

Date: 13 June 2024
Our ref: 472774
Your ref: EN010122

Planning Inspectorate

BY EMAIL ONLY

Dear Ashley McInnes

NSIP Reference Name / Code: Oaklands Farm Solar Park / EN10122

Title: Natural England's comments in respect of Oaklands Farm Solar Park, promoted by BayWa.

Examining Authority's submission deadline with a date of 03 May 2024

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

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

Yours sincerely

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Part I: Summary and conclusions of Natural England's advice

Summary of Natural England's advice

Natural England advise that there are still matters to resolve and we require further information.

Natural England disagree with the information submitted to inform the HRA, there is a potential likely significant effect on the River Mease Special Area of Conservaiton due to a reduction in water quality as a result of this DCO.

Natural England's advice in these relevant representations is based on information submitted by Oaklands Farm Solar Limited in support of its application for a Development Consent Order ('DCO') in relation to Oaklnds Farm Solar Park.

Part I of these representations summarises what Natural England considers the main issues¹ to be in relation to the DCO application, and indicate the principal submissions that it wishes to make at this point. Natural England will develop these points further as appropriate during the examination process. Natural England may have further or additional points to make, particularly if further information about the project becomes available.

Our comments are set out against the following sub-headings which represent our key areas of remit:

- Internationally designated sites
- Nationally designated sites
- Protected species
- Biodiversity net gain
- Nationally designated landscapes
- Soils and best and most versatile agricultural land
- Ancient woodland and ancient/veteran trees
- Connecting people with nature (National Trails, open access land and England Coast Path)
- Other valuable and sensitive habitats and species, landscapes and access routes

Our comments are flagged as red, amber or green:

- Red are those where there are fundamental concerns which it may not be possible to overcome in their current form.
- Amber are those where further information is required to determine the effects of the project and allow the Examining Authority to properly undertake its task and or advise that further information is required on mitigation/compensation proposals in order to provide a sufficient degree of confidence as to their efficacy.
- Green are those which have been successfully resolved (subject always to the appropriate requirements being adequately secured).

Part I of these representations provides an overview of the issues and a summary of Natural England's advice. Section 2 identifies the natural features relevant to this application. Section 3 summarises Natural England's overall view of the application and the main issues which it considers need to be addressed by the Secretary of State.

Part II of these representations sets out all the significant issues which remain outstanding, and which Natural England advises should be addressed by Oaklands Farm Solar Limited and the Examining

¹ PINS NSIP Advice Note 11 Annex C sets out Natural England's role in infrastructure planning.

Authority as part of the examination process in order to ensure that the project can properly be consented. These are primarily issues on which further information would be required in order to allow the Examining Authority properly to undertake its task or where further work is required to determine the effects of the project to provide a sufficient degree of confidence as to their efficacy.

Natural England will continue discussions with Baywa-re to seek to resolve these concerns and agree outstanding matters in a Statement of Common Ground. Failing satisfactory agreement, Natural England advises that the matters set out will require consideration by the Examining Authority as part of the examination process.

The Examining Authority may wish to ensure that the matters set out in these relevant representations are addressed as part of the Examining Authority's first set of questions to ensure the provision of information early in the examination process.

2. The natural features potentially affected by this application

Internationally designated sites - AMBER

Natural England's position regarding impacts on internationally designated sites is summarised below. Further detail on our reasoning for this is given against each impact pathway in Part II.

Natural England is not yet satisfied that it can be ascertained beyond reasonable scientific doubt that the project would not have an adverse effect on the integrity of the following internationally designated sites.

- River Mease Special Area of Conservation (SAC)

Natural England note that the applicant has stated in Environmental Statement (Appendix 6.2) section 3.10 the operational phase of the development will result in an improvement in the water quality of the River Mease SAC.

Natural England disagrees that impacts during the operational phase can be completely ruled out. The proposed development is partially within the River Mease SAC catchment. The River Mease SAC is already failing its conservation objectives for water quality. It is possible that solar panels can create channels where rain falls off from the lowest point, this could then convey sediment with nutrients via tributaries towards the River Mease SAC. Typically solar panels require regular cleaning to maintain efficiency. This introduces the potential for chemicals used in the cleaning of the panels to migrate to the SAC.

