

Appendix A

SUNNICA ENERGY FARM - DRAFT RESPONSE TO STATUTORY CONSULTATION

NB. This response is in draft form and it has been noted where further technical responses from officers are awaited. The response will continue to be developed by all four affected authorities prior to its submission to Sunnica by the consultation deadline of 2 December 2020.

Introduction

This document is the joint response of West Suffolk Council, Suffolk County Council, East Cambridgeshire District Council and Cambridgeshire County Council (referred to as "the Councils" in this response) to Sunnica's Section 42 consultation. Unless it is identified otherwise in specific sections, the Councils share the views on matters within this response. Any views expressed in regards to East Cambridgeshire District Council are at an informal professional officer view only.

The following comments are organised according to the chapters of the Preliminary Environmental Information Report

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EIA Methodology

Policy considerations

The Councils acknowledge the need to increase renewable energy generation. For example, West Suffolk Council is an investor, developer and supporter of renewable energy generation and has set out its plan to achieve Net Zero Emissions. The Councils recognise the demands for new additional generation and the UK Government's legal obligation to achieve Net Zero Emissions by 2050, as supported by research and publications by the Committee for Climate Change.

NPS EN-1 (the Overarching National Policy Statement for Energy) was published in July 2011. This sets out the UK Government's commitment to increasing renewable generation capacity and recognises that, in the short to medium term, much of the new capacity is likely to come from onshore and offshore wind. Solar is noted within the document as being an intermittent renewable technology.

NPS EN-3 (the National Policy Statement for Renewable Energy Infrastructure) does not include solar power or electricity storage within its scope. NPS EN-3 suggests that, at the time of designation in 2011, other types of onshore renewable energy generation were not technically viable at a scale of more than 50MW, and that the Government would consider revisions to NPS EN-3 or separate NPSs to cover such technologies should the situation change. The Councils acknowledge that the feasibility of delivery of solar PV technology has advanced to enable deployment on a larger scale, however, no such updates to the NPSs have been produced to indicate that solar PV on the scale proposed is appropriate.

In relation to 1.2.10, the Councils welcome a diverse energy generation mix to support the growing need for clean renewable energy. The East of England has significant solar photovoltaic generation in place, with more planned in the future that will make it one of the dominant onshore renewable generation technologies in the short term¹.

In relation to the policies set out and the acknowledgement to the developing West Suffolk Local Plan, it is clear that Councils will need to develop clear strategic plans to achieve net zero emissions balancing out demand reduction with increased electrical demands and renewable generation alongside the needs of the community and the need for wild biodiverse ecosystems that will provide the carbon positive countryside we demand upon.

The Councils therefore require additional information in relation to the carbon balances of the development as the land take required is clearly significant and relevant to the local activities to achieve net zero emissions.

The UK Solar PV Strategy requires proposals to be appropriately sited, with proper weight given to environmental considerations such as landscape and visual impact, heritage, and local amenity, and provide opportunities for local communities to

¹ See East of England Renewable Capacity Plan:
<https://www.eastsuffolk.gov.uk/assets/Planning/Suffolk-Coastal-Local-Plan/Document-Library/Infrastructure/east-of-england-renewable-energy-capacity-study.pdf>

influence decisions that affect them. As detailed elsewhere in this response, insufficient weight has been given to the environmental effects of the proposal, particularly in relation to its landscape and visual impact. Insufficient attention has been paid to the views of the local communities and there is little evidence to demonstrate that the local communities have had any meaningful input to the scheme design.

The proposed Development Consent Order (DCO) boundary definition makes reference to land potentially being required temporarily and/or permanently. Clarification as to what land is required on a temporary basis and for which periods is required.

The scheme definition refers to a *potential* Battery Energy Storage System (BESS). If there is a possibility that this element of the scheme may be removed, then the needs to be non-BESS scenarios within the PEIR. Clarity is necessary as all other references within the PEIR indicate that this is a confirmed part of the scheme.

East Cambridgeshire District Council wish to point out that the village of Witchford has an adopted Neighbourhood Plan.

Scheme Location

This section describes the location of the project. The Councils do not disagree with this description. Our view on site selection can be found in the Alternatives section.

Scheme Description

The scheme description fails to identify the electrical generation capacity for the scheme, and it is considered that this information should be contained within this section in the same way that it is detailed in the Scoping Opinion. Likewise, confirmation of the BESS electrical capacity should also be contained within this section.

Plate 3-10 depicts a typical battery storage compound configuration. The BESS electrical capacity of this configuration needs to be set out including how this relates to the proposed BESS system as set out in the Scoping Opinion.

The solar PV generating capacity is significant as it will enable an assessment of the Green House Gas (GHG) impacts benefits from the project set out in later chapters. Further comments in this response in relation to the energy proposed to be generated and the need for clarification of the size of the solar array relate to the scheme description as do the role of the BESS in emissions savings and the quantification of the overall emissions benefits.

Paragraph 3.6.12 refers to the volume of staff on site, and the vehicle journeys this will generate and is of significant concern. Whilst a Travel Plan will be produced, its effectiveness will depend on investment and consideration as to implementation. The potential for, a shuttle bus or holding non-critical journeys away from the site should be part of the Travel Plan. An understanding of how vehicle journeys will be distributed across the sites is required in order to aid the understanding of the key

issues and would assist the applicant in developing a travel plan and recommendations to manage journeys that can actually be implemented.

In relation to paragraphs 3.6.15, 3.6.16 and 3.6.27, the Councils expect further details in relation to the fuel used on site and how this will be monitored and managed for efficient use. The applicant should provide a final report of the fuel consumption and carbon footprint of the scheme after completion showing what was undertaken to reduce fuel consumption and emissions generation.

Concerns are raised in relation to paragraph 3.6.25 and the treatment of topsoil and spoil from the sites. In terms of the soil as a natural resource, retaining the distinct ecological characteristics of the sites and to encourage local biodiversity back to the sites there needs to be a priority for topsoil management, retention and redistribution on site. Further reference to the management and maintenance of the sites post construction should be made and it is suggested reference is made to DEFRA's Construction Code of Practice for the Sustainable Use of Soils on Construction Sites and that this tool is utilised- <https://www.lancaster.ac.uk/spies/>. The operational phase management should minimise fuel demands and avoid spraying, and this should be detailed.

Clarity is also required on where the weather stations be positioned and what form will these take.

Paragraph 3.6.13 states that working hours are expected to be 07:00 to 19:00 Monday to Saturday. An assurance is required on these hours and that there will be no working on Sundays, bank holidays and public holidays. Chapter 11 of the PEIR (noise and vibration) is based on these working hours and assumed construction plant such as a push press piling rig. The actual methods are not confirmed but, as noted in 11.8.10 for example, vibration distances are lower for push piling than other piling activities.

East Cambridgeshire is likely to have concerns in regards to these construction hours; specifically if piling is to be used. However, comments are still awaited by the Council's Environmental Health Officer.

The location of the office/warehouse at Sunnica East Site A is questioned given the amount of vehicular traffic that will need to use the local road network to access the site. The office/warehouse would be better located at parcel E18 where there is access from the major road network.

Alternatives

The PEIR states that a report setting out the assessment of alternative sites will be submitted with the DCO application. While the PEIR sets out that a key consideration in relation to site selection was the chosen connection point at Burwell, it is unclear how a search radius of 15km from this point was arrived at. Furthermore, the applicant should explain why land closer to Burwell Substation does not form part of the scheme, to negate the need for the installation of extensive connecting cables, and that the use of four separate sites is an efficient strategy given the additional connection work that will need to be undertaken.

The PEIR fails to include two critical requirements in connection with site selection in connection with the avoidance of areas that have an impact on residential areas and, in respect of Sunnica East, the avoidance of an impact on The Brecks. The Sunnica East sites are located close to ancient villages (some dating back to 1000 AD) such that over 11,000 residents will be impacted by the development. The proposal will surround a number of villages, reducing the perceived openness of their landscape setting, and in places individual properties/farms are enclosed by the development. For further details of the landscape impacts see the Landscape & Visual Amenity section below.

It is noted that there are proposals for other solar PV installations in the vicinity of Burwell substation and it is assumed that all such installations will want to use the same connection point. The applicant should demonstrate that their proposal is still feasible and viable should these other installations be completed ahead of the anticipated operation years.

Geographical location, local weather patterns, pollution levels and damage or failure of key components are some of the important factors influencing the overall effectiveness of solar PV. The applicant should provide further detail to demonstrate that such factors have been taken into account including, for example, whether damage from bird strikes has been considered. West Suffolk Council has experience of damage being caused to solar panels from birds dropping stones from height onto the panels, believing that they are a body of water.

The applicant should demonstrate that sufficient light will pass through the solar PV panel tables to support plant growth below.

It is considered that the option of 'No Development' should be included in the Environmental Statement in sufficient detail given the extent of land that will be occupied by the scheme and the adverse effects it may have on soil and carbon storage and any future options to increase the carbon sequestration from this considerable land area.

The need for the generation of renewable energy should not be stated in isolation. The Committee on Climate Change (CCC) have stated that a considerable amount of carbon could be stored by improved land use and from land use change, as set out in 'Land use: Reducing emissions and preparing for climate change':

'Land is a critical natural asset. It provides us with the fundamentals of life: clean water, food, timber, and the natural regulation of hazards such as flooding. Key to the effective functioning of these is biodiversity. Land is also an essential resource to mitigate climate change, naturally sequestering and storing carbon. Over the rest of this century and beyond, climate change combined with other social, economic, and environmental pressures will present significant risks to the services provided by the land. Unless land is managed more effectively over this transition, its essential functions will not be maintained for future generations'.

The above document is now being utilised to set out environmental targets within the Environment Bill, which will detail how soil health and improved woodland health should be achieved, monitored, and reported. It would be beneficial to understand

how this project may impact on these expected targets and the stated ambitions for a Nature Recovery Network.

The Councils agree with the point made at 4.2.7 in relation to energy diversity and would highlight that, in the East of England, Suffolk and Cambridgeshire are locations where solar PV is the predominant onshore renewable energy generation technology. However, the projects role in diversification locally is not adequately explained.

The Councils expect to see a comparison to other energy generation technologies in this section. It is noted from 4.1.3 "*The NPS confirms that from a policy perspective there is no general requirement to consider alternatives or to establish whether a development represents the best option.*" However, this is contested given the rapid growth of the renewable energy industry, the need to achieve Net Zero Emission by 2050 and the roles that land use and land use change will play in achieving this Net Zero Emissions target, the discussion around "best option" might have moved on.

It is appropriate to consider how alternative schemes using the same technology may have different acceptability depending on the scale of development. As the scale of a development increases, the resulting increase in benefits is presumably directly proportional as the amount of clean energy that can be produced increases with the amount of land that can be used for arrays. However, it is not obvious that the relationship with environmental impacts is necessarily proportional in the same way, as the marginal impact of each additional hectare of land may be greater than the last. It could therefore be appropriate to consider the relative impact of multiple smaller sites amounting to the same total output. It is our view that this scenario constitutes a reasonable alternative for the purposes of paragraph 14(2)(d) of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017.

To better understand comparisons to projects with significant visual impact, the Councils would like to see an appraisal of Onshore Wind as a comparator project or a hybrid Onshore Wind and solar PV project. The reason for this appraisal of the alternative generation technologies is to help us to understand the benefits and challenges of the proposed approach.²

Climate Change

In relation to 6.3 Assumptions, the assessment should include the emissions from land use and land use change and the carbon sequestration of the land. This is significant given the area of land and the need for increased carbon sequestration from land and vegetation³.

Section 6.3.3 states that 'it has been assumed that overall loss of vegetation will be minimal'; this needs to be firmed up and must state what will be impacted.

In Section 6.3.10 the Councils cannot identify a target for waste material recycling from the project. We would suggest that a higher recycling percentage than 50 percent should be targeted.

² See, for example: <http://westmillsolar.coop/> and <https://www.westmill.coop/>

³ See: <https://www.theccc.org.uk/wp-content/uploads/2018/11/Land-use-Reducing-emissions-and-preparing-for-climate-change-CCC-2018.pdf>

Section 6.3.17 - It is requested that the information from the applicant's design team be shared. What is the expected peak electrical generation and annual energy generation for the site and what assumptions are being made in relation to the BESS?

A diagram showing the GHG emissions boundaries should be included at 6.4.3.

Table 6-2 - In relation to "Operation stage" the information should include information in relation to soil carbon and sequestration in vegetation⁴. Given the large area and the figures available for soil and vegetation carbon storage and the 40-year lifetime of the development we feel this is a significant omission. Especially given the need for soil carbon improvements and afforestation as a measure to store carbon.

At 6.4.22, the Councils would prefer to see a county or regional approach with reference to total GHG emissions. The development, located in the districts of West Suffolk and East Cambridgeshire, will feed power into the local grid, and would be accounted for as part of Net Zero Emissions targets for West Suffolk, East Cambridgeshire, and the region. The generation will be included as a regional asset for Suffolk and Cambridgeshire, it will impact on the local distribution network as managed by UKPN. More importantly, the development impacts on local people and the local environment and therefore it should be able to define its benefits and risks in line with those of the community in which it is situated. This approach means that the Magnitude Criteria for GHG Impact Assessment needs to be reviewed.

Given the need to achieve Net Zero Emissions by 2050 and the need for increased levels of carbon storage and sequestration, the assessment should include data in relation to fluxes of carbon based upon changes to land use over time and in comparison to a baseline scenario where the land is managed in a consistent way to present.

In relation to section 6.6, Baseline Conditions, as set out in Table 6.6 in the comments from the Planning Inspectorate a more detailed response in relation to baseline conditions is required.

The Councils have several questions with regard to sections 6.6.2, 6.6.3 and 6.6.4. What figures for carbon storage has the EIA processes used to assess the soil carbon storage and carbon sequestration from vegetation from the 1,073-hectare site? What is the annual rate of carbon storage and what is the value over 40 years and then in comparison to the construction, operation and decommissioning of the proposed development? How does this figure compare to the following statement in 6.6.4?

"While the current land use within the DCO Site will have minor levels of associated GHG emissions, it is anticipated that these emissions will not be material in the context of the overall Scheme. Therefore, for the purposes of the lifecycle GHG impact assessment, a conservative GHG emissions baseline of zero is applied"

⁴ See: <https://iopscience.iop.org/article/10.1088/1748-9326/11/7/074016/pdf>

In relation to section 6.7, Embedded Design Mitigation, given the scale of the development, the waste generated, the water and fuel inputs, vehicle journeys and the need to limit the overall GHG emissions arising from the construction phase, the use of the Considerate Constructors Scheme (CCS) is not suitable to the project.

Although listed as Best Practice, the CCS is, instead, commonplace with a light touch approach to on-site environmental management. It does require monitoring of impacts but we would expect that such a development will seek to ensure it meets environmental management best practice in terms of target setting, on site management, monitoring and reporting as well of off-site reporting to key stakeholders. In terms of demonstrating Best Practice, the Councils would expect a stated objective to achieve an Excellent or higher CEEQUAL rating as set out in Version 6 targeting key outstanding credits, such as 4.4 "Change and enhancement of biodiversity" and 7.2 "Reducing whole life carbon emissions with an independent third-party certification of carbon management activities".

In addition to SuDS, how will the site design in surface water flood attenuation from this use of vegetation and also ensure a net positive impact in the loss of soils into water systems or air?

In relation to section 6.8.7, as stated previously, the calculations used to determine the professional judgement with regards to the loss of carbon sink from the land use change should be set out. The land area is significant for the districts of West Suffolk and East Cambridgeshire, and stated ambitions to achieve Net Zero Emissions means that the Councils will need to balance energy generation, energy demand reduction, emissions savings policies and activities alongside soil carbon and other forms of carbon sequestration.

The Councils request the figures utilized alongside to evaluate soil carbon and carbon sequestration as the baseline alongside the figures for the construction, operation, and decommissioning phases to better demonstrate the baseline emissions alongside the GHG impacts from the proposed development.

In relation to section 6.8.23, the applicant should clarify the size of the peak electrical generation capacity of the proposal. The Councils note the 653,973 MWh stated and this would require 1350kWh/kWp/yr from a 500MWp array (which is not possible) or an array with a rated peak generation of around 725MWp using West Suffolk Council's standard solar PV calculation model.

It follows that confirmation is required that the figures stated in relation to the operational emissions benefits are correct – it is noted as being 744,061 tCO₂e (6.8.32) over the 40-year project life – with an average emissions factor of 0.0316 tCO₂e/kWh. It is noted that the detail in 6.8.28 and 6.8.29 shows the forecast grid intensity in Plate 6-1.

If there is an issue with the energy generation and emissions savings figures then all emissions figures should be reviewed to ensure Completeness, Accuracy, Consistency, Relevance, and Transparency.

Potentially these overall emissions savings also account for some benefits from the BESS. If that is the case this should be set out together with clarification on the installed generation capacity of the solar PV array modelled and the BESS size and operation benefits assumptions.

In relation to the Significance of Effect, 6.8.33 to 6.8.41, it is felt that these figures should reflect the impact locally in relation to the emissions arising from the areas that the development is located in as the development will affect the strategic plans for the local areas to meet their Net Zero Emissions targets and impact on future decision making.

Have the 'Increased summer and winter temperatures' been taken into account in relation to the impact on the Solar cell performance at 6.8.49?

In relation to 6.9.1 and as set out previously it is recommended that this development sets a CEEQUAL target to achieve and enhance the level of monitoring of key emissions sources during construction and the works to manage and reduce these to achieve the stated targets.

In relation to 6.9.2 it is good to see the overall emissions for the development in comparison to the other figures for energy generation options. It would be useful to see these again once the generation and emissions figures have been clarified. With this in mind, and given the oversight of the soil carbon and the need for improvements and carbon sequestration, we do not feel it is sufficient to rely on the emissions savings during operation instead of ensuring the emissions from construction, operation and decommissioning are properly targeted and managed. In addition, the UK Net Zero Emissions target means it is even more important that the construction, operation, and decommissioning emissions arising from the development are minimized as much as possible as the GHG benefits of the site will diminish over time.

In relation to the points above and also the local significance of this development the Councils feel that additional mitigation measures should be put in place to ensure that soil and vegetation carbon storage is improved and the emissions arising from the development are minimized.

East Cambridgeshire District Council welcome the fact that comparisons to gas, nuclear and wind power have been made.

Cultural Heritage

Built Heritage

The Councils broadly consider the chapter on cultural heritage acceptable in as far as it relates to built heritage. The following point should however be addressed:

- Paragraph 7.4.1 refers to the study area as being 1km which extends to 5km for higher grade assets. There does not appear to be any explanation for this, and the setting of Grade II listed buildings is protected in the same way as the higher-grade buildings.
- Table 7.17 – Sunnica East B refers to views to the north of the Freckenham Conservation Area potentially being affected. This is more likely to be in views to the east. Sunnica West A also refers to the same view from Freckenham being affected. It is assumed that this is included in error.

ECDC Conservation Officer to comment on this chapter – ECDC note that the PEIR concludes that there will be a permanent adverse impact upon the historic park and garden of Chippenham.

Archaeology

SCC and CCC officers are engaged in an ongoing workstream to determine the acceptability of AECOM's trial trenching proposals. The site contains areas of high archaeological potential, and it is necessary for the applicant to provide sufficient trial trenching coverage to ensure that impacts on below-ground heritage assets can be mitigated by detailed design.

Archaeological trial trench evaluation will enable any sites of national significance which warrant preservation in situ to be identified, to allow archaeological mitigation strategies to be defined at the earliest opportunity and to ensure that archaeological findings are taken into consideration as the scheme design is refined. Not undertaking sufficient archaeological assessment at pre-consent will mean that the nature, extent and significance of below ground archaeological remains will not be fully understood. This will also mean that insufficient information will be available to allow informed planning decisions to be made regarding the impact of proposals on below ground heritage assets.

Mitigation requirements cannot be defined without full evaluation. There needs to be a commitment to undertake archaeological mitigation- either preservation in situ or full excavation-across the entire development area and factor that possibility into project programmes, given that the extent of the archaeological resource is currently unknown and the worst-case scenario approach.

The Councils are pleased that a geophysical survey has been undertaken, although there are a number of key land parcels which have not yet been able to be surveyed. It is essential that the outstanding areas circa 74.6ha in Zone B and 19.4ha in Zone C, 113ha of land on the cable route or in the 10ha required for HV connections, which leaves a total of 217ha to revisit (plus any additional elements of the scheme which have since been added into the red line boundary) are surveyed. This work should be undertaken as a priority at the earliest opportunity- before DCO submission- given that they include high archaeological potential areas, in key sections which have limited flexibility. It is presumed that this work will be submitted as part of the Environmental Statement, but it would be preferable for the Councils to see the preliminary results as soon as they are available.

If the applicants wish to undertake an 'avoidance' mitigation approach to below ground heritage where possible, they cannot finalise the design without having fully defined all the surviving below ground heritage assets which will be impacted upon by different elements of this scheme. The Councils are extremely concerned that further scheme refinement is being undertaken without sufficient archaeological assessment to inform this work. There is still 217ha of outstanding geophysical survey. Where geophysical survey has defined a number of anomalies likely to be archaeological in nature, their nature and significance is not understood, and this survey will not have defined all below ground heritage assets (for example, due to masking factors or feature types which might not show up well). As a result, there is also high potential for additional unknown archaeological remains to survive throughout the scheme red line boundary area which are of high significance, including a potential for human remains, funerary monuments and settlement. The geophysical survey undertaken to date is a considerable commitment and achievement, but it needs 'ground truthing', as part of a suite of techniques.

It is strongly advised that all elements of the scheme should be subject to archaeological trial trench evaluation. Several of the anomalies defined during geophysical survey which are likely to be archaeological in nature are situated in key areas of the project where flexibility is limited or are of a scale that they cannot be avoided. Therefore, understanding the nature and significance of these remains through trial trenching is essential before planning decisions can be made. The Environmental Statement should set out the approach to any outstanding archaeological evaluation which is required, alongside mitigation.

The Councils wish to highlight the severe risk to extremely tight project timetables by leaving the second phase of evaluation until post consent which means that archaeological mitigation requirements will not be able to be defined until this point. Delays are possible if extensive areas requiring archaeological mitigation are defined.

Insufficient assessment has been undertaken to determine the full scope and significance of heritage assets and therefore the impacts of different elements of this scheme. Many of the statements presented in this chapter are assumptions based upon insufficient assessment to support these conclusions. The potential for additional unknown remains is also not clearly set out. There are additional scheme elements which have the potential to impact upon archaeological remains which are not considered here

Significant portions of information related to Archaeology is out-of-date and does not reflect the discussions the Councils have had with the applicant since the non-statutory consultation in 2019. In particular the Desk-Based Assessments (DBAs) are dated from April 2019, and use the original scheme boundaries as proposed at that time. This excludes many of the sites in Sunnica East A which are of the highest sensitivity and with the greatest know archaeological potential. The DBAs contain data from the Historic Environment Record which is two years out-of-date.

Additional areas now included into the red line boundary, including revisions to the red line boundary area for PV array fields, compounds, substations, cable route etc. and for scheme elements including new access roads, internal roadways, laydown areas, compounds, ecological mitigation, landscaping and planting, site access etc., need to be included in all assessments going forward into the Environmental Statement.

As such, the assessments relating to archaeological impact in the PEIR cannot be agreed unless these DBAs are updated and the assessments are made on the basis of the proposal as it stands today. We would encourage the promoter to ensure the DCO proposals reflect and capture all discussions which have taken place to date.

Archaeology should be factored into traffic management, water management, dust and spoil management, landscape management, ecological works plans etc., as proposals have the potential to have archaeological impacts. To avoid conflicts between different priorities and proposed mitigations for other aspects, a joined-up, holistic approach is needed. Archaeological matters, as well as being in the Written Scheme of Investigations (WSIs), should be considered in RAMS documents and Construction Environmental Management Plans, Materials Management Plans, Decommissioning Environmental Management Plans etc. Logistical considerations should be reflected throughout for instance:

- Spoil management associated with archaeological work should be factored in;

- Plant movement should be factored into traffic assessments;
- Ecological implications of pre-construction archaeological work should be considered.

Ecology

The ecological assessment concluded no significant residual effects on ecology are predicted during construction, operation or decommissioning of the proposed solar farm.

Having reviewed the PEIR, the Councils have come to the conclusion that as it is currently presented the proposed scheme is not acceptable with regards to ecology and cannot currently be supported. The shortcomings are as follows:

Key issues

- Protected Species surveys have been carried out across the site and these appear to have been conducted according to best practice guidelines. However, the ecological assessment has not been fully completed at this stage including the cable routes remain to be fully surveyed.
- The assessment is reliant on impact avoidance, design measures and management activities when determining the significance of potential effects. However, these measures are not described in sufficient detail. The scale of the parameter plans at 1:18000 does not help with this.
- Efforts have clearly been made to avoid damage to- or loss of- ecological features throughout the design of the scheme. Our interpretation of the mitigation hierarchy is avoid-mitigate-compensate-enhance.
- However where losses do occur these are not quantified. Data in the reports should be presented in a way that would allow us to interpret losses of habitats compared to gains, and therefore assess the impacts more fully. This would be helpful to see mapped and in tabular form
- All assumptions should be evidenced including on the potential for habitat gain. It is not clear whether there is also an element of double counting.
- The scheme has incorporated the principles of Biodiversity Net Gain (BNG), however, there has not been a commitment to measuring Biodiversity Net Gain at the site, e.g. through the BNG Metric. This would enable BNG to be quantified and will make any data on ecological benefits of the scheme more tangible. We would like to see this employed, especially as the scheme proposes habitat restoration, creation and enhancement which can be measured

Information requested in Pre-consultation Ecology response which remains outstanding:

- Surveys of cable routes

- Skylark plots
- Appropriate Stone Curlew mitigation
- Full assessment of potential impacts upon The Brecks not yet provided.
- More focus on conserving and enhancing Breckland habitats.
- Use of BNG metric
- Clear detail on how habitats will be connected between the site and adjacent priority habitats and designated sites
- Detail on whether ecological enhancements delivered by the scheme can be secured after decommissioning.
- Detail on how management and monitoring plans will be secured in the planning process.

Given the short timelines during the statutory consultation period, the fact that the design is still evolving the LPAs reserve the right to raise additional matters of detail beyond the statutory consultation period.

Detailed ecology comments

The ecology chapter focuses on a preliminary assessment of the potential 'significant' effects of the Scheme identified Comments are organised according to those chapter headings that appear in the ecology section of the PEIR and associated appendices as relevant.

Legislation and Planning policy

- Suffolk BAP is no longer in use and reference should be made to Priority Habitats and Species from SBIS website. This is up to date and live data.

Assessment assumptions and limitations

- The PEIR is clear that survey has been undertaken where access to land has been available. It is not clear from the PEIR (and including table 8-1) what the limitations to access are, although it is noted that further survey work is ongoing and several areas remain yet to be surveyed, for example the cable route.
- Additional further survey will be required for any changes to the DCO boundary.
- Validity of Ecological data and reports – Recommendations are made in the appendix reports in relation to validity of ecological data. However, reference should be made to the CIEEM Guidelines to determine whether any survey work should be re-done.

Stakeholder engagement

- Table 8.3 states that 'the scheme has incorporated the principles of biodiversity net gain' – this is not tangible. Please use a Metric to measure BNG. Predictions that there will be BNG need evidencing (for example at 8.9.8).

- Survey data should be sent to SBIS etc – this was asked for and we are pleased to see this as an action. Please ensure records are provided asap.

Assessment methodology

Study area

- The cable routes remain to be fully surveyed and we require access to these reports once they are finalised in order to fully assess the proposals
- Please refer to the local Biological Records Centres (Suffolk and Cambridgeshire) for up-to-date data prior to undertaking the walkovers.
- Mitigation area – this was referred to in pre-consultation presentation on 10 November 2019 Strategic Environmental Masterplan as an area between sites A and B in Sunnica East. Cannot see these in Parameter Plans. These areas could be used for Skylark plots and in providing habitat connectivity between sites A and B. If these areas are no longer available, then alternative suitable land for mitigation areas must be secured.

Embedded design mitigation

- The provision of Stone Curlew nesting plots as part of the scheme is welcomed, and it is noted that these will be provided prior to the bird breeding season. However, it is not clear where these will be located and whether the locations would meet the criteria in the NE advice note 'Sourcing and managing mitigation land'.
- The management of areas for rare and scarce arable plants is welcomed and it is noted that this will be concentrated in areas already identified for arable plants. However, impact avoidance (for example through limiting soil profiling and compaction) in these areas should also be implemented.
- The types and location of grassland and other types of planting should be tailored to each location. The development site extends across a number of different landscape types and this should be reflected in the mitigation proposed. Grassland establishment through natural regeneration and through local grassland seed collection, as suggested in the PEIR (p8-69), is welcomed. However, it should be accompanied by appropriate management.
- It is noted that existing woodland, treelines, and hedgerows are to be retained and additional woodland and hedgerows are to be planted. However, it is not clear where hedgerow losses will occur, these should be defined. Neither are the proposals for woodland and hedgerow planting clear. The scale of the parameter plans, at 1:18000 is too small.
- 'Remaining land' (referred to on page 8-69)- it is not clear how much there is? and whether this is sufficient to mitigate any effects.
- 5m buffers around panel fields – please confirm that these will not be used for access. In previous iterations this offset was applied to features on internal boundaries with no visibility. External boundaries with roads, settlements and

PRoW a buffer/offset of more than 20m was proposed and this should be retained.

- Detail must be provided on whether habitat created as part of the development could be conserved rather than reverted to the baseline after 2065 via s106 agreement or other means.
- Fencing – must be porous to Badger and Rabbit and thought also given to how Priority Species may be protected from predators with access to the site and sensitive areas in particular. Please provide details on effective deterrents/control.
- Habitat connectivity between the development site and designated sites/priority habitats – please show this on a map. This will help the applicant to achieve Biodiversity Net Gain.

Appendix 10I Draft Outline Landscape and Ecology management Plan

Additional comments on this document to follow

- Ecological site walkovers referred to in 6.4.3 OLEMP – liaise with environmental stakeholders as well as Sunnica Ltd to ensure levels of survey effort required are agreed and implemented.
- 6.10.11 Invasive Species Management Plan (ISMP) – please refer to signal crayfish in water courses as well as invasive plant management.
- Biodiversity offsetting metrics (7.1.4 OLEMP) – please detail how this will be calculated and how it relates to BNG
- 7.2.2 – seems to be an emphasis on creation of calcareous grassland, we require acknowledgement and appropriate prescriptions for acid grassland in appropriate areas.
- Please be aware that Rabbit numbers are currently struggling in the area due to Rabbit Haemorrhagic Disease, therefore a mix of grazing may be required.
- Composting of cut grass welcomed – please ensure piles of compost are placed in ecological corridors so that they may fulfil their potential.
- Consideration should be given to whether Stone Curlew plots (7.2.24) will need protection from predators and human disturbance. Suggest fencing and locating these well away from disturbed/frequented areas.
- 8.2.6 Bat Boxes – some bat species are now potentially active throughout the year, bat box cleaning should only be undertaken once boxes have been found to be vacant by a suitable qualified and licenced ecologist.
- Use of herbicides common throughout the OLEMP- this should be minimised for example use of mulches around planted trees rather than spraying circles.

- Ragwort – should only be controlled in areas that are grazed by livestock as this is important food source for, amongst other species, cinnabar moth.
- Please ensure precautionary measures employed include disinfection (check, clean, dry) for INNS following works in or near to watercourses.
- 8.3 Post Construction Monitoring – a post construction monitoring program is welcomed, including provision to amend management plan based on results of monitoring surveys. Proposed amendment of management plans should be submitted to the environmental stakeholders.

Assessment of likely impacts and effects

- The consequences of closing footpaths in the area on recreational patterns should be considered in particular whether this would result in additional recreational visits to designated sites. The proposals include the closure of Public Rights of Way in the vicinity of Worlington and Red Lodge for the duration of the construction period. Whilst the effects alone may be judged to be insignificant, when considered in-combination with other plans and developments, there may be potential for recreational effects for example on Breckland SPA, and Red Lodge Heath SSSI.
- Stone curlew are sensitive to human-related disturbance. Research has found that Stone Curlews are highly susceptible to disturbance with active responses being recorded at distances of up to 500m from a dog walker (Taylor et al. 2007). It is not clear whether the mitigation for stone curlew will be located to avoid the potential for disturbance that would arise from the proposed permitted paths. In addition, the potential for these paths to impact on existing Stone Curlew nest sites which are to be retained should be considered.
- The PEIR and OLEMP have not detailed Skylark mitigation, which is concerning due to the high numbers of Skylark breeding territories across all sites, identified in Appendix 8H (Breeding Bird Survey Report). Skylark are a Priority Species under s41 of the NERC Act 2006 and details of how displacement of Skylark will be mitigated and compensated for, e.g. by provision of Skylark plots at an equal or higher number than any lost to the scheme, must be provided.
- The scheme is said to have 'incorporated the principles of Biodiversity Net Gain' (BNG), however, there has not been a commitment to measuring Biodiversity Net Gain at the site, e.g. through the BNG Metric. This would enable BNG to be quantified and will make any data on ecological benefits of the scheme more tangible. We would like to see this employed, especially as the scheme proposes habitat restoration, creation and enhancement which can be measured.
- We would like to see effort put into trying to secure habitats of high ecological value which are created as part of this development post decommissioning, rather than being reverted back to the baseline, via s106 agreement or other means.
- We would like to see more emphasis on enhancing and creating Breckland habitats in the relevant parts of the site.

- We would like to see data in the reports already submitted presented in a way that would allow us to interpret losses of habitats compared to gains, and therefore assess the impacts more fully. This would be helpful to see mapped and in tabular form.

Significance of effects

- Decommissioning impacts 8.9.36 PEIR – predicted to be similar to construction - more detail required on how this will be measured and mitigated. How long is decommissioning phase and how might features be protected, e.g. Is there a longer-term plan for mitigation/translocation of features at decommissioning?
- Decommissioning Environment Management Plan – require use of ongoing monitoring of biodiversity to inform appropriate mitigation during decommissioning. Please consult on this.

Additional mitigation measures and enhancement measures

- The PEIR suggests that the scheme will look to deliver significant enhancements for biodiversity in line with national and regional policies and biodiversity priorities although this is not currently demonstrated. All enhancements need to be adequately detailed and included in the LEMP to ensure that they are deliverable.

Residual effects

- The section states 'no significant residual effects on ecological features during...decommissioning' this cannot be evidenced without data at that time to measure this by. This will require full site survey work prior to a detailed mitigation plan being prepared for decommissioning.

Cumulative effects

- This section does not give any details about which schemes have been considered in-combination with the project or the issues, if any, that would be of concern.

Water Resources

Flood Risk

The majority of the land required for Sunnica East Site A has a low risk of flooding (less than a 1 in 1,000 chance of being flooded each year). There are some small areas at greater risk of flooding (1 in 100 to 1,000 annual probability) presents within Sunnica East Site A, associated with the Lee Brook within the western extent, and also north from the River Lark. The Sunnica East Site B is located on land with a low risk of flooding (less than a 1 in 1,000 chance of being flooded in any given year).

