impacts of solar farms referred to. The aim of the report (dated August 2016) was to synthesis the available evidence (from scientific research papers and grey literature, including planning decisions) on the ecological impacts of solar farms, particularly on birds and bats. Natural England is not aware of any monitoring of existing solar farms, other than those studies identified in the review referred to above. This concluded that the small amount of scientific and grey literature available suggests that bird collision risk from solar panels is very low, and that there is likely to be more of a collision risk presented by infrastructure associated with solar developments, such as overhead power lines.
1.1.17.	Natural England	Could Natural England explain the rationale for the inclusion of the existing coastal flood defences at the site within the boundaries of the statutory nature conservation notifications/ designations (SSSI, SPA, Ramsar)?	The Swale SSSI boundary is aligned with an easily recognisable feature, which in this location (unit 74) is the sea wall. The habitat features for which this part of the SSSI is notified are ditches and reedbed, which support aggregations of bearded tit and marsh harrier in the wintering season, assemblages of wintering and passage bird species, vascular plant assemblage and invertebrate assemblage. Similarly, the SPA and Ramsar are aligned with the SSSI, to ensure the boundary is an easily recognisable feature.
1.1.21.	Natural England	There are several birds identified on the information sheet for the Swale Ramsar site (and in section 5.2.3 of the RIAA [APP-026]) 'for possible future consideration under criterion 6'. Please could Natural England confirm the status of these features? Is it likely that the Ramsar citation will be updated in the near future to include these as features under Criterion 6?	The species in question are ringed plover, wigeon, pintail shoveler and black-tailed godwit. Four of these (pintail, wigeon, shoveler and black-tailed godwit) are considered 'main component' species of the wintering waterbird assemblage of the SPA and Ramsar site. Therefore, these species are covered by the existing designations even though they are not individually named. The fifth species,

			ringed plover, is identified on the Ramsar Information Sheet as important in the passage period. The latest WeBS 5 year peak mean for ringed plover is 255 (12/13 – 17/18), which does not qualify it as a main component species. Nevertheless it contributes to the waterbird assemblage, and should be captured under any assessment of impacts on the assemblage. Therefore, whilst we currently have no information on any timetables for future updates to the Ramsar Citation, we can confirm that these species are captured in the by the assemblage feature of the SPA and Ramsar site.
1.1.25.	Natural England	Is Natural England content that the RIAA [APP-026] includes sufficient regard for the Swale and Medway European Marine Site and its Conservation Objectives?	Natural England's advice in relation to The Swale Estuary MCZ is set out at paragraph 3.6.2 – 3.6.3 of this Written Representation. Standard best practice pollution control measures are sufficient to mitigate potential impacts on the MCZ, which underpins the Swale and Medway European Marine Site (EMS). The EMS covers the marine parts of The Swale SPA and Medway Estuary and Marshes SPA. Therefore, our view is that the RIAA [APP-026] does have sufficient regard for its Conservation Objectives.
1.1.27.	The Applicant Natural England RSPB Kent Wildlife Trust	Given the survey findings that there was almost no coincidence between Brent goose and the two target waders (golden plover and lapwing) in the same fields at the same time, could the Applicant confirm the extent to which the evidence used to support the design of the Arable Reversion Habitat Management Area can be relied upon to ensure that both will successfully coexist in the requisite numbers within the same mitigation area? Could Natural England expand on the statement in its Relevant Representation [RR-826] that golden plover and lapwing feed on soil and surface invertebrates and do not	As set out in paragraph 3.4.6 of this Written Representation, Natural England's view is that as they eat different food, geese and waders do not compete with each other and can use the same piece of land. The factors determining whether both types of species can be accommodated will be whether there is physically enough space for the different flocks, and whether management for one does not hinder the other's ability to forage. The crucial factor, in Natural England's opinion, is whether the intensive grassland management necessary to feed the brent geese hinders the waders' ability to get to their

		compete for the same food as Brent geese and can 'potentially' be accommodated on the same piece of mitigation land. What factors does Natural England consider might determine whether lapwing, golden plover and Brent goose can be accommodated on the same piece of mitigation land? Are Natural England, RSPB or Kent Wildlife Trust aware of any types of inter-species competition or interaction that might restrict the capability of the area to support the necessary density of all three species of birds? Do Natural England, RSPB or Kent Wildlife Trust consider that any additional evidence is required from the Applicant in this regard?	invertebrate prey. These waders prefer muddy patches where it is easy to probe for earthworms. As set out in paragraph 3.4.9 of this Written Representation, Natural England recommends that the Applicant provides further information on whether the lapwings and golden plovers were found foraging together in the Gillings <i>et al</i> (2007) study, whether competition for the same resources is likely, and hence whether it is appropriate to add the bird-days for the different species into a combined plover-days figure.
1.1.28.	The Applicant Natural England	In relation to the effectiveness of the proposed Arable Reversion Habitat Management Area, Natural England's Relevant Representation [RR-826] highlights uncertainties around the bird-days calculations for lapwing and golden plover. Could the Applicant and Natural England provide an update on discussions to resolve these uncertainties?	As noted in our answer to question 1.1.27, and paragraphs 3.4.6-9 of this Written Representation, Natural England's view is that further information is needed to resolve the uncertainties surrounding the mitigation land for lapwings and golden plovers.
1.1.30.	The Applicant Natural England RSPB Kent Wildlife Trust	Paragraph 163 of the RIAA [APP-026] states that the Arable Reversion Habitat Management Area will be established prior to construction, whereas paragraph 204 states that the Arable Reversion Habitat Management Area will be established during the construction phase. The Outline LBMP [APP-203] states that this will be established 'at the start of the construction phase, or prior to the start of the first winter of the construction phase, whichever is earlier'. The ornithological and hydrological assessments in the Environment Statement appear to rely on the conversion of arable to grassland prior to the start of construction of the solar panel tables and arrays. For the avoidance of doubt, could the Applicant confirm at what point in the programme the fields hosting the solar arrays, the Arable Reversion Habitat Management Area and	Natural England considers that more detail is needed in the LBMP regarding the timing and management of the AR HMA, to provide certainty that it will provide sufficient and suitable habitat. We understand from our common ground discussions with the Applicant that the LBMP will be updated to take account of these concerns.