It is feasible to mitigate this through the use of SUD's that would intercept surface water that will contain nutrient rich sediment and chemicals arising from the part of the site that is within the River Mease SAC catchment. The SUD's treatment trains can treat the surface water prior to it being discharged or infiltrated which would protect the designated features of the River Mease SAC.

Nationally designated sites - AMBER

Natural England's position regarding nationally designated sites is summarised below. Further detail on our reasoning for this is given against each impact pathway in Part II.

- The River Mease SSSI

The River Mease SSSI could also be impacted by nutrient rich sediment reaching it. Measures to protect the River Mease SAC would also protect the River Mease SSSI.

Protected species - AMBER

Natural England's position regarding European protected species is summarised below. Further detail on our reasoning for this is given in Part II.

Natural England is still awaiting of draft protected species licence applications for review. Without draft protected species licence applications we are unable to issue Letters of No Impediment.

It is noted within ES Chapter 6 (Ecology) that licences will be required for works relating to Badgers (section 6.79). Natural England has not received submission of draft protected species licence applications for review. Without draft licence applications we are unable to issue Letters of No Impediment (LoNI).

We would be happy to work with the applicant and the examining authority to ensure the required Protected Species Licences are sought.

Aside from these comments, our advice at this stage is limited to our [Standing Advice](#).

Biodiversity net gain - GREEN

Natural England's position regarding provision of biodiversity net gain (BNG) is summarised below. Further detail on our reasoning for this is given in Part II.

Natural England note that the applicant has submitted results from a BNG calculator in (ES Appendix 6.12). Natural England welcome the delivery of BNG as part of this project.

Nationally designated landscapes - GREEN

Natural England's position regarding nationally designated landscapes is summarised below. Further detail on our reasoning for this is given in Part II.

Natural England welcomes the inclusion of embedded mitigation during the construction phase as set out in the Construction and Environmental Management Plan (ES appendix 4.3). Natural England also welcome the oLEMP (ES Appendix 5.6) for mitigation proposed during the operational phase of the development.

Natural England welcome the commitment to use native species as set out in paragraph 2.5 of the oLEMP (ES Appendix 5.6). The inclusion of native species in the Objectives and Design approach ensure that proposed planting will likely be better suited to the site and local environment, this will provide the greater benefits for nature recovery compared to non native ornamental species.

Natural England consider the measures as set out in the oLEMP to be satisfactory in protecting the elements of the natural environment which represent the key areas of our remit.

Soils and best and most versatile agricultural land - - AMBER

Natural England's position regarding soils and the best and most versatile agricultural land is summarised below. Further detail on our reasoning for this is given in Part II.

Environmental Statement Chapter 15 – Agriculture and Soils January 2024 Document Ref: EN010122/APP/6.1

15.36 Whilst this predictive mapping (plate 15.2) provides an indication of the ALC grade, and thus the potential impact on BMV agricultural land, it does not provide the soil details required to inform soil management which would feed into the Soil Management Plan. There is a risk of soil damage, ALC degradation and long term or permanent loss of BMV from cable installation. Soil will need to be handled according to best practice and reinstated to a high standard to reduce the impacts. The results from a detailed ALC survey would provide soils data to inform a soil management plan for the whole site regardless of whether the use is permanent or temporary in nature.

We require that land quality and soil resources information is gathered for any land that is disturbed by the development, so the cabling route should be surveyed. Ideally a full detailed ALC survey would have been carried out across the whole site. With the Predictive mapping provided, it is recommended in this instance, that an ALC survey is undertaken within the cable route.

A semi detailed survey is acceptable where the site is clearly expected to be non-BMV (1 auger per 2 ha plus representative pits), but where BMV has been identified, a detailed ALC survey would be expected (1 auger per ha plus representative pits).

This type of survey requires an experienced ALC surveyor, in order to make the correct professional judgements, where to introduce flexibility. A semi detailed survey may not identify all of the BMV land.

