



# Longfield Solar Farm

PINS Ref: EN010118

Applicant's Comments on Relevant Representations

Submission for Deadline 1A

Document Reference : EN010118/EX/8.1

August 2022

Longfield Solar Energy Farm Ltd

Planning Act 2008

The Infrastructure Planning (Examination Procedure) Rules 2010 – Rules 8(1)(c)

## Table of Contents

1.	Executive Summary .....	2
2.	Introduction.....	3
2.1	Purpose of the report .....	3
2.2	Structure of the report .....	3
3.	Parties with Statements of Common Ground.....	5
3.1	Overview .....	5
3.2	Responses to Selected Individual and Technical Consultees.....	5
3.3	Themed Responses .....	6
	Appendix A – Responses to Interested Parties .....	7
	Appendix B – Responses to Relevant Representations by Topic .....	47

# 1. Executive Summary

- 1.1.1 The purpose of this report is to provide Longfield Solar Energy Farm Limited's (the Applicant) response to the key issues raised in relevant representations submitted by Interested Parties in relation to the Longfield Solar Farm.
- 1.1.2 The period for registering as an Interested Party through the submission of a relevant representation ran from 14 April to 9 June 2022.
- 1.1.3 A total of 105 relevant representations were submitted to the Examining Authority by Interested Parties, which includes the submission by the East of England Ambulance Service NHS Trust at Procedural Deadline A.
- 1.1.4 This report provides a response from the Applicant to the matters raised in the relevant representations and is structured as follows:
  - a. **Section 2** lists the Interested Parties with whom the Applicant is engaging to progress a Statement of Common Ground (SoCG). The relevant representations of these Interested Parties have been responded to through those SoCG directly.
  - b. **Section 3** lists the parish councils for areas where the proposed development would take place, elected representatives, international agencies, statutory consultees (excluding those with whom a SoCG is being progressed), undertakers and those whose interests would be affected by the Order (as listed within the Book of Reference [APP-016]) (again, excluding those with whom a SoCG is being progressed). Individual responses to the relevant representations of these Interested Parties have been provided within **Appendix A** of this report.
  - c. **Section 4** lists the relevant representations received from members of the public and all remaining organisations and businesses. Relevant representations from this group have raised similar matters, and thus matters raised have been grouped and thematic responses provided by the Applicant in **Appendix B** of this report.
- 1.1.5 The Report is supported by Appendix A – Responses to Interested Parties and Appendix B – Responses to Relevant Representations by Topic.

## 2. Introduction

### 2.1 Purpose of the report

- 2.1.1 The purpose of this report is to provide Longfield Solar Energy Farm Limited's (the Applicant) response to the key issues raised in relevant representations submitted by Interested Parties in relation to the Longfield Solar Farm.
- 2.1.2 The period for registering as an Interested Party through the submission of a relevant representation ran from 14 April to 9 June 2022. The period of time was extended slightly due to technical issues with the Planning Inspectorate's website. The Applicant confirmed that it had complied with sections 56 and 59 of the Planning Act 2008 and Regulation 16 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 on 7 June 2022, certifying that it had notified the required persons, made available a copy of the application and accompanying documents and information and publishing it in the required manner.
- 2.1.3 A total of 105 relevant representations were submitted to the Examining Authority by Interested Parties, which includes the late submission by the East of England Ambulance Service NHS Trust at Procedural Deadline A. These can be broken down as follows:
- a. three responses from the host authorities (i.e. Braintree District Council [RR-011], Chelmsford City Council [RR-017] and Essex County Council [RR-035];
  - b. six responses from other statutory bodies;
  - c. three responses from the host parish councils (i.e. Boreham Parish Council [RR-010], Little Waltham Parish Council [RR-052] and Terling and Fairstead Parish Council [RR-093]); and
  - d. 93 responses from members of the public and business, some of whom have an interest in the land.

### 2.2 Structure of the report

- 2.2.1 This report provides a response from the Applicant to the matters raised in the relevant representations and is structured as follows:
- b. **Section 2** lists the Interested Parties with whom the Applicant is engaging to progress a Statement of Common Ground (SoCG). The relevant representations of these Interested Parties have been responded to through those SoCG directly.
  - c. **Section 3** lists the parish councils for areas where the proposed development would take place, elected representatives, international agencies, statutory consultees (excluding those with whom a SoCG is being progressed), undertakers and those whose interests would be affected by the Order (as listed within the Book of Reference [APP-016]) (again, excluding those with whom a SoCG is being progressed). Individual responses to the relevant representations of these Interested Parties have been provided within **Appendix A** of this report.