		each of the other Habitat Management Areas would be established, and how this was incorporated into the assessments? Could the Applicant also clarify where in the Outline LBMP or in the Outline CEMP the requirement for pre-construction sowing is secured? Could the Applicant provide a plan to show the relevant areas? Are Natural England, RSPB, Kent Wildlife Trust and other nature conservation interests content that the Outline LBMP [APP-203] and draft Requirement 4 in the dDCO [APP-016] form a sound basis for ensuring that the necessary mitigation would be secured through any DCO or do they consider that there should there be more detail and assurance on the timing of seeding and establishment in the Outline LBMP?	
1.1.45.	The Applicant Kent Wildlife Trust Natural England RSPB	In the Applicant's response to Relevant Representations [AS-009], it is noted that negotiations and work are ongoing with Natural England and the Habitat Management Steering Group on the various management plans and prescriptions, including the promotion of extensive reedbed systems, and the inclusion of relevant provisions in a future iteration of the Outline LBMP. Could the Applicant provide an update on the current situation regarding progress on agreeing the management and monitoring prescriptions for the proposed Arable Reversion Habitat Management Area, Freshwater Grazing Marsh Habitat Management Area, Lowland Grassland Meadow Habitat Management Area (and the other Habitat Management Areas) with Natural England, the Kent Wildlife Trust, the RSPB and any other relevant consultees? Any necessary updates to the Outline LBMP should also be provided. Are Kent Wildlife Trust, Natural England and the RSPB content that the LBMP is an appropriate means of securing the monitoring of the Habitat Management Areas and provision of any necessary remedial measures?	Natural England's view is that the LBMP could be an appropriate means of securing the monitoring of the Habitat Management Areas and any adaptive management necessary. However, more detail is needed in relation to the monitoring, targets and triggers for remedial action. More detail is also needed on water level management across the whole site, wetland management, and on the SSSI enhancement proposals.

1.4.46	The Applicant Natural England	Draft DCO Requirement 13 states that the Undertaker must submit to the Relevant Planning Authority a Special Protection Area Construction Noise Management Plan for approval before commencement of each phase of the Authorised Project. As this is material to the Habitats Regulations Assessment by the Secretary of State, does the Applicant believe that the proposed approach will be acceptable to the Secretary of State? (For example, compare Requirement 7 of the Testo's Junction DCO which requires approval by the Secretary of State following consultation with Natural England, rather than the local planning authority.) Is Natural England satisfied with this approach and do they consider that sufficient detail is available to demonstrate that the necessary measures could be delivered?	Natural England's view is that, in principle, the approach is acceptable. However, we understand that the Applicant is updating the SPA CNMP, and therefore will provide further comment when the revised version is submitted.
1.5.11.	MMO Natural England Swale Borough Council Kent County Council Canterbury City Council	Could the MMO, Natural England, Swale Borough Council, Kent County Council, Canterbury City Council and any other local authority please confirm whether they are content that all other developments, plans and projects that have potential to result in cumulative or in-combination effects together with the proposed development have been identified and appropriately assessed by the Applicant in the Environmental Statement (Table 2.2) [APP-032] and the RIAA [APP-026] (including any relevant marine licensed projects)?	Natural England has discussed the plans and projects to include in the in combination assessment in our preapplication discussions. We are content that our advice has been followed in identifying relevant plans and projects.
1.6.1.	Natural England Swale Borough Council Kent County Council Canterbury City Council	Could Natural England, Swale Borough Council, Kent County Council and Canterbury City Council confirm that they are content with the locations of the viewpoints and photomontages presented in the LVIA?	As set out in paragraph 4.1.3 of this Written Representation we are content that a viewpoint was selected from the Kent Downs AONB. We cannot comment on other landscape receptors that are outside our remit.

1.7.6.	Swale Borough Council Natural England RSPB Kent Wildlife Trust The Applicant	Are Swale Borough Council, Natural England, RSPB and Kent Wildlife Trust content with the Applicant's proposal to specify construction plant, equipment and mitigation measures to ensure compliance with the various commitments to reduce noise at a later stage through the development of management plans and the imposition of Requirements? What reassurance could the Applicant give that sufficient measures will be available to achieve predicted and acceptable construction noise levels?	Natural England understands that the SPA CNMP and CEMP will be updated, and will provide further comment on those updated documents.
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