



# Mallard Pass

Solar Farm

## Mallard Pass Solar Farm

### Applicant's Response to Deadline 7 Submissions

**Deadline 8 - October 2023**

EN010127

EN010127/APP/9.47

## INTRODUCTION

This document introduces Mallard Pass Solar Farm Ltd.'s (the Applicant's) response to the documents submitted at Deadline 7 by Interested Parties.

The Applicant has responded to these documents in a tabular form. In this table, the Applicant's approach has not been to respond to every Deadline 7 submission. It has instead focused on responding to key or new points that either haven't been considered in previous submissions or where it was considered that further information could be provide to add to its previous responses.

The submissions have been summarised within the table below, which identify the parties who have raised the point concerned and set out the Applicant's response to that point.

The thematic tables that have been submitted are as follows:

- Response to the Interested Parties' Deadline 7 Submissions
- Applicant's Response to MPAG Landscape and Visual Review at Deadline 7 Submissions

In addition to the above thematic tables, Appendix A of the document focuses on the Applicant's response to critique of Agricultural Land Classification survey by Landscape on behalf of Mallard Pass Action Group.

## Applicant's Response to Interested Parties' Deadline 7 Submissions

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Parties Raised	Sub-Theme	Issues Raised	Applicant's Response
Helen Woolley [REP7-071]	Construction Noise	There is circumstantial evidence that suggests the prevailing wind can carry piling noise over many miles, not the 400m suggested by the Applicant.	<p>The Applicant does not dispute that piling noise may be audible in some conditions at a distance of 400 m, and potentially beyond. The distance of 400 m was calculated to be the greatest distance at which worst-case noise levels of 55dB would be expected. It is important to note, however, that while noise at this level could be audible, it would correspond to negligible noise levels in the context of a construction noise assessment.</p> <p>The relevant criteria for the assessment of the effects of construction are set out in Chapter 10: Noise and Vibration <b>[APP-040]</b> and derive from the guidance of BS 5228. Given the temporary nature of construction noise effects, there is some expectation that it will be audible from time to time, but it will be appropriately controlled and minimised through mitigation measures in line with the applicable guidance.</p>
Lincolnshire County Council [REP7-040]	Socio-economic and PRow	In response to the ISH4 Action Point 22, the width of PRow and Bridleways should be increased to 2m and 3m respectively and therefore the current wording contained within the oOEMP updated.	The oCEMP, oOEMP and oDEMP have been updated and submitted at Deadline 8 to reflect this request.
Richard Williams [REP7-070]  Town Legal on behalf of Mr Willaims [REP7-062].	Compulsory Acquisition Hearing	Our primary point is that our land is not required to deliver the solar project. Reducing production by 50MW would still leave 300MW of production which still exceeds the 240MW grid connection. The applicant passed on the opportunity to acquire the Braceborough land which was available prior to their DCO submission and holds fewer of their site constraints than our	As referred to within the Applicant's Deadline 6 response [REP6-004a], the Applicant has set out within its Deadline 4 [REP-4-042] and Deadline 5 [REP5-012] submissions why Mr Williams land is required for the Proposed Development – including a significant proportion of the solar PV site and associated LEMP measures.

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		<p>land.</p> <p>As stated in previous submissions, the public stand to gain very little from the compulsory acquisition of our land.</p> <p>The public will not see any benefit from lower electricity prices for many years – Mr Gillet stated that the price of electricity in the UK is linked to the price of gas and that it is the delivery of low carbon generation that will undercut gas and lower prices of electricity in the UK. So we would need to see the elimination of gas generation within the lifetime of this scheme for that benefit to occur.</p> <p>The negligible contribution that this scheme makes Net Zero targets was covered in our first submission (REP2-234) and the peripheral biodiversity matters in the second and third (REP3-053 &amp; REP4-066).</p> <p>We are already spending significant amounts of time and money on this matter without having engaged any assistance in quantifying our private loss. Land areas of similar size to that which we stand to lose do not often come on to the market locally so there will undoubtedly be tax issues as well as rationalisation costs to incur if we lose 19% of the land that we farm in the area.</p>	<p>The Applicant has provided a response regarding the land 'near Braceborough' within their response the Second Written Questions (Q4.0.8) [REP5-012].</p> <p>Section 3.3 of the Statement of Need [APP-202] describes Government's view that large capacities of low-carbon generation will be required to meet increased demand and replace output from retiring (fossil fuel) plants, and that "a secure, reliable, affordable, Net Zero consistent system in 2050 is likely to be composed predominantly of wind and solar.</p> <p>Paragraph 8.1.4 of the Statement of Need states (with references) that "A program of grid investment and operational development by NGENSO, regulated by Ofgem, is aiming for safe and secure operation of the national Electricity Transmission System at zero-carbon by 2025 and for full decarbonisation of the electricity system by 2035."</p> <p>Paragraph 8.9.3 of the Statement of Need states that "In 2021, BEIS unveiled plans to decarbonise UK power system by 2035. The plans focus on building a secure, home-grown energy sector that reduces reliance on fossil fuels and exposure to volatile global wholesale energy prices".</p> <p>As set out in the Statement of Need, the Proposed Scheme plays an important part in helping these goals be delivered.</p> <p>Renewables (including wind and solar) have already replaced a large amount of fossil-fuel generation on the grid. the price of electricity has on numerous and increasing occasions been set by technologies other than gas. The benefits of</p>

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			<p>an increasing share of renewable generation – including wind and solar – have already been felt on the UK wholesale electricity market and more benefit will be delivered as renewable capacity increases.</p> <p>The extent and compensation of any private loss is not a matter for the Examining Authority. However, the Applicant considers that the public benefit of the Proposed Scheme, including the near NSIP size of energy that would be produced from Mr Williams' land, in the context of a climate emergency, outweighs that private loss.</p> <p>In respect of the points raised by Town Legal:</p> <ul style="list-style-type: none"> <li>• the Applicant acknowledges that previous references to the Tribunal should have been to the High Court;</li> <li>• just because no claim has been made against a private developer granted CA powers to date, does not mean it cannot be (noting that given the number of public authority CPOs over the lifetime of the relevant legal provisions, the fact there have only been a small number of cases indicates that this is not a well worn route of challenge in any event), as the Applicant has noted, the effect of the Order is that the Applicant is an acquiring authority for the purposes of the 1981 Act and thus able to be challenged;</li> <li>• CA powers can only be utilised for land that is required for the authorised development – if a JR was brought, then it would be for the Applicant to demonstrate that it was in fact required. The merits or otherwise of any</li> </ul>

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			<p>judicial review would be a matter for the Courts at that time, but the fact is that pursuing one is open to Mr Williams, notwithstanding that commercial discussions have been on-going between the Parties; and</p> <ul style="list-style-type: none"> <li>the Applicant has responded to the point on the Crichel Down Rules in its response to the ExA's Rule 17 request.</li> </ul>
Andrew Croft [REP7-065]	Cumulative noise impact	We will be subjected to living so close to 2 substations, then it is incumbent upon Mallard Pass to quantify the cumulative noise impact of both facilities for us specifically during construction of the substation and the effect on health of possible EMF radiation.	<p>The baseline noise survey, which is described in Appendix 10.4 of the ES <b>[APP-080]</b> and included monitoring at locations representative of the residential properties closest to the existing substation, did not observe noise from this substation as a particular source clearly noticeable at these locations.</p> <p>Noise from the existing Ryhall substation forms part of the baseline noise environment against which the effects of the Proposed Development were assessed. It was determined in Chapter 10 of the ES <b>[APP-040]</b> that operational noise levels (including the contribution of the proposed Onsite Substation), which will not exceed a rated level of 35 dB, will not result in a significant noise increase at Mr Croft's property.</p> <p>Similarly, the predicted worst-case construction noise levels, following implementation of the relevant mitigation measures, will not result in any significant effects on Mr Croft's property, taking into account the existing baseline noise levels.</p> <p>In terms of EMF radiation, advice from National Grid is that Magnetic field levels at the boundary of a substation are typically at a level of 1 or 2 <math>\mu\text{T}</math> (microtesla), but this decreases very quickly as</p>

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			<p>you move away from the substation. At approximately 1-2 metres from the substation, for example, the magnetic field is usually lower than the field found in homes.</p>
<p>Andrew Croft [REP7-065]</p>	<p>Private drinking</p>	<p>We have a private borehole for drinking water some 40 metres beneath our property. We have had no information as to the risks to our drinking water this project could bring.</p>	<p>Following a data request by the Applicant on 16<sup>th</sup> February 2022, Rutland County Council provided details of known water abstractions within their administrative boundary on 17<sup>th</sup> February 2022, including initial details of the borehole at North Lodge (now named Goose Lodge).</p> <p>As noted in Table 1 of the Environmental Statement Volume 2 Appendix 11.3: Water Resources and Ground Conditions - Consultation Summary <b>[APP-084]</b>, two letters requesting information regarding the private water supply (PWS) at Goose Lodge were sent in March 2022 and July 2022.</p> <p>Having received no response from the residents of Goose Lodge, a site visit was undertaken to the property, where information regarding the supply was provided by the resident.</p> <p>This information was used to inform the assessment of PWS, and the details of the supply are provided in paragraphs 11.2.57 to 11.2.63 and Table 11-4 of the Environmental Statement Volume 1 Chapter 11: Water Resources and Ground Conditions <b>[APP-041]</b>, while locations of the PWS are shown on Figure 11.5: Private Water Supplies <b>[APP-199]</b>.</p> <p>Potential effects on private water supplies are assessed in paragraphs 11.4.86 to 11.4.87 of ES Chapter 11 <b>[APP-041]</b>, which concludes that due to the depth of groundwater and the measures outlined</p>

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			<p>in the Outline Water Management Plan (oWMP) [APP-071] there will be no significant effects on the quantity or quality of water used for PWS.</p>
<p>Essendine Village Hall [REP7-053]</p>	<p>Compulsory Acquisition Hearing</p>	<p>At the meeting held last week in the village hall as a presentation to the village by the Mallard Pass team, (held in this format at our insistence and well attended, because of the promoting done by the Parish Council and by the action group); when asked what would the level of compensation per household for huge disruption over many weeks for the cable laying, was likely to be, we were told the miserly sum of £50 per household.</p>	<p>As explained at that session, the £50 referred to was not in relation to any form of 'compensation' for potential disruption.</p> <p>It was mentioned in the context of the likely approximate value of any subsoil affected by any acquisition of rights for cabling through the village.</p>
<p>Linda Davis [REP7-066]</p>	<p>Compulsory Acquisition</p>	<p>One extremely important example of an issue that emerged from the AP's concerns was that not all cable routes had been explored fully by the Applicant prior to this application. Compulsory Acquisition may not have been in any way necessary. There were many other concerns. This demonstrates insufficient investigation in order to cause minimal impact on the rural area and residents.</p>	<p>As set out within the Summary of Applicant's Oral Submissions at CAH2 &amp; Appendices [REP7-035], the Applicant undertook an appraisal of various possible options for crossing the East Coast Main line with underground power cables to connect PV Arrays located to the east of the East Coast Main Line with the National Grid substation, during the early stages of land selection for the Proposed Development.</p> <p>Please refer to the Summary of Applicant's Oral Submissions at CAH2 &amp; Appendices, specifically Agenda Item 6 and Appendix C, for further details on the Applicant's consideration of alternative route crossings.</p>
<p>Linda Davis [REP7-066]</p>	<p>Sourcing of materials</p>	<p>Questions regarding the sourcing of the solar panels the Applicant stated this to be unknown at this time.</p>	<p>The Applicant will source the equipment and infrastructure for the Proposed Development prior to construction, and will choose from the best options available on the market at the time of purchase. Given the scale of change and advances in technology within the renewable</p>



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			<p>energy industry, no decisions will be made on the equipment required at this stage in the project.</p> <p>In terms of how such decisions will be made in the future, the outline Employment, Skills and Supply Chain Plan <b>[REP6-012]</b> includes various objectives and obligations relating to the procurement of materials for the Proposed Development. It is at that time that these investment decisions are made, not now prior to consent potentially being granted.</p>
Linda Davis [REP7-066]	60 years	<p>The Development status has been recently changed from a permanent status to a semipermanent 60 years. In October 2021, the Applicant explained to the residents that local farmers targeted by the Applicant had already agreed to lease some of their farmland for this Proposed Development.</p> <ul style="list-style-type: none"> <li>- How can it be possible to change the time status at this late stage?</li> <li>- Was this a contract already sealed?</li> </ul>	<p>The Applicant refers to its previous responses on the introduction of the 60 year operational time period.</p> <p>To answer the two points raised by Ms Davis:</p> <ul style="list-style-type: none"> <li>- Following concerns raised by Interested Parties in respect of the non- time limited nature of the Proposed Development in the application, the Applicant amended the DCO to introduce a 60-year operational time-limit – this was the only reason for the change from what was previously not time limited.. This is a change from permanent to temporary / semi-permanent (in EIA terms) and a time limited project is considered to be of less impact than one installed in perpetuity.</li> <li>- The Applicant has set out the position in respect of its landowner agreements throughout Examination – options with all bar 2 of the affected landowners are completed, with 1 of those 2 not having submitted any objection.</li> </ul>
Linda Davis [REP7-066]	Decommissioning	During the operational 60 years, the Applicant/ owner of this development could have changed	The decommissioning of the Proposed Development is secured through the draft DCO

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		hands many times. The Applicant did not give any coherent reason for this change other than the Applicant would receive a further 20 years of income. Who would be reasonable for ensuring that the decommissioning is undertaken?	and will be undertaken in accordance with a Decommissioning Environmental Management Plan (an outline version of which is submitted with the Application) <b>[REP7-019]</b> . Approval of decommissioning activities will be the responsibility of the relevant local Planning Authority at the time of decommissioning, as secured in the draft DCO. That DEMP will set out the programme for decommissioning activities. The company with the benefit of the DCO at that time (if not the Applicant) will therefore be required to comply with the provisions of that DEMP.
Linda Davis [REP7-066]	Community impacts	Challenge to the Applicant's position at hearings that there would be negligible additional impacts on the area or communities as a result of the 60-year time limit for the Proposed Development.	The Applicant refers to its response at <b>[REP7-036]</b> 'Statement on 60 Year time limit'.
Linda Davis [REP7-066]	Environmental Impacts	Challenge to the Applicant's position regarding the different determinants of health and extent of adverse impacts on health and wellbeing.	<p>The Applicant provided details on this matter in its response to SWQ10.0.8 <b>[REP5-012]</b>, in the Applicant's Responses to Interested Parties' Deadline 2 Submissions – Socio-economic Effects' <b>[REP3-033]</b>, and most recently in the Applicant's Comments on any submission received at Deadline 5 <b>[REP6-004]</b>, specifically its response to MPAG's note on the implications of the Proposed Development on health and wellbeing.</p> <p>The Applicant has assessed the impact of the Proposed Development on environmental factors relevant to wellbeing and mental health throughout the Environmental Statement. The Applicant understands that some individuals may face adverse mental health impacts, but notes that feelings of uncertainty and frustration at the Examination process will be alleviated to some</p>

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			<p>extent by the Secretary of State's decision in due course.</p> <p>Guidance on Health Impact Assessments in the planning process, such as the widely recognised Institute of Environmental Management and Assessment (2022) Guide to Determining Significance for Human Health in Environmental Impact Assessment, identifies that in EIA, health impacts should be considered against a framework that identifies the significance of a health effect at a population health level. As previously highlighted in the Applicant's other responses on this matter, the Applicant considers that given the extent of the changes in environmental conditions, any impact on mental health would not be significant at that level. The Applicant recognises the strength of feeling of those involved in the Examination and throughout project development has sought to mitigate its impacts to the local area and be a good neighbour as set out in its scheme vision set out in the DAS [REP5 - 058]. The Applicant considers that its design and mitigation measures have achieved this.</p>
Greatford Parish Council [REP7-048]	Outline Surface Water Strategy	<p>Specifically, I will concentrate on Mallard Pass (MP) outline surface water strategy (OSWS) as amended REP 5 053 Section 3, pages 13 -21.</p> <p>MP estimates that surface-mounted PV arrays extending to 4630000m<sup>2</sup> in a 6-hour storm will increase surface water runoff by 14147 litres per second or a 256% increase from the current baseline i.e. current circumstances. Extrapolating this out, an additional 305 million litres of surface water would be discharged into the West Glen</p>	<p>As outlined in the Applicant's Response to Deadline 4 Submissions, the calculations presented in Table 7 of Section 3.1 of Appendix 11.6: Outline Surface Water Drainage Strategy (oSWDS) <b>[APP-087]</b> assumes that the PV arrays are placed on the ground over the full PV array area of 4,630,000 m<sup>2</sup> i.e., assuming an overly conservative approach, which would reduce the potential for infiltration, hence theoretically increasing run-off by 256 %.</p>

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		<p>River in a short period of time, inevitably increasing river levels &amp; the risk of flooding in Greatford. But no, according to MP this can be reduced to a 0% increase by 4 measures;</p> <ul style="list-style-type: none"> <li>- As shown in plate 7 MP intends to leave gaps between the frame-mounted panels rather than a single drip line at the lowest end. Their reasoning seems to rely upon a report by Cooke &amp; McEwan which in summary, states ' solar panels do not have a significant effect on run off volumes or peak flows however where ground beneath panels is bare there may be an increase. MP, however make no reference to the conclusion in this report which states that in certain circumstances, the peak discharge could be in excess of 100%, which of course, would be a major problem!</li> <li>- MP are relying upon clay soils across the site not being compacted during the construction period &amp; that grass can be established both under &amp; between panels. This is referenced in Natural England's technical information note 101 which says ' the key to avoiding increased runoff &amp; soil into water courses is to maintain soil permeability &amp; vegetative cover. Permeable land surfaces underneath &amp; between panels should be able to absorb rainfall as long as they are not compacted &amp; there is vegetation to bind the soil surface.</li> </ul>	<p>It should be noted that the Applicant has updated Appendix 5.1 (submitted at Deadline 5) to include a parameter that limits the surface area of panels to 1,647,300 m<sup>2</sup>. Based on the confirmed PV area, the theoretical surface water increase (assuming PVs on the ground rather than on a racking system) would be a 90 %. Therefore, the calculations presented in Table 7 of Section 3.1 of Appendix 11.6 are an extremely conservative scenario.</p> <p>The raised nature of PV Arrays will not prevent soil from absorbing rainwater as the panels will not be placed directly on the ground and each PV Row will be separated, with the same area of soil available for infiltration as per the baseline scenario. Therefore, the calculated increase does not represent the impact of the PV Arrays on surface water runoff.</p> <p>The Applicant has explained how the Proposed Development is likely to lead to reduced surface water run-off rates compared to the baseline agricultural scenario in its answer to Q12.0.6 a) in the Applicant's Responses to ExA's First Written Questions [<b>REP2-037</b>], principally through the implementation of advanced sowing of grass, where appropriate, in addition to planting and vegetation. This approach has been utilised on other solar developments of similar scale and the methodology has been reviewed by the relevant regulatory bodies.</p> <p>The conclusion of the Cook &amp; McCuen study states that "<i>when gravel or pavement was placed under the panels, with the spacer section left as patchy grass or bare ground, the volume of the runoff increased</i></p>

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		<ul style="list-style-type: none"> <li>- MP suggest that the panels will be located on flat topography. This is not true for the whole site where there are significant slopes down into the West Glen river therefore inevitably increasing surface water runoff.</li> <li>- MP propose a 6m buffer zone from all watercourses which they allege will absorb surface water run off &amp; slow this down before entering the watercourse. How established will this be?</li> <li>- MP have suggested that additional attenuation could be considered as referred to in the OSMP, by the introduction of swales &amp; scrapes to collect water runoff. No detail of what is proposed has been provided. This risk was clearly identified by Rutland County Council REP2 048 ' it is considered that the proposals would have a negative impact on surface water drainage across the whole site &amp; the development could pose a flood risk' I have no doubt this is correct.</li> </ul> <p>MPs solicitor stated that the Environment Agency had not raised any issues with flood risk. As I pointed the Environment Agency do not deal with surface water runoff issues which is the LLFAs responsibility.</p>	<p><i>significantly and the peak discharge increased by approximately 100%. This was also the result when the <u>entire cell</u> was assumed to be bare ground." i.e., the entirety of the Order limits would have to be bare earth for this scenario to occur. This is a wholly unrealistic scenario and the commitment in the oSMP [REP5-069] will ensure that grass cover is achieved as far as reasonably practicable. Measures in the Outline Water Management Plan (oWMP) [APP-214] will ensure that if isolated areas of bare earth are present then target measures such as swales and cut-off ditches will be placed in these areas.</i></p> <p>Regarding compaction, the effects of construction activities including plant and machinery on the underlying clay soils will be managed through the oSMP [REP5-069], which includes measures to identify when the soils are suitable for construction activities to take place. The location of construction sites on clay soil is not considered to be rare or unique, and any effects will be managed through delivery of the oSMP [REP5-069].</p> <p>The commitment in the oSMP will ensure that grass cover is achieved as far as reasonably practicable. The suggestion in the oSWDS [APP-087] that grassland establishment with a suitable grass mix under the PV array tables is consistent with the approach in the oSMP [REP5-069] and will prevent rilling and soil erosion.</p> <p>Section 3.1 of the oSWDS [APP-087] states that localised topography within each parcel of the Proposed Development generally comprises gentle gradients and hence increased runoff would be unlikely to lead to fast moving surface water and</p>

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			<p>consequent erosion except on the small areas of steeper slopes immediately adjacent to parts of the West Glen River.</p> <p>The Applicant has provided a response to topography within the Order limits in its comments on any submission received at Deadline 5 <b>[REP6-004]</b>, which states that 90% of the PV array area is located on land with slopes of 2% or less and only 2.5% of the PV array area is located on slopes of greater than 6%.</p> <p>The Applicant has explained how the Proposed Development is likely to lead to reduced surface water run-off rates compared to the baseline agricultural scenario in its answer to Q12.0.6 a) in the Applicant's Responses to ExA's First Written Questions <b>[REP2-037]</b>.</p> <p>Regarding buffer strip establishment, this will be undertaken at the same time as the grassland establishment.</p> <p>Regarding the 2D surface water model, as outlined in the oral submissions on behalf of the Applicant at ISH4 (and Summary of the Applicant's Oral Submissions at ISH4 <b>[REP7-036]</b>), the 6.6 ha modelled area is representative of the wider Order limits due to the topography being broadly similar to the study area. The basic principle of surface water modelling is that increasing surface roughness (e.g. by changing a surface from arable to grassland) in turn increases friction, which will slow surface water passing over it regardless of slope. As outlined in the oWMP <b>[APP-214]</b>, other drainage measures could be implemented and measures would be proportionate to the risk i.e., where greater risk is highlighted at specific locations,</p>

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			<p>specific measures would be agreed with the relevant stakeholders for those locations prior to construction.</p> <p>Table 1-1 Summary of Mitigation Measures of the oWMP <b>[APP-214]</b> specifically refers to drainage features (cut-off ditches, swales and retention ponds) to be employed for the construction phase for the dual function of reducing run-off rates and sediment control. These features need to be designed and located by the appointed construction contractor and these are to be secured through the Outline Water Management Plan <b>[APP-214]</b> and outline Construction Environmental Management Plan <b>[APP-207]</b>.</p> <p>It should be noted that Rutland County Council have recently updated the draft Statement of Common Ground to reflect their acceptance of the measures in the oWMP <b>[APP-214]</b> and their ability to approve the detailed design of SuDS features in the WMP prior to the construction phase.</p>
Kevin Corby [REP7-063]	Alternative Traffic routes	<p>I would therefore appeal to you that there is a perfectly viable alternative that would mitigate all the concerns raised, and this would be to insist that all vehicles over 7.5 Tonnes only access and egress the site via the A6121 from Bourne direction. Access either from the North A1 at A151 Colsterworth, from the South A1 or A43 at either A1139 or A47 (Peterborough) through to A15 (Bourne).</p> <p>Routing from these points would entirely eliminate the Gt Casterton problem, and keep all HGV'S on main trunk roads with proper resting places right to point of delivery, without significant added journey times. Light vehicles would be able to go through Gt Casterton as per</p>	<p>The HGV routing arrangement with access via Great Casterton has been chosen to provide the most direct, shortest route from the Strategic Road Network, in the form of the A1. The egress route will be via Bourne and the A6121 to prevent two-way vehicle conflicts along Ryhall Road and through Great Casterton. The one-way routing arrangement reduces the environmental impacts of construction vehicles by reducing the overall traffic impact that would be associated by an increase in two-way HGV flows through Essendine and the surrounding receptors. The HGV routing arrangements have also been agreed with the local highway authorities.</p>

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		<p>the present plan. As an experienced HGV driver this would be my preferred route, and this is the route that I would direct any HGV.</p>	
John Hughes	Development Consent Order (DCO) Process	<p>Lack of detail for the substation at this stage of the process, and passing responsibility to RCC for them to review the detail design when it is completed after the DCO has been approved.</p>	<p>The Development Consent Order (DCO) process happens in phases. It has some similarities to an outline planning application insofar as any approval tends to establish whether the principle of development is acceptable and sets maximum parameters for the extent of any development. The detail then follows at later stages, much like reserved matters applications. The discharge of Requirements (DCO equivalent of planning conditions) means that the detail is then reviewed and approved by the appropriate body, in the case of Mallard Pass and its detailed design, that is the Local Planning Authority. It is simply the case that the detail is often not known until later in the process but that the maximum extents of the potential development have already been considered. In that context, and as we have previously set out and explained in Section 5.2 of the Project Description [REP2-012] the Application uses a parameters-based approach, which is then assessed in the Environmental Statement.</p> <p>The detailed design of the substation will be controlled through requirement 6 of the draft DCO and will be submitted to the Local Planning Authority for approval, subject to the DCO being granted. Design Guidelines for the detailed design of the Project Substation are set out within the Design and Access Statement (DAS) [REP5-058] and include no permanent lighting (PL3.17).</p>




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John Hughes	Landscape and visual - Residential Visual Amenity Assessment	Landscape and Visual impacts on 'The Bungalows' and 'Glen Crescent' and what mitigating measures the applicant has taken with regards to residents west of the ECML.	<p>The Applicant's Residential Visual Amenity Assessment (RVAA) [APP-057] where Glen Crescent is recognised as a specific receptor group. The RVAA recognises the potential impacts and comments on how the design evolution has sought to address potential impacts by removing panels from Field 26. The RVAA also points to the planting along the boundaries of Fields 18 and 19 and concludes that the magnitude of change would be negligible with a slight adverse impact.</p> <p>The Applicant has further responded to concerns relating to visual amenity from Glen Crescent in the Applicant's Response to Interested Parties' Deadline 2 Submissions – Landscape and Visual [REP3-032].</p> <p>Specific point around the ECML, the solar PV area in fields 27 and 29 was moved to provide a greater set back from Essendine, further respecting public amenity of the residents of Essendine and mitigating visual impacts of users travelling along the A6121. The combination of the dis-used railway line, topography and existing underground utilities offer structuring elements within in the landscape, with the proposed solar PV area being designed to sit to the east of Essendine to reduce the potential impacts in accordance with the design principles set out within the Design and Access Statement (DAS) [REP5-058].</p> <p>The Applicant's response to potential impacts has sought to work on a bespoke basis, noting that an appropriate measure for one area of the Site may not result in the same outcome somewhere else so it is not necessarily a matter the solar PVs</p>


Parties Raised	Sub-Theme	Issues Raised	Applicant's Response
			<p>being a certain distance or using a certain feature to the achieve the same effect. In the case of Glen Crescent, the Applicant has identified measures it feels are appropriate in the context of the landscape and assessed impact and these must be balanced against a range of other factors including the urgent need for renewable energy generation.</p>
John Hughes	Project Substation	The Landscape and Visual impact on Glen Crescent from the Project Substation.	<p>In respect of the substation, the LVIA provides comment on the impact of the Substation throughout the assessment, noting when it is likely to be visible or not within views.</p> <p>Photomontage E [APP-172] provides a visualisation of the proposed substation looking from Stamford Road (A6121). This photomontage illustrates the screening effect of a hedgerow with individual hedgeline trees, which provides an element of screening of the PV Arrays. It should be noted that whilst Photomontage E is an illustrative photomontage, the Green Infrastructure Strategy [REP7-021] proposes for a tree belt to be located along the alignment of the hedgerow. An illustrative photomontage depicting the proposed tree belt is shown on the Onsite Substation wireline [Appendix D, REP4-002]. The tree belt strengthens the screening of the PV Arrays located in fields 26 and 18 and the substation in Field 19. The proposed tree belt is seen in the context of the existing wooded disused railway line, helping assimilate it into its immediate landscape context.</p> <p>The Onsite substation has been located in close proximity to the existing Ryhall substation in order</p>

Parties Raised	Sub-Theme	Issues Raised	Applicant's Response
			<p>to minimise the length of the grid connection cable (and the associated construction disruption). It is considered that the colocation of the taller elements of the electrical infrastructure, rather than dispersed infrastructure reduces the visual impact and effects on the landscape character. It is contained within Field 19 which benefits from a strong boundary network of vegetation which would be retained. The Onsite Substation has been located to the west of the East Coast Mainline so to avoid having to cross the railway line with a 400kV cable. Furthermore, if the Onsite Substation were to be relocated within closer proximity to the existing Ryhall Substation it would reduce the distance to noise sensitive receptors when compared to its current location.</p>
CPRE [REP7-049]	Sustainability	<p>CPRE are very concerned about the long-term sustainability of silicon solar panels. These are made, like silicon chips, in high energy processes using particular types of silica sand which, according to the Institute of Materials, Metals and Mining of which I am a member, is in increasingly short supply.</p> <p>There is serious doubt that the solar panels will continue to operate effectively and efficiently over the now proposed lifetime of the site and it is likely they will need to be replaced during that time. For the reason given above replacement material may not be available.</p> <p>Furthermore, speaking as a person with a degree and a doctorate in materials science from the University of Sheffield which included considerable study of metallurgy, I believe that</p>	<p>The oOEMP [REP7-017] sets out the activities that will occur during the operational phase which will be restricted principally to vegetation management, equipment maintenance and servicing, replacement and renew of any components that fail, and monitoring. It is anticipated that maintenance and servicing would include the inspection, removal, reconstruction, refurbishment or replacement of broken or faulty (including as a result of reaching end of life) equipment. The oOEMP was amended at Deadline 7 to clarify that the replacement of equipment included any equipment that had reached its end of life.</p> <p>The Applicant has provided further clarity regarding the conservative embedded carbon assumptions within their 'Statement on 60 Year Time Limit' [REP7-038].</p>


Parties Raised	Sub-Theme	Issues Raised	Applicant's Response
		<p>over the proposed lifetime of the site it is probable that the metal frames and stands on which the panels will be mounted will suffer serious corrosion, probably leading to structural collapse and a further need for replacement with all the additional carbon emissions that this will entail. This requires full independent investigation.</p> <p>As far as we are aware there is no established process or industry for dealing with disposal and/or recycling of waste solar panels. Although it is possible that such a new industry may emerge. Currently, it is just an aspiration that by the time these sites cease to operate, an industry recycling solar panels might exist.</p>	<p>As noted at the Hearing (Agenda Item 3c) [REP4-022] the Applicant explained that the ExA and Interested Parties could be confident of the project having value at the end of its operational life in terms of the recycling and/or repurposing of the assets. It may well be that the project ceases to be commercially viable after a period, based on the UK renewable energy market, but its assets would continue to be commercially viable in a different jurisdiction, for example, a developing country. On that basis, the project could be decommissioned and sold to an investor/operator in the alternative jurisdiction. Indeed, this is a practice already underway worldwide, albeit it is a developing marketplace because few solar projects have come to the end of their operational life.</p> <p>It was also noted that there is a growing market across the world for recycled panels to repurpose them. Therefore, in other parts of the world the panels would not necessarily only have a scrap value as although they may be deemed no longer cost effective for this site in the UK market, the panels are likely to have a value in different jurisdictions.</p> <p>The Applicant provided clarification regarding the Carbon Lifecycle Analysis and carbon Benefit at Deadline 7 [REP7-038] (paragraphs 1.1.37 - 1.1.55), which concluded that the net benefit can be estimated at 1,942,310 tonnes CO<sub>2</sub>e.</p> <p>Further to this the oCEMP [REP7-015] includes a commitment that requires the Applicant will provide a statement within the detailed CEMP(s) using published data from Government and/or</p>

Parties Raised	Sub-Theme	Issues Raised	Applicant's Response
		<p>We consider that formal carbon lifecycle analysis (CLA) should be used to prove that during their whole lifecycle - construction, operation, decommissioning and disposal/recycling - this installation will actually save more carbon emissions than it creates. The standard evaluation used by the applicant is not a complete CLA. Without a robust carbon lifecycle analysis, the development cannot be said to be sustainable.</p> <p>We believe that a clear, funded, plan for the decommissioning, removal and recycling of the materials from these sites must be in place before their development is allowed to proceed.</p>	<p>International Climate bodies that demonstrates that the lifecycle emissions of the Proposed Development will deliver a carbon benefit over the lifetime of the project in light of the proposed detailed construction methodology.</p> <p>The oDEMP [REP7-019] sets out the plan for decommissioning the Proposed Development. At paragraph 2.1.1 it states that:</p> <p><i>“All the solar infrastructure, including PV Modules, Onsite Substation, Mounting Structures, cabling on or near the surface (excludes cabling in highways), Inverters, Transformers, Switchgear, fencing and ancillary infrastructure, would be removed and recycled or disposed of in accordance with good practice following the waste hierarchy, with materials being reused or recycled wherever possible. All waste will be disposed of in accordance with the legislation at the time of decommissioning.”</i></p> <p>Given the operational time period of 60 years, it is not possible to set out the exact decommissioning requirements. The draft DCO therefore includes, at Requirement 18, that the undertaker must submit to the relevant planning authority for approval, in consultation with the Environment Agency and Lincolnshire County Council, a decommissioning environmental management plan that must be substantially in accordance with the relevant part of the outline decommissioning environmental management plan.</p> <p>The Applicant has previously noted at the Hearings and within their response the SWQ (Q1.0.11) [REP5-012] that there is no precedent,</p>

Parties Raised	Sub-Theme	Issues Raised	Applicant's Response
			<p>in either solar or offshore wind, for specific funding commitments for decommissioning to be made at consent stage.</p>
<p>CPRE [REP7-049]</p>	<p>Effect on Farm Land</p>	<p>In our written submission, we made clear our concerns about the use of good food-growing land for solar installations at a time when climate change is causing increasing risks to national food security and government has been advised that we must grow more food within the UK. I won't repeat those details today.</p> <p>However, we are very concerned about the long-term effects of solar panel management on the land where they are installed and doubt that these are good or as environmentally friendly as claimed.</p> <p>The maintenance of solar panel installations on open land requires regular cleaning with chemical cleaners or distilled/de-ionised water. Their production uses energy and the use of chemical cleaners causes land contamination.</p> <p>In our experience, the vegetation under and between panels is not controlled by grazing sheep.</p> <p>Instead, the normal maintenance regimes include both regular mechanised mowing and treatment of roadways with weedkiller and the treatment of sub-panel areas with weedkiller. The normal weedkiller used is glyphosate.</p> <p>In our written submission we listed several companies which specialise in providing these solar panel maintenance services. I won't repeat that list here. They were after all just</p>	<p>The comments about food security are noted and have been responded to in earlier submissions.</p> <p>As set out in the outline Operational Environmental Management Plan (oOEMP) [REP7-017] panels are cleaned with clean water which does not contain chemicals. They are cleaned usually once per year and this causes no physical damage to the soils and the cleaning causes no chemical damage or contamination. These machines are usually smaller than most normal farm tractors.</p>  <p>Photo from the revised oSMP [REP6-017]</p> <p>The vegetation under and around the panels could be managed by sheep grazing, as the following examples show. These are all panel areas controlled by sheep grazing and mechanical means, and there is no spraying off required.</p>