As a result, we request that the site is revisited to carry out a detailed ALC survey of the predicted BMV areas and a semi-detailed survey in the areas currently identified to be non-BMV to confirm its extent. The ALC survey will enable a soil management plan to be generated for any areas to be disturbed (temporary and permanent) to ensure correct handling and restoration of soils, and onsite reuse of any surplus soils stripped from areas of permanent development.

Plate 15.3 This map identifies land outside of the DCO as mostly non BMV but with 2 and 3a BMV present. Natural England request clarification as to whether this land has undergone detailed survey.

15.44 In the absence of detailed survey for most of the cable corridor it is impossible to provide an accurate baseline and demonstrate the likely potential impacts. So, whilst this may make the mitigation precautionary, it means that the project is unable to show how it avoids impacts to BMV soils nor the design of potential mitigation to safeguard the soil resources. Refer to advice (para 15.36) for further guidance.

15.71 Natural England do not concur with the assumptions made in this paragraph. Stone and concrete pad bases have potential to increase compaction on soils within the solar array component. Typically, where infrastructure ie inverters/substations require bases the soil will be stripped during the construction phase, stored and then replaced at the time of decommissioning. The non-intrusive method for mounting solar arrays should be considered in the oSMP.

15.77 Figure 4.5 Illustrative Drakelow Access Design indicates a temporary 5m track width, however there is no Indicative Access Track Cross Section (figure 4.11) for a 5m width.

15.90 Refer to advice (para 15.36) for further guidance.

15.91 Natural England does not concur with the assumption land quality is mostly 3b within the cable route corridor. Grading should be based on actual findings from an ALC survey.

15.98 Refer to advice provided below on oSMP

15.126 NPPF Paragraph 181 states '*Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework*⁶² *Footnote (62) Where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality. The availability of agricultural land used for food production should be considered*'.

Appendix 1 Outline Soil Management plan

1.1.4 Natural England support the provision of an Outline Soil Management Plan (oSMP) and we advise under para 5.1 of the Defra Construction Code of Practice (Defra, 2009). A SMP informed by site-specific soil information to inform suitable soil handling. The SMP will also set out the target specification for the proposed end uses. The target specification for the restored soils should be based on pre-construction ALC grade. Natural England is satisfied that the Soils and Agricultural Land Classification Report (*Appendix 15.1 of the Environmental Statement- Soils and Agriculture*) constitutes a record of the pre-working ALC grading and physical characteristics of the land within the application site boundary.

1.2.4 Natural England the correct professional judgements necessary under the role of site foreman represent those typically made by an experienced soils scientist. Natural England require clarification on the level of professional qualification and experience the site foreman will hold to ensure soil handling and storage of soils will adhere to Defra Construction Code of Practice for the Sustainable Use of Soils on Construction Sites ensuring the sustainable use of the soil resource.

1.3.3 MAFF 2000 guideline superseded by Institute of Quarrying's Good Practice Guide for Handling Soils in Mineral Working.

1.4.2 Whilst the commitment to handle soils only when in a 'driest practicable conditions' is welcomed, soil handling should normally be avoided during October to March inclusive, irrespective of soil moisture conditions, because it will generally not be possible to establish green cover over winter to help dry out soils and protect them from erosion. Soils should only be handled in a dry and friable condition. A field suitable method for assessing whether soils are in a dry and friable condition based on plastic limits set out in Part One (Explanatory Note 4 – Table 4.2 provided below in Annex 1) of the Institute of Quarrying's Good Practice Guide for Handling Soils in Mineral Working, and this approach together with the associated rainfall protocols should be adopted.

1.5 As advised above (Explanatory Note 4 – Table 4.2 provided below in Annex 1) of the Institute of Quarrying's Good Practice Guide for Handling Soils in Mineral Working, and this approach together with the associated rainfall protocols should be adopted.

1.7.2 As above refer to advice for para 1.3.3 - for BMV Natural England advise sheets A-D ("for BMV A-D") of the loQ Guidance

1.7.7 Where topsoil is proposed to be stripped, typically for construction compounds; access tracks and laying cabling, the soil handling methodology (movement, storage & replacement) and soil protection proposals are reviewed to ensure that appropriate mitigation is in place to allow for the restoration of the land to the baseline ALC Grade.

1.8.5 Natural England advise stockpiles should not exceed 3m for topsoils and 5m for subsoils. Natural England recognises that Defra Construction Code of Practice for the Sustainable Use of Soils on Construction Sites notes these may be increased where limited space is available however with underlying Clay subsoils across most of the site, as indicated by the ALC report (January 2024) suggests heights of stockpiles should be kept to the maximum advised above and suggested in the para 1.8.5 . Should these heights be exceeded Natural England require further clarification on what methods will be used to determine whether increased stockpile heights will not result in compaction of soils.

1.8.7 For stockpiles that are to be grass seeded (EN010122/APP/6.1/Appx 4.3 para 1.9.1), slope should not exceed 25°

1.8.9 Refer to relevant loQ sheet B.

Appendix 4.5: Outline Decommissioning Environmental Management Plan

3.1.2 To ensure successful restoration all infrastructure should be removed and the soil profile, as determined by the detailed ALC survey. In terms of subsoil, it is important to note that the full soil profile down to 120cm should be regarded as soil resource rather than mineral resource. In some cases a shallower profile may provide adequate soil material for the grade of the land. In this case the lower parts of the profile could be considered as potential mineral. Where droughtiness is the main limitation then the full 120cm of soil resource is usually required to maximise the potential of the land. MAFF describe the soils resources to a depth of 120cm.

3.1.4 The minimum settled depth of subsoil/subsoil substitute and topsoil shall be 1.2 metres. Where it is intended to use imported soils or soil forming materials as agricultural soils in the restoration process these materials shall:

- a) Be separately stored in a designated area.

- b) Be identified to, and agreed as suitable with prior to placement.
- c) Be free of objects greater than 15 cm in any dimension which are likely to cause any obstruction to cultivations.

Table 2 Natural England welcome the provision of a Soil Resource Management Plan.

ES Appendix 15.1 – Agricultural Land Classification Survey for Oaklands Farm January 2024
Document Ref: EN010122/APP/6.1/Appx 15.1

1 Natural England request that all surveyors that took part in the survey are listed and advises there should be more detail provided of the qualified soil scientists (surveyors) professional credentials and experience in carrying out ALC.

3.1 The ALC reports does not identify the National soil Map soil associations that are relevant to the survey area.

3.2 Natural England note the differences in texture from those previously mapped, however there are no submitted laboratory analysis results. Where soil texture is critical to the grading, taking soil samples for laboratory analysis of particle size and/or organic matter content should be considered.

4.2 Text error, FCD is 137.5 days not 37.5

Appendix A Soils Profile data

Based on the data presented and the absence of whether there is a Slow Permeable Layer present and at what depth. Natural England is unable to confirm whether wetness class has been assessed correctly for each boring.

General comments on ALC

Pits 80 and 90 are clearly indicated on the Drawing No.: 1 however the presented soil profile data does not clearly identify numbered pits.

The full set of soil profile data that presents droughtiness calculations with assigned droughtiness grades; assigned wetness class for each boring; dominant limitation and subsequent ALC grade for each boring and representative pits.

There is no confirmation of stone assessment method, we would mainly expect to see this in soil pit descriptions

Oaklands Farm Solar Park - Environmental Statement Volume 3 Appendix 15.2: Agricultural Land Classification (Park Farm area) (KCC)

2.1 Natural England notes the recognised qualification meet the standards required however this appears to be generic in nature and does not identify the surveyor. Natural England advises there should be more detail provided of the qualified soil scientists (surveyors) professional credentials and experience in carrying out ALC.

2.4 Pit 1 is not visible on plan KCC3018/01A therefore, Natural England is unable to verify to location of pit 1 or confirm the observations made at that sample location.

3.13 The Published soil information has incorrectly been assessed. Looking at the red line boundary presented in insert 1 (para 1.2) the land surveyed according to data available is mostly in the Brockhurst 2 association and partially in both Wick 1 and Dunnington Heath. This part of the report needs updating.

3.16 Auger borings 34, 35, 36, 40 and 41 are not visually represented on plan KCC3018/01A or presented in soil profile log data.

3.22 Where soil texture is critical to the grading, taking soil samples for laboratory analysis of particle size and/or organic matter content should be considered.

General comments on ALC

When mapping ALC data Natural England advise the ALC grades are defined by a standard colour notation. It is important this is complied with to avoid confusing users. The RGB codes in ArcGIS systems used by Natural England are as follows:

Grade 1 : Red = 0, Green = 129, Blue = 254

Grade 2 : Red = 194, Green = 251, Blue = 254

Grade 3a : Red = 1, Green = 129, Blue = 0

Grade 3b : Red = 165, Green = 254, Blue = 164

Grade 4 : Red = 254, Green = 251, Blue = 105

Grade 5 : Red = 178, Green = 136, Blue = 100

Non Agricultural : Red = 254, Green = 196, Blue = 85

Urban : Red = 255, Green = 99, Blue = 85

Annex 1

Closed season and definition of 'dry and friable'

A 'closed season' for handling soil shall be applied between the months of October and March inclusive. At all other times soils shall only be stripped and handled when they are in a 'dry and friable' condition. Broadly speaking, a soil is 'dry and friable' when it breaks and shatters when disturbed rather than smears and deforms. The following tests describe methods to objectively differentiate between these two conditions.

Soil Tests.

Soil tests are to be undertaken in the field. Samples shall be taken from at least five locations in the soil handling area. The tests shall include visual examination of the soil and physical assessment of soil consistency.

Examination Test:

- If the soil is wet, films of water are visible on the surface of soil particles or aggregates (e.g. clods or peds) and/or when a clod or ped is squeezed in the hand it readily deforms into a cohesive 'ball' – NO HANDLING should take place
- If the sample is moist (i.e. there is a slight dampness when squeezed in the hand) but it does not significantly change colour (darken) on further wetting, and clods break up/crumble readily when squeezed in the hand rather than forming into a ball – HANDLING OK.
- If the sample is dry, it looks dry and changes colour (darkens) if water is added, and it is brittle – HANDLING OK.

Consistency Test

First Test – Attempt to mould soil sample into a ball by hand:

- Impossible because soil is too dry and hard – HANDLING OK
- Impossible because the soil is too loose and dry – HANDLING OK
- Impossible because the soil is too loose and wet – NO HANDLING
- Possible – GO TO NEXT TEST

Second Test – Attempt to roll ball into a 3mm diameter thread by hand:

- Impossible because soil crumbles or collapses – HANDLING OK
- Possible – NO HANDLING

NB: It is impossible to roll most coarse loamy and sandy soils into a thread even when they are wet. For these soils, the result of the Examination test alone must be adhered to.

Weather and ground conditions

Soil handling shall cease during rain, sleet or snow. The following criteria shall be applied:

- In light drizzle soil handling may continue for up to 4 hours unless the soils are already too moist
- In light rain soil handling must cease after 15 minutes
- In heavy rain and intense showers, handling shall cease immediately

- After rain has ceased, soil tests shall be applied to determine when handling may restart, provided that the ground is free from puddles.

Ancient woodland and ancient/veteran trees - GREEN

Natural England's position regarding ancient woodland and ancient/veteran trees is summarised below. Further detail on our reasoning for this is given in Part II.

There is no Ancient Woodland or ancient/veteran trees within the order limits. However, there are blocks of ancient woodland near the site boundary on the northeast (Grove Wood). We note that the oCEMP contains a Dust and Air Quality management plan, we advise that where the CEMP is implemented as described, impacts to these woodlands are unlikely.

Connecting people with nature (National Trails, open access land and England Coast Path) - GREEN

Natural England's position regarding access is summarised below. Further detail on our reasoning for this is given in Part II.

Natural England welcome the mitigation set out in the oCEMP to mitigate the disturbance to the Cross Britain Way.

3. Natural England's overall conclusions

The main issues raised by this application are the impacts on the River Mease SAC and the potential impacts on best and most versatile agricultural land.

Natural England's Relevant Representations

4. Part II: Natural England's detailed advice

Part II of these representations expands upon the detail of all the significant issues ('red' and 'amber' issues) which, in our view remain outstanding and includes our advice on pathways to their resolution where possible. Natural England advise that we are working contrcutively with Baywa-re on a statement of common ground.

Natural England is not satisfied that it can be excluded beyond reasonable scientific doubt that the project would not have an adverse effect on the integrity of the The River Mease Special Area of Conservation.

Natural England is not satisfied that the project is not likely to damage features of interest of The River Mease SSSI

Natural England advises that, if approved, the project must be subject to all necessary and appropriate requirements which ensure that unacceptable environmental impacts either do not occur or are sufficiently mitigated.

Natural England's advice is that there are a number of matters which have not been resolved satisfactorily. Some of these matters, set out in Internationally Designated and Nationally Designated sites above are important enough to mean that if they are not satisfactorily addressed it would not be lawful to permit the project due to its impacts on the SAC and SSSI interests.

The potential impact pathway introduced by this development between the site and the River Mease SAC mean that nutrient rich sediment could be transported to the SAC. The River Mease SAC is already failing its conservations targets for water quality and any increase in nutrients would have an adverse affect on the integrity of the site. Natural England advise that SUDS could be used to mitigate this impact and avoid an adverse affect on integrity.

Natural England require that land quality and soil resources information is gathered for any land that is disturbed by the development, so the cabling route should be surveyed. Ideally a full detailed ALC survey would have been carried out across the whole site. With the Predictive mapping provided, it is recommended in this instance, that an ALC survey is undertaken within the cable route.

We request that the site is revisited to carry out a detailed ALC survey of the predicted BMV areas and a semi-detailed survey in the areas currently identified to be non-BMV to confirm its extent. The ALC survey will enable a soil management plan to be generated for any areas to be disturbed (temporary and permanent) to ensure correct handling and restoration of soils, and onsite reuse of any surplus soils stripped from areas of permanent development.

Natural England will continue engaging with the applicant to seek to resolve outstanding concerns throughout the examination. Natural England advises that the matters indicated as 'amber' will require consideration by the Examining Authority during the examination.

Natural England's Relevant Representations, Part II, Table 1

Table 1: Natural England's detailed advice						
NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	NE commentary and advice on: <ul style="list-style-type: none"> Further details about the project in order to enable assessment Further evidence or assessment work required 	NE comment on mechanism for securing resolution – e.g. mitigation/compensation	Matters that must be secured in the DCO (with DCO/DML or omission ref as applicable)	Risk Red/Amber/Green
	International designated sites	(C) & (O)	An assessment of the impacts from surface water arising from the section of the site within the River Mease SAC catchment	Mitigation	An appropriate treatment train that will intercept and treat surface water	AMBER
	National designated sites (biodiversity & geodiversity)	(C) & (O)	An assessment of the impacts from surface water arising from the section of the site within the River Mease SAC catchment	Mitigation	An appropriate treatment train that will intercept and treat surface water	AMBER
	Protected species	(C)	If species licence is required then draft licences should be provided.	Mitigation	Letter of no impediment (if required)	AMBER
	Biodiversity net gain	n/a	Natural England welcome the inclusion of BNG as part of the project.	n/a	n/a	n/a
	National designated landscapes	n/a	There are no nationally designated landscapes that will be impacted by the DCO.	n/a	n/a	GREEN

Table 1: Natural England's detailed advice

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	NE commentary and advice on: <ul style="list-style-type: none"> • Further details about the project in order to enable assessment • Further evidence or assessment work required 	NE comment on mechanism for securing resolution – e.g. mitigation/compensation	Matters that must be secured in the DCO (with DCO/DML or omission ref as applicable)	Risk Red/Amber /Green
	Soils and best and most versatile agricultural land	(C)	A detailed ALC survey would provide soils data to inform a soil management plan for the whole site regardless of whether the use is permanent or temporary in nature. We require that land quality and soil resources information is gathered for any land that is disturbed by the development, so the cabling route should be surveyed as well.	Mitigation		AMBER
	Ancient woodland and ancient/veteran trees	(C)	The dust management strategy will avoid any impacts on Grove Wood Ancient woodland.	n/a	n/a	GREEN
	Connecting people with nature	(C)	The maintenance of the Cross Britain Way in the CEMP will ensure there are no impacts on access.	Mitigation	n/a	GREEN