

Cambridgeshire County Council

ID Number 20031358

Sunnica Solar Energy Farm

Planning Inspectorate Reference: EN010106

Written Representations

November 2022

1 Introduction

- 1.1 Cambridgeshire County Council is a host authority alongside East Cambridgeshire District Council, Suffolk County Council and West Suffolk Council. Each authority is submitting their Written Representations on an individual basis to ensure that The Examining Authority (ExA) is fully informed of the matters of concern each of the authorities.
- 1.2 The Local Authorities continue to work together to best inform the Examination, and where appropriate submit joint responses. The host authorities have provided joint consultation responses to Sunnica, as well as joint submissions to ExA, including the Local Impact Report (LIR) that was submitted at Deadline 1. These arrangements are for practical purposes to avoid undue duplication.
- 1.3 This document containing Cambridgeshire County Council's Written Representations provides an overview to the county's concerns. This should be read alongside the Joint Local Impact Report submitted by the host Councils which provides more detail.
- 1.4 The matters raised in the Relevant Representation by Cambridgeshire County Council remain and should also be referred to.
- 1.5 Cambridgeshire County Council does not support the proposals as they currently stand and considers that development consent should not be granted. The Council is of the view some impacts are not possible to mitigate and changes to the scheme are needed. In addition, details are needed on elements of the scheme to demonstrate the proposals are deliverable.
- 1.6 There are a number of concerns related to the quality of the assessments and assumptions used particularly given the scale and size of the development being proposed (1,130 hectares or 2,792 acres) including within the red line a total of 11 parish councils, six in Cambridgeshire and five in Suffolk, making it the largest solar farm in the UK.
- 1.7 This written representation is based on the Council's current understanding of the information comprised in the DCO application for the Scheme at the time of writing. The Council's position on individual topics may therefore change and/or be supplemented as the Examination progresses particularly if there is meaningful engagement with the Applicant on key topics of concern.
- 1.8 The main topics of concern for the Council are:
 - a. Cultural Heritage
 - b. Ecology and Nature Conservation
 - c. Flooding and drainage
 - d. Land Use and Agriculture
 - e. Transport and Access
 - f. Public rights of way (PROW)
- 1.9 These points are discussed in more detail in the sections below, along with other comments that the Councils have on the DCO application.

2 Cultural Heritage

- 2.1 The archaeological mitigation strategy is incomplete. However, the scheme will adopt the 'Rochdale Envelope approach', which allows flexibility in the approach to mitigation and fixing the design after submission of the DCO application.
- 2.2 Currently areas for protection have only been developed from geophysical survey data. The trench-based evaluation results will be assessed alongside the geophysical survey plots to validate or change the scope and areas where diverse archaeological mitigation work is needed.
- 2.3 Relevant documents in the submission pack will need to be revised once an agreed mitigation strategy has been developed: for example, **APP-257** Schedule of Environmental Mitigation, and **APP-123** ES Appendix 16C Framework Construction Environmental Management Plan and Travel Plan.
- 2.4 According to **APP-039** (6.1 ES Chapter 7 - Cultural Heritage), a Detailed Archaeological Mitigation Strategy (DAMS) will be prepared and will respond to the requirements of the local authority archaeology brief, which is to be prepared by the end of November (see 7.6.8). The council would prefer to see the draft DAMS further developed, so that a mitigation strategy that takes into account all of the development impact areas (swales, landscaping, cable trenches, construction areas, solar panels over archaeological areas, exemption areas of significant and extensive archaeological sites) can be developed and agreed prior to determination.
- 2.5 An Historic Environment Management Plan should be prepared to provide a mechanism by which archaeological mitigation sites removed from construction will be suitably protected under pasture, managed and maintained. Details should include who will manage and maintain these sites throughout the life of the solar farm, along with proposals for what will happen to them should the site be decommissioned and dismantled.
- 2.6 Cambridgeshire County Council is of the view, that parcel W01 should be omitted from the scheme to avoid harm to the scheduled Roman Villa at Sunnica West B, and the non-designated, associated, contemporary settlement on the opposite river bank by the proposed development.
- 2.7 The floodplain of the river snail (EC04 and W01– see APP-131) to the south-west of Chippenham Fen Local Nature Reserve formed an integral part of the setting of the designated Roman villa on the west side of the River Snail (National Heritage List Entry 1006868, Table 1.3 Gazetteer of Scheduled Monuments APP-058). The Roman villa site together with the previously known cropmarked site (CHER reference MCB20063) recently evaluated in W01 for the Sunnica scheme yielded earlier and contemporary evidence, including an area of settlement on a land spur surrounded by channels and floodplain features such as ponds and small tributary streams, which are still waterlogged. Together with the relict floodplain earthworks, the below ground evidence gained from the evaluation

of W01 forms an integrated ancient landscape straddling a river and its floodplain that will be negatively affected by development.

- 2.8 The double impact of the loss of rural setting for the villa site to the south (immediately west of the light green retained woodland shading on Fig 3-2 of APP-136) along with the risk of desiccation of the floodplain features in Snailwell Fen W01 cannot be suitably mitigated as the excavation costs would be prohibitively high. The councils are concerned that the earthworks of the River Snail's floodplain and riverbank will be damaged and destroyed by inappropriate development.
- 2.9 New heritage information concerning a military aircraft crash site was referred to in the Examining Authority's written questions and requests for information (ExQ1, 1.4.13), published 4th October 2022. The Applicant is preparing a document that explains the history of the crash and its location in Sunnica East field E05.
- 2.10 The Historic Environment Team was unaware of the crash site at the time of AECOM's initial provision of Cambridgeshire Historic Environment Record (HER) data in November 2018 for the Preliminary Environmental Impact Report through to refreshed data issued in April 2021 around the time of the field evaluation. In November 2021 new information from a Historic England-funded aerial photograph mapping project (East Cambridgeshire Aerial Investigation and Mapping project) was delivered to the CHER but this was after the Cambridgeshire field evaluation had been completed. Migration of records into the CHER from this project is ongoing.
- 2.11 Geophysical Survey plots Figure A7-A9 and A33 (APP-063) show a strong dipolar anomaly, which in hindsight is the crash site (please see attachment 'Sunnica East E05 GS Zone A crash site'). Although it seems strange to have avoided it, the dipolar anomaly did not receive a test trench to check it due to a common assumption that the strong dipolar signal usually means the burial of farm rubbish and potentially contaminated land – all too often seen and often hazardous to deal with. Archaeologists do not deal with contaminated land issues and leave this to other professionals.
- 2.12 There is a strong likelihood that human remains may yet lie in wreckage that was not/could not be recovered by the military detachment from USAF Lakenheath despite best efforts. A recent example of this can be found in the report of the Holme Fen Spitfire Excavations (Oxford Archaeology East Excavation Report no 1872, attached: 4.2 and 4.3, legislation: 1.3 [though American military legislation would apply] and 4.3.11).
- 2.13 The councils consider that it would be inappropriate to develop the site of the crash with photovoltaic panels but that an agreed space around it be clear of panels, fenced, grassed, and a small memorial stone established to mark it instead. A path to the memorial from a proposed footpath to be developed at the western field boundary is another possibility for consideration in the design of the solar array.
- 2.14 The council has significant concerns about the timescales proposed for construction ([APP-035 ES 6.1: Chapter 3 (Scheme Description) Section 3.6 Construction). This is particularly true for areas yet to be fully archaeologically evaluated, including the cable route corridor and the Burwell NG Substation expansion site in Cambridgeshire.

- 2.15 The post-consent programme of archaeological investigation, monitoring, assessment, reporting, archiving and publication will need to be secured through DCO Requirements. While the Requirement wording (Archaeology 13.) submitted covers many of the important points, it does not currently take into account the second phase of archaeological trenching required, or secure timescales for delivery of the Post-Excavation Assessments and an Updated Project Design.
- 2.16 We recommend that Part 4 Supplemental Powers: Section 15: Removal of human remains is amended as it does not cover provisions for the removal of archaeological human remains (over 100 years old). The Applicant is advised to insert provisions to ensure this is covered including reference to the need to acquire relevant exhumation licences from the Ministry of Justice.
- 2.17 Section 17: Authority to survey and investigate the land, Part 1 (a) and (c) provide welcome authorisation for archaeological investigation work and to demarcate areas for long term protection of archaeological sites and monuments, where no landscaping or construction impacts are to occur. Access to areas of archaeological protection should also be included for future management and maintenance proposes. Who will be responsible for the management of these areas is to be clarified.

3 Ecology and Nature Conservation

- 3.1 The Council is concerned that the proposed scheme does not adequately avoid, mitigate or compensate adverse impacts to biodiversity, including designated sites, protected species, priority habitats and notable species. Further details are required to demonstrate how the scheme accords with requirements to protect biodiversity within the Overarching National Policy Statement for Energy (EN-1). It is essential the matters are addressed prior to a decision being reached in the examination of this proposal, otherwise the consented development is likely to result in avoidable ecological impacts.
- 3.2 Cambridgeshire County Council has a number of concerns related to baseline survey work. Further information is required to ascertain the impact of the scheme and the suitability of the mitigation measures.
- 3.3 Furthermore there are Ecological receptors where the Council suggest that the applicant should bring forward changes to the application as part of the Examination and/or provide further clarification:
- Fenland SAC Chippenham Fen Ramsar, Chippenham Fen and Snailwell Poor's Fen SSSI - lack of information on the effects of the solar panels on aquatic macroinvertebrates requires a precautionary approach and the panels should be removed from Sunnica West B
 - Stone Curlew – lack of confidence in the effectiveness and amount of offsetting land provided requires a precautionary approach and panels should be removed from parcel E12 (and potentially parcels E05 & E13) which should be retained as Stone Curlew habitat. Additional and alternative Stone Curlew mitigation measures should also be identified.

- Notable arable flora – lack of confidence in the effectiveness of and location of proposed compensation for impact to arable flora. High quality arable field margins of W09 should be retained. Compensation areas for loss of arable field margins should be expanded across the scheme.

- 3.4 Whilst in many cases mitigation and/or compensation measures are proposed to address impacts, the Council considers that in a number of cases measures are either inadequate, too vaguely defined or inadequately secured by the proposed DCO to give certainty that all ecological impacts can be satisfactorily addressed as part of the development proposal including in the long-term post decommissioning.
- 3.5 It is not possible to determine whether or not the scheme will deliver Biodiversity Net Gain (or at least no net loss) during either the operational or decommissioning phases.
- 3.6 The Council is concerned that the impact of Battery Energy Storage System (BESS) fire safety measures on watercourses and hydrologically linked wildlife sites, wetland habitats and associated species has not been adequately assessed. There is insufficient detail about the BESS including type and scale to define the impact. As noted in the LIR significant quantities of water may be required and as a consequence containment of any such water run-off from fires is needed.
- 3.7 The Council is concerned that the proposed mitigation measures are inadequate to mitigate adverse impact to Havacre Meadows and Deal Nook County Wildlife Site. The County Council seeks detailed design of the proposed cable route crossing at W3 (County Wildlife Site) be provided to demonstrating no construction works within 30m of the County Wildlife Site and no impact to habitats / hydrology from tunnelling. In addition the Framework Construction Environment Management Plan [APP-123] updated to include monitoring of County Wildlife Site.
- 3.8 The Council is concerned that not all of the hedgerows/trees identified for works in connection with the abnormal indivisible loads on Unnamed Road and Beck Road Junction, Newmarket Rd (B1103)/Isaacson Road junction, Burwell, Reach Road(B1103)/Weirs Drove, Burwell, have been assessed as part of the Preliminary Bat Roost Appraisal Report (figures 2.1-2.9, Appendix 8J - Report on Surveys for Bats, ES [APP-087]). It is therefore not possible to determine the level of impact of these works.

Management Plans

- 3.9 The Construction Environmental Management Plan (CEMP) does not provide sufficient details to demonstrate that biodiversity will be adequately mitigated through the construction phase.
- 3.10 The proposed landscape scheme does not demonstrate how the scheme will deliver adequate biodiversity mitigation / compensation and deliver biodiversity net gain. For example, the landscape masterplan doesn't show all proposed habitats and the Landscape Environmental Management Plan (LEMP) does not provide any detailed design, management or monitoring of the proposed habitats / key features.
- 3.11 It is essential that adequate monitoring provisions are put in place and secured, during the construction, operation, and decommissioning phases, to ensure that mitigation and compensation measures are being / have been implemented successfully and retained in the long term.

- 3.12 The scheme, including the Decommissioning Environment Management Plan (DEMP), provides insufficient details of the decommissioning phase to determine whether the scheme will result in long-term adverse impact on biodiversity. For example, no landscape masterplan has been submitted to show what habitats will be retained. The Council is concerned there is no long-term management / monitoring for these habitats, as well as any compensatory habitat / reinstatement of original habitats created as part of the decommissioning phase.

4 Flood Risk, Drainage and Water Resources

- 4.1 Due to the high-level nature of the submitted information to date, the Applicant has not demonstrated that the sites can deliver mitigation that is compliant with National and Local Policy, Guidance and Best Practice within the Order Limits.
- 4.2 Infiltration rates are of concern to the council. It appears that the scheme is to utilise infiltration for the disposal of surface water. However, Infiltration testing has not been carried out to date and rates of 1×10^{-5} m/s have been used within the design of the network. Whilst it is acknowledged that testing across the whole site is not feasible due to the scale of the DCO boundary, there is a lack of confidence in using assumed figures, as small variances in geologies can impact infiltration rates. In the event discharge is required to watercourses, due to poor infiltration rates or shallow groundwater, flows would need to be restricted to the greenfield equivalents. This could lead to an increase in attenuation requirements for the basins. If the infiltration issues are not addressed early there may be issues in accommodating the required levels of attenuation before discharge.
- 4.3 The Lead Local Flood Authority (LLFA) would also expect groundwater vulnerability to be reviewed in any areas where groundwater could be at risk from infiltration. This includes a minimum clearance of 1.2m between the base of any infiltration feature and peak seasonal groundwater levels. If infiltration is proposed in areas where groundwater bodies are vulnerable to pollution, this must be suitably considered within the design.
- 4.4 Quick Storage Estimates (QSE) have been used to review the required level of attenuation for the scheme. It is acknowledged that this is a large site, however there is an uncertainty within the QSE calculation. The current proposals have used a storage requirement of the average for the site, assuming infiltration works. However, the LLFA requests that the maximum level of the QSE is used for preliminary sizing. If the upper end values are required for attenuation, this could result in requiring a further $17,831\text{m}^3$ storage across the scheme, which is a large amount to be accommodated at a later stage. This requires the scheme to provide enough space to attenuate the $73,700\text{m}^3$ as a minimum.
- 4.5 FEH (Flood Estimation Handbook) rainfall data is now required on all applications to ensure the hydraulic modelling is an accurate representation of the proposed network. The surface water hydraulic model needs to reflect.

- 4.6 The Proposals require a more detailed drainage layout plan must be provided to demonstrate the different SuDS features in use across the site. This should also include all proposed drainage management systems for the battery storage and solar station areas. For the SuDS to work properly, it must be ensured that all water draining from impermeable areas drains through SuDS features in order to treat water using natural processes before discharging into the ground.
- 4.7 Plans demonstrating the exceedance routing of surface water in the event of system exceedance or system failure should be provided. This should ensure that any overland flows do not adversely impact any surrounding land or property.
- 4.8 No details are currently provided on the maintenance tracks around the solar farm and how water will be managed from these surfaces. As these would be subject to use by vehicles, any surface water management scheme for these surfaces must treat water suitably to ensure that pollutants are not discharged into groundwater.
- 4.9 Ordinary watercourse consent applications will be required for any works to a watercourse within the Order limits, both temporary and permanent. It is unclear at this time the extent of watercourse works that are required for the scheme. Any culverts within the scheme should only be where they are required and of a minimum length to protect the surrounding watercourse networks.
- 4.10 High intensity storms in the first few years could damage any planting around the site along the PV row driplines, and therefore could lead to levels of rilling within the scheme. This can lead to increased flood risk to downstream areas. Maintenance and monitoring for vegetation should be carried out particularly after heavy periods of rainfall, to ensure that there is no damage. Any damage to the planted areas should be repaired/reinstated as soon as possible. This should be incorporated into the appropriate management plan.

5 Socio-Economic and Land Use

- 5.1 As stated in the LIR, the Council is concerned the Agriculture Baseline Report (Appendix 12B) does not appear to be consistent with local knowledge or evidence from neighbouring farms. A review of Baird's report, commissioned by the Action Group but not yet published, has highlighted a number of apparent issues, with the surveys and conclusions. It is noted the Action Group employed an agricultural specialist Cambridgeshire County Council uses to assess planning applications where agricultural assessments need to be verified, therefore the Council considers this credible evidence. The Council notes the recent notification of hearings and agriculture and soil quality being agenda items for Issue Specific Hearing 3 (ISH3) scheduled for Thursday 8 December 2022.
- 5.2 The applicant has excluded the assessment of the soils and agricultural land quality of the cable route, and it is clear in the Draft National Policy Statement for Renewable Energy Infrastructure (EN-3) that soil surveys should be extended to the underground cabling and access routes (2.48.14), the Councils consider that further evidence on this should be provided to allow a comprehensive assessment to take place ahead of any decision being made. Consideration should be given to the methods employed when installing the cable

route. The disturbance of the topsoil and subsoil can have a lasting impact on the quality of the soil and the retention of water, and this should be taken into account.

5.3 Notwithstanding the above, the capability of the soils to produce high yield crops with the support from irrigation seems to be understated. Grade 3 soils in Cambridgeshire can produce a greater range and yield of crops than Grade 3 soils in other areas of the country albeit using irrigation. Evidence of the yield from this area is needed to inform the assessment of the scheme's impact on agricultural production in the area. The assessment needs to reflect this.

5.4 The loss of land capable of food production is less well documented by Sunnica and should be assessed.

6 Transport and Access

6.1 As stated in the council's Relevant Representation there is insufficient detail to assess the impacts upon the highway network and the general travelling public. Further information is required and in the absence of this the council objects to the scheme. The main issues being:

- The information provided is largely comprised of generic information with little site specific detail.
- Traffic flows (including deliveries and muck away vehicles) have not been provided for each individual access (including those on the cable route) so it cannot be determined if the locations of compounds and accesses are appropriate, feasible or if mitigation works are needed.
- Local operatives will travel directly to local sites and are 'not expected to have a significant impact' (ES Appendix 13B Paragraph 6.3.1) but movements cannot be qualified fully.
- Site specific information provided, is limited in detail and does not provide the necessary local detail, to determine whether existing highways are geometrically adequate to cater for the intended traffic levels, whether the access arrangements proposed are adequate and safe, or whether off site mitigation is needed.
- Lack of specific details of internal arrangements such as internal tracks, buildings, loading area, turning provision etc.
- The application documents appear to lack a schedule of proposed works to enable full consideration of whether the works are acceptable in layout, geometry, and safety terms. It is yet to be determined if the works are feasible within the constraints of the public highway or land within the applicant's control.
- References are made to a minibus for construction staff, but there is no supporting detail relating to routing, frequency, stop locations etc. or any meaningful commitment to this.
- 7.2.30 of Appendix 13C indicated that staff will be transported from the main site car parks to other site compounds on internal routes where possible but provides no detail to support what will be achievable internally, nor provide details the impact that internal movements may have on the use of accesses along the cable route.

- 6.2 Further detail should be provided such that the impact of the proposals on the Local Highway network can be determined and confirm whether the works proposed are adequate and deliverable to mitigate the impact of the development. At a minimum, designs for access and all mitigation within the highway should be provided, supported by the necessary supplementary information.
- 6.3 Highway boundary and topographic surveys are necessary to ensure that the proposals are deliverable.
- 6.4 The County Council is concerned that the Applicant has not requested highway boundary details of the relevant junctions so that it can be confirmed that AILs (or other works) do not extend beyond the public highway except where already identified. In many cases, it will be necessary to commission surveys to establish boundaries.
- 6.5 Section 5.2.5 of Appendix 13c refers to a review being undertaken of road width on key road locations where a majority of HGV trips will occur. It is asked Sunnica seeks clarification from the LHA as to the lateral width of the highways for all routes. This is needed to ensure all impacts are identified and that any works proposed or undertaken within the DCO area do not unlawfully encroach upon the highway or have a negative impact on the users of the network. This applies equally for roads and PROWs.
- 6.6 Many roads are narrow, have limited visibility, poor surface quality and subject to national speed limit. Mitigation regarding highway safety, particularly large vehicles routed on constrained highways need to be shown in greater detail. This information should include:
- Vehicle tracking and visibility splays are needing to be provided for each access in sufficient detail to allow the LHA to assess.
 - Any works need to consider ditches. Detailed designs need to show any work to ditches that would require consent from the LLFA.
 - The number of journeys between sites throughout the day to each access. This information is needed to be able to assess if safe accesses are deliverable. Safe access is too fundamental to consider at a later stage in a Construction Traffic Management Plan.
- 6.7 Details of the information requirements are included in the LIR Annex E.
- 6.8 The County Council has concerns to the impact on La Hogue Road. In particular crossroads are proposed onto the B1085. This would not normally be accepted on a rural high speed road, but may be considered in context of the proposed use and under traffic management during the construction phase, however further information relating to the cross-traffic movement is required.
- 6.9 The LIR Annex E contains further details of the concerns for all accesses.
- 6.10 Mitigation of the impact of HGVs use on the highway network need to be agreed with the LHA. The Framework Construction Traffic Management Plan (FCTMP) and the Travel Plan App 6.2 needs to be updated to reflect the necessity of monitoring, reporting and enforcement to ensure delivery of mitigation measures.
- 6.11 Cambridgeshire County Council does not agree with the current draft DCO.

- 6.12 A number of articles do not give the local highway authority (LHA) a role in agreeing the design or standard of construction of proposed alterations to the highway. It also makes no reference to any amendments that may be required to the Public Right of Way (PROW) network. This sort of engagement is essential in ensuring that the proposed works are completed to the "reasonable satisfaction" of the Local Highway Authority (LHA) as mentioned in article 10(1), by collaboratively developing a framework for the undertaker to work within. Relevant articles are needing to be amended to include a requirement for the consent from the LHA. Equally there is no methodology for how Sunnica will seek approval from the LHA. It is important a process is agreed in the design, inspection, and approval of works.
- 3.13 Works within the highway (include PROW) must be undertaken to the satisfaction of the LHA and to the relevant specification and standards. The applicant must clarify how this will be secured. Temporary works in the highway must also be undertaken to the same standard and specification.
- 3.14 Based on experience with other DCO schemes, the Council recommends a legal side agreement. The Applicant has shared a heads of terms for such an agreement and work is continuing to develop this.

7 Public Rights of Way (PROW)

- 7.1 The ES has not assessed the PROW as historic features within the landscape, and has not proposed any measures to enhance them e.g., through the creation of permanent new PROW to enable connectivity that would assist the long term health and well-being of local communities and non-motorised Users. For a development of this large size and impact on local communities, opportunities to enhance PROW provision in the area has not been realised.
- 7.2 The Applicant has not adequately assessed the impact of the development on users of PROW as visual receptors in the landscape. This is particularly the case for equestrian users on Public Bridleway No. 5 Snailwell on the southern boundary of Sunnica West Site A.
- 7.3 The Preliminary Environmental Impact Report 4.7.5 predicts the effects of noise to be negligible. This needs to be assessed in the context of inverters, switch gear and associated equipment in proximity to PROW and equestrian users that are sensitive preceptors to such noise. Sufficient detail of the location of such equipment is needed and where necessary mitigation provide.
- 7.4 Written confirmation is needed that internal haulage routes will not use sections of PROW, only cross PROW. The latter would still potentially have a significant detrimental impact on PROW users and cause damage to the PROW and its boundary features. The Council seeks for article 11 of the DCO to be amended to remove the ability of the developer to travel

along PROW as is currently implied. The Council objects to article 11 of the DCO as currently drafted.

- 7.5 There are a number of inaccuracies and missing information associated with the Access and Rights of Way (A&ROW) Plans and Permissive Paths Schedules 1 and 2. These will be amended to Cambridgeshire County Council's satisfaction. The pre-existing legal highway boundary extents and proposed new physical and legal extents for all roads and PROW must be added to the A&ROW Plans so a) the LHA can assess the implications for users and its maintenance liability and advise the developer accordingly; b) the Applicant can implement appropriate mitigation measures for any temporary closures and reinstatement work that might be required; and so it knows the correct legal location for the shielding measures; and c) the LHA can plan its future asset management of the highway network and infrastructure appropriately.