Parties Raised	Sub-Theme	Issues Raised	Applicant's Response
		<p>examples.</p> <p>CPRE Cambridgeshire &amp; Peterborough is very concerned by the cumulative impact of damage to the soil over a period of 40 years from the combination of shielding from daylight, regular spraying with weedkiller and routine tracking of panel-cleaning and grass-cutting vehicles and equipment.</p> <p>We are not aware of any applicable long-term studies which either support or negate our concerns. In 40-years we could be leaving significant resulting problems to another generation.</p>	 <p>There may be sections or areas within the Solar PV Site where chemical weed control is required, such as the following example of an area sprayed off adjacent to a substation, where a clear gap with no vegetation was required for maintenance.</p>



Parties Raised	Sub-Theme	Issues Raised	Applicant's Response
			 <p>The photographs of grazed panel areas above are all sites that have been in operation for over five years and there is no evidence of physical damage or chemical contamination affecting the grass growth.</p>
<p>South Kesteven District Council [REP7-043]</p>	<p>Fencing</p>	<p>Lincolnshire Police Designing Our Crime Officer have suggested that 'deer fencing' is inadequate to secure the perimeter of the site.</p> <p>They have provided the following advice in terms of security measures for the site perimeter: <i>"I would recommend at least 2m – 2.1m welded mesh fencing (this can be any colour most choose green) with a commensurate gating system that is access controlled – some may choose to use 2.1 m palisade fencing which in my opinion is a bit industrial and not that ideal for a rural environment – some sites do have (and it is recommended to have monitored CCTV that covers the various boundary lines."</i></p>	<p>The perimeter fencing is part of the proposed security system which also comprises of the creation and management of existing field hedgerows, the installation of secure gates at the point of access into the fields, securing of existing field entrances that won't be used for ongoing maintenance, secure access gates into the PV array along with perimeter fencing as well as CCTV along the perimeter of the PV Arrays. The combination of these measures seeks to prevent and deter unauthorised access into the PV Arrays.</p> <p>The parameters as set out in Appendix 5.1 of the ES and the Design Guidance (PL3.5) in the Design Access Statement <b>[REP5-058]</b> both stipulate that the 'perimeter fencing will comprise of wooden posts and wire mesh fencing' and will be up to 2m in height. The Applicant also notes the Officer's comment about CCTV and can confirm that monitored CCTV is proposed around the perimeter of the PV Arrays, as stipulated by the design guidance (PE4.7) within the DAS.</p>



Parties Raised	Sub-Theme	Issues Raised	Applicant's Response
			<p>The Applicant therefore considers this to be in alignment with the suggestions of the Designing Out Crime Officer.</p>
MPAG [REP7-055]	Battery Energy Storage System	<p>Disadvantages of Mallard Pass Solar Farm not having a Battery Energy Storage System (BESS)</p> <p>The Applicant has made it clear that the Proposed Development could not have a BESS and that renders the proposed development sub-optimal.</p> <p>It is the view of MPAG (and others) that without a co-located BESS the value of the Proposed Development would be significantly reduced. The need for a co-located BESS is supported by NPS policy, technical experts and the developers of other large solar farms all of which will have a BESS, as outlined by Sunnica's Statement of Need Table 10.1.</p> <p>NPS EN-1 para 2.2.27. "Storage is needed to reduce the costs of the electricity system and increase reliability by storing surplus electricity in times of low demand to provide electricity when demand is higher. Storage can provide various services, locally and at the national level. These include maximising the usable output from intermittent low carbon generation (e.g. solar and wind), reducing the total amount of generation capacity needed on the system; providing a range</p>	<p>The Applicant does not agree that the absence of a BESS makes the Proposed Development 'sub-optimal'. Indeed the Proposed Development will, if consented, make the best use possible of the available grid connection capacity at Ryhall and therefore is an optimal solution in this location. The Proposed Development will, if consented, generate a significant amount of low-carbon electricity over its lifetime, which will contribute to Government's legal requirements to achieve net zero by 2050, and improve UK energy security and affordability of supply.</p> <p>MPAG states that "without a co-located BESS the value of the Proposed Development would be significantly reduced" but has not provided evidence to support their view, define the 'value' which has reduced, or quantify the supposed extent of assumed "reduced" value. The Proposed Development will, if consented, generate a significant amount of low-carbon electricity over its lifetime, which will contribute to Government's legal requirements to achieve net zero by 2050, and improve UK energy security and affordability of supply MPAG seem to be interpreting a national need for electricity storage as an individual requirement for each specific development. The Applicant agrees that there is a need for new storage capacity to be connected to the electricity system, but national policy does not require or obligate any applicant to provide for storage at any or all RES (Renewable Energy Source) development(s) no matter what the scale.</p>

Parties Raised	Sub-Theme	Issues Raised	Applicant's Response
		<p>of balancing services to the NETSO and Distribution Network Operators (DNOs) to help operate the system; and reducing constraints on the networks, helping to defer or avoid the need for costly network upgrades as demand increases.”</p> <p>NPS EN-3 Para 3.10.17 states “Where sited on agricultural land, consideration may be given as to whether the proposal allows for continued agricultural use and/or can be co-located with other functions (for example, onshore wind generation, or storage) to maximise the efficiency of land use.”</p> <p>The Ryhall sub-station has been put forward by the Applicant as a key determinant for the location of the Proposed Development. However, it has a fundamental weakness in that it has no import connection from the Grid. Thus it is not able to support a BESS, impacting seriously on the viability of the Proposed Development as a fully functional supplier to the National Grid.</p> <p>“There are substantial benefits to the co-location of solar and storage generation facilities which will result in an improved contribution to low carbon UK electricity supplies when compared to a scheme coming forward independent of the</p>	<p>For example, NPS paragraph 2.2.27 does not use the word “must” or “is required to” and in no way assumes co-location with any RES development.</p> <p>Similarly NPS para 3.10.17 uses the phrase that “consideration may be given” rather than any firmer obligation, supporting the Applicant’s position.</p> <p>Within the context of (a) co-located storage not being a requirement for renewable generation schemes, (b) renewable generation schemes being required urgently to support decarbonization and security of supply targets, and (c) the connection of low carbon generation to the NETS (i.e. solar generation) working to decarbonize the electricity system, (note that storage supports this but does not in itself export ‘new’ low-carbon energy to the grid), the Ryhall substation provides a suitable and beneficial connection for the generation scheme to connect to the NETS. Government is targeting full decarbonization of the electricity system by 2035. Ryhall has no ‘fundamental weaknesses’.</p> <p>The substantial benefits of a co-located scheme over a standalone scheme, do not render the contribution of a standalone scheme to be sub-optimal in this location, because the co-located scheme is not deliverable at this location. Further, the benefits of a co-located scheme over a standalone scheme, do not undermine the need for solar and other renewable energy schemes to come forwards either as standalone or with without storage, especially when Government’s</p>

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		<p>storage.” (Statement of Need Cottam para 11.5.18)</p> <p>Co-location is especially beneficial for NGENSO (National Grid Electricity System Operator) where connections are to the transmission, rather than to the distribution network, because the combined asset is required to meet certain energy market operational planning, notification and service obligations. (Statement of Need Sunnica para 10.4.13)</p>	<p>targets are for so much more solar to be delivered to meet the urgent need for low-carbon electricity and security of supply.</p> <p>Para 11.5.3 of the Cottam statement of need states that:</p> <p><i>“Standalone solar schemes provide essential low-carbon electricity to the grid and not including storage capability at the site does not detract from their core contribution to decarbonising the electricity network:</i></p> <ul style="list-style-type: none"> <li>• <i>Not all grid connections have both import and export capability, and the import capability may not be cost effective to provide, however export capability, where it is available, should be used to connect renewable generation to the NETS; and</i></li> <li>• <i>Although storage facilities, if collocated with renewable generation schemes add utility to the operation of solar generation schemes, services which support the efficient flow of renewable power onto the UK electricity system can and also are expected to be located and operated separately to renewable generation assets.”</i></li> </ul> <p>Prior to the selected text from Sunnica Statement of Need para 10.4.13, the author had written: <i>“Colocation of energy storage within solar generation schemes is not essential for either asset to make a significant contribution to the future operation of the NETS”.</i></p> <p>The Applicant has provided a response to MPAG's incorrect reading of the paragraph quoted, in The Applicants written summary of oral submissions at CAH2 (REP7-035). A lack of</p>

Parties Raised	Sub-Theme	Issues Raised	Applicant's Response
		<p>In the Statement of Need paragraph 11.5.1 the Applicant writes "In the absence of electricity storage facilities, the Proposed Development's overplanting strategy (see Section 7.7) seeks to maximise use of the grid connection capacity through its operational life". This confirms that the Applicant considers there to be a link between the lack of a BESS and overplanting. The Proposed Development needs to overplant so that in periods of low irradiance and therefore low output per panel, the grid can, at least to some extent, be supplied.</p> <p>When Grid operators have to curtail power generation, power is lost without a BESS co-located on the same site to store the curtailed power. As more solar plants come into service and as maximum solar power production takes place during the summer when demand is low, curtailment is likely to occur more frequently rendering the proposed development less efficient as the years go by.</p> <p>The land take could be larger as more panels (overplanting) will be required to supply the Grid when light levels are low and, normally, when demand for power is high. This demand would normally be met by power already saved in a</p>	<p>storage limits the opportunity to overplant at MPSF, as REP7-035 explains.</p> <p>MPAG are factually incorrect. MPSF have a fully unconstrained connection agreement with National Grid, and no bespoke constraint arrangements have been identified in that contract. If for some reason National Grid needed to curtail power generation nationally, storage facilities connected to the NETS elsewhere (i.e. not associated with the scheme) may be asked to import more power meaning that the scheme may not be curtailed.</p> <p>MPAG continue to misunderstand the relationship between overplanting and storage</p> <p>The Applicant has demonstrated that the clipping effect is very minor at MPSF (c. 0.2% reduction in annual load factor) and have demonstrated directly to MPAG in an online meeting and a series of email exchanges with MPAG following the Applicant's REP5-012 and REP5-013</p>

Parties Raised	Sub-Theme	Issues Raised	Applicant's Response
		<p>BESS, thus negating the need for the overplanting of solar panels for this purpose, and avoiding the need for excessive land take.</p> <p>The excess number of panels would produce power during periods of high light levels exceeding inverter capacity thereby causing clipping. Without a co-located BESS the clipped power is lost thereby wasting power and the land taken up by the panels producing that power.</p> <p>Including a BESS in a solar project is expensive. Given the safety concerns of lithium-ion batteries, it is also very controversial with developers having to justify the importance of a BESS against local opposition. It follows therefore that IF developers did not consider a BESS as being essential, they would not have been included in all other similar developments to that of the Proposed Development.</p> <p>The benefit of having a BESS is quantified in Burton Gate ES Chapter 6 Climate Change. Note that the advisers to Gate Burton include Pinsent Masons and Mr Gillett, both acting for the Applicant and many of the other solar farm NSIPs</p> <ul style="list-style-type: none"> <li>• Para 6.10.34 "Use of the battery energy storage system provides additional carbon saving opportunities. Relatively fast response power sources such as battery storage have an important role to play in helping to balance supply and demand within the electricity grid. This grid balancing function is often performed</li> </ul>	<p>submission that overplanting the Proposed Development would deliver many more MWh/Yr than would be the case, including with a BESS on a unitary scheme,</p> <p>BESS are needed in the UK's future low-carbon electricity system and are being developed where appropriate and technically deliverable. It is a step too far to conflate a national need to a blanket expectation or requirement for all RES developments to be developed with co-located BESS or not at all.</p> <p>It is a step too far to conflate a national need to a blanket expectation or requirement for all RES developments to be developed with co-located BESS or not at all.</p> <p>BESS, if connected at other locations, either co-located or standalone, may be capable of fulfilling the role described in the Gate Burton application, and deliver the benefits described. The Gate Burton proposal has an import connection, and therefore those benefits are related to the scheme, although the carbon savings associated with the BESS at Gate Burton for grid balancing, "are not factored into the overall GHG assessment" for Gate Burton Energy Park. The Gate Burton Energy Park delivers a significant climate change benefit, which MPAG do not seem to disagree with. This acutely demonstrates that the main solar component of the Gate Burton Energy Park development delivers a significant carbon benefit without considering any BESS benefit, and therefore supports the significant</p>

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		<p>using high-carbon intensity power sources such as open cycle gas turbines (OCGT), so the use of a battery charged from solar PV generation can deliver a direct carbon saving relative to an OCGT.”</p> <ul style="list-style-type: none"> <li>• Para 6.10.35 “Should the BESS be charged from the Scheme, and discharged back into the grid once each day, at a typical round trip efficiency of 85% and an overall lifetime degradation rate of 80%, it will be able to supply 7,446,000 MWh to the electricity grid over its 60 year operational lifetime.” “As the operational carbon intensity of the Scheme is 0.016 tCO<sub>2</sub>e/MWh and the comparable figure for an OCGT is 0.460 tCO<sub>2</sub>e/MWh, the use of the BESS for grid balancing purposes would deliver a saving of 3.3 million tonnes CO<sub>2</sub>e over its operational lifetime. The overall carbon reduction when the BESS is used for a daily charge-discharge cycle as described here is around 10.3 million tonnes CO<sub>2</sub>e, or over 1.1 million tonnes CO<sub>2</sub>e higher than if the entire output of the Scheme is supplied to the grid without the use of a BESS.”</li> <li>• Para 6.10.36 “The BESS can also be used for additional grid balancing purposes independent of the solar PV element of the Scheme, charging the battery from the grid overnight during periods of low demand and feeding it back when demand increases in the morning.”</li> </ul>	<p>benefit the proposed Development, as a standalone solar scheme, delivers in support of Government’s aim to achieve its decarbonisation, energy security and affordability targets.</p>

Parties Raised	Sub-Theme	Issues Raised	Applicant's Response
		<ul style="list-style-type: none"> <li>• Para 6.10.37 “All of these figures are inevitably subject to a degree of uncertainty, but they illustrate the fact that the use of the battery system, when used for grid balancing purposes, is likely to result in significant additional carbon savings over its operational lifetime. These additional carbon savings from use of the BESS for grid balancing are not factored into the overall GHG assessment .....</li> </ul> <p>The Statement of Needs for Longfield, Cleve Hill, Sunnica, Gate Burton and Cottam, all of which supported the need for a BESS, were all written by the same advisor to the Applicant, Mr Gillett. There seems an inconsistency between the Statement of Need for the Proposed Development written by Mr Gillett and all the other solar farms – the main difference being Mallard Pass Solar Farm has no BESS and his attempts to try and justify the viability of this scheme.</p> <p>Table 10.1 from Sunnica’s Statement of Need summarises the many benefits of co-located BESS. This table is also used in Gate Burton’s, Cottam’s, Longfield’s, West Burton’s, Cleve Hill’s and other solar farm applications.</p> <p>In Applicant’ Response to IP’s Deadline 5 submissions SWQ1.1.1 the Applicant stated “The Appendix provided by Mallard Pass Action Group, appears to suggest that because the need for</p>	<p>All schemes cited by MPAG are different layouts on different land in different locations and with different grid connection capabilities and agreements. It should therefore not be surprising that each have different Needs cases, although the theme of delivering significant low-carbon generation capacity to the grid runs common in each. The Proposed Development will, if consented, play an important role in supporting Government to reach its legally binding target of Net Zero 2050 as well as improve UK energy security and increase the affordability of electricity in the UK.</p> <p>A revision of this table as appropriate to MPSF, was submitted in the SoN [APP-202] at Table 9-2. It should be no surprise that different schemes have different characteristics but that does not mean that any scheme submitted to PINS for consent is not needed and should not come forwards</p> <p>Sub-optimal is a relative and un-evidenced term. The Proposed Development will, if consented, play an important role in supporting Government</p>



Parties Raised	Sub-Theme	Issues Raised	Applicant's Response
		<p>BESS has been demonstrated for other projects which have the capability to co-locate with BESS, the Proposed Development is somehow “worthless” (their emphasis) because it is not proposed to be developed with BESS. This argument does not hold water. “</p> <p>MPAG has never maintained that the Proposed Development is worthless however we would describe it as distinctly “sub-optimal” given the limitations of the existing 400KV Ryhall substation. Given the likely relaxation of on -shore wind planning regulations recently announced, putting aside all the other in-combination effects of this scheme, an on-shore wind farm could generate the same energy at periods when it is more likely to be needed, is 3 times more efficient than solar and so would take a fraction of the space and would allow for arable farming to continue on probably 95% of the Order Limits.</p>	<p>to reach its legally binding target of Net Zero 2050 as well as improve UK energy security and increase the affordability of electricity in the UK. Scheme. The Proposed Development will, if consented, make the best use possible of the available grid connection capacity at Ryhall and therefore is an optimal solution in this location.</p> <p>MPAG have provided no evidence to support their claim on the appropriateness of onshore wind connecting at Ryhall, and that any onshore wind farm would meet the claims that they suggest of it.</p> <p>Table 7.1 of the Applicant's Statement of Need [APP-202] provides evidence that solar produces a comparable amount of energy per hectare as onshore wind. Further, MPAG have in this paragraph acknowledged that there is benefit in the Proposed Development, and the Applicant contends that this benefit is significant and it is necessary for it to be delivered. The Applicant therefore requests that the Examining Authority accord the significant weight as recommended by Government to the benefits of the Proposed Development when he considers the planning balance in arriving at his recommendation for the SoS to consider.</p>
MPAG [REP7-060]	Agricultural Land Classification	MPAG introduce and discuss the results of an ALC Survey that they have commissioned.	The Applicant has responded to this in a separate section of this response below, Appendix A - Applicants Response to Critique of ALC by Landscape on behalf of MPAG.



Parties Raised	Sub-Theme	Issues Raised	Applicant's Response
MPAG [REP7-056]	Schedule 2 – Requirement 6	<p>The Applicant already has a one of the highest land takes per hectare compared to other solar farm applications, as discussed in some detail in earlier submissions. When you consider the areas that the Applicant allocated for the order limits and solar area from stage 1 to stage 2 consultations to final application submission, with not a huge amount of time in between these stages, there were continual changes to the sizes of those areas. Latterly the solar area reduced from 584Ha to 531Ha including margins. Therefore if the solar area were to be reduced again, our point is that land should not just be re-assigned to mitigation, that the Order Limits should be reduced further to minimise the impacts on landscape and residential receptors. e.g. field 4 in the west of the site which has a small solar area and has to have a dedicated secondary construction compound despite there being 2 just a few hundred yards up the road. In terms of a logical red line boundary, field 37 serves no useful purpose across the north side of Carlby Road. The Applicant would argue it needs it for skylark plots however not only should skylark plots be positioned where the skylarks normally breed (as opposed to the Applicant's random assignment of them, but also there is plenty of mitigation to accommodate moving one skylark plot to another area within the remaining order limits.</p>	<p>Within ISH5, the Applicant explained that if the Applicant does not build out on any area of land then that would be used for farming or landscaping. Requirement 6 (Detailed Design) and Requirement 7 (Landscape and ecology management plan) of the dDCO will work together so that if any areas proposed for PV arrays are not developed, the information submitted to discharge these two requirements will set out how the land is to be used, which may simply be for the farmer to continue farming the land. The LPAs will, in considering Requirement 6 and 7, be able to see how any land that is not used for solar is otherwise proposed to be utilised. That is the appropriate stage for this to happen.</p> <p>As set out at the Hearings, the Proposed Scheme's size is generally consistent with the majority of NSIP solar schemes.</p> <p>The Applicant is not proposing any mechanisms for the Order limits to change because once the detailed design approvals are in place the DCO can only be built out in accordance with these, even if the Order limits end up being wider than the scheme in that detailed design. To comply with the Requirements, the development would only be able to take place within the areas provided for by the Requirement 6 discharge.</p> <p>Where this is the case, the land is likely to remain under agricultural management as sufficient mitigation for skylarks has been identified and secured within the extents of the Order limits. It is the Applicants view that the removal of any field from the Order limits that is solely under agricultural management (with or without skylark</p>

Parties Raised	Sub-Theme	Issues Raised	Applicant's Response
			<p>plots) would not further reduce the impacts on landscape and residential receptors. This is because the fields would continue to be managed as they are now so there would be no material change to the baseline for those particular fields and therefore their removal from the Order limits would not alter the effects of the Proposed Development as a whole.</p> <p>The Applicant has provided reasoning for the location of the secondary construction compounds within their 'Summary of Applicant's Oral Submissions at CAH2 &amp; Appendices' [REP7-035].</p> <p>As shown on the Green Infrastructure Plans (Sheet 3 of 5) as appended to the oLEMP, Field 37 is a retained arable field parcel with skylark plots. The skylark mitigation strategy has followed the guidance from the RSPB regarding the provision of skylark plots and the Local Wildlife Trust has no objection with regard to impacts upon skylarks as set out in the statement of common ground [REP4-034].</p> <p>With regards to the suitability of Field 37 for skylarks, they were noted to be present within this field during the breeding birds surveys as shown on Figure 7.6 of the ES [APP-187]. It should be noted that the symbology (purple triangle) shown on the Green Infrastructure plans is to identify the field within which skylark plots would be created, it is not representative of the number or location of the skylark plot itself. The LEMP, submitted in accordance with Requirement 7 of the DCO will specify the number of skylark plots to be created within the retained agricultural land.</p>

Parties Raised	Sub-Theme	Issues Raised	Applicant's Response
MPAG [REP-057]	Scope of the Proposed Development	<p>The confusion over the Plant Load Factor (PLF) was reflected in the different numbers the Applicant supplied in the various ES documents. MPAG used government data from DUKES that at the time which had a PLF of 10%. Since MPAG submitted our original response on output figures, DUKES has updated their PLF to 10.6%. Having seen the Applicant's satellite data and taking it at face value, their hypothesis seems reasonable and therefore we would now have to accept 11.5%.</p> <p>The Applicant had not used actual output figures but the best-case scenario assuming 350MW output capacity rather than the actual 240MW AC energy that the grid would be able to take, noting they have no capacity to store excess energy. This in turn affected the figures they used for the 'Homes' calculations. However still using the Applicant's figures, it shows the proposed development to have the lowest homes per MWp as illustrated in the table in paragraph 2.3.</p> <p>The Applicant admitted to not applying a degradation factor to their output scenarios which in turn also affected the 'Homes' calculations. That has since been corrected. 2.5 MPAG spotted anomalies in their degradation % between their 350MW DC calculations and 240MW AC which they admitted should have been the same.</p> <p>Their current figures assume the panels would last 40 years but there is no evidence to suggest that this is likely to be the case. As such therefore they included no replacement panel carbon costs in their carbon calculations. It will be important for the 60 year calculation that they explain their replacement panel assumptions and reflect that in their calculations.</p>	<p>The Applicant engaged with MPAG on a Teams call (Tony Orvis, 13<sup>th</sup> September) and walked through the Excel analysis shared in REP5-012 and REP5-013.</p> <p>During the call, the Applicant explained how the load factor had been calculated and how the installed capacity and grid connection capacity related to each other in the calculation of an estimated annual load factor for the site, both at commissioning and each year after as a result of anticipated degradation. The Applicant asked Mr Orvis whether the explanation given had been clear and whether there were any questions arising and none were raised.</p> <p>In summary, the analysis shared by the Applicant showed that at commissioning the load factor of a 350MW(p) site with a 350MW grid connection would be 11.6% and with a 240MW grid connection (as would be the case at Mallard Pass) would be lower, at 11.4%. This was the average of multiple years of satellite data and cannot therefore be interpreted as a 'best case' as suggested by MPAG.</p> <p>Appendix B in REP4-022 explains clearly which load factors the Applicant has used, referring as necessary to its application and publicly available material. For example, some calculations have been made on conservative assumptions. Where this was the case, that fact was made clear and conservative assumptions should not be taken to be an estimate of actual future performance. The Applicant did however acknowledge in the same REP4-022 the presence of a typographical error in ES Chapter 13 (Climate Change).</p>

Parties Raised	Sub-Theme	Issues Raised	Applicant's Response
		<p>The point that MPAG wanted to make was that the Applicant should not to be misleading in overstating the number of homes that could be supplied in reality, rather than hypothetically. The same applies to lack of battery storage which undoubtedly has a huge impact on delivering the 'case for need'. (See Appendix 1 for a deeper review of the importance and evidence on BESS).</p>	<p>The Applicant presented, at ISH4, a conservative assessment of the carbon costs, benefit and net benefit of a 60-year timeframe and this was submitted in REP7-036. Further information has been submitted to the ExA at DL8 in answer to the Rule 17 Request for Additional Information.</p> <p>The Applicant wishes to highlight that DUKES reports on actual (historical) annual national performance on a year-by-year basis for already installed and operational capacity, and this is (a) highly likely to differ from year to year and (b) highly likely to differ from a location-specific multi-year projection of average load factor for a new facility before it may reduce due to the effects of degradation.</p> <p>In Item 3a of REP4-022, the Applicant notes that Mr Fox "confirmed that the Applicant welcomes other academic papers to be submitted so that they can be reviewed" but that none have so far been submitted by MPAG or others which contradict the position presented by the Applicant.</p> <p>The Applicant has worked to explain to MPAG and others the basis of its calculations on output but does not believe that it has at any time materially overstated the number of homes that could be supplied either in reality or hypothetically.</p> <p>The Applicant wishes to remind the ExA of the urgent need for low-carbon generation capacity to come forwards in order to fight climate change, and deliver security of supply. This case was set out in the Statement of Need [APP-202]. The Applicant also wishes to remind the ExA of the national shortage of grid connection capacity, as explained in the Applicant's response to the ExA's</p>

Parties Raised	Sub-Theme	Issues Raised	Applicant's Response
			<p>First Written Questions, Q1.2.6. In that response the Applicant stated that:</p> <p>“To achieve [a] Net Zero future, the <b>equivalent</b> of over 150 solar projects (350MW x 150 = 52.5GW, versus c.14GW installed solar capacity as at 2023) of a similar scale to the Proposed Development will be required to come forwards in the next 12 years (i.e., in 2035 or earlier)”</p> <p>and that</p> <p>“One of the key benefits of the Proposed Development is that it makes use of existing grid connection capacity which facilitates a connection in 2028”</p> <p>It is clear therefore that the Proposed Development is not coming forwards instead of any of the schemes listed in MPAG's table 2.3, but is required to come forwards alongside those schemes and countless others. The Applicant therefore believes that it is appropriate to consider the benefit of the case that the Proposed Development comes forwards (315GWh/year average low-carbon electricity is generated over 40 years, effective 2028, or 301GWh/year over 60 years, also effective 2028) versus the case that it does not: no low-carbon electricity is generated from the scheme or at Ryhall Substation.</p> <p>The question of battery storage is addressed elsewhere in the Applicant's Deadline 8 submissions.</p>
MPAG [REP-057]	60-year lifespan	As this is an NSIP MPAG believe the development should be considered in terms of its wider and longer term implications. Whilst we now have certainty, 60 years is more than a generation, an incredibly long time in whatever	The Applicant refers to its response at <b>[REP7-036]</b> 'Statement on 60 Year time limit' which reviews each topic within the Environmental Statement in turn to appraise the change from a

Parties Raised	Sub-Theme	Issues Raised	Applicant's Response
		<p>context you view it. It is impossible to make any reasonable predictions of future land use need, or energy generation technologies over this period of time. Committing to 60 years means that the government and future generations would be unable to respond to changes brought about by climate change, technology changes and land use need, not just in the UK but globally.</p> <p>Sustainable development, which is what we are all striving for, is defined as meeting the needs of the present without compromising the ability of future generations to meet their needs. Can the Applicant truly say the proposed development meets this test?</p> <p>The government seems open to looking at repowering in the future if deemed appropriate at the time. They have also said in NPS EN-3 para 3.1.58 that a time limited consent would not prevent the Applicant at a later date seeking to extend the period. So we cannot comprehend why the Applicant has chosen such a long time period with so many unknown implications into the future.</p> <p>60 years is 50% more than the baseline for any of the calculations used, 50% more than typical solar farms consented and 50% more than the NPS refers to. Given this huge step change, MPAG believe the Applicant should review systematically all the chapters of the ES to reflect their latest position and to acknowledge the material changes.</p> <p>One of the key changes is that all the panels (530,000) will have to be replaced during the 60 year period. Yet in answer to RCC's and LCC's</p>	<p>permanent to a temporary / semi-permanent operational period.</p> <p>The ES assessed a worst-case scenario that the Proposed Development would be permanent (with an unspecified operational period). The ES also assessed a construction phase and a potential decommissioning phase; the conclusions of these assessments do not change other than providing a certainty as to when the Proposed Development would be decommissioned with the time limit being imposed.</p> <p>It is important to emphasise that the change in approach is <u>not</u> a change from 40 years to 60 years. As the Statement sets out the only change relates to two assessments where some form of 'line' had to be drawn for the purposes of assessments. All other assessments had assumed no 'line', meaning that there is now a benefit in certainty.</p> <p>Furthermore, for carbon, the change means that the assessed benefit stretches further into the future.</p> <p>As explored at the Hearings, and in the Applicant's response to the ExA's Rule 17 Request, whilst there may be panel replacement in that 60 year period, it cannot be done in a way that causes materially new or materially different effects to those assessed in the ES. Given that the ES considered only ad-hoc replacement, any replacement activities therefore cannot be worse than such activities.</p>

Parties Raised	Sub-Theme	Issues Raised	Applicant's Response
		<p>comments about SWQ1.0.1 (REP6-004) the Applicant states.</p> <p>The move to 60 years is a material change on which the EA's were originally assessed. The Applicant is incorrect in stating that there will be no significant impact. Gate Burton, also a client of Pinsent Mason and Si Gillett the expert, who has a defined 60 year period, is quite clear in Chapter 6, Climate Change paragraph 6.4.29.</p> <p>It seems the Applicant is not entirely clear about the lifespan of their panels, Mr Phillips for the Applicant says it is 40 years, yet the Canadian Solar website talks about 25-30 years. There is a lack of clarity moving forward with 60 years at what point the Applicant thinks the panels will need to be replaced. The view of MPAG is that it will be the economic life of the panel, not necessarily the actual life and that as it stands today, assuming technology does not change considerably in the next 12-18 months, will be approximately 30 years necessitating full replacement in and around that timescale taking account that the panels would need to be updated in efficient blocks. The replacement will trigger a number of impacts.</p> <ul style="list-style-type: none"> <li>- Gate Burton, for example, takes this into account in their project's output and carbon calculations. They say the replacement of equipment has a similar emissions output as the original construction and will contribute 95.9% of carbon emissions made during the construction phase.</li> <li>- However there are also the removal and recycling impacts to be taken into account</li> </ul>	

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		<ul style="list-style-type: none"> <li>- Wooden posts need to be replaced, panel mountings may need replaced, along with much of the rest of the electrical infrastructure</li> <li>- Traffic and transport issue. Whilst the oOEMP sets out a maximum of 5 x 2 way HGVs during operation taking account of replacing panels, MPAG struggles to understand the viability of replacing the panels in such a piecemeal ad hoc way. Based on the oOEMP it would take around 200 days to replace just the panels based on c1000 containers.</li> <li>- Potential soil damage due to trafficking of the soils leading to a higher risk of surface water run off.</li> <li>- Loss of food production increases by 50% moving to 60 years when we know the country will be in a different place with Climate change leading to rising sea levels, global warming, more weather extremes; increased population numbers; less global food production available per head.</li> <li>- Potential habitat and species damage and disturbance.</li> <li>- Long term loss of landscape and quality recreational amenity leading to communities fragmenting.</li> </ul> <p>The overarching message the Applicant is trying to give is concerning, suggesting that during the operational phase there will be limited adverse impacts from the proposed development. In reality if consent were granted based on that assumption, it would be easier for the Applicant to push through material changes given the limited</p>	



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		<p>resource of councils to contest, monitor or take enforcement action on any non-compliance.</p> <p>MPAG and others question the rationale for 60 years, seemingly a slightly random number and strange that it wasn't selected for many of the numerical calculations in the first instance. Mr Fox in the hearing stated 'we had to pick a number' and so picked 60.</p>	
MPAG [REP-057]	National Grid	<p>Is it possible to have a grid connection agreement without having a grid connection. This question was raised to clarify 2 points:</p> <ul style="list-style-type: none"> <li>- Grid connection cannot wholly be the determining factor for the justification of a development and therefore the chosen location of a development. Using Fosse Green and Springwell solar farm NSIPs as examples, both have connection agreements but no substation physically exists or necessarily an agreed location for a substation to be built.</li> <li>- Even though a commercial agreement might be in place with NGET, there may be impediments and reasons why it cannot go ahead, or within the agreed timescale and there is no assessment or clarity what is involved and what effects they may have that have not been assessed in the ES.</li> </ul>	<p><b>REP7-036</b> records the response provided to this question which was raised by MPAG at ISH4 and provides further detail at Appendix B of that same document.</p> <p>When National Grid offer a 'User' (their contractual term) a grid connection agreement, they set out (a) where that connection will occur, (b) from when that connection will be available, (c) what works they are required to carry out to enable that connection, and (d) when those works will be carried out, subject to 'User' securities. As set out in its submissions, including its responses to ExA's Rule 17 request, the Applicant sees no impediment to why the connection cannot be made.</p> <p>MPSF have received no indication from NGET or NGESO that the current contractual connection date of 1 January 2028 will not be met.</p> <p>In relation to the Proposed Development, as has been stated in responses to Relevant Representations and at other stages in the Examination process, Paragraphs 3.3.17-18 of the <b>Statement of Need [APP-202]</b> explain Government's view that irradiance, site topography and proximity to suitable connection points to the transmission network, are likely to be</p>

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			<p>key inputs to site selection. Section 7.5 of the <b>Statement of Need [APP-202]</b> describes the site selection process for large-scale solar more fully. This is then built upon by the Site Selection Assessment (Appendix 1 to the Planning Statement) which explains how these factors, and other factors such as impacts to dwellings and agricultural land, have been applied specifically to the Scheme. Section 7.7 of the <b>Statement of Need [APP-202]</b> sets out how the design of the Proposed Development seeks to maximise utilisation of the grid connection capacity available at Ryhall Substation.</p>
MPAG [REP-057]	Water and flood risk	<p>A question on the management of grassland which the Applicant says will be organic. Can they clarify what they meant by organic in that context? The question is asked as it could affect the creation and management of the sward?</p>	<p>There is no expectation that fertilisers will be used on the grassland areas for the duration of the operational phase. To that extent the management will be organic – please see the GEMP submitted at Appendix 3 to the oLEMP.</p> <p>There will be no formal application for the land to be certified as organic status as there may be a need for the use of chemicals for small areas and tracks etc, within the site.</p>
MPAG [REP-057]	Landscape and Visual	<p>Design Guidance. MPAG were slightly surprised to see the addition of storage containers in the design guidance parameters, in addition to whatever arrangement they determine for the solar stations which is already aesthetically ambiguous.</p> <p>This is an additional visual effect if approximately 30 of them are to be dispersed around the site) which has not been assessed. The addition of secure access gates at P4.8 seems a bit of an anomaly as secure access gates are slightly</p>	<p>The provision and location for Storage Containers is set out in Chapter 5 of the ES [APP-035] and Appendix 5.1 of the ES [APP-053]. Appendix 5.1 of the ES states that 'There will be up to 1 storage container for every 30MW of installed DC Capacity located at a Solar Station.'</p> <p>The provision of storage containers has been assessed within the ES and the Applicant previously updated the Design Guidance wording to include references to storage containers for clarity.</p>

Parties Raised	Sub-Theme	Issues Raised	Applicant's Response
		pointless when you have deer stock fencing elsewhere.	
MPAG [REP-057]	Ecology	<p>There are some really big issues with respect to being able to establish that grassland on high nutrient soil, and that applies to all of the types of grassland. Quoting from Emorsgate seeds website with respect to seed mix EM1, which is what I believe is being suggested for under the solar panels. "Endeavour to select ground that is not highly fertile and does not have a problem with perennial weeds. Good preparation is essential to success, so aim to control weeds and produce a good quality seedbed before sowing". The way in which the land will be managed, and which order the panels or the grassland may be put in is material to whether or not that biodiversity net gain is established.</p> <p>There are similar issues with respect to soils fertility and establishment of the grassland type in the mitigation areas as well.</p> <p>In terms of being able to keep good quality grassland, the management, the way it is mown or grazed is critical. Cutting every two years is not the way to establish a hay meadow. And if you do that, you will not end up taking off the arisings in the first year, which of course will then rot down and increase the nutrient status of the soil.</p> <p>The oLEMP for Gate Burton states OLEMP states in paragraph 3.6.10 that the grass beneath the panels will be mowed and the arisings will be sent to green waste as part of the long term management. This seems a more appropriate approach and one that doesn't risk increasing the nutrient status of the soil.</p>	<p>A response on this point was provided in the oral responses and subsequent written responses to the same point raised in the previous hearing. The Applicant is proposing the creation of grassland which will conform to the definition of Modified Grassland in Moderate condition, as defined in the BNG metric and supporting technical documents. This is not a challenging target on land that was previously arable and therefore nutrient rich. Nutrient levels will be gradually reduced via management (cutting and removal of arisings). The grassland being created elsewhere within the Order limits will be a grassland which conforms to the definition of "Other Neutral Grassland" in Good condition as defined by the BNG Metric and supporting technical documents. This again is an achievable target habitat with suitable seeding and management.</p> <p>The Applicant's proposals in relation to the establishment of grassland is set out in the Grassland Establishment Management Plan forming Appendix 3 to the oLEMP <b>[REP7-022]</b> submitted by the Applicant at Deadline 7.</p>

Parties Raised	Sub-Theme	Issues Raised	Applicant's Response
MPAG [REP-057]	Ecology	<p>Baseline of BNG. MPAG has a concern the tree baseline for the calculations is completely distorted and artificially low as all the pockets of woodland have been removed from the Order limits despite being surrounded by the Order Limits. Therefore it is very easy to show a high net gain. From a practical perspective there is no clarity from the Applicant how those areas of woodland will be accessed or maintained by the landowners. It was a surprise to hear that all the landowners wanted to maintain those woodland areas when most of them have conducted no maintenance activities other than removing fallen trees where they pose a hazard.</p> <p>Monitoring. This is critical to showing whether or not net gain is being achieved and there are some issues with the frequency of monitoring. It should be annual throughout the length of the development or as long as is practicably possible; the results should be publicly available with the Applicant highlighting what is working, what isn't and where corrective measures are taking place.</p>	<p>The woodlands are not included within the Order limits as these will not be under the Applicant's control and are therefore not included in the BNG assessment. They were removed from the Order limits at the request of landowners who wanted to still be able to access them.</p> <p>In terms of the monitoring, the oLEMP [REP7-022] sets out how the monitoring will be carried out, with what frequency and how the data will be used and shared. If the local authorities wished to publicise the results of any monitoring it could do so by putting the requirement discharge material onto their planning portal – the Applicant would have no problems with this approach.</p>
MPAG [REP-057]	Noise	<p>MPAG are encouraged that the Applicant has agreed to acoustic validation, albeit it is not clear what the parameters for that will be. Can they give an undertaking to do it for all sensitive residential receptors both during construction and operation?</p> <p>There is still concern that there are percussive piling activities taking place at the weekend. Due to the nature of the work 400m distance is not sufficient to mitigate the noise. Evidence shared by other action groups show the noise can be heard over 2 miles away. In reality it probably is better for residents for</p>	<p>The procedures for acoustic measurements, following construction and commissioning of the equipment, will be set out in the detailed OEMP which will be determined in consultation with the relevant planning authority. It is unlikely that monitoring would be undertaken at "all" noise-sensitive receptors, as it is more typical practice to agree a set of monitoring locations which would be sufficiently representative of the surrounding noise-sensitive locations. As predicted noise levels from the plant are relatively low, it may be necessary in some cases to undertake measurements closer to the equipment or on the</p>

Parties Raised	Sub-Theme	Issues Raised	Applicant's Response
		<p>the piling activity to take longer and for residents to have decent respite at the weekends.</p>	<p>site boundary to minimise corruption from other sources, rather than at noise-sensitive locations themselves.</p> <p>As noted above in response to Mrs Woolley, the Applicant does not dispute that piling noise may be audible in some conditions at a distance of 400 m, and potentially beyond. The distance of 400 m was calculated to be the greatest distance at which worst-case noise levels of 55dB would be expected. It is important to note, however, that while noise at this level could be audible, it would correspond to negligible noise levels in the context of a construction noise assessment. By restricting piling activity in this way at weekends provides a reasonable level of protection to residents whilst not delaying the construction programme excessively.</p> <p>Given the temporary nature of construction noise effects, there is some expectation that it will be audible from time to time, but it will be appropriately controlled and minimised through mitigation measures in line with the applicable guidance.</p>

## Applicant's Response to MPAG Landscape and Visual Review at Deadline 7 Submissions

Applicant's response to issues raised (MPAG emphasis)	CT comments on Applicant's response (27.09.23) (MPAG emphasis)	Applicant's Response
<p>Re REP4-044, Lincolnshire County Council, ISH2 – Environmental Matters, agenda item 4, Landscape and visual effects:</p> <p>Response: <i>at a distance of 2km and beyond the level of change to a view is <b>unlikely to result in any perceptible change to the amenity of that view</b></i> (my emphasis).</p>	<ul style="list-style-type: none"> <li>i) I fundamentally disagree with this assertion. Often, LPAs / others accept a 'tight' 2km study area boundary for large-scale schemes without realising the implications for landscapes and views over much longer distances until schemes are built.</li> <li>ii) In this case, the site is up to c. 7.5km long and c. 6km wide (note changes in my measurements in comments below); therefore, from several viewpoints beyond 2km from the main site boundary, the very extensive coverage would <b>definitely</b> result in a <i>perceptible change to the amenity of that view</i>.</li> <li>iii) The main question is, what would the levels of effects be, a) on landscape character, and b) receptors at longer-distance VPs identified by others? And if unacceptably high, could levels of visual effects be reduced to acceptable levels through mitigation?</li> <li>iv) Assessments of effects on longer-distance views should include an assessment of <b>sequential</b> visual effects (see refs to this in my May 2023 review (REP2-075) and responses, and ARA below).</li> </ul>	<ul style="list-style-type: none"> <li>i) - iii) The Applicant refers to representations made on page 49 of Deadline 5 submissions <b>[REP5-014]</b>. The Applicant reiterates the Proposed Development would not be visible in its entirety from any one location when viewed on the ground.</li> <li>iv) The ARA <b>[APP-058]</b> considers sequential views within a study area of 500m of the Order limits. Whilst the Applicant's Appendix B at Deadline 3 <b>[REP3-037]</b> provides further details of the network of local roads and footpaths that may be affected by the Proposed Development. It is the Applicant's view that this evidence, along with findings of the LVIA <b>[APP-036]</b> present a suitable assessment of the likely sequential visual effects.</li> </ul>
<p>Re - Schedule 7 – Access to works: RCC: <i>'the LHA remain confused about whether this development</i></p>	<ul style="list-style-type: none"> <li>i) The emboldened section contradicts what is said elsewhere, for example the Applicant's response to the RCC at Schedule 2 – Requirement 18 (page 28),</li> </ul>	<ul style="list-style-type: none"> <li>i) The Applicant confirms that the Proposed Development is for 60 years'.</li> </ul>

Applicant's response to issues raised (MPAG emphasis)	CT comments on Applicant's response (27.09.23) (MPAG emphasis)	Applicant's Response
<p><i>is for 40 years as stated in some documents or whether this is a permanent development.'</i></p> <p>Response: <b><i>'The ES assessments have all assumed permanent impacts from the Proposed Development given the lack of a committed time frame and so the conclusions would apply for an over 40-year time frame'</i></b> (my emphasis).</p>	<p><i>'The dDCO (Rev 5) submitted at Deadline 5 has been updated to provide that decommissioning must commence no later than 60 years from the date of final commissioning of Work No. 1.'</i></p> <p>ii) In my September 2023 Comments on Applicant's 'Response to ExA's Second Written Questions Deadline 5, under the heading 'Topic 8.0 Landscape and Visual', at para. 11 which relates to Q8.0.1 (temporary vs permanent), I noted that 'The Applicant proposes to change its description of the proposed development from 'permanent' (the 'worst-case scenario', as assessed in the EIA), to 'semi-permanent' (60 years' duration)'.</p> <p>iii) In the light of the above, the LVIA assessor reassessed levels of effects and concluded that the levels of effects reported in the LVIA should be reduced.</p> <p>iv) I disagree that levels should be reduced, for the reasons set out in my review and responses.</p> <p>v) I would also like to draw attention to the fact that in 2016, an appeal decision letter (DL) was issued relating to a proposed solar development (APP/B9506/W/15/3006387) which would have had a lifespan of thirty years. The appeal was recovered for the Secretary of State (SoS)'s determination. The Inspector recommended that the appeal be</p>	<p>ii - iv) n/a.</p> <p>v - vi) The Applicant is not aware of the specifics of these cases but would note this appeal decision dates from 2016 in a very different policy context to today. Whilst the duration of effects would change given 60 years is not 'permanent' timeframe under the LVIA methodology [refer to page 93 REPS-12], the significance of effects assessed for both landscape and visual within the LVIA do not change as a result of 60 year timeframe.</p> <p>vii) n/a</p> <p>viii) The oDEMP [REP7-019] at paragraph 2.1.1 sets out the elements of the Proposed Development that will be decommissioned and removed from the Order limits.</p>

Applicant's response to issues raised (MPAG emphasis)	CT comments on Applicant's response (27.09.23) (MPAG emphasis)	Applicant's Response
	<p>allowed, but the SoS disagreed with the Inspector's recommendation, and dismissed the appeal.</p> <p>vi) Para. 18 of the DL states, <i>'The Secretary of State takes the view that 30 years is a considerable period of time and the reversibility of the proposal is not a matter to which he has given any weight. He considers that a period of <b>30 years would not be perceived by those who frequent the area as being temporary and that the harmful effect on the landscape would prevail for far too long'</b></i> (my emphases).</p> <p>vii) Also, my September 2023 comments asked whether the proposed substation would remain in place post-decommissioning, and if so, whether the effects of that scheme element would be assessed as 'fully' permanent. I believe this was clarified in [REP4-064], [REP-065] John Hughes - ISH 1 – Scope of the Development, agenda item 3 of the Applicant's Response to Deadline 4 Submissions Deadline 5 September 2023.</p> <p>viii) However, would any other scheme elements be permanent? 'Improved' access points? Tunnels under railways? Would cables be removed from eg underneath waterways, and roads? If so, have the effects of such works been assessed?</p>	
Re ISH 1 Scope of the Proposed Development,	See paras. 4 - 10 of my September 2023 <i>Comments</i>	i) – vi) The Applicant refers to its submission at



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<p>Need, alternatives –</p> <p>3i)/Any further information/ISH2 LVIA, relating to the potential future change from deer-proof to high- security fencing.</p> <p>Response:</p> <p>a) <i>'...The established network of existing and proposed hedgerows will also act as a deterrent and prevent unhindered access to the Solar PV Site'.</i></p> <p>b) <i>'...the PV Arrays are sufficient for their security arrangements, which are commonplace for Solar Farms throughout the UK.'</i></p> <p>c) <i>The proposed development is '...insurable. To evidence this, appended at Appendix 1 - Response from Insurance Brokers – AMI Speciality, this response is a letter from insurance brokers which confirms this is the case'.</i></p> <p><i>'... Any amendments to the details of the Proposed Development (including fencing pursuant to Requirement 8) are controlled via Requirement 5 of the dDCO... etc.'</i></p>	<p><i>on Applicant's Response to ExA's Second Written Questions</i></p> <p><i>Deadline 5</i>, under the heading 'Topic 1.0: Design, parameters and other details of the Proposed Development', Q1.0.10 a – g. Relevant extracts / summaries are provided below:</p> <p>i) Re response point a): My para. 4 vi) states, <i>'some DOCOs (for example, Suffolk Constabulary) are now recommending that, 'where appropriate, security fencing systems are transparent to facilitate observation from outside the site'; <b>planting along fencelines would not allow the required transparency'</b>.</i></p> <p>ii) Re response point b): Deer-proof fencing is indeed <b>currently commonplace for Solar Farms throughout the UK</b>; the problem is that as more solar schemes are built out, the levels of crime increase, as does the recognition that far higher levels of security, including high-security fencing, are required.</p> <p>iii) Re response point c): the <i>Response From Insurance Brokers – Ami Specialty</i> doesn't change what I have said in my review and later responses.</p> <p>iv) Especially, confirmation from the British Association of Insurance Brokers (BIBA) that due mainly to Police and other parties' concerns about rising levels of often highly-organised international solar crime, at some point in the near future, it appears likely that the insurance industry will not accept deer-proof fencing around even small solar</p>	<p>Deadline 5 <b>[REP5-014]</b> and particularly page 38 and Appendix 1 in relation to these matters.</p> <p>The Applicant notes the formal response of the Designing Out Crime Officer who does not request 'high security' fencing around the perimeter of the Solar PV area. The Applicant also notes the evidence MPAG relies on in reference to the amendment of fencing is the Brook Farm BESS scheme in Mid Suffolk District Council (LPA ref. DC/22/05018) which sought a change to v-mesh fencing from deer fencing. This application is for a standalone BESS scheme with no solar PV element.</p> <p>Please also see the Applicant's response to MPAG's summary of this in main Response to Deadline 7 submissions document.</p>

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	<p>developments.</p> <p>v) Re response point d): In my opinion, it is important that the ExA is satisfied that Requirement 5 of the dDCO ensures that an application for an amendment from deer-proof to high-security fencing <b>would be accompanied by an assessment of landscape, visual and ecological effects.</b></p> <p>It is essential that these assessments are carried out due to the levels of landscape and visual effects arising from high-security fencing being significantly higher than those arising from deer-proof fencing, and there also being the potential for significant ecological effects (for example, resulting from lack of mammal passes).</p>	
<p>Re ISH2 – Environmental Matters, agenda item 4 Landscape and visual effects, Impact on local landscape –</p> <p>Response (my emphases):</p> <p>i) <i>'...the assessment... assumes that <b>all effects are considered to be 'adverse'</b>... A number of the <b>embedded mitigation</b> measures including improvements to the West Glen River Corridor (para 6.4.5), the New Permissive Paths (para 6.4.6), Calcareous Grassland Enhancements (para 6.4.7) and Woodland and Hedgerow Connections (para 6.4.8) are considered to give rise to individual <b>positive benefits on the local landscape.</b></i></p>	<p><i>i) a) As I have explained in my review and responses, <b>landscape and visual mitigation measures cannot be double-counted as landscape and visual enhancements.</b> See GLVIA3 para. 3.39. My comment was seeking clarification about which measures are proposed as mitigation, and which are purely enhancement.</i></p> <p><i>b) It seems unlikely that the parties will reach agreement about whether or not GLVIA3 has been interpreted correctly. Given the importance of this and other disputed matters in terms of judgements and decisions, one option would be for PINS to refer</i></p>	<p>i – v) The Applicant has clearly set out its position in relation to this matter in <b>REP5-014</b> page 42 onwards and at ISH4 <b>[REP7-036]</b>. The Applicant's approach to mitigation is in exact alignment with IEMA and GLVIA3 mitigation hierarchy of avoiding (by good/embedded design), reducing or offsetting potential impacts. The Applicant considers that the ExA will be able to come to its own conclusions on this matter without need for the GLVIA panel to be involved.</p> <p>vi - xi) The Applicant's response to the establishment of grassland and protection of soil is set out in <b>REP5-014</b> and comprehensively discussed at ISH4 <b>[REP7-036]</b> as part of the ecology, agriculture and hydrology</p>

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<p>ii) <i>'The proposed embedded <b>mitigation</b> measures... are <b>both landscape mitigation and enhancement</b> measures. In many instances, the landscape proposals are considered to be <b>multi- functional as both a mitigation and enhancement measures</b>'.</i></p> <p>iii) <i>'... the assessment of residual landscape and visual effects has taken into consideration embedded mitigation...'</i></p> <p>iv) N/A</p> <p>v) <i>'... the provision of wildflower grassland with calcareous species within areas currently managed for arable crops should be considered to be a landscape enhancement'.</i></p> <p>vi) <i>'There is no evidence to suggest that the proposed tussocky grassland with wildflowers nor the Wildflower grassland with calcareous species would be unsuccessful within these soil conditions as demonstrated in part by the nearby roadside verge SSSI9s and Local Wildlife Sites which are cited for botanic diversity'.</i></p> <p>– xi) Relate to effects on soils during construction and establishment of wildflower grassland, <i>inter alia</i>.</p>	<p><b>the matter/s to the Landscape Institute's GLVIA panel, and ask for clarification.</b></p> <p>ii) As above.</p> <p>iii) But it has also erroneously assumed that landscape and visual mitigation measures also count as landscape and visual enhancements. As a result of this (ie balancing harm against benefit), levels of adverse effects have been reported as lower than they should have been.</p> <p>iv) N/A</p> <p>v) a) As point i) above (<b>'embedded mitigation measures [include] Calcareous Grassland Enhancements'</b>).</p> <p>b) Please note the LI's statement about 'embedded', or 'designed-in' mitigation in the July 2023 consultation draft Technical Guidance Note 05/23 <i>Notes and Clarifications on aspects of GLVIA3</i>, which is as follows:</p> <p><i>'There are different points of view on whether significance should be judged before or after mitigation. Some practitioners assess at both stages, to convey the effectiveness of mitigation measures in reducing significant effects to 'not significant'. <b>The Panel emphasises that it is not helpful to do this for measures which are 'designed in' as the effects without mitigation would never arise. GLVIA3 Paras.</b></i></p>	<p>sessions. A Grassland Establishment Management Plan was also added to the oLEMP at Deadline 7 [REP7-021]. The Applicant has committed to landscape and ecological mitigation measures being left in situ at decommissioning – it will be for the landowners to decide what they wish to do with that land at that stage.</p>

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	<p>4.21- 4.22 and IEMA guidance echo this point. Statements of significance should be reported post primary (designed-in) mitigation, and pre secondary mitigation measures which are not designed into the scheme' (my emphasis).</p> <p>vi) <b>This is a very important point which requires clarification.</b> However, I have not checked to see whether it is covered in the recent ecology submissions / responses.</p> <p>a) LVIA para. 6.3.1 states that <i>8The Order limits cover approximately 852 hectares of... [predominantly] <b>arable</b> farmland'</i>.</p> <p>b) As far as I am aware, the <i>nearby roadside verge SSSI's and Local Wildlife Sites which are cited for botanic diversity</i> are not on land that was previously arable.</p> <p>c) Arable soils are high fertility.</p> <p>d) Native wildflower grassland requires low-fertility soils for successful establishment.</p> <p>e) <b>How would the fertility of the existing high-fertility arable soils be reduced in order to allow the successful establishment of wildflower grassland?</b> Would topsoil be stripped and stored / removed from the site? If so, <b>has this been factored in / have the effects been assessed?</b></p> <p>f) LVIA para. 6.4.2 states that <i>'The embedded landscape mitigation and enhancement measures would remain for the operational phase and <b>would not be removed as part of the decommissioning stage</b> remaining in-situ on handback to landowners'</i> (my emphasis).</p>	

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	<p>g) However, <b>it is not clear whether landowners / managers are required to retain the landscape mitigation and enhancement measures <i>in situ</i>, or whether the fields could revert to arable use.</b></p> <p>h) In fact, in my experience, applications for solar developments usually state that the land would 'revert to its former use' at decommissioning.</p> <p>i) If landowners did want to revert to arable farming, they would be faced with <b>the problem of restoring high-fertility soil.</b></p> <p>j) And if they did revert to arable farming, then <b>certain landscape / visual / ecological benefits would be lost.</b></p> <p>vii) – xi) As point vi) above. I note the assertion that <i>'The existing soil structure would be protected during the construction stages through implementation of the oSMP [REP3-019]'</i>, and trust that the detailed measures would be robust enough to avoid excessive soil damage.</p>	
<p>Impacts on landscape character (construction effects):</p> <p>i) <i>'...The effects during the construction stages are considered to be short term in duration as opposed to being permanent...The magnitude of change and therefore the significance of effects are therefore generally considered to be lower during the construction stages'.</i></p> <p>ii) N/A</p>	<p>i) Re construction effects:</p> <p>a) I agree that construction effects are usually assessed as short-term (in comparison to the operational stage), and that generally, levels of construction effects (NB the use of the term 'significance' of effects in this context is incorrect, it should be 'levels') are assessed as being lower than operational effects.</p>	<p>i) The Applicant welcomes the confirmation from MPAG that construction impacts are generally lower than operation.</p> <p>ib) The Applicant agrees that construction effects for a development could be permanent, but in the case of landscape and visual, the LVIA <b>[APP-036]</b> concludes that all potential character and visual impacts would be temporary and not significant. The Applicant has considered the impacts to trees and</p>

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<p>iii) N/A and v) This is in response to my comment that in the light of recent experience, including a solar development under construction at Bishampton, the two-year construction period may be over-optimistic. <i>'The Applicant notes this comment but based on its experience in delivering solar farms around the world, considers this is a valid assumption'.</i></p>	<p>b) However, as explained in my May 2023 review (REP2-075), <b>some construction effects can be permanent</b>, for example, damage to roadside vegetation / overhanging trees along the construction route.</p> <p>ii) N/A</p> <p>iii) N/A</p> <p>iv) and v):</p> <p>a) The Applicant may well have experience in <i>delivering solar farms around the world</i>, but in the UK, I have found that contractors seem to have limited experience.</p> <p>b) The Bishampton development is a case in point. In my July 2023 response, I explained that whilst the construction period was stated as being <b>three months</b>, <i>'It is now nine months since construction commenced, and not only are the works not complete, they are also now the subject of enforcement. Piling noise is one of the main problems – it can be heard over two miles away'.</i></p> <p>c) The latest update is that works are unlikely to be completed until Christmas this year at the earliest, ie sixteen months' duration, over five times longer than expected.</p> <p>d) 'I have been sent summaries of informal conversations which local residents have had with the contractors. For example: "I had a lovely chat with the security guard yesterday, he's from Newcastle. He told me a lot about the site:</p>	<p>vegetation in the Arboricultural Impact Assessment [<b>APP-103</b>]</p> <p>ii) and iii) N/A</p> <p>iv and v) a) With respect, MPAG's experience of solar farm construction in the UK or elsewhere is not comparable to that of the Applicant who has completed over 9 gigawatts (GWp) of operating utility-scale solar projects and 3 gigawatt hours (GWh) of energy storage projects across six continents.</p> <p>b) – e) The Applicant is not privy to the particular details of the Bishampton development, as neither are MPAG, and would again draw attention to the anecdotal nature of this evidence.</p>

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	<p><i>'All workers flown in from Romania and housed In Birmingham.</i></p> <p><i>Workers trained on the job as majority of them are farmers/fruit pickers paid minimum wage. A lot of theft of copper wire, they use drones to scout the area.</i></p> <p><i>Panels from China.</i></p> <p><i>Site will be unmanned but with CCTV cameras. He said that the companies that oversee the footage tend to turn them off a lot as weather conditions continually set their alarms off.</i></p> <p><i>He said that the fence is useless as they keep cutting it.</i></p> <p><i>Site now requires 4 security guards and 2 dogs at night.</i></p> <p><i>It is well known in the industry that Worcestershire has the most sites either constructed or in the planning process than anywhere else because the councils always say yes. Wildlife has gone!'</i></p> <p>Regarding piling noise, I do have audio recordings of the activity, which, if necessary, I could play at the hearing.</p>	
<p>Size and Scale:</p> <p>i) <i>'The Applicant considers that the majority of people would experience the scale of the development from ground level when moving through the landscape and not from an aerial or plan view perspective... the overall scale or totality of the development would not be</i></p>	<p>i) My point was about the effects of scale on landscape character, not views and visual amenity, which in the LVIA and responses, are often conflated. Effects on character are not assessed in relation to visibility, it is not relevant to consider who can see a development and from where. Effects on</p>	<p>i) The Applicant refers to its response on page 47 of <b>REP5-014</b> in relation to this matter and maintains the view that this line of argument is misguided in the context of the assessments that the Applicant has undertaken. The Applicant stands by the effects to landscape character as set out in the LVIA [<b>APP-036</b>].</p>

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<p><i>viewpoint. Whilst the Proposed Development does comprise a utility scale solar PV development, it would not appear as a single or continuous block of development due to the physical and visual separation.</i></p> <p>ii) N/A</p> <p>Responding to my comment that <i>'The main site measures almost 8km from west to east, and at its widest point is c. 5.5km from north to south'</i>, the response says, <i>'The Solar PV Site measures approximately 5.9km from north- to-south between Barbers Hill to the north farm and Essendine Road to the south. The Solar PV Site also measures approximately 6.2km from east-to-west'</i>.</p>	<p>character <b>are</b> assessed in relation to 'perception', or 'perceptual qualities', or 'aspects' (eg wildness, tranquillity, scenic beauty, dark skies, presence of wildlife/ birdsong), which exist regardless of whether or not anyone is there to see and/ or experience them. If you put a nuclear power station in an isolated rural area where no one lives or ever goes to, then in theory, it would not give rise to any adverse visual effects; however, it would change the character of the landscape from rural to industrial, and in that regard would therefore give rise to adverse effects on character that could not be mitigated. If views of the power station were possible, levels of adverse visual effects – including the <b>perception</b> of the change in character - could potentially be reduced through camouflage / integration (using right colours / materials, and through good siting / design), or by screening with vegetation.</p> <p>ii) N/A</p> <p>iii) Re measurements:</p> <p>a) I agree that my measurements were not accurate – I scaled off a print of an OS map that was not quite exactly to scale. I have since checked on Google Earth.</p> <p>b) I accept that from / to the points specified, the north – south distance is c. 5.9km and not 5.5km, and that the east – west measurement is c. 6.2km.</p>	<p>ii) N/A</p> <p>iii) The Applicant notes the confirmation of the discrepancy of these measurements provided by MPAG.</p>



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	<p>My 8km measurement was from the north-westernmost part of the main site to the south-easternmost (just north of Uffington). It is actually 7.6km</p>	
<p>LVIA / RVAA Study Area:</p> <p>i) In summary, the 2km study area boundary for the LVIA, and the 100m study area boundary for the RVAA, are acceptable / appropriate.</p> <p><i>'There is no evidence to suggest that the Proposed Development would result in any significant landscape and visual effects beyond the 2km study area... [nor] to suggest that the Proposed Development would exceed the acceptability threshold for residential properties as a private concern beyond 100m from the Proposed Development'.</i></p>	<p>i) and ii): please see my response above to REP4-044, Lincolnshire County Council, ISH2 – Environmental Matters, agenda item 4, Landscape and visual effects.</p> <p>In summary, I disagree with the Applicant's assertion that <i>'at a distance of 2km and beyond the level of change to a view is unlikely to result in any perceptible change to the amenity of that view'</i>, and that the 100m RVAA study area boundary is acceptable.</p>	<p>i) and ii) The Applicant refers to representations made on page 49 of <b>REP5-014</b> in regard to these matters.</p>
<p>Threshold of Significance:</p> <p>i) – iv)</p> <p>v) <i>'The Applicant disagrees that the landscape and visual effects have been understated as suggested within the MPAG representation.'</i></p>	<p>i) – iv):</p> <p>a) I accept the Applicant's response given at the July hearing, that they routinely use 'Major to Moderate' as the threshold for a 'significant' effect. I would simply reiterate that in my experience, it is considered usual, and best-practice, to use 'Moderate'.</p> <p>b) Also, LVIA para. 6.1.8 explains and illustrates that a five-point scale is used for significance ratings, ranging from Major to Minimal, with Moderate in the</p>	<p>i) – iv) The Applicant refers to its response on page 50 of <b>REP5-014</b> in relation to these matters. The Applicant again re-iterates paragraphs 5.54 and 6.42 of GLVIA3 in that it is for each individual assessment to determine thresholds for significance.</p> <p>V) The Applicant strongly disagrees with this assertion.</p>

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	<p>middle.</p> <p>c) Of relevance to the Applicant's decision to categorise Moderate effects as 'not significant' is note 3(5) <i>Significance: how to assess significance, where to set thresholds and how to achieve consistency</i> in the LI's draft Technical Guidance Note 05/23 <i>Notes and Clarifications on aspects of GLVIA3</i>, which states:</p> <p><i>'... typically, effects falling <b>below</b> the middle of the range of overall effect are assessed as not significant. For example, if using a scale of minor/ moderate/ major, then major effects will be significant and minor effects will not be significant. In this example, <b>moderate effects are likely to be on the borderline and may or may not be significant and justification would need to be provided in making the judgement as to whether a moderate effect is significant or not</b>' (my emphases).</i></p> <p>d) The Note goes on to say that <i>Regarding thresholds of significance and the need for consistency, the threshold of significance should ideally be consistent across projects</i>.</p> <p>v) My opinion remains as set out in my review and previous responses, ie that in the Applicant's LVIA, levels of landscape and visual effects have been underestimated.</p>	
Conflation of Landscape and Visual Effects:	i) – iv):	The Applicant strongly rejects this assertion and

Applicant's response to issues raised (MPAG emphasis)	CT comments on Applicant's response (27.09.23) (MPAG emphasis)	Applicant's Response
<p>i) – iv)</p>	<p>a) In my opinion, the approach taken in the LVIA, and reiterated here, is not in accordance with GLVIA3 – see for example GLVIA3 para. 3.39.</p> <p><b>This matter could also be referred to the Landscape Institute's GLVIA panel for clarification.</b></p>	<p>refers to detailed responses made in Deadline 3 <b>[REP3-032]</b>. Moreover, the LVIA methodology has been tested at other DCO examinations and the LVIA itself been subject to independent review by Stantec on behalf of the LPAs and found to be sound.</p>
<p>Mitigation as Harmful</p> <p>i) In the Applicant's LVIA, <i>'the magnitude of effects is assessed on a rating of high, medium, low and negligible...The Applicant would note that the loss of an open countryside view from a PRoW within a solar PV development is not an unusual occurrence and would be anticipated for virtually any NSIP or TCPA solar development as recognised in draft EN-1 at paragraph 5.10.20. Although significant effects have been identified along the PRoW passing through the Solar PV Site, this scenario would be anticipated when assessing utility scale solar development. It is also noted that views from PRoWs are not protected in policy terms.'</i></p> <p>ii) <i>'Site specific character assessments have also been undertaken within the baseline conditions assessments LVIA to identify those features which contribute to the value of the local landscape as outlined in paragraph 6.3.72 points a – h. The Applicant notes that the MPAG representation [REP2-075] refers to 'intervisibility' with regards to landscape character assessment within this response</i></p>	<p>i) a) As stated at para. 5.1.43 of my May 2023 review (REP2-075), the LVIA uses a three-point scale for levels of susceptibility to change, but four for value and magnitude of effect, which is odd and may skew the results. Also, in my experience, a five-point scale is much better when a more granular analysis is required, as is the case here (in fact, the LVIA uses a five-point scale for significance).</p> <p>b) I agree that <i>'the loss of an open countryside view from a PRoW within a solar PV development is not an unusual occurrence'</i>. However, my point was that the LVIA assessed the effect of placing a screen between the receptor and the development as a benefit (in that the development would not be visible), whereas in fact, as per the LVIA's method, <b>the total loss of an existing view over good quality open countryside would give rise to a high level of adverse effect.</b></p> <p>c) <b>This applies to both public and private visual receptors.</b></p> <p>d) In the UK, some views from PRoWs are protected in policy terms. Perhaps this response</p>	<p>i) The Applicant refers to its response to these matters made in <b>REP5-014</b> on page 52 onwards.</p> <p>ib - ic) The Applicant explained at ISH4 <b>[REP7-036]</b> nuance in terms of planting as mitigation or enhancement and its ability to change from one to the other over time. The Applicant has committed at Deadline 7 in an updated oLEMP <b>[REP7-022]</b> to consult with the community of heights of hedgerows along permissive paths and public rights of way.</p> <p>id) N/A</p> <p>ie) The ExA Will be familiar with the wording of draft EN-1 which does state at 5.10.20 <i>'All proposed energy infrastructure is likely to have visual effects for many receptors around proposed sites. The Secretary of State will have to judge whether the visual effects on sensitive receptors, such as local residents, and other receptors, such as visitors to the local area, outweigh the benefits of the project.'</i></p> <p>iii) The Applicant refers to representations made previously in relation to the robustness of the LVIA <b>[Rep5-015 page 53]</b>. The Applicant has</p>

Applicant's response to issues raised (MPAG emphasis)	CT comments on Applicant's response (27.09.23) (MPAG emphasis)	Applicant's Response
<p><i>which was previously considered to be a conflated issue within point (ii) of the previous row of this table'.</i></p> <p>iii) <i>'The Applicant considers that the interpretation of enclosure means the definition of field boundaries or visual enclosure by hedgerows depending on the specific location within the LCA...'</i></p> <p>Re hedges being allowed to grow to 3 – 3.5m tall to screen.</p>	<p>is referring to there being 'no right to a view'; however, as visual amenity is an aspect of residential and social amenity, adverse effects on views can contribute to adverse effects on other amenity, which is a planning policy matter.</p> <p>e) Draft EN-1 para. 5.10.20 does <b>not</b> say – or 'recognise', or even suggest – that <i>'the loss of an open countryside view from a PRoW within a solar PV development is not an unusual occurrence and would be anticipated for virtually any NSIP or TCPA solar development'</i>.</p> <p>Draft EN-1 para. 5.10.20 actually says, <i>'The assessment should include the visibility and conspicuousness of the project during construction and of the presence and operation of the project and potential impacts on views and visual amenity. This should include light pollution effects, including on local amenity, and nature conservation'</i>.</p> <p>ii) a) My comment related to the LVIA's lack of independent baseline landscape study. The response's reference to LVIA para. 6.3.72 a – h illustrates my point: the baseline description runs to 183 words. For a site of this very large size, and relative complexity, <b>that is inadequate</b>. The baseline character section of my own assessment runs to over 4500 words.</p> <p>b) The term 'intervisibility' was not used in the context of carrying out LCAs: it related to the need to establish both interinfluence and intervisibility when carrying out granular assessments, in order to decide the most appropriate form of / approach</p>	<p>committed in the oLEMP [REP7-022] for a bespoke response to planting where necessary in certain areas, the detail of which would be later defined in the detailed LEMP(s).</p>

Applicant's response to issues raised (MPAG emphasis)	CT comments on Applicant's response (27.09.23) (MPAG emphasis)	Applicant's Response
	<p>to the design of, development.</p> <p>iii) The Applicant appears to have misunderstood my point, which was about the difference between the term 'enclosed' (as used in the context of the published LCA, and which is referring to the form / characteristics of enclosure), and visual 'enclosure', which is not what the LCA is describing at that point. The LCA does note that the '<b>close trimmed hedges alongside large arable fields give a more open feeling to the landscape. This is particularly so in the extreme eastern corner of the County, between Ryhall and Essendine</b>' (my iv) See previous point i) b) about screening resulting in total loss of previously open views. I imagine that at a later stage, details could be agreed and produced for maintenance and management on a hedge-by-hedge basis, depending on the various factors involved (landscape, visual, and ecological). I note the final point about the updated oLEMP, but recommend that residential receptors are included in discussions about proposals for hedges affecting views from private properties.</p>	
<p>Difference between LVIA and ARA</p> <p>i) and ii), especially the assessment of sequential visual effects.</p>	<p>i) and ii):</p> <p>a) As far as I am concerned, the issues raised in Section 5.5 of my May 2023 review (REP2-075) and subsequent comments remain unresolved.</p> <p>For example, my review report para. 5.5.11 explains that <i>Another problem with the ARA is that <b>it only considers effects along a single route, whereas in</b></i></p>	<p>i) and ii) The Applicant refers to its response in <b>REP5-014</b> on page 57 in relation to this matter.</p>

Applicant's response to issues raised (MPAG emphasis)	CT comments on Applicant's response (27.09.23) (MPAG emphasis)	Applicant's Response
	<p><i>reality, people are very likely to be travelling along a <b>series of different routes</b> – such as those described in Section 3. This means that <b>effects are likely to be experienced at multiple places and times in a single journey, perhaps continuously</b>. In my opinion, the magnitude of this effect would be <b>Large</b>! (emphases added).</i></p>	
MPAG Assessment	Comments noted.	N/A
<p>Evidence Base</p> <p>i) – vii) relate to the evidence base, and consultation with people in local communities to inform the baseline studies.</p> <p>ix) <i>The potential intra-project effects were further assessed within Chapter 16, Interactions of Effects and Summary of Cumulative Effects. As confirmed at ISH3 and stated in the document, this assessment does account for non-significant effects. In undertaking the LVIA the full scale, extent and duration of effects has been considered with regards to the relevant landscape and visual receptors to determine the significant and not significant effects'.</i></p>	<p>i) – vii): My opinion remains that the LVIA's evidence base is insufficient for conclusions to be drawn about whether or not the proposed development would give rise to significant adverse effects.</p> <p>ix) I could not find any explanation in the LVIA as to how non-significant effects were considered cumulatively, nor any analysis of such effects and how they could combine to become 'significant'.</p>	<p>i) – vii) The Applicant refers to representations made at page 58 in Deadline 5 <b>[REP5-014]</b> in relation to this matter.</p> <p>Chapter 16 <b>[APP-046]</b> provides a consideration of the cumulative impacts including 'intra' cumulative effects.</p>

# APPENDIX A - APPLICANTS RESPONSE TO CRITIQUE OF ALC BY LANDSCOPE ON BEHALF OF MPAG

## INTRODUCTION

- 1.1 MPAG's written summary of oral case item 4 "BMV" also references and appends a new document, Appendix 2, which is a "Critique of ALC" by Landscape. Both are responded to in this document.
  
- 1.2 There is implicit and explicit criticism of the Applicant's motives and methodologies. This document provides a succinct response to the matters in the following section order:
  - (2) summary of MPAG's position;
  - (3) ALC methodologies and sampling densities;
  - (4) expected ALC results;
  - (5) preliminary results and Natural England's comments;
  - (6) additional survey carried out;
  - (7) impacts on soils and ALC grade, and the robustness of the results;
  - (8) the Landscape field 2 survey and matters raised;
  - (9) comments on Landscape's analysis and where that leaves the EIA conclusions;
  - (10) what do Landscape's conclusions mean?;
  - (11) land use;
  - (12) enhancement of soils; and
  - (13) conclusions.

## 2 SUMMARY OF MPAG'S POSITION

- 2.1 MPAG's written statement is at [REP7-057]. The Appendix 2 Landscape Critique of ALC is [REP7-060]. The following key points are raised by MPAG and Landscape:
  - the ALC survey is not robust. The requirement is that there is one auger boring taken per hectare (REP7-057/4.0.3);
  - additional sampling was only undertaken on instruction from Natural England (REP7-057/4.0.5);
  - the Applicant's information has been selective (REP7-057/4.0.8);
  - Landscape conclude that across the whole Site there is around 50% Subgrade 3a and a small amount of Grade 2 (REP7-060/7.3).
  - this adds 10 – 15% of BMV to KCC's second stage ALC results (REP7-057/4.0.14). If Landscape's results are extrapolated it is likely that over the whole site there is more than 50% BMV (REP7-060/1.6).

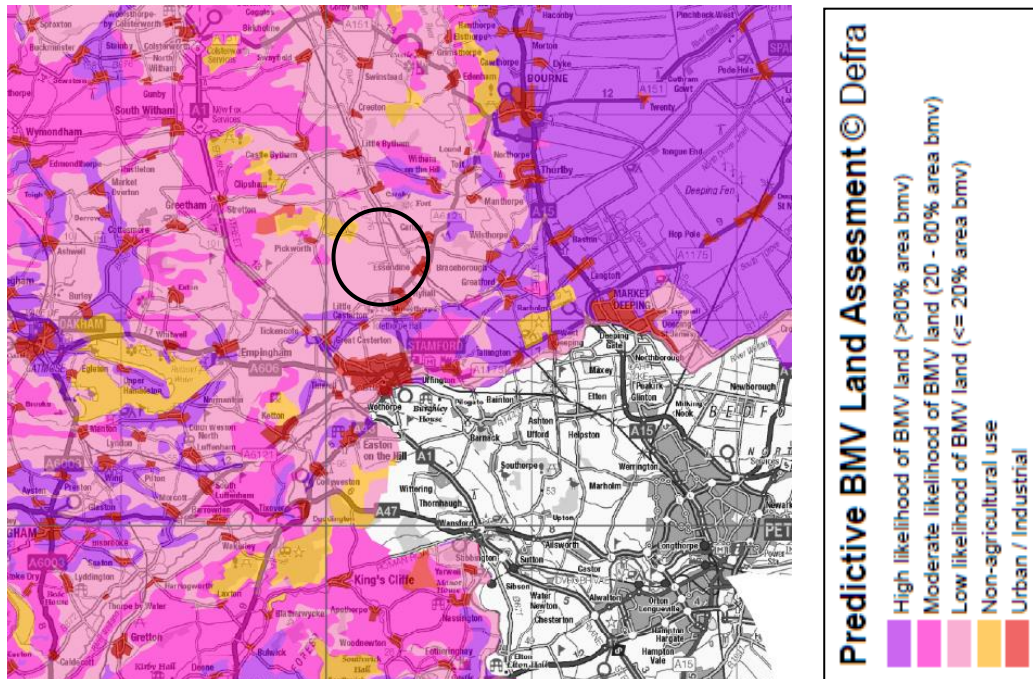
### 3 ALC METHODOLOGIES AND SAMPLING DENSITY

- 3.1 There is considerable criticism of the sampling density. MPAG [REP7-057] at 4.0.3 state that Natural England “**requires 1 auger boring every hectare**”.
- 3.2 That is not the case. There is no sampling density set out in the ‘Agricultural Land Classification of England and Wales: revised guidelines and criteria for grading the quality of agricultural land’ (MAFF, October 1988), which is the methodology used for ALC.
- 3.3 To describe a survey as a detailed survey, one auger per hectare is the normal practice. This is stated in, for example Natural England’s TIN049 where it says surveys are “**undertaken at a frequency of one boring per hectare for a detailed assessment**” (TIN049, 2012, page 3). It is not a requirement of the methodology, however, that every survey has to be a detailed assessment. This is recognised in, for example, the Welsh Government “Agricultural Land Classification: Frequently Asked Questions” document (May 2021) in respect of the same ALC methodology, which advises that “**depending upon the type of development, location, scale, purpose of the survey, availability of existing ALC data etc, less detailed surveys (or sometimes more detailed) may be undertaken, but expert advice must be sought from a soil scientist or other practitioner experienced in undertaking ALC survey work**”.
- 3.4 The semi-detailed ALC provided baseline data, and was submitted with the Preliminary Environmental Information Report (PEIR). This was reviewed by Reading Agricultural Consultants (on behalf of Rutland County Council) at PEIR stage, and the semi-detailed and detailed ALC subsequently submitted with the ES, has been reviewed by Natural England throughout the project development.
- 3.5 Despite MPAG’s comments, Landscape do not state that the ALC was completed incorrectly. Indeed at 1.3 [REP7-060] Landscape state “**our findings across the site broadly indicate that the KCC report is correct in that it presents the ALC grades in accordance with the guidelines**”. Therefore it is not clear on what basis Landscape and MPAG consider the grading to be incorrect in the areas surveyed.

### 4 EXPECTED ALC RESULTS

- 4.1 The Applicant is confident that the ALC provides sufficient detail for the Examining Authority to assess the effects. There is agreement [RR-0823] from Natural England that the installation of the panels does not result in loss, by sealing or downgrading, of land quality, subject to good management. Therefore, a detailed level of survey across all of the Site should not be necessary, as the agricultural land will not be sealed or downgraded (ie lost).
- 4.2 Based on the Likelihood of BMV Land maps produced in 2017 by Natural England, the Site was predicted to be in the low likelihood of BMV. The following is a copy of Insert 12.4 from the ES Chapter 12 [APP-042], which is an extract from Natural England’s plan.





4.3 A high proportion of BMV was not, therefore, expected for this site. That formed a starting point for the survey.

4.4 The installation of the solar PV arrays does not result in the sealing or downgrading of agricultural land. The ALC land will be neither lost nor downgraded. This is noted in Natural England’s response of 2<sup>nd</sup> March [RR-0823]. It is noted in the decision at Little Crow (EN010101) (Secretary of State’s decision letter of 5<sup>th</sup> April 2022, paragraph 4.50). In cases where the land will not be lost, and the ALC grade will not be affected, the level of detail of the survey can be reduced to reflect that position.

## 5 PEIR RESULTS AND NATURAL ENGLAND’S COMMENTS

5.1 The PEIR set out the findings of the initial semi-detailed ALC. A PEIR is a preliminary assessment. It is entirely appropriate that it sets out the results of the survey to the level of detail that had been completed at that time, which was at an early stage in the design process.

5.2 Following the PEIR review and comments, the main areas for additional survey were discussed with Natural England and additional survey was carried out.

5.3 The installation of solar PV arrays does not cause the ALC grade to change. Accordingly, given the nature of the Proposed Development, the ALC results provide a robust and adequate level of information. Some 334 samples were taken across the 817ha of land within the Site, mostly in the Solar PV Site and field margins area. This gives an appropriate level of information about the ALC resource, which will not be sealed or downgraded. It provides sufficient information to inform the soil management plan, an outline of which is an application document [REP6-017], and to inform the future SMP (which may include areas for additional survey prior to construction).

## 6. ADDITIONAL SAMPLING

- 6.1 The additional sampling identified areas where the ALC pattern was more complex, as would be expected with additional sample results. Overall, however, the general pattern of the land quality identified was not significantly altered.

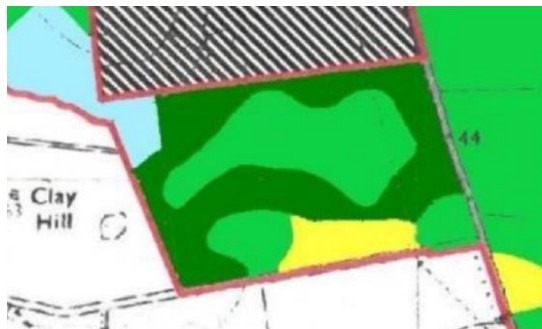
## 7 CONTEXT OF THE RESULTS

- 7.1 The land quality will not be affected, because the land will not be sealed or downgraded by the installation of the Solar PV Site.
- 7.2 There will be areas used for tracks, solar stations and the Onsite Substation and these have been recorded. The ES took a precautionary approach and assessed these areas as though they may not be returned to the same ALC grade. As the oSMP was expanded and developed during the Examination it was possible to conclude that the information was now available to allow the conclusion that these areas will be restored to the same ALC grade and that therefore there will be no loss of land or ALC downgrading.
- 7.3 As discussed above, undertaking additional survey work to refine the ALC grades across the Solar PV Site will not alter the assessment conclusions from a soils and land quality perspective because the land quality will not be affected. The question then becomes simply whether the change in land use of agricultural land, of the different qualities identified, is acceptable.

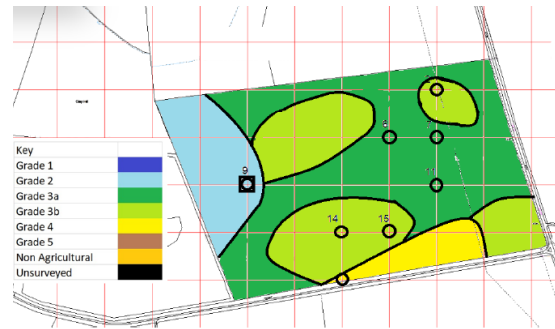
## 8 THE LANDSCOPE SURVEY

- 8.1 The Landscape report sets out in 1.3 that **“our findings across the site broadly indicate that the KCC report is correct in that it presents the ALC Grades in accordance with the guidelines”**.
- 8.2 The Landscape survey focuses mainly on one field. As Landscape record in paragraph 1.5 [REP7-060] KCC have sampled 24 auger points over the 30ha field. In 1.6 it is stated that **“we consider that a full ALC survey across the whole site is justified to determine more precisely the quantity of BMV land”**. This implies that 24 points over 30ha is not considered to be enough.
- 8.3 Landscape then report the field survey that they have carried out. As identified in section 5, a total of 8 samples were taken over the 30ha field. Field 2 is a variable field, as shown on the aerial photograph set out in the Landscape report.
- 8.4 Based on those 8 sample points, Landscape consider that the KCC ALC results (based on 24 sample points) can be re-graded as below. In so doing the ALC boundaries are changed in parts of the field where Landscape has not taken samples, yet KCC has.

KCC ALC



Landscape ALC



8.5 Landscape then extrapolate their findings. The conclusion in 7.1 is that not all the BMV has been identified on the site (the implication is that they are referring to the whole Site not just field 2). It is stated that areas of Subgrade 3b that were not resurveyed (ie detailed survey) may contain some 3a or higher.

8.6 From that it is extrapolated (1.6) that “it is likely that there is more than 50% BMV on the site overall”. The overall comment in 7.3 is that “the land remains mostly BMV, with around 50% of the site Grade 3a and a small quantity of Grade 2.”

8.7 Questions are also raised about some boundary changes between the semi-detailed and detailed ALC mapping. These are considered in **Attachment A**.

## 9 COMMENTS ON LANDSCAPE’S ANALYSIS

9.1 Landscape have sampled 8 points in Field 2, and 3 points in Field 3. From those 11 points they extrapolate that over 50% of the entire Site is BMV, which MPAG consider represents a 10 – 15% increase in BMV across the Site than is reported in the ES [REP7-057 paragraph 4.0.14].

9.2 It is stated in MPAG’s D7 ISH4 document [REP7-057] that sampling should be carried out at one per hectare (4.0.3, 4.0.4) and Landscape state that a full ALC survey is justified [REP7-060], paragraph 1.6. Yet based on only 8 sample points Landscape have concluded that the distribution of ALC grades across the whole 30ha of Field 2 can be altered, as set out in the comparison above, and from that small number of samples in small parts of two fields they conclude that over half the entire Site is BMV.

9.3 Landscape do not challenge that the KCC ALC survey was carried out according to the guidelines. Indeed, at 1.3 they explicitly acknowledge that the KCC results are in accordance with the guidelines. The Rutland County Council commissioned review of the PEIR and Natural England’s review of the ES both reach the same conclusion on the validity of the survey findings.

- 9.4 Accordingly Landscape's conclusion that, based on 8 sample points they are able to remap the ALC of the whole field, including regrading areas graded by detailed survey by KCC, must be wrong. Landscape do not have the data to remap the ALC across the field. Therefore, the Landscape regrading cannot be accepted as accurate.
- 9.5 It follows that there is no factual basis for then extrapolating those conclusions to apply to the whole of the Site, which Landscape have not surveyed.
- 9.6 The results set out in the ES are based on 334 samples over the 817ha Site, and are recorded as detailed in places and semi-detailed on other parts of the site and have been undertaken at an appropriate level for the size of the site.
- 9.6 A small sample of 11 points from two fields is not a scientific basis to reclassify any areas beyond the areas sampled. It is not a scientific basis for making comments that there is 10-15% more BMV across the entire Site than is assessed from the samples submitted with the application. Therefore, the Landscape survey should not be relied upon.

## 10 WHAT DO THE CONCLUSIONS MEAN?

- 10.1 The conclusion by Landscape and MPAG is that there is likely to be more than 50% BMV across the Site as a whole.
- 10.2 MPAG conclude that Landscape's analysis allows them to extrapolate that there is 10 – 15% more BMV across the Site than assessed in the ES (42%, see Table 12-1 in Chapter 12 of the ES [APP-042]). As set out above, the Applicant does not accept this premise.
- 10.3 However, even if the conclusions were accepted, the obvious question to ask is "so what?"
- 10.4 If it was considered (which the Applicant does not accept) that the Landscape results are robust and the ALC of the whole Site can therefore be adjusted, it would change the proportion of BMV from about 40 – 42% (solar PV Site and field edges or Order limits), to about or just over 50%.
- 10.5 That land quality will not be adversely affected. There is no commentary or conclusion in the Landscape report that the land will be downgraded as a result of the Proposed Development.
- 10.6 Accordingly this really is a question of a land use assessment and the acceptability of using that increased amount of BMV from agriculture to agriculture and solar. Increased amounts of BMV does

not result in losses of BMV, since the resource is not lost. Hence changes to the percentage of BMV does not affect an assessment of the protection of the BMV resource.

## 11 [LAND USE](#)

- 11.1 Landscape set out in 6.4 [REP7-060] that the loss of productive agricultural land “**should be avoided, wherever possible**”. MPAG [REP7-057] consider this to be a “**key issue**”, and the food production loss “**has potentially huge implications**” (4.0.5).
- 11.2 The layout was amended during the design stage to minimise the placement of panels on Grade 2 land. The areas within the proposed Solar PV Site are almost all mixed grade fields, which affects the ability to exploit different ALC grades separately.
- 11.3 This land is generally suitable for cereals and break crops. The difference in yield between Grades 3a and 3b is often, in practice, minimal. There would be limited difference in overall production if the subgrade 3a was retained for farming, and panels moved to subgrade 3b land elsewhere, which is the important question if the focus is on land use. The Applicant also notes its submissions in chapter 12, in respect of the land use within the Order limits, in this regard.
- 11.4 Neither document provides a reference to any planning policy or initiative that discusses food security or the use of agricultural land for food production. MPAG cross refer to their D2 submission [REP2-090], but no policy document requiring or encouraging food production on farmland is referenced.
- 11.5 The most recent Statement by Government was the Press Release of 6<sup>th</sup> December 2022, attached as **Attachment B**. This document makes clear that the UK has a highly resilient food supply chain and a high degree of food security.

## 12 [ENHANCEMENT OF SOILS](#)

- 12.1 Landscape comment in 6.3 [REP7-070] that recent studies have shown there are more efficient ways of sequestering carbon (non-tillage farming and rock dust) than (the Applicant assumes) through conversion of arable land to grassland.
- 12.2 The comment is in stark contrast to the British Society of Soil Science “Science Note: Soil Carbon” [APP-094] which states at the top of the fifth page:
- “**Soil carbon stocks can be increased by either increasing inputs (eg crop residues, cover crops, use of organic materials, inclusion of grass leys in arable rotations) or decreasing losses (ie reducing oxidative losses to CO<sub>2</sub> or particulate and dissolved organic content) via improved management such as reduced intensity tillage. Significant long-term land use change (eg conversion of arable**

land to grassland or woodland) has by far the biggest impact on soil organic carbon ..." [Referenced in Chapter 12 of the ES, paragraphs 12.4.64 and 12.4.65, APP-042].

### 13 CONCLUSIONS

- 13.1 The Landscape survey takes 10 samples mostly from one field. That is used to extrapolate different results across the whole Site. The survey is not robust and does not enable the conclusion that 10 – 15% more BMV exists across the Site than has been mapped from the semi-detailed and detailed ALC results.
- 13.2 Even if there was more BMV, that land would not be sealed or downgraded. The impact is not increased. Therefore, the consideration is one of land use, not of land loss.
- 13.3 There is no policy or initiative to enable the conclusion that the change in farming practices from arable to grassland based, which could occur at any time without needing permission or without penalty, is a significant adverse effect of the proposals.

### ATTACHMENT A - ANALYSIS OF BOUNDARY CHANGES

This Attachment reproduces the comparison from the Landscape report, then explains any changes. Circles added are for ease of reference.

#### LANDSCOPE A



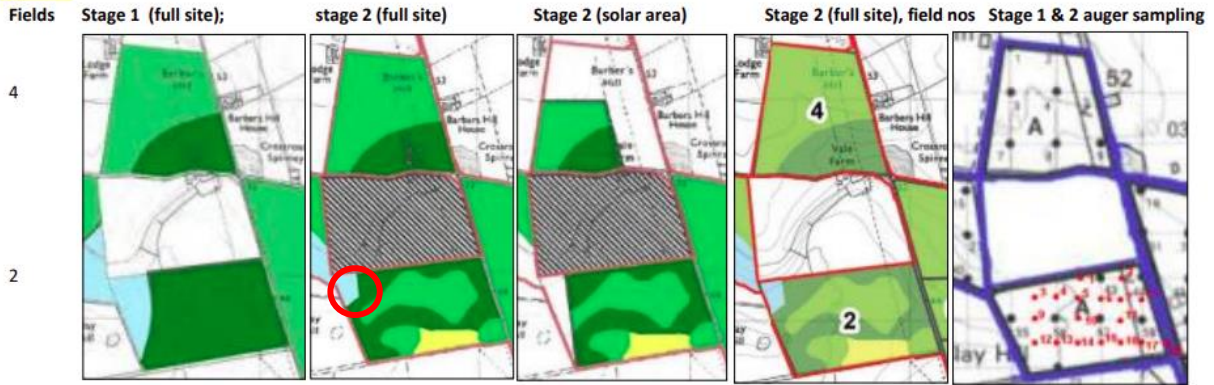
The change: the RHS of field 3 is mitigation as is the bottom of field 1

Comment: these plans all show the same area, bar a small area of Grade 2 (circled). That was mapped originally right up to auger point 27, which was a 3b position. The Applicant changed the boundary to match the field boundary. The area involved is about 0.5 ha.

#### LANDSCOPE B



B



The bottom field was subject to an additional 18 auger points following the semi-detailed survey, meaning there are 25 points in that area. That changed the boundaries. The Grade 2 to the west (circled) is not proposed for Solar PV arrays, and the Applicant did not therefore carry out additional sampling in all of that area. However, following a walk-over survey, it was clear that the field had very different characteristics over short distances, and that the Grade 2, taken in the redder soils, was not evenly spread across the field. The boundary was therefore amended. As noted, no panels are proposed for this field. The variability is shown in the following photographs and aerial image.

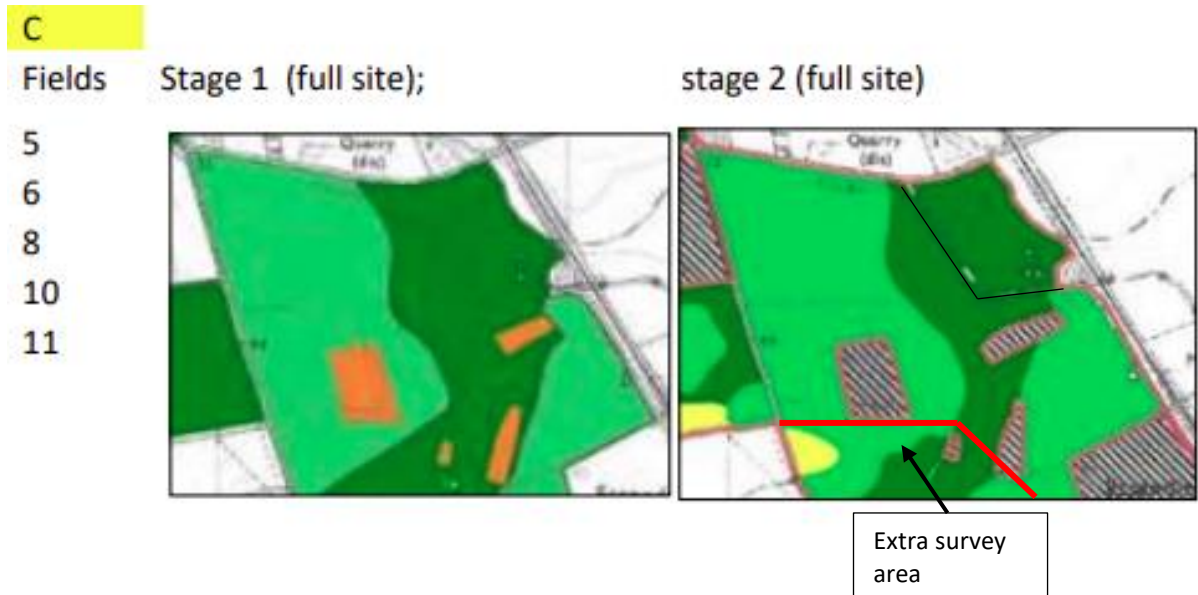




**LANDSCOPE C**



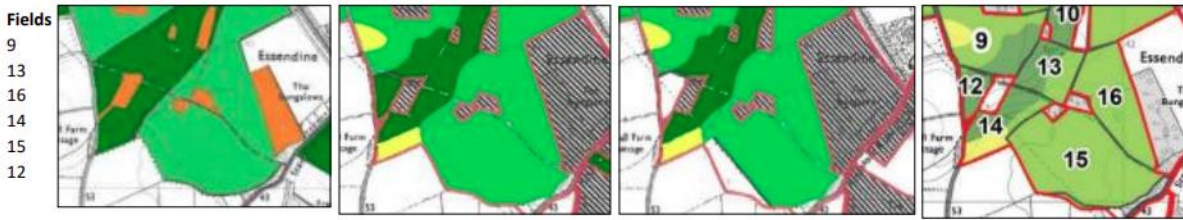
Part of this area, as below, was subject to additional surveys, changing the boundaries. The rest is not significantly changed. The woodland area was increased to match Google Earth. The small change to the boundary, to the east of the two woodlands, is a cartographic error, circled.



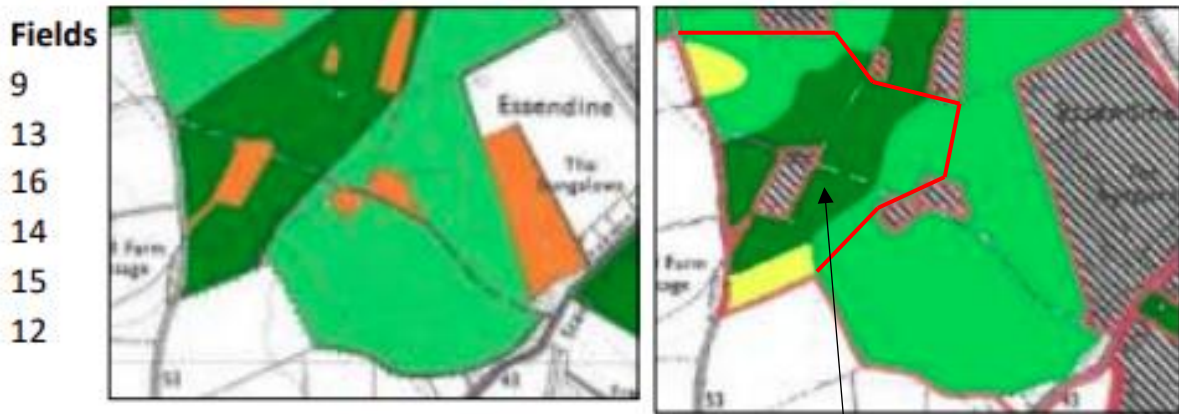


**LANDSCAPE D**

**D**



Part of this area was subject to additional sampling, as below. Otherwise the boundaries are not altered.



Extra survey area

**LANDSCAPE E**

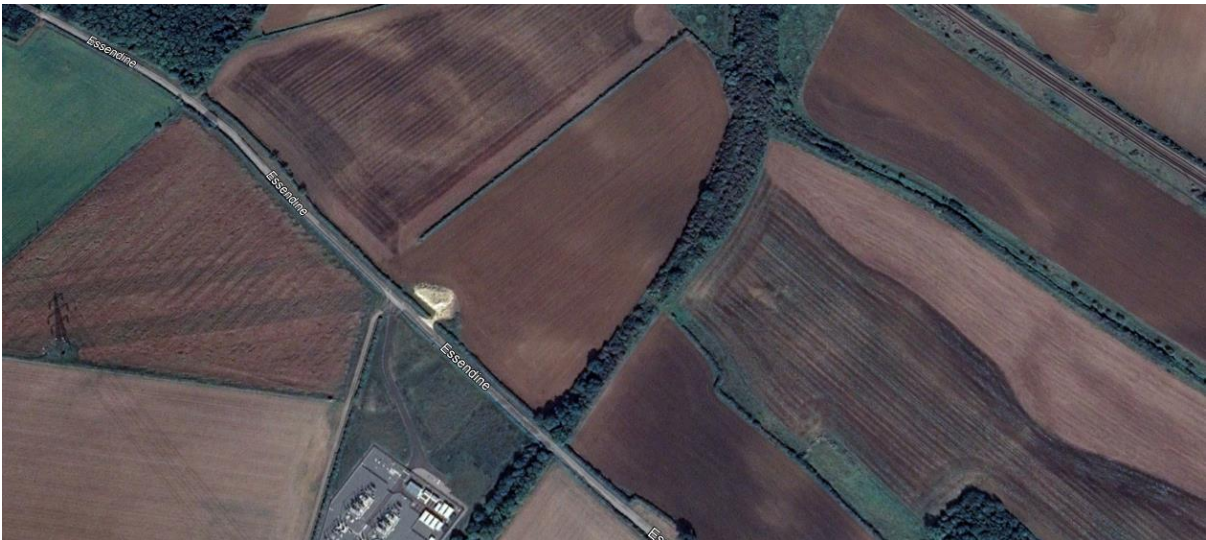
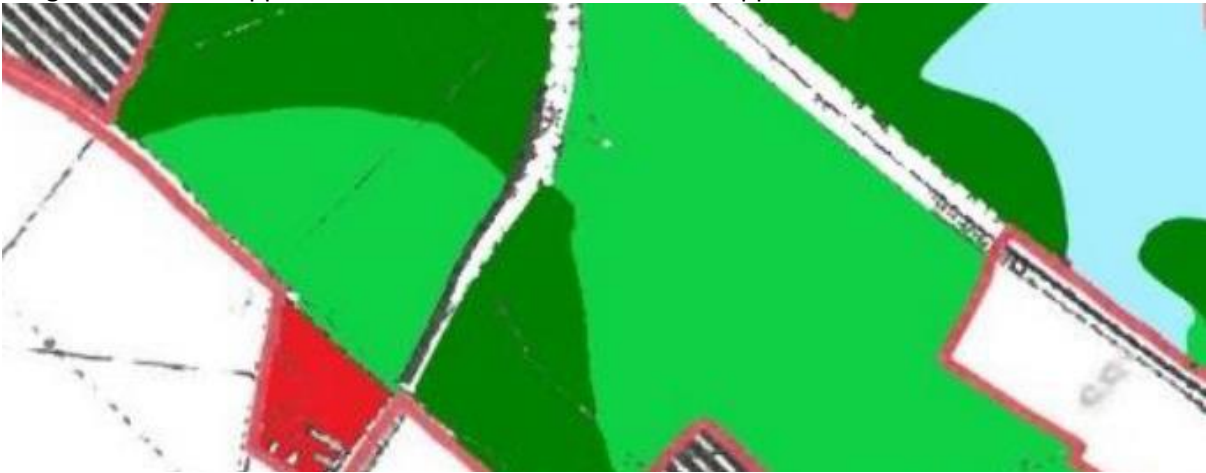
**E**



This area is adjacent to an area subject to additional surveying. Having completed additional auger sampling in the adjacent field, and reviewing 2020 Google Earth imagery, it was concluded that the 3b boundary was slightly further north. This area will be subject to further sampling as part of the final Soil Management Plan once the Onsite Substation position is fixed. See circled section, which involves approximately 1.5 ha.



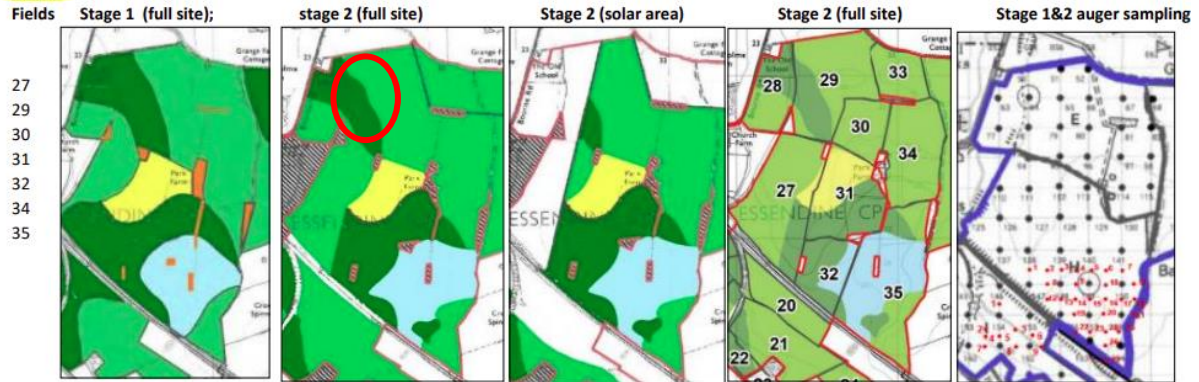
Subgrade 3b was mapped in detail as more extensive than mapped at semi-detailed scale.



## LANDSCOPE F



F



There is a slight change to the boundary of the Grade 3a land in the north-west of the area shown above (circled). The Applicant tried to match the boundary to the evident change in soil on the aerial below, but the difference has not significantly altered the qualities of different grades.



**LANDSCAPE G**

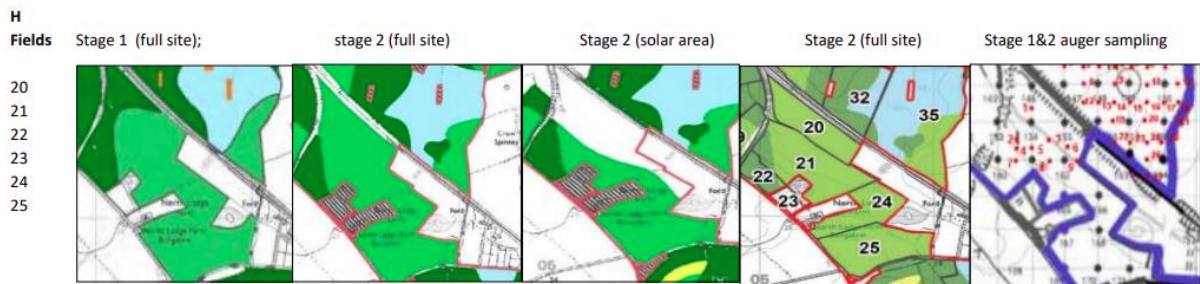
G



The big change here is the tongue of subgrade 3a which was reduced as circled. The reason for this was that Reading Agricultural Consultants, who carried out a technical review of the PEIR for Stantec, on behalf of Rutland County Council, concluded that auger points 69 and 83 should have been graded as 3b, not 3a. Therefore this

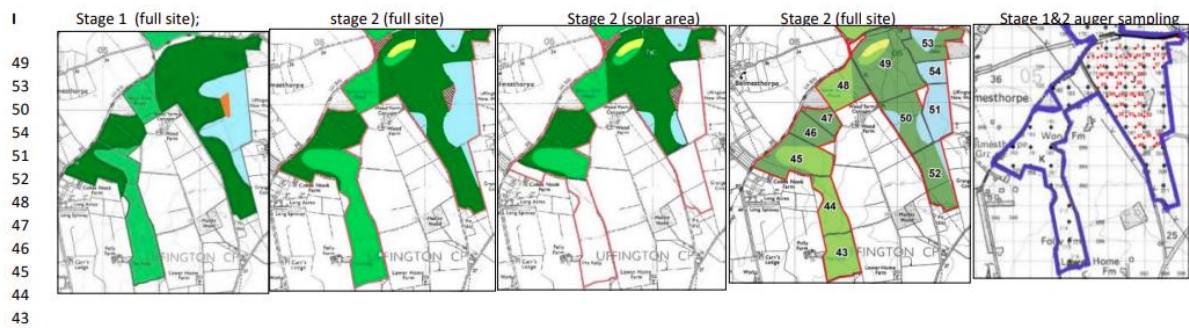
area was remapped (Reading Agricultural Consultants also downgraded 179 from 3a to 3b, 198 from 2 to 3a, and 203 from 3a to 3b)

### LANDSCAPE H



The only changes were due to additional sampling.

### LANDSCAPE I



The only changes were due to additional sampling.



# Food supply and food security

[Defra Press Office](#), 6 December 2022 - [Weekly stories](#)



There has been some coverage of calls by the National Farmers Union (NFU) for more government support for farmers to safeguard the nation's food supplies.

We understand that farmers are facing increasing costs as a result of the impacts of the conflict in Ukraine and global economic shocks including the spike in oil and gas prices, and have announced a range of measures throughout the course of the year to help mitigate these challenges and support industry.

The UK's food supply chain remains resilient, with supply from diverse sources guaranteeing a high level of food security.

## **A Government spokesperson said:**

“ The UK has a large and highly resilient food supply chain. Our high degree of food security is built on supply from diverse sources; strong domestic production as well as imports through stable trade routes. The government is in regular contact with the food and farming industries to ensure they are well