A range of mitigation measures, such as crossing of watercourses with trenchless techniques, removing infrastructure from Flood Zone 3b areas, and implementation of swales/drainage ditches, are embedded within the design of the scheme or

captured within standard construction practices reflected in the CEMP so as to prevent or minimise effects on the water environment.

Overall, the councils agree with the assessment of flood risk; only Sunnica East A contains notable sources of fluvial risk from Lee Brook but construction works will be outside Flood Zone 3. Surface water flooding is very low across all site and we therefore agree with the findings of the report

Drainage Strategy

The use of open SuDS features to route runoff towards a basin is acceptable. All features are shallow, which is satisfactory and follows Environment Agency groundwater criteria and our local guidance on open SuDS.

The proposal to mimic natural drainage is a suitable approach, but it is difficult to evaluate as the topographic plans are difficult to use. No levels are provided, and resolution is poor. It would be better to convert contours into heat maps given the size of the plots. We need these plans to be able to follow logic behind the siting of swale and basin locations. We recommend the use of LiDAR if surveys have not already been undertaken. It would be helpful if the plans showing conveyance swales could include flow arrows.

Though we anticipate that infiltration is likely to be successful based on local knowledge of the site areas, no infiltration testing has yet occurred. At this stage, we would expect at least some intrusive investigations at each site to gain a better understanding of conditions. The critical factors are groundwater levels and how far below ground any chalk deposits are.

The section of chapter 9 concerned with Management of Construction Site Runoff does not appear to be based on the runoff dynamics of the site. It is also concerning that this section proposes "site drainage, including surface runoff and dewatering effluents, will be discharged to sewers". This is the opposite approach to the SuDS hierarchy; surface water should not be discharged to sewers. Instead, we would suggest that the best temporary drainage system would be temporary SuDS based on an infiltration strategy with increased levels of pollution and sediment control (i.e. silt and oil traps).

In addition, this document should contain some assessment of the surface water drainage impacts of proposed access and haul roads through the site, both in terms of the quantity of run-off and the quality.

The decision to use piled foundations rather than concrete pads for solar panels is suitable from a drainage perspective. However, it is recommended that the risk of scouring and/or rutting caused by localised compaction during construction followed by intense rainfall being routed off panels is evaluated in order to consider whether any mitigation is necessary.

The applicant should also consider the possibility of conflict between drainage features and archaeology due to the shallow soils in the area.

It is not clear from the drainage strategy whether existing land drains are to be retained. They do not seem to be mapped in the PEIR documentation, so clarification would be welcome.

Drainage Technical Note (FRA/Drainage Strategy Appendix F)

The Councils have the following specific comments to make on the technical note provided:

- A conservative infiltration rate has been selected – This is acceptable for this stage, however we do not agree with suggestions that ground investigation is cost prohibitive at this stage as groundwater levels information is important.
- 10% PIMP is an acceptable assumption for solar arrays but 50% for compound areas seems too low.
- FEH13 or observed rainfall should have been used given the scale of these sites and not FSR.
- 0.6m deep Suds features are satisfactory.
- Table 2 suggest 8% increase in impermeable due to the development – 45ha increase for eastern sites – This seems reasonable, but should be reflected in body of report at 4.1.
- Results in a conservative estimate of 53,400 m³ of storage required across all sites (88ha of imp area) – again seems reasonable.

Document Quality

Although the Councils generally agree with the recommendations of this chapter, there are a number of quality issues in the document which must be addressed in the Environmental Statement.

- In terms of drainage strategy, the PEIR does not match the findings and recommendations in the Flood Risk Assessment (FRA, Appendix 9A). The main chapter refers to attenuation features or detention basins throughout the document whereas the FRA uses infiltration as the basis for control. This is an important distinction, as attenuation is unlikely to be acceptable to the Ministry of Defence due to the risk of bird strikes for military aviation caused by standing water.
- The drainage strategy assumes that 50% of the total area will be impermeable. If this relates to the compound and substation areas only, then it seems a little low, as it is presumed that there is little green space in these areas.
- At 4.1 it seems unlikely that the contributing area will not change post-consent, even if only due to the addition of the compound and substation areas. It would be useful to provide a map showing the contributing areas mentioned.

Landscape and Visual Amenity

The characterisation of the baseline and the assessment adverse effects of the proposals, as well as the suggested mitigation/compensation are not appropriate or acceptable. Therefore, as it is currently presented, the proposed scheme is not acceptable in respect of landscape and visual amenity, and in this respect cannot be supported. However, the Councils consider that many of the methodological and baseline characterisation issues can be resolved, if the applicant is willing to engage effectively on these issues.

If a project of this scale must proceed, there will be substantial residual visual impacts that just cannot be mitigated. A creative approach to design is required avoiding monotonous rows of panels. This could be through, for example, emulating field patterns or creating shapes and vistas that promote more visual interest. If the applicant was prepared to recognise the need for an exemplary approach to the design and mitigation, of what is currently the largest solar proposal in the UK, the Councils consider that there might be scope for the landscape and visual amenity impacts to be mitigated.

Key Issues – relating to the overall scheme

Baseline

There are concerns about the Local Landscape Character Areas especially as much of the assessment is based on these areas. For example, the boundaries around the character areas defining the villages are far too tight. The setting of the villages should be included.

Action Required - whilst the principle of a detailed local landscape base is acceptable this should be developed and agreed in consultation with the relevant local authorities prior to its use in the environmental statement. This is essential, if it is not to become an area of uncommon ground at a later date.

Design

The proposals have evolved (and continue to do so), and the red line has changed significantly. This means that some of the earlier comments made by authorities may have become obsolete. However, it also means that the following new concerns have arisen:

- a. The proposed areas for PV panels are encroaching too close towards Isleham, and the proposals (including mitigation) do not respect the fenland edge character of this area.
- b. The proposal is encroaching too close to the avenue leading to Chippenham Hall, affecting the setting of a registered park and garden.
- c. Further landscape concerns are around the U6006 road, Worlington, West Row, La Hogue Road, the B1085 and the view from Newmarket (Limekilns).
- d. Despite the significant changes to the red line, Sunnica West A would be a vast expanse of uninterrupted solar plant.

Action Required – In order to minimise and eliminate adverse landscape impacts from the revised layout of the scheme, effective engagement between the applicant and the Councils, and a more creative approach are necessary steps to resolve these issues.

Mitigation

The mitigation proposals across the scheme are too homogenous and, in some areas, inappropriate to the extent that the adverse effect of the proposed mitigation planting is potentially greater than the adverse effects of the solar plant proposals. (Isleham / La Hogue Road/ Golf Links Road/ B1085 view out of Chippenham and possibly other locations).

Further details are required about specific mitigation planting that is suitable for the different identified landscape character areas. Planting proposals should be based on the landscape character and observed existing vegetation.

Action Required – an effective and locally appropriate scheme of mitigation reflecting the local characteristics of the different areas in which the project is built is essential if the project is to be made acceptable – Detailed discussions with the LPAs is essential if these issues are to be resolved.

Public Rights of Way

There are concerns about the visual impact on PROWs. This includes the various different users of the network, with viewpoints not being covered for equestrian use as previously agreed.

The closure of all Rights of Way within the red line boundary for the duration of the construction phase seems excessive and needs to be reconsidered. There is concern that Worlington and Freckenham will effectively be cut off from recreational routes in the area during the construction phase. A phased approach should be adopted, and routes should only be closed for a minimum period, when works require it. Alternative routes should be provided. There are areas of the network that should remain open at all times due to routes being around the edge of the scheme area and not physically affected by works.

The closure of routes could potentially have a negative impact on other recreational areas in the wider area, including areas designated for their ecological value. These impacts will need to be assessed in the report and in the Habitat Regulation Assessment.

The public access has not sufficiently increased. The suggestions from the Rights of Way Officer for desired additional routes were not taken further; some of the proposed additional permissive routes may interfere with ecological aims, for example in stone curlew areas.

There are concerns over noise from inverters, switchgear and other associated equipment disturbing equestrian users, for example on Bridleway 204/5. Such equipment needs to sufficient distance away from PROW.

Because permissive paths either cross or are bordered by the proposed DCO area, it is recommended that the works promoter seeks clarification from the Cambridgeshire Asset Information service as to the lateral width of PROW and highways in the affected area. This will help to ensure that any works proposed or

undertaken within the DCO area do not encroach upon the PROW or have a negative impact on the users of the network.

LVIA Methodology

The methodology for the assessment of landscape effects of the scheme is fundamentally flawed and therefore leads to conclusions that the Councils cannot agree with. This needs to be addressed. It would have been preferable to do this prior to the PEIR, but we are happy to give further detail as to what changes to the methodology we feel are necessary.

Action required - methodology should be agreed prior to preparation of Environmental Statement to avoid uncommon ground in this area.

Visual presentation

The viewing angles of some of the photographs go much beyond the human field of vision, resulting, in some views, in a fish-bowl effect, which also leads to the proposed development appearing smaller within the photograph.

Some important views (photomontages) are cut in half, with the result that the important and central elements of the views, the solar installations, are effectively pushed to the edge as well as split in half. This is making it harder to read the photomontages and to understand the effects of the proposals in the landscape.

The photomontages do not appear to have location maps. The remaining viewpoints have small location maps that are difficult to read, especially as all viewpoints in the area have been left in and it is near impossible to identify which viewpoint relates to the photograph.

The annotated photographs have hardly any annotations, a zoomed-in add-on has none; description and assessment have to be found in the appropriate appendix, which is cumbersome.

Given that this statutory consultation is taking place exclusively online and that officers and many members of the public are likely to continue using the online material, the visual representation should be made much more user friendly.

It would be useful to add to Year 15 visualisations a succinct comment of when this level of mitigation can be expected to be reached. For some mitigation planting (e.g. reed beds or hedges) this could be much earlier than in Year 15.

Action required - methodology should be agreed prior to preparation of Environmental Statement to avoid uncommon ground in this area

Inter- and Intra-Cumulative effects

While the assessment addresses the potential interaction of effects caused by the scheme and has also identified other developments in the area that may lead to

cumulative effects, it has not sufficiently addressed potential intra-cumulative effects. The proposal now effectively consists of four sites, plus interlinking cable routes. It is not sufficient to state that from no visual receptor the entire development can be viewed and bury the findings within the appendices that assess landscape and visual effects and not summarise them in the main report. It is necessary that the sequential aspects of moving through the area are thoroughly assessed for all users, and that it is fully understood how the perception, that users have of the landscape within and around Sunnica, is affected by the proposals.

Action required – methodology for dealing with intra and inter cumulative effects of the project should be agreed prior to preparation of Environmental Statement to avoid uncommon ground in this area.

Glint and Glare

There is concern as to the impact of glint and glare, noting proposals to use planting to mitigate the impact will take a number of years to establish.

There is concern regarding glint and glare for equestrian users south of Sunnica West site A. Proposals should investigate methods to mitigate these impacts in the years before the planting is established.

Receptor heights have not been covered fully for equestrian use for the public rights of way network, with a number of routes not assessed at the increased height detailed in the assessment.

Action required – Further discussion with the Councils required to resolve these issues.

Other concerns

It is concerning that many suggestions and recommendations previously made by the Councils do not seem to have been taken on board, for example:

- a. No reference can be found in the PEIR for assessment of views for equestrian users.
- b. The proposed permissive paths are not what was asked for.
- c. Some additional viewpoints are still missing (most importantly along the avenue towards the entrance of Chippenham Hall, but also from B1085 looking south-east into the Sunnica West A (slightly north-east of viewpoint 32)).
- d. Directionality of viewpoints on map is still inaccurate in places and double arrows are unhelpful.
- e. The impact of lighting has not been sufficiently considered in the landscape section.

More detailed comments with regards to these key issues as well as additional comments on Chapter 10 of the PEIR are detailed below. Given the short timelines during the statutory consultation period, the fact that the design is still evolving and the Councils are seeking fundamental changes to the methodology, assessment and

mitigation, the Councils reserve the right to raise additional matters of detail beyond the statutory consultation period.

The Councils are happy to collaborate in updating the approach to the LVIA between now and the submission of the DCO application.

Within West Suffolk, the assessment concluded that the proposals would have a significant effect on the landscape character of the Sunnica East site A and B and on the local landscape character for Sunnica East site B, and that the effects would persist in the long term and at decommissioning. Visual effects would be significant during construction phase; however, these would be short to medium term and would be reduced as the landscape planting matures. In the long term there would continue to be significant visual effects which would be experienced by recreational users and users of the training ground at the Limekilns located on the northern side on Newmarket.

Within East Cambridgeshire the assessment concluded that the proposals will have a significant effect on the landscape character of the Sunnica East site A, as well as Sunnica West sites A and B, and that the effects would persist in the long term and at decommissioning. Visual effects would be significant during construction phase for all three sites; by Year 1 these would be reduced for Sunnica East site B, and by Year 15 also for Sunnica East B, as the mitigation planting matures. In the long term there would continue to be significant visual effects for Sunnica West site A.

Assessment assumptions

Groundworks: An assumption within the PEIR is that localised ground levelling will be required. It is not clear what the scope of this would be, for example would the ground levels be manipulated by +/- 0.5m such that they would be imperceptible, or would changes in ground levels be more significant and therefore have an additional impact on landscape character and visual amenity. The assumptions include that the excavated material from the cable route and other excavation will be stored within the DCO site. However, it is not clear where this will be stored, and how it will be accommodated both in the short term and during operation. This has the potential to contribute to the landscape effects of the proposal.

Ground preparation: There does not appear any provision for de-compacting the soil after use of heavy machinery during construction and prior to mitigative seeding/planting (10.3.7).

Perimeter fence: An assumption is that the perimeter fence will be a 2m high deer proof fence constructed early in the construction period to help protect retained vegetation. Chapter 3 suggests that this could be up to 2.5m in height. Whilst the early construction of the perimeter fence is welcomed, it is not clear what the design (noting that the plate 3-11 is a typical example of a deer fence) or alignment of the perimeter fencing will be. These factors will contribute to the landscape character and visual effects – the fence itself has the potential to have a significant effect on its own if not aligned carefully in relation to existing landscape features. More detail is required. It appears that the BESS, substations and other infrastructure such as the solar stations would require more substantial security fencing and it is not clear whether this has been taken into account.

Appendix 10B High Level Tree Constraints Report

The PEI and design of the proposals to date relies on a High-level tree constraints report, **Appendix 10b** (still to be further reviewed). The methodology used relies on approximate tree height and canopy spread information taken from the National Tree Map (NTM) data set and a walk-over assessment for accessible areas. The data has been used to derive underground and above ground constraint buffers for trees and to identify trees likely to be on higher value. Whilst it is agreed that this high-level assessment may be suitable for early stage design and planning purposes, focusing on the likely quality and benefits of the trees, there are likely to be gaps that will come to light at later stages. The PEIR confirms that further survey is required, and this should be undertaken to inform the DCO application.

To be further reviewed

Assessment methodology

Study Area

The study area should continue to be reviewed by the applicant if the parameters of the scheme change including the footprint and the height of the structures.

A large area of the original site area of Sunnica East around Freckeham has been removed from the scheme; instead the scheme now comes much closer to Isleham. Sunnica East is now split into A and B. While this brings much needed relief in the area between Worlington and Freckenham, the location of solar panels in close proximity of Isleham may not be appropriate. While this area is still within Rolling Estate Chalklands, the landscape here is beginning to change and transition into the settled fenland character type, being quite flat with wide open views.

Methodology

The methodology for the LVIA is derived from the Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA3), 2013 and the photomontage methodology is derived from the Landscape Institute's TGN 06/19: Visual Representation of Development Proposals, 2019 which are considered to be the industry standard. The methodology is set out in **Appendix 10C** (*still to be reviewed*). Reference is also made to the glint and glare assessment **Appendix 16A** (*still to be reviewed*)

The scheme design has evolved and the viewpoints that have been chosen will need to be adjusted to ensure that the visual effects of the more intrusive infrastructure are also assessed.

Residential Visual Amenity Assessment has not been considered necessary (section 10.4.24 -28). However, in light of the concerns about the methodology this should remain a matter for review.

The potential effect of lighting during construction, operation, and decommissioning of the proposals does not appear to have been considered. The need for lighting is detailed on page 8-70 of the PEIR, however, it doesn't appear to have been considered in the landscape section. West Suffolk planning policy DM 13 requires

that development should protect and enhance the nocturnal character of the landscape.

Appendix 10C LVIA Methodology, August 2020 (to be further reviewed)

Table 1-2: Landscape susceptibility, p.2

- The susceptibility criteria are ill defined and generic rather than specific.
- All assessments should be carried out against the current proposals as they stand (bearing in mind the Rochdale Envelope).
- How can 'likelihood of undue consequences' be a criterion for susceptibility? Surely it is the susceptibility of a particular site to the proposed changes of a specific scheme that determines the likelihood of undue consequences.
- In order to establish the susceptibility of a specific area of a specific landscape to change caused by a specific development the criteria need to be landscape based and should include aspects like landform, location (valley – valleyside – plateau), characteristic vegetation, local landscape character, tranquillity. GLVIA 3rd states on pp.88f. that susceptibility "means the ability of the landscape (whether it be the overall character or quality/condition of a particular landscape type or area, or an individual element and/or feature, or a particular aesthetic and perceptual aspect) to accommodate the proposed development without undue consequences for the maintenance of the baseline situation and/or the achievement of planning policies and strategies."

Table 1-3: Landscape Sensitivity, p. 2

- The criteria to discern 'medium' and 'low' sensitivity seem to be too similar and we suggest losing the 'very low' category and use its criteria for the 'low sensitivity' category. Otherwise there is a danger that landscapes of community and local value may slide too easily into the 'low sensitivity' category.
- Looking at the provided tables more holistically, we cannot see much difference between Landscape Sensitivity and Landscape Value. There are no categories for landscapes/ sites that have limited or very low value, because they are degraded, yet have little capacity for further adverse change, but could benefit from improvement. Nor does there appear to be a category for highly valued landscapes of national importance that may be able to accommodate a certain degree of change, because of factors in the landscape.
- I am concerned that the methodology is calibrated in a way that may put more of the expected effects into the non-significant bracket. This could be mitigated by the professional judgement in the narrative. However, this cannot be verified for Viewpoint 33 View north-west from La Hogue Road at the junction with La Hogue Farm. It is difficult to follow the judgement that the change of view by year 15 from wide open landscape to looking up close onto the edge of a tree belt as far as the eye can see can result in a negligible effect.
- Need to question:

10.6.201 The susceptibility of the LLCA mainly ranges between low to high. The low susceptibility is due to many developed areas or fields without landscape features such that development could be accommodated. The high susceptibility is due to Conservation Areas, or defined 'stud' landscapes, with limited ability to accommodate change. PEIR, p.10-55

In particular around Isleham, but also south- west of La Hogue Road, wide open spaces with few features are part of the character and highly susceptible to change.

Appendix 16A Glint and Glare Assessment

- There is a concern over the impact on equestrian use and impact on viewpoint 40 with regards to early morning impacts when route receives high use.
- Section 5.4 shows a number of Public Rights of Way that have equestrian access as an assessment height of 1.8 metres. These should all be assessed at a height of 3.5 metres of horse and rider.
- The geometric calculations results do not give a true interpretation of the impact for the Public Right of Way network as detailed in 8.8 of the assessment.

Stakeholder engagement

- Consultation with EDCD, CCC, WSC and SCC Landscape Officers and other consultees has been undertaken to discuss some technical issues ahead of the PEIR. However, many details of the scheme including the parameter plans, and the DCO outline were evolving at that time. As a result, those early comments may not now be relevant to the design currently being assessed and similarly comments made in relation to the PEIR are focused on the current scheme which may be different to the final scheme submitted

Baseline conditions

- The GLVIA 3 is clear (section 5.41-5.42) that sensitivity of a landscape may be based on a published 'intrinsic' sensitivity study (such as those in the landscape character assessments) but should be an assessment of the susceptibility of the receptors in relation to change arising from the specific development proposals. The GLVIA 3 advises that the assessment of sensibility should not be recorded as part of the landscape baseline. The methodology used does not appear to have followed this principle. *The assessments of sensitivity have not yet been fully reviewed by landscape officers to form an opinion on the judgements made.*
- The PEIR does not identify that policy DM13 identifies the Brecks as a valued landscape which has "by reason of their landform, historic landscape importance and/or condition, a very limited capacity to absorb change without a significant material effect on their character and/or condition."

Appendix 10D Local landscape character assessment and Appendix 10E Local landscape character areas (to be further reviewed)

- The fine-grain approach to local character areas is welcome as a baseline for assessment. As such this should have been agreed with the LPAs prior to assessment being derived from it. This will be reviewed further.
- The paragraphs relating to susceptibility should not form part of the baseline, as they are part of the assessment. Judgements about susceptibility are not general facts that can be established once and for all.
- The assessment of an area's susceptibility to the changes the proposals would bring appears to be formulaic, which in some cases (such around Isleham) has led to conclusions that the LPAs cannot accept.
- The paragraphs relating to susceptibility do not adequately analyse how the proposed development (or the elements of the development present within this area) would affect certain elements of the landscape. Returning to the example of the area around Isleham, which is named: East Fen Farmland (LLCA 11): no explanation is given as to what effect the proposals have on the baseline of particular aesthetic and perceptual qualities of this area; it only briefly refers to landscape features:
"1.1.51 The LLCA is an open, very gently undulating arable landscape with limited vegetation cover, such that the extent of features with the potential to be impacted is low. the LLCA is therefore assessed as being of low susceptibility to the type of development proposed".

Appendix 10F Visual baseline

- There is still concern that the location and field of view of viewpoints is not precise on the plan and the direction of view is not always consistent with the photographs. The PINs scoping opinion drew attention to this matter in the scoping opinion (4.5.13).
- Example: Viewpoint 9, shown on plan to be looking north-west, while the photo does appear to be looking north; in addition, the caption on the photo page refers to trees visible along the B1102, which is impossible as the B1102 is situated south of the viewpoint. The trees may be located along Beck Road.
- An additional viewpoint is required from Devil's Dyke.
- An additional viewpoint is required from the avenue leading from the original main entrance to Chippenham estate looking south, from a suitable location, where the extent of the PV panels on either side of the avenue and the resulting effects on the setting are evident. This should be a Type 4 visualisation (photomontage).
- An additional viewpoint is required from B1085 looking south-east into the Sunnica West A.
- The provision of photomontages does not appear to be sufficient, particularly for Sunnica West and around Burwell substation. Suggest to reconsider Viewpoints 41, 46 and 54/55.
- The use of double arrows instead of a fan indicating the visual field is not useful.

To be further reviewed

Embedded Design mitigation

- The assessment of the effects of the various infrastructure elements, for example the BESS relies on tonal rendering of the infrastructure elements to reduce their visual effects. Landscape colour is likely to vary along with the main landscape character areas. There is no evidence that a colour study has been undertaken. This should form part of the design code for these built features.
- The embedded landscape mitigation in 10.7.5 in general lacks detail. There are no minimum offsets and the minimum width of tree belts is not detailed. A tree belt of 5m in width will perform differently from one of 15m or 30m wide.
- The landscape proposals should respond to the landscape character typology.
- The mitigation does not always appear appropriate for the local landscape character, in some cases, to the extent that the mitigation planting itself has a greater adverse effect than the development proposals.

Assessment of likely impacts and effects

This section of the report is the assessment of likely significant effects of the scheme. Effects on both landscape character (**Appendix 10G** - still to be further reviewed) and visual amenity (views) (**Appendix 10H** - still to be further reviewed) are covered.

The effects of the individual elements of the project areas are assessed individually and of the project as a whole, for example where there are two site areas within a character area, or a view is of more than one component part.

- The description of the construction activity across the landscape is underplayed. The presence of the construction materials within the landscape is not included, nor the presence of the workforce and the vehicle movements that would be required across the project areas and on the network. The assessment states that *individually the construction equipment and excavation within the fields would not be uncharacteristic within an agricultural landscape* – this is not entirely true as many of the vehicles and machinery that will be present are not generally associated with farming and the increased activity in the rural area would be widespread across a large area of farmland leaving a visible footprint.
- The assessment of construction effects on the published landscape character assessments relies on the fact that the effects are focused on only a small part of each of the landscape character areas. Whilst the GLVIA allows for the geographical extent of the effects to be part of the consideration, in this assessment, significant weight is given to the fact that the effects would only be on small and localised in relation to the wider extent of the published landscape character area.
- The quarry close to Rectory farm is not perceptible in the landscape because of mature tree belts and the farm is typical of its rural location. The BESS,

substation and compound at E18 is likely to have a significant visual effect and this is not picked up in the assessment and additional viewpoints are required.

- Golf links road, which is a quiet country lane between Worlington and Great Barton is used by pedestrians for recreation as well as motorists. The sensitivity of receptors should reflect this.
- The effects of the elements of the project areas are assessed individually and then the interconnectivity of the project as a whole, for example where there are two site areas within a character area, or a view is of more than one component part.

Cumulative effects are those that result from additional changes to the landscape or visual amenity caused by the proposed development in conjunction with other developments (associated with or separate from it). The study does not consider whether the total effect of the individual development parcels is greater than the sum of the parts. The study should consider whether the cumulative landscape effects would change the landscape character of the area to the extent that it becomes a significantly different character type. This might be the case if the proposals are likely to change aesthetic and perceptual qualities of the landscape such as scale, pattern and colour, sense of naturalness, remoteness and tranquillity which would lead to modification of key characteristics (GLVIA 7.28).

Whilst combined visual effects may have been considered, sequential visual effects are potentially more relevant in this case. The concern is that residents in some settlements, for example Worlington, would have a series of sequential views when travelling to or from their home by either car or when walking for recreation. The geographical extent of this development suggests that a more thorough assessment of the combined effects of the development areas is required.

Landscape officers requested that a narrative on the overall effects of the proposals on each village and identifying within each village how the effects might vary. The applicant has responded (PEI page 10-30) "A local landscape character assessment has been undertaken to assess the likely impacts and effects on the villages. This has been undertaken by a local landscape character assessment of the villages and identifying their sensitivity to the Scheme". This is in Appendix **10E and 10G** and is still to be further reviewed.

Appendix 10G Landscape effects

To be further reviewed

Appendix 10H Visual effects

The viewpoints for Public Rights of Way and the U6006 have been set at 1.6 metres for pedestrian view. A higher equestrian view has not been provided as previously agreed. This does not give a true interpretation for visual effects for all recreational users.

To be further reviewed

Additional mitigation measures and enhancement measures

There were no additional landscape and enhancement measures identified. It is noted that retention of existing landscape features will be implemented through the CEMP and this is welcomed, as is monitoring of the establishment of the landscape through the OLEMP (**Appendix 10I**)

There may be a requirement for assessment of the landscape effectiveness at a future point to see if the proposed measures are effective or whether additional planting is required.

Appendix 10I - Outline Landscape and Ecology Management Plan

To be reviewed

Noise and Vibration

11.2.9 of the report states "The DCO application will include a statement of statutory nuisance." It is unclear what such a statement will address.

Section 158 of the Planning Act 2008 advises that in developments of this size the statutory authority for carrying out a development provides a defence in any civil or criminal proceedings for nuisance under Part III of the Environmental Protection Act 1990 i.e. the nuisance was the inevitable consequence of what has been authorised. This is termed the statutory authority defence but only applies to actions that are a nuisance and not those determined to be prejudicial to health.

Although statutory noise nuisance does not provide for a maximum level of noise to be attained, the spirit of the legislation is the prevention of an unreasonable and substantial interference to a person's quality of life. This is the threshold at which a nuisance is assessed. Although EN1 advises it is very important that, at the application stage of an energy NSIP, possible sources of nuisance under section 79(1) of the 1990 Act and how they may be mitigated or limited are considered so that appropriate requirements can be included in any subsequent order granting development consent, it is the PH&H view that the DCO application needs to address adverse amenity impacts and satisfy the aims of the Noise Policy Statement for England in that the development will mitigate and minimise adverse impacts on the quality of life, and not only be required to demonstrate the prevention of an unreasonable and substantial interference from noise and other nuisances.

Therefore, if the DCO application includes a statement advising that a statutory noise nuisance will not be caused from this development then this is not considered to go far enough.

That said the report does go on to categorise amenity impacts using the recognised concepts of LOAEL and SOAEL against which the sensitivity of receptors is compared.

11.4.11 of the report correctly references E.3.2 of BS5228-1 to identify noise threshold levels during construction. However, the report has not correctly addressed the variation between threshold daytime noise levels and the threshold levels at weekends, namely Saturdays after 1300 hours. Although the calculated range of

predicted construction noise at all the receptors is calculated to be below a threshold level of 65dB(A) some are above the weekend threshold value of 55dB(A). Taking into account this issue the levels categorised as appropriate for describing a LOAEL and a SOAEL must be revisited as it is not a single threshold level of the noise that is to be considered but also the day of the week that construction is occurring and when elevated noise levels may occur.

Further explanation to expand on the details in 11.8.5 are required. Does the maximum period of 1 month for high construction noise levels at any of the receptors relate to levels below 65dB(A)?

Agree with the determination of LOAEL and SOAEL levels for vibration impacts in 11.4.13 but cannot comment on the acceptability or otherwise of the guideline values for cosmetic damage to buildings. The information provided with respect to human responses to vibration from 11.8.7 onwards and the determination of negligible or minor adverse impacts is accepted. However, the human response to vibration is very sensitive, even at low levels. Concerns are often raised about breaches of acceptable standards and damage to property, so it is recommended that as part of the noise monitoring procedures to be adopted within the detailed CEMPs and any S 61 applications, that vibration monitors are also installed at key sites during specific periods, to enable reassurance to be provided to residents and the LA that guideline limits are being met.

Baseline Noise Survey – It is noted that for the long-term monitoring survey several of the sites chosen were immediately adjacent to roads. Practical considerations may have required this, but would expect ambient and background noise levels at domestic properties in many of the villages, particularly those sited away from roadsides or screened by buildings, to be lower. The development sites are positioned in isolated fields often some distance from roads, with construction plant and operational plant potentially having a line of sight to rural dwellings with no intervening existing noise sources, particularly at night. It is noted that L90 levels at 6 of the long-term monitoring sites is measured to be 40 dB(A) or higher at night, with only 5 sites showing a L90 of below 40 dB(A). The lowest measured ambient level during the daytime is 49dB(A), with the highest 4 ambient levels being shown at roadside monitoring positions. That said it is noted that the predicted construction and traffic noise assessments calculate the noise to be sufficiently below the reported ambient levels to allow for some uncertainty whilst still demonstrating a negligible impact. It will be important when developing the detailed CEMP(s) to have regard to the rural nature of many of the dwellings in this area which are not adjacent to roads leading into or out of villages (therefore experiencing lower ambient levels) and to fully consider the adequate protection of their external amenity areas during construction phases.

Operational Noise Monitoring -

- a) Clarification required of the figures being quoted for sound power levels of the substations (sound power levels referenced may be sound pressure levels). Clarification is required on the difference in sound power of the transformers proposed on East A, West A and East B compared to that of the proposed extension to the existing Burwell Substation.

- b) Information as to worst case noise levels should be provided. The data appears to be suggesting that the sound power of the transformers increases from 90 dB(A) to 92 dB(A) with +50% load. Rational of accepting this as representative and information as to the sound power and potential resultant noise levels at sensitive receptors with greater than 50% loading is required.
- c) Clarification as to the noise levels being quoted are for externally sited transformers or internal ones housed in solar stations. If solar stations are to be used to house all the equipment how will they be cooled and what noise impacts would result from cooling units serving these?
- d) Low frequency hum from any of the proposed fixed plant is an issue that needs to be considered, and technical evidence provided in any final report if predictions show negligible adverse impact. Measurements of the existing Burwell substation did not identify distinguishable low frequency components from transformers already on site, but no data has been supplied to provide confidence that low frequency hum will not be an issue at any residential properties in the West Suffolk area, taking into account potential maximum loading scenarios and the number and type of proposed inverters, transformers, and battery units that will be stationed at each of the proposed sites. In addition, the applicant should be providing confidence that the significance of operational noise impacts are sufficiently low that they will remain negligible under all weather conditions such as temperature inversions, positive downwind scenarios etc, and will not impact those properties who may experience lower background noise levels at night than those reported in the Baseline Noise Survey.
- e) The assumptions made for the generation of the construction and operational noise models require further exploration and assessment. Plant items were modelled as point sources at a standard height of 1m above ground levels. Some of the fixed plant will be 3.5 m high with the battery storage containers 6m high. The proposals suggest that such items of plant will be grouped together and therefore confirmation that the cumulative effects of the equipment, in addition to their increased heights, will not affect the modelling results is required. Receptor points were set at 1m above ground. Night time receptor points would be bedrooms at 4.5m high and so account should be taken of this issue in any modelling scenarios.

Framework Construction Environmental Management Plan –

- a) Hours of work during construction phases are proposed to be between 0700- and 1900-hours Mon-Sat. Construction hours on development sites are restricted in West Suffolk to be between 0800 and 1800 Mon-Fri, 0800 and 1300 Sat and at no time on Sundays or Bank Holidays. Extensions to these hours have been agreed during the pandemic, when Government policy encouraged the relaxation of construction working hours, but only when adverse noise impacts could be appropriately controlled. Extended hours have therefore been adopted on other development sites within the District but has required agreement to additional measures to minimise noise impacts outside of the normal working hours. Such measures should equally be applied to this site, for example a commitment not to undertake the noisiest works prior to 0800 hours Mon-Sat, higher noise impact works to be completed by 1800 hours Mon-Fri and if working through to 1900 hours on Saturdays I would wish to

see additional methods employed so that those tasks with the potential for higher noise impacts are adequately mitigated between 1300 and 1800 hours and are not undertaken after this time.

b) There is the suggestion in this document that site works may need to be conducted outside the core working hours. There should be no working undertaken on Sundays or Bank Holidays and this authority would not be supportive of any such requests.

c) The general information provided in the framework CEMP is agreed with respect to noise and dust controls and it is acknowledged that detailed CEMP(s) will be provided at later stages for individual subsections relevant to specific sites within the development. Although the mechanism for liaison with local authorities, residents and other parties who may have concerns is clearly described we highlight the importance of recording the actions taken to resolve any justifiable concerns received about noise and/or dust deposits. Such a log can positively influence future work methods and controls moving forward into later stages of the construction.

d) Noise monitoring proposals have been identified in the framework CEMP as a future noise control measure. 11.9.1 of Chapter 11 of the report suggests no additional mitigation, enhancement or monitoring measures for the construction/decommissioning and operational phases are required given that no significant adverse impacts have been predicted. The applicant should refer to the points raised in this response and provide further assurances either through additional monitoring or evidence, to satisfactorily address these concerns.

At this stage there is insufficient detail provided in the documents to consider the location of the Solar Stations containing inverters, switchgear and other associated equipment. The Preliminary Environmental Information Report in section 4.7.5 predicts the effects of noise to be negligible. The British Horse Society advice on Solar Farms noise explains that noise from inverters can be intrusive. This could potentially be disturbing to equestrian users, for example on the Bridleway 204/5. It should be noted that a horse's range of hearing is wider than a humans and sounds are audible at lower decibels. CCC would recommend that Solar Stations are sited away from the Public Rights of Way and new permissive routes, and where this is not possible, that suitable sound insulation is used to mitigate against disturbance to equestrian users.

ECDC and CCC PHH/Environment Team to comment on this chapter.

Socio-Economics and Land Use

Land Use

Chapter 12 of the PEIR states that effects related to agriculture and soils has not been assessed at this stage. Given that the vast majority of the development site is in agricultural use this is disappointing. The ALC soil survey indicates that the land within Sunnica East A and B is predominantly classed as Grade 3b and 4. We are concerned that these surveys seem to understate the land quality of these areas, as indicated for example by Natural England's Regional Agricultural Land Classification

maps⁵. Though these are strategic-scale maps, they indicate that there may be areas of grade 2 land located within the scheme. The applicant should publish the surveys relied on in the PEIR to allow them to be scrutinised.

Even if correct, while the survey indicates that the applicant has met the requirement to minimise impacts on the best and most versatile agricultural land, the PEIR does not acknowledge that the site is mostly productive agricultural land used for the production of crops such as potatoes, sugar beet, onions, carrots and maize. The importance of local food production should not be underestimated, and it is considered that the assessment of the proposal on agricultural land should not be limited to its classification.

West Suffolk Council would question the conclusion that as the sites are currently in agricultural use the scheme will not result in any employment loss (albeit that the PEIR then concedes that an estimated two temporary jobs will be lost). The evidence obtained by the applicant to support this assessment should be clearly set out in the ES.

West Suffolk Council and East Cambridgeshire District Council have concerns that the size of the scheme and the subsequent loss of agricultural land may also impact the ability of the Council's to deliver future housing and employment growth, while maintaining a suitable level of agricultural land.

Economy

In this chapter the Councils would expect to see references to relevant local policy in paragraph 12.2.7, such as:

- Norfolk & Suffolk Local Industrial Strategy
- Local Energy East Strategy
- Suffolk County Council's Raising the Bar Strategy
- Suffolk County Council's Suffolk Growth Strategy
- Transforming Suffolk: Suffolk Community Strategy 2008-2028

Section 12.4 is aimed at setting out the methodology for socio-economic assessment of impacts of the scheme.

The use of baseline data and the assumptions made in this assessment are flawed to the extent that the figures produced cannot appropriately be used to assess impact. The use of the Cambridge Travel to Work Area (TTWA) as the area of impact is inappropriate for a number of reasons. First, the scheme covers a great deal of land in both the Cambridge TTWA and in the Thetford and Mildenhall TTWA and may include land in the Bury St Edmunds TTWA, so using only the Cambridge TTWA will not provide complete baseline. Second, the Cambridge TTWA will be distorted by the heavy weight of Cambridge's economy, which accounts for much of the travel within the TTWA. This distortion further reduces the relevance of this baseline to a scheme on the periphery of the TTWA with very different employment characteristics. Thirdly, the use of the Cambridge TTWA implies that workers from within West Suffolk are not local for the purposes of impact evaluations. This is clearly an undesirable outcome.

⁵ See:

<http://publications.naturalengland.org.uk/publication/127056?category=5954148537204736>

There is also a concern about the consistency of geography use. In section 12.6, East Cambridgeshire and West Suffolk are used for unemployment and economic activity rates. It would be preferable to be consistent in geography use to the extent possible.

For a project of this scale it would be more appropriate to define a bespoke TTWA using census data, perhaps using the two district geographies as a starting point. The selection of TTWA is relevant because it defines the leakage percentage used in economic additionality calculations.

The multiplier used in 12.4.19 to calculate indirect and induced employment gains (1.5) is high for a scheme like this. For example, the Scottish Power offshore wind projects have used a multiplier of 1.31 for indirect impacts and 1.21 for induced. The use of the ready reckoner from HCA Additionality Guidance Further is reasonable, but justification of the multiplier selected is necessary. Specifically, the assessment of supply chain linkages should be expanded on since it is expected that many components will not be sourced from the local or national economy.

Without justification for these assumptions, the calculations in section 12.8 are clearly unreliable and, by using an inappropriate statistical geography, are irrelevant to the real geography which will be impacted.

An assessment of the impact of the proposal on tourism should be undertaken. The proposal could result in visitors being deterred from seeking the solitude and long-distance views in many parts of the development. This would be to the detriment of both recreational and tourist objectives of the affected local authorities.

The PEIR does not appear to contain any reference to the Bay Farm Anaerobic Digester plant and whether the scheme is likely to have any effect on the operation of the plant in terms of the production of feed to serve the plant and the associated traffic movements.

Site allocation policies in the former Forest Heath area Site Allocations Local Plan (SALP) 2019, including allocations of employment land, should be given considerable weight in the EIA process and referred to in the report as appropriate.

Sunnica East Site B is adjacent to existing and allocated employment land at Red Lodge. In addition, the site includes/is adjacent to SHELAA sites WS455 – deferred residential, and WSE04 – included economic.

Evidence to support the West Suffolk local plan review includes the 2020 SHELAA⁶ Site WSE04 is shown as an 'included' site in the 2020 SHELAA: 55ha of land for employment uses, land north of Elms Road and A11 northbound exit slip road to Red Lodge.

An Employment Land Review (ELR October 2016), produced to support the former Forest Heath area Local Plan (Single Issue Review of Policy CS8 [SIR] and Site Allocations Local Plan [SALP] 2019) recognises that a wide range of employment

⁶ See: https://www.westsuffolk.gov.uk/planning/Planning_Policies/shlaa.cfm

sites in the area rely on their proximity to the A11 corridor (and connected A14 Newmarket Bypass) for strategic road access, providing a route down to London in the South and Norwich in the East. It is a long-term aspiration of West Suffolk and adjoining authorities to achieve employment growth in this location.

The suitability of the site for employment uses was recognised at paragraph 6.45 of the ELR which refers to the site 'having excellent strategic road access being located on the A11 and relatively few other identified constraints.' The ELR also recognises at paragraph 8.37 that 'this could provide a good opportunity for a new employment site proposition of a genuinely strategic scale that does not exist elsewhere in the District and could benefit from its location on the A11 to capitalise upon growth corridor opportunities. This could also provide the potential to develop a critical mass of business occupiers and benefit from a greater level of operational flexibility away from incompatible uses such as residential...'. The site was not included in the emerging Site Allocations Local Plan as there was already a sufficient supply of employment sites at Red Lodge. However, the creation of West Suffolk has resulted in a review of the local plan, and the West Suffolk Issues and Options Draft Local Plan was published for consultation on 13 October 2020. Part Three – Settlements, section 3.6 Red Lodge includes a settlement map for Red Lodge showing SHELAA included sites with WSE04 clearly shown in green.

Insufficient consideration has been given as to whether Sunnica East would prejudice the council's long-term cross boundary aspirations for employment growth along the A11 corridor through the review of its Local Plan (West Suffolk Issues and Options Local Plan published for consultation 13 October 2020).

Insufficient or no evidence is provided or has not been addressed adequately in the PIER on the impact on some of the areas set out in EN1 – 5.12.3 (particularly those in ***bold italics***):

- *the creation of jobs and training opportunities;*
- ***the provision of additional local services and improvements to local infrastructure, including the provision of educational and visitor facilities;***
- ***effects on tourism;***
- *cumulative effects – if development consent were to be granted to for a number of projects within a region and these were developed in a similar timeframe, there could be some short-term negative effects, for example a potential shortage of construction workers to meet the needs of other industries and major projects within the region.*

West Suffolk Council has clear aspirations for infrastructure improvements to support existing communities and future growth. The following are of particular importance:

- A11 Fiveways – Highways England have previously expressed concerns regarding the at grade junctions on the A11 south of Fiveways. Longer term improvements for Fiveways Roundabout (for example at grade separation) and the at grade junctions will be considered for Highways England's RIS3 funding cycle, however there is no guarantee of funding at this stage.

- Improved transport links to the West of Mildenhall.
- Junction 38 - where the A14 meets the A11.
- Ipswich to Cambridge railway line – ability to deliver increased passenger or freight services.

The applicant should consider whether the project would compromise future growth opportunities and improvements to these key infrastructure points.

Community Impacts

NPS EN-1 highlights the need for equality, community cohesion and well-being to be assessed. Based on the information contained within the PEIR it is unclear whether these matters have been fully considered. In particular, the impact on the local communities affected should be explored further.

There is no reference in the PIER to legacy benefits, i.e. education and training opportunities, or a visitor centre. In addition, there is insufficient evidence that construction and operation jobs will be filled locally or that there will be long-term benefits in the form of skills enhancements. Further assessment of future skills development is required.

Transport and Access

Reference to Suffolk County Council and Cambridgeshire County Council as the relevant local Highway Authorities should be made with section 13.2, together with any associated national or local policy or guidance employed by the authorities.

Assessment Baseline and Impacts

Neither local Highway Authority has received engagement from the promoter in advance of the consultation period, so many of the details set out are being examined for the first time. Therefore, the highway authorities have not been able to agree in advance the baseline data used in the project's Transport Assessment.

The Highway Authorities reserve the right to add to this section as they continue to evaluate the details of the Transport Assessment.

The PEIR assesses that the peak number of staff movements will be just over 800 per day and the peak number of HGV movement will be around 100 per day.

The methodology used for assessing the impacts based on the evidence is flawed. The assessment relies on an assumption that staff and HGVs will only travel to and from the site during specific off-peak periods. Without any relevant controls and enforcement in place, this assumption presents a significant risk to the reliability of any conclusions about impact.

No junction modelling has been undertaken. Again, this is based on impacts occurring outside of network peak periods, which would require relevant controls and, even so, junction modelling may still be required during hours where relevant impacts do occur. This should be agreed in advance of submission with the relevant highway authorities.

The Assessment's dismissal of impacts on the road network based on the conclusion that the network will not be as congested as it is at peak hours is not appropriate. Instead, the assessment should quantify the increase to congestion and consider the impact of this increase.

Impact on cyclists and pedestrians have been dismissed based on low existing provision for these road users in the area. This is not an appropriate way to assess baseline conditions and the assessment should quantify levels of use by these types of user and people with particular needs such as children to support their assessment.

The PEIR assesses impacts on Public Rights of Way (PRoW) by assuming that PRoWs within the site will be closed during the construction period. Though it is appreciated that this is a worst-case scenario, the Councils do not think it will be necessary to close all PRoWs on the site or will need to be closed for the entire duration. It would be better to work on a phased approach to PRoW closures, with appropriate mitigation, such as temporary diversions and clear way markers, where closures are necessary. If closures are needed, details to minimise the duration of time and implementation of a diversions should be provided.

The PEIR states that no abnormal indivisible loads are anticipated during the construction period. Given the scale of equipment and infrastructure proposed, particularly the presumed requirement for transformers to be delivered to Burwell, this statement is questioned. Provision should be made to accommodate abnormal indivisible loads should this assessment prove to be incorrect.

No assessment of the impact on pedestrian and cyclist safety has been undertaken to date.

The suitability of local roads along the construction traffic route to accommodate the volume of proposed construction traffic should be fully assessed. The likely increase in traffic on the numerous 'B' roads passing through Sunnica East should be assessed, preferably using current survey data. In the absence of current survey data, the applicant must be able to demonstrate that any assumptions made can be verified and relied upon to accurately assess any impacts.

Necessary Mitigation

To ensure that the construction workforce vehicles numbers do not exceed those assessed within the ES, relevant monitoring and enforcement is needed through a Travel Plan. Monitoring needs to limit the total number of construction vehicles to those assessed within the ES; this will negate concerns over the car sharing ratio used in the assessment.

Consideration should be given to running a shuttle bus service to key public transport points, such as Kennett railway station, or any locations that have significant staff numbers travelling to/from the site to reduce impacts on the highway network and achieve sustainable workforce travel patterns.

Monitoring and enforcement is needed to ensure that the arrival and departure profiles assessed within the ES occur, otherwise the conclusions reached in the ES

are considered to be severely flawed. Monitoring of staff movements should also include the use of designated parking areas.

There are no commitments within the Construction Traffic Management Plan to limit HGV numbers; it is expected that daily HGV numbers will be limited and monitored throughout the construction period. Timing restrictions should also be in place for the movements of HGVs on the local road network together with a delivery management system. HGV movements are proposed to be outside the peak hours of 08:00 to 09:00 and 17:00 to 18:00. These hours should be extended to 07:00 to 09:00 and 16:00 to 18:00 to reflect the wider network peak hours. Where appropriate, speed restrictions should be put in place for HGVs.

There should be a routing strategy for HGVs and the identification of roads and areas that must not be used by construction traffic without the prior agreement of the relevant local highway authority. The routing strategy will need to take into account weight and height restrictions.

Further details are sought on how HGV routing will be monitored; it is assumed either ANPR or GPS will be used.

There is HGV routing shown to access West site B via Snailwell. Note the road has a weight restriction of 7.5 tonnes and narrow in sections. More details are needed as to ensure appropriate sized vehicles are used for this route. The level of traffic anticipated needs to be provided. Evidence of alternative routes being looked into should be shown.

Reporting of all monitoring data should include reporting to both highway authorities, as well as publishing on a public website. Further details are needed with regards to how enforcement will ensure breaches of controls are managed.

Highway condition surveys should be undertaken before, during and after construction work that will include the construction traffic route from the strategic road network to the various development sites. The survey should include main carriageway surfaces, footways, verges, and any adjoining access points. Any areas identified to be in poor condition, especially those near to residential properties, should be improved prior to the commencement of the development. During construction routes should be monitored and remedial works undertaken where necessary.

All access points off the highway need to be appropriately designed and constructed to the relevant highways authority standards. Early engagement with highway engineers is encouraged.

Where existing accesses are to be utilised, further detail in respect of any upgrades or improvements required should be included in the DCO submission.

Golf Links Road is a narrow road, used by recreational walkers and cyclists and is, therefore, not suitable for HGVs. The road has hedgerows tight to the carriageway in many places which limits the ability to mitigate highway impacts through increased width or passing places for example. This road should not, therefore, form any part of a routing plan for HGVs.

The proposal is close to Mildenhall which has considerable growth planned. For example, works are already underway for the Mildenhall Hub. There remains concern about constraints at key junctions within Mildenhall which will be difficult to mitigate. Cumulative traffic impacts need to be taken into account, not just for projects with planning permission but also allocated in local plans. Evidence is available through the cumulative impact transport study produced by AECOM for the former Forest Heath area Local Plan⁷.

In the long term, constraints at key junctions within Mildenhall will become more difficult to mitigate without further modal shift and the potential for some form additional road capacity has been raised, including a relief road at paragraph 8.4.89 of the Transport Study. The Sunnica proposal should not compromise this longer-term aspiration or longer-term development potential of Mildenhall that might be brought forward through the emerging West Suffolk Plan.

Air Quality

The various legislation and guidance that is referred to within the report is acceptable. The report considered the construction phase road traffic emissions but does not consider the impacts from operational road traffic as the scheme will create little traffic once operational. We agree with this approach.

The application of Institute of Air Quality Management (IAQM) guidance to the assessment of construction dust is appropriate and the approach to mitigation, in which IAQM guidance is embedded in the CEMP, is also appropriate.

The report confirms that the maximum number of construction vehicles (including Light Duty Vehicles (LDVs) and Heavy Goods Vehicles (HGVs)) during the peak of construction will exceed 200 vehicles per day (anticipated to be over 200 HGV movements and over 500 LDV movements per day). The existing road network in the proposal is relatively low and the anticipated number of HGV and LDV movements will significantly increase traffic.

A detailed dispersion modelling exercise will take place to assess the impact of this change in traffic movements. Discrete receptors will be identified for the dispersion modelling. A scheme-specific nitrogen dioxide monitoring survey will take place for verification of the dispersion model, which was due to start in September 2020. It should be noted that the traffic flows for a monitoring survey starting in September 2020 may not reflect the long-term traffic flows and therefore levels of air pollution in the area and this should be considered during any subsequent assessment.

At this stage no assessment of the impact on local air quality from construction traffic has been carried out, however, it is acknowledged that an impact is possible, and an appropriate assessment based on site specific information is proposed. We accept this methodology, but we would recommend caution with the use of baseline data collected during 2020 and early engagement on the selection of sensitive receptor locations.

⁷ See:

https://www.westsuffolk.gov.uk/planning/Planning_Policies/local_plans/upload/AECOM-Cumulative-Impact-Study-with-appendices.pdf

Human health

The applicant will need to demonstrate that safety and security risks associated with the development have been thoroughly assessed. West Suffolk Council remains concerned that the risks associated with battery storage fires have not been fully explored and it is imperative that an outline Battery Fire Safety Management Plan is submitted with the DCO application.

The PEIR states that the scheme is unlikely to interfere with telecommunications and television reception but does not explain how this conclusion has been reached.

The applicant should consider the issue of electromagnetic fields in relation to human health, in consultation with Public Health England. The National Policy Statement for Electricity Networks Infrastructure (EN-5) highlights that whilst putting cables underground eliminates the electric field, they still produce magnetic fields, which are highest directly above the cable and can have both direct and indirect effects on human health.

The Councils, as Public Health Authorities, have not had the opportunity to review the documents at this stage but reserve the right to make comments in due course.

Sunnica Ltd. that is required to satisfy the EqIA requirements when they submit their application to the Secretary of State. This assessment must account for people with protected characteristics and, in particular, must consider whether impacts of the scheme such as glint & glare or noise might affect people with physical or mental health conditions.

Waste Management

The amount of waste requiring managed disposal following decommissioning is substantial. Reusing or recycling old panels would be required before material is disposed through landfill. While the PEIR refers to the possibility of components being recycled it is unclear on current and likely future techniques and whether these would be more cost effective than disposal.

The PEIR proposes a Construction Resource Management Plan (CRMP) to form part of a Construction Environmental Management Plan (CEMP) to deal with the management of waste. Suffolk County Council, as the waste planning authority for Suffolk, consider that this is an acceptable approach and does not expect the quantities of waste to warrant objection. The Councils would appreciate sight of the relevant management plans in advance of submission as the framework CEMP deals with waste very briefly.

Other Environmental Topics

The Councils do not feel that the Considerate Constructors Scheme is a robust enough standard to ensure that a project of this size and national significance is appropriate for managing and reducing the environmental impacts arising – especially in relation to the operational impacts from energy and waste, water.

The project should be setting out an approach that will have clear targets to meet for reducing emissions in relation to those set out and then the monitoring, management and verification systems in place to ensure that the project does deliver a net zero emissions development.

The Councils' main concerns are related to fuel use on site; in relation to vehicle journeys to and from site; waste volume arising, and recycling rate set out. This project should be setting an exemplary approach to waste management and recycling and this should be made clear as a target to be achieved.

Contaminated land is dealt with in Chapter 16 of the PEIR, and refers to a Preliminary Environmental Risk Assessment undertaken by AECOM dated December 2019, that is included as Appendix 16B.

The assessment includes the findings of a site walkover and a desktop review of pertinent geo-environmental information. The walk over identifies a number of minor potential sources of contamination on the site and in the surrounding area. The historical map review also identifies a small number of historical uses that are potentially contaminative, although the majority of the site has remained undeveloped throughout the historical period studied. Areas of note included a number of tanks; potentially infilled land; former agricultural structures with potential asbestos containing material and a generator with evidence of oil contamination surrounding.

The assessment recommends that there are intrusive investigations at post consent stage to further assess the contamination status of the ground. Predominantly this would be to assess the potential of impact on the controlled waters (underlying principal aquifer and surface waters). We are in general agreement that the risks have been appropriately identified and that it would be appropriate to undertake the intrusive investigations following consent (should consent be granted) to assess the identified risks.

Effect Interactions

Summary of Environmental Effects

In relation to Table 18-1, the Climate Change section of the table states "No significant residual effects on climate change are predicted during construction of the Scheme." We would like to see some information that quantified what the land use change impacts may be on soil carbon and carbon sequestration from vegetation as this could be significant locally. Similarly, the same point is made in respect of the Ecology Section and the water environment particularly soil run off during construction and its impacts on the water environment.

Other matters/General

Given the importance of The Brecks and the ecological interests found within them West Suffolk Council expected that specific reference to Natural England and the RSPB would be more frequent within the PEIR. The absence of such reference casts doubts over the involvement of these organisations in the development of the scheme and it is expected that the ES will address this.

The applicant should undertake an Equality Impact Assessment.

Where outline management plans are to be presented with the DCO application the applicant should ensure that, where relevant, interactions between the plans are considered. Where mitigation measures in one plan are reliant on measures in another plan this should be clearly referenced, and appropriate mechanisms put in place to secure delivery of such measures.

To date the applicant has offered very little detail with respect to community benefits.

The joint response of West Suffolk Council and Suffolk County Council to the non-statutory consultation (dated July 2019) contained reference to future growth in Mildenhall. These comments do not appear to have been addressed and the applicant's attention is again drawn to this matter. It is imperative that the proposed scheme would not prejudice future growth in and around Mildenhall.

Similarly, it should be demonstrated that the applicant has engaged with the Cambridgeshire and Peterborough Combined Authority in respect of the Cambridge Autonomous Metro.

Freckenham Parish Council are in the early stages of preparing a Neighbourhood Plan, with the neighbourhood area designated on 2 November 2018.

Effects on mineral resources were scoped out of the EIA by PINS, and Worlington Quarry has been removed from the red-line boundary. The applicant may wish to consider the effects of dust on the panels from Worlington Quarry.

Throughout this response the Councils have detailed where further information and/or assessment is required. The following is a brief summary of a number of requests for further information and should be read in conjunction with the remainder of this response:

- The need for local and regional perspective on GHG emissions evaluation to be undertaken – not just in relation to the national carbon budgets.
- The Net Zero Emissions trajectory for the UK and the need to balance energy generation alongside other issues such as soil carbon storage.
- The calculations in relation to soil carbon storage and sequestration that were used to determine the professional judgement as to the baseline GHG emissions.
- The details of the energy generation peak capacity, the battery energy storage system (BESS), its location and operation.
- A review of the stated energy generation and operational GHG benefits to ensure Completeness, Accuracy, Consistency, Relevance, and Transparency.
- Comparison to alternative technologies and how these achieve the development objectives and to aid our understand for diversification in energy generation in the Eastern Region.
- An improved management on the stated Considerate Construction Scheme (CCS) of the operational impacts of the development to ensure it delivers Best Practice and a demonstrable ambition for Net Zero Emissions from the development.

- A more detailed breakdown of the vehicle journeys for staff in relation to the development areas.
- A Travel Plan that will actually lead to a reduction in the proposed vehicle journeys.
- Targets for fuel, waste, water and energy consumption reduction for the construction and operation phase.
- A reporting mechanism that will demonstrate the progress against the targets.
- Details of how topsoil will be managed, retained, and reused onsite to enable local biodiversity improvements during the operation phase.
- How was the search radius of 15km from the Burwell substation arrived at?
- That the cumulative impact of other planned and existing solar development in the vicinity of Burwell substation has been taken into account.
- How have the geographical location, local weather patterns, pollution levels and damage or failure of the key components been considered in relation to the overall effectiveness of the scheme?
- The necessary corrections and/or additional assessment information should be included in the Cultural Heritage chapter.
- Further ecological assessment is required together with additional detail on the mitigation measures.
- Further detail and assessment work are required in respect of the socio-economic and land use chapter. In particular, the impact of the scheme on agricultural land should not be limited to its classification and consideration should be given as to how the scheme will impact upon future growth opportunities and the delivery of infrastructure improvements in the effected authorities.
- Details of the decommissioning process are required prior to the submission of the DCO application and it should be demonstrated how this process will be financed and managed.