- d. **Section 4** lists the relevant representations received from members of the public and all remaining organisations and businesses. Relevant representations from this group have raised similar matters, and thus matters raised have been grouped and thematic responses area provided by the Applicant in **Appendix B** of this report.

## 3. Parties with Statements of Common Ground

### 3.1 Overview

3.1.1 Statements of Common Ground (SoCG) are being developed with the following Interested Parties that capture the matters raised within their relevant representations, which will be submitted at Deadline 1B:

- a. Braintree District Council [RR-010];
- b. Chelmsford City Council [RR-017];
- c. Essex County Council [RR-035];
- d. Natural England [RR-068];
- e. Environment Agency [RR-032];
- f. Essex County Fire and Rescue [RR-036];
- g. Historic England [RR-040];
- h. National Grid Electricity Transmission Plc [RR-066];
- i. National Highways [RR-067];
- j. Network Rail Infrastructure Limited [RR-001];
- k. UK Health Security Agency/Office for Health Improvement and Disparities; and
- l. East of England Ambulance Service NHS Trust [AS-001].

### 3.2 Responses to Selected Individual and Technical Consultees

3.1.1 This section lists the relevant representations received from: parish councils for areas where the proposed development would take place; elected representatives; international agencies; statutory consultees and undertakers where a SoCG is not being progressed (refer to **Section 2** for details); those with an interest(s) affected by the Order as listed within the Book of Reference [APP-016]; and non-statutory organisations.

3.1.2 These Interested Parties are as follows:

- a. Parish Councils:
  - Boreham Parish Council [RR-010];
  - Little Waltham Parish Council [RR-052]; and
  - Terling and Fairstead Parish Council [RR-093].
- e. Interest Groups:
  - Boreham Conservation Society [RR-009];
  - British Transport Police [RR-013];
  - Campaign to Protect Rural England – Essex [RR-014];

- Essex Area Ramblers [RR-033];
- Essex Bridleways Association [RR-034];
- Essex Local Access Forum [RR-037]
- Network Rail Infrastructure Limited [RR-001]
- Ramblers- Essex Area [insert link]
- f. Interests affected by the Order as listed within the Book of Reference
  - Roberta Mary Rance [RR-083];
  - Country Side Zest (Beaulieu Park) LLP [RR-029]; and
  - The Riley Family [RR-095].

3.1.3 Full responses to the relevant representations received from these Interested Parties are detailed within **Appendix A** of this report.

### 3.3 Themed Responses

3.3.1 Relevant representations received from members of the public and businesses, beyond those included in **Sections 2** and **3** of this report, have been grouped by topic and a thematic response has been prepared in **Appendix B**. The themes are as follows:

- |   |                         |
|---|-------------------------|
| a. Alternatives and site selection      | r. Landscape and visual |
| b. Amenity and recreation               | s. Operations           |
| c. Battery energy storage system (BESS) | t. Need                 |
| d. Bulls Lodge substation extension     | u. Noise and vibration  |
| e. Climate change                       | v. Other                |
| f. Compulsory acquisition               | w. Socio-economics      |
| g. Construction                         | x. Transport and access |
| h. Consultation                         | y. Water resources      |
| i. Cultural heritage                    |                         |
| j. Cumulative impacts                   |                         |
| k. Decommissioning                      |                         |
| l. Design                               |                         |
| m. Ecology                              |                         |
| n. EIA process                          |                         |
| o. Glint and glare                      |                         |
| p. Human health                         |                         |
| q. Land use                             |                         |

# Appendix A – Responses to Interested Parties

**Table A-1: Parish Councils**

Summary of the Position of the Interested Party	LFS Limited's Response
<b>Boreham Parish Council [RR-010]</b>	
Alternatives and site selection	
Large car firms are currently developing hydrogen cells for batteries and this method should be properly examined before this development is built.	The battery energy storage system (BESS) will use lithium-ion batteries. The Applicant considers that these are the best available technology for the BESS. The Scheme is being brought forward in response to an urgent national need for new renewable energy generation, as set out in the <b>Statement of Need [APP-203]</b> , and the Applicant considers it appropriate to move forward with lithium-ion batteries.
Wind turbines are cheaper, more efficient and take up less space.	Chapter 11 of the <b>Statement of Need [APP-203]</b> provides an analysis of the economic viability of large-scale solar generation as a future contributor to a low-carbon Great Britain electricity supply system in comparison to alternate technologies. That Statement also includes analysis of why the Scheme will be most beneficial to the achievement of government's aims, if it is consented to the scale proposed. Solar power reduces the market price of electricity by displacing more expensive forms of generation.
<b>BESS</b>	
The BESS is too close to protected ancient woodland, namely Toppinghoehall Wood.	A buffer of at least 15m has been applied to all existing woodlands and ancient woodlands. This buffer has been integrated into the Scheme's <b>Outline Landscape Masterplan [APP-179]</b> to protect trees located on, and adjacent to, the Order limits, and this is secured via the <b>Design Principles [APP-206]</b> with which the Scheme must comply (in line with Requirements in Schedule 2 of the <b>draft DCO [APP-011]</b> ).
<b>Land use</b>	
The site is an area of high value agricultural land. This should be protected for domestic food production, especially with the ongoing war in Ukraine.	The use of agricultural land for the Scheme is justified by the urgent need for renewable energy generation. The Scheme is urgently needed in order to generate renewable energy to contribute to meeting the government's legally binding commitment for the country to reach net-zero by 2050, and to address the cause of climate change. This is set out further in the <b>Statement of Need [APP-203]</b> . Whilst the Scheme will result in best and most versatile agricultural land not being available for agricultural use over its lifetime (12% of the site is grade 2 and 22% is grade 3a), the non-intrusive and reversible nature of solar development means that there will be very little permanent loss of agricultural



	land. The soil will have undergone recovery through less intensive farming such as being left fallow, or sheep grazing and is expected to be the same or better quality as it is currently. Section 12.8 of <b>Environmental Statement (ES) Chapter 12: Socio-economics and Land Use [APP-044]</b> concludes this is not significant in EIA terms.
<b>Landscape and Visual Impact Assessment (LVIA)</b>	
The Scheme would create a massive blot on the landscape and would destroy the natural environment.	The <b>Outline Landscape and Ecology Management Plan (OLEMP) [APP-217]</b> , includes new woodland, scrub, grassland and hedge habitats to buffer and enhance connectivity across the Order limits. In identifying the Solar Farm Site, the Applicant identified that it is remote from nearby villages and that the relatively flat landform and existing woodland and hedgerow would limit views of the proposed development. These design measures are proposed to prevent, reduce or mitigate likely adverse effects. The landscape design has been extensively considered in order to embed mitigation measures in line with management recommendations included in policy and published landscape studies and strategies. The assessment of landscape and visual effects takes account of the effectiveness of these embedded mitigation measures, which are set out in <b>ES Chapter 2: The Scheme [APP-034]</b> , and mitigation measures described in Section 10.8 of <b>ES Chapter 10: Landscape and Visual Amenity [APP-042]</b> .
<b>Little Waltham Parish Council [RR-052]</b>	
<b>Transport and access</b>	
Use of the A131 Essex Regiment Way along Wheeler's Hill and Cranham Road and the main access is inappropriate. It will include small country roads which are narrow in places and not at all suitable for construction traffic. It would also result in damage to verges and will have a detrimental impact upon that rural area.	The route from Essex Regiment Way, via Wheelers Hill and Cranham Road, provides the most direct route from higher order roads and will minimise disruption in the nearby villages of Boreham and Hatfield Peverel. Where necessary, Cranham Road and Wheelers Hill will be widened to allow vehicles to pass safely. More information regarding access can be found in <b>ES Chapter 13: Transport and Access [APP-045]</b> . Development on land north of Cranham Road is considered as part of the cumulative impact assessment in <b>ES Chapter 13: Transport and Access [APP-045]</b> .
<b>Terling and Fairstead Parish Council [RR-093]</b>	
<b>Alternatives and site selection</b>	
Alternative sites which may have been considered are dismissed as those that ' <i>may come forward in addition to Longfield in due course</i> ', one is already in the control of EDF (Bradwell).	The Applicant selected the Solar Farm Site following a process to identify land which is suitable from a technical, environmental and planning perspective, as set out in <b>ES Chapter 3: Alternatives and Design Evolution [APP-035]</b> . It references each of the matters identified by section 2.48 of draft National Policy Statement for Renewable Energy (EN-3) (Draft NPS EN-3) as factors influencing solar farm site selection by the Applicant.
The Scheme is in the wrong place.	
<b>Amenity and recreation</b>	

<p>No permanent legacy community assets are included in the proposals.</p>	<p>The Applicant has committed to providing a Community Benefit Fund (CBF). This funding is not required to mitigate the impacts of the Scheme. Therefore, the CBF does not form part of the DCO application and accordingly the Secretary of State must not apply any positive weight to the CBF when making a decision on the overall planning balance of the Scheme. However, the commitment to providing the CBF will be secured by a legal agreement between the Applicant and the host authorities. A local Skills and Employment Plan is to be prepared prior to commencement of construction. This will set out measures that the Applicant will undertake to advertise and promote employment opportunities locally associated with the Scheme during construction and operation. This will be complemented by a financial contribution (secured via a legal agreement) to the host authorities to fund measures that will assist and encourage local people to access apprenticeships and training. Further information is set out in section 12.8 of <b>ES Chapter 12: Socio-economics and Land Use [APP-044]</b>. Further information can be found in the <b>Planning Statement [APP-204]</b> and in the Heads of Terms for the above mentioned legal agreement, at Appendix B of the Planning Statement.</p>
<p><b>BESS</b></p>	
<p>The parish council intends to challenge the battery technology and Essex Fire and Rescue's responses as to future community risk, as they consider the risk to be significant.</p>	<p>A plume assessment has been undertaken with respect to the BESS to assess the likelihood of a fire occurring and the level of impact on receptors in the unlikely event a fire occurs. The assessment demonstrates that under day-to-day operation there is a low risk of an incident, and in the event of an incident the credible hazards are understood and have been evaluated to demonstrate that the risk to the local population would be very low. The Plume Assessment has been submitted as part of the Application as <b>ES Appendix 16B: BESS Plume Assessment [APP-103]</b>. The Applicant has prepared an <b>Outline Battery Safety Management Plan (BSMP) [APP-210]</b> that details the design measures and controls to be included within the BESS to minimise the risk of a fire, which includes a framework for responding to an incident. The design of the BESS and its impacts are controlled in several ways. Prior to commencement of construction of the BESS, a Battery Safety Management Plan (in accordance with the <b>Outline Battery Safety Management Plan (BSMP) [APP-210]</b> submitted with the Application) is required to be submitted to the relevant local planning authority and approved, in consultation with the Health and Safety Executive, Essex County Fire and Rescue Service and the Environment Agency. The Applicant must operate the BESS in accordance with the approved plan. Further, pursuant to Requirement 8 of the <b>draft DCO [APP-011]</b>, the detailed design of the BESS must be in accordance with the <b>Outline Battery Safety Management Plan (BSMP) [APP-210]</b>, which includes safety requirements for the BESS design, and the <b>Design Principles [APP-206]</b>. The Outline Design Principles contain controls over the BESS, which include: (i) that the chemistry of the BESS will be lithium ion, and (ii) that an assessment will be undertaken, based on the detailed design for the BESS, to demonstrate that the risk of fire and impacts from such a fire will be no worse than as assessed in the Plume Assessment submitted with the Application as <b>ES Appendix 16B: BESS Plume Assessment [APP-103]</b>. In this way, the Applicant can confirm that if the BESS is constructed</p>

	differently to that assessed in the plume assessment, its impacts in the event of a fire would be no worse than those assessed and, therefore, the risk to the local population would be very low.
<b>Climate change</b>	
The parish council is yet to be convinced of the carbon factors stated in the manufacture, construction, operation and decommissioning of the scheme as well as the negative carbon footprint of any associated activity.	The Greenhouse Gas (GHG) assessment summarised in <b>ES Chapter 6: Climate Change [APP-038]</b> and described in more detail in <b>ES Appendix 6A: Climate Change - Technical Appendix [APP-056]</b> covers all significant emissions sources associated with the construction, operation and decommissioning of the Scheme, as well as net emissions from any land use change during and after the Scheme's lifetime. The most reliable known emissions factors available were applied to these emissions sources, and a full list of references is available in <b>ES Appendix 6A: Climate Change – Technical Appendix [APP-056]</b> . It is acknowledged in <b>ES Chapter 6: Climate Change [APP-038]</b> that some factors are more reliable than others, and, therefore, a certain degree of uncertainty in the overall emissions figure is inevitable. The GHG assessment is a conservative worst-case scenario, as it is likely that not only will the reliability of emissions factors improve over time, the carbon intensity associated with the manufacture and supply of materials and components, and with the operation and ultimate decommissioning of the scheme, is very likely to fall with the continuing decarbonisation of supply chains.
<b>Compulsory acquisition</b>	
The Secretary of State originally called for sites in single ownership to support solar farms of over 50 MW. It is clear now there will be additional land acquired to deliver this scheme 'at scale'.	The Solar Farm Site is within the control of a single landowner as set out in the <b>Book of Reference [APP-016]</b> and explained in the <b>Statement of Reasons [APP-014]</b> . The Solar Farm Site represents the vast majority of the Order limits and agreement has been reached with the landowner. The connection to Bulls Lodge Substation was identified and agreed (via a grid connection agreement) with National Grid. The Applicant is in discussions regards additional smaller areas of land and rights required in relation to the Grid Connection Route, Bulls Lodge Substation Extension and land required for access to the Scheme, with a view to reaching agreement with those landowners. The Applicant seeks compulsory acquisition powers within the DCO in order that, should it not be able to reach agreement with landowners, this nationally significant infrastructure project may still be delivered in line with the proposed programme, to meet the urgent need for renewable energy in the UK. The approach taken is common amongst energy infrastructure schemes. The <b>Statement of Reasons [APP-014]</b> includes more detail in respect of the powers sought over land and the status of discussions with affected landowners.
<b>Construction</b>	
The EIA is evasive concerning the removal of topsoil (at construction phase) suggesting any re-instatement for agricultural use requires robust conditions in any DCO consent.	An Outline Soils Resource Management Plan is provided as an Appendix to the <b>Outline Construction Environmental Management Plan [APP-214]</b> . This sets out principles for how soils will be managed and protected during construction, operation and decommissioning of the Scheme. A detailed soils resource management plan will be prepared and approved by the relevant planning authority prior to

	the commencement of construction, prior to operation, and prior to decommissioning, as set out by the Requirements of the <b>draft DCO [APP-011]</b> .
Will there be a construction camp and hours of work conditioned as Monday to Friday 0730-1700, Saturday 0730-1300 with no work on Sundays?	The <b>Outline Construction Environment Management Plan [APP-214]</b> and <b>ES Appendix 13B: Framework Construction Traffic Management Plan [APP-094]</b> restrict the hours of construction work. Construction working hours on the Solar Farm Site will run from 07:00 to 19:00 Monday to Saturday. Working days will generally be one 12-hour shift. Construction working hours on the Bulls Lodge Substation Extension will run from 07:00 to 19:00 Monday to Saturday, with the exception of overhead line works which will run from 07:00 to 19:00 Monday to Sunday. Where on-site works are to be conducted outside the core working hours, they will comply with the limits and controls detailed in the CEMPs, and any other restrictions agreed with the relevant planning authorities.
<b>Cumulative impacts</b>	
The parish council has two other DCOs (pre-statutory consultation stage); A12 widening and National Grid East Anglia Green and the proposed Chelmsford Garden Village is close to the site. The parish council seeks evidence of collaborative approaches to programming these significant impacts within the parish.	The Applicant had engaged with National Highways regarding the A12 widening scheme to understand the potential for cumulative impacts as well as synergies between the projects. As indicated in <b>ES Appendix 13B: Framework Construction Traffic Management Plan [APP-094]</b> the Construction Traffic Management Plan will include details of how the projects will liaise on an ongoing basis during the construction phase. National Grid's East Anglia Green project was publicised after the acceptance of the DCO application for the Scheme. The Applicant will engage with National Grid through its pre-application consultation and engagement to understand potential impacts from East Anglia Green, although it is noted that this project is only at early planning stage and will need to take account of Longfield Solar Farm in its design to avoid new significant effects. The Applicant is engaging with the host authorities regards the Chelmsford Garden Village and any relevant considerations will be included in the SoCG with those authorities.
The cumulative effect of the Longfield proposals and all other solar schemes will affect the UK's food security.	Draft NPS EN-3 [BEIS. Draft National Policy Statement for Renewable Energy Infrastructure (EN-3). 2021] includes an anticipated range of 2 to 4 acres for each MW of output generally required for a solar farm along with its associated infrastructure. Using the most conservative value from the range, and assuming that all future solar capacity deployment is large-scale rather than micro-scale (another conservative assumption) implies that a further 80,000 to 300,000 acres of land (approximately 32,000 to 120,000 hectares) would need to be set aside for solar capacity by 2050 in order to meet the Future Energy Scenarios published by NGENSO. This represents at a maximum, 0.5% of total UK land area, or between 0.2% and 0.9% of UK pastures and non-irrigated arable land [Alasdair Rae. A Land Cover Atlas of the United Kingdom. 2017, Author analysis]. It is the Applicant's belief that UK food security will not be adversely affected by proposals to increase the scale of onshore renewable energy in the UK.
<b>Decommissioning</b>	

<p>The PC requests the re-instatement of land to agricultural use be conditioned by a performance bond.</p>	<p>Solar farms are temporary and typically have an operational lifespan of approximately 40 years. Once Longfield Solar Farm reaches the end of its lifespan, infrastructure on the Solar Farm Site will be removed and the Solar Farm Site returned to the landowner. Post-decommissioning, it is expected that the landowner would return the Solar Farm Site to arable use, although it is assumed that established habitats such as hedgerows and woodland would be retained. The DCO will require the decommissioning of the Scheme in accordance with a Decommissioning Environmental Management Plan (DEMP). A <b>Decommissioning Strategy [APP-216]</b> has been prepared as part of the DCO Application. This provides the outline mitigation measures to be adhered to during decommissioning. The DCO includes a requirement to prepare and approve of the DEMP substantially in accordance with the Decommissioning Strategy, and for the approved DEMP to be implemented.</p>
<p><b>Design</b></p>	
<p>The scheme is too large along with the associated BESS of a scale proportionally larger; its impact/massing in this rural/agricultural location, even with the mitigations suggested, do little to ameliorate long-term land industrialisation for future generations.</p>	<p>The Applicant does not consider the impact of the Scheme to be industrialising and has developed the Scheme with a particular focus on mitigating the potential effects on landscape and visual amenity. The Landscape and Visual Impact Assessment in <b>ES Chapter 10: Landscape and Visual Amenity [APP-042]</b> establishes that no significant visual effects are expected once mitigation planting has established. Proposed planting is shown on <b>ES Figure 10-12: Outline Landscape Masterplan [APP-179]</b>.</p>
<p><b>LVIA</b></p>	
<p>Concern about negative effect on landscape/visual amenity in this attractive part of Essex for its community.</p>	<p>The Landscape and Visual Impact Assessment in <b>ES Chapter 10: Landscape and Visual Amenity [APP-042]</b> establishes that, with the exception of major adverse effects experienced by people walking on PRoW 213_19 and PRoW 113_25 within the Order limits because of close range views of the proposed PV Arrays in the immediate foreground, no significant visual effects are expected once mitigation planting has established. Proposed planting is shown on <b>ES Figure 10-12: Outline Landscape Masterplan [APP-179]</b>. The <b>Outline Landscape and Ecology Management Plan (OLEMP) [APP-217]</b> includes new woodland, scrub, grassland and hedge habitats to buffer and enhance connectivity across the site. In identifying the Solar Farm Site, the Applicant identified that it is remote from nearby villages and that the relatively flat landform and existing woodland and hedgerow limits views into the site. The new permissive paths embedded into the Scheme's design include a new north-south green route and east-west green links which improve access through the Solar Farm Site rather than replicating existing routes. More information can be found in <b>ES Chapter 10: Landscape and Visual Amenity [APP-042]</b>.</p>
<p><b>Need</b></p>	
<p>There is not a convincing case for the need for the Scheme. Solar energy generation is an inefficient</p>	<p>The Applicant has set out the case for the need for the Scheme in detail in the <b>Statement of Need [APP-203]</b>. This also considers the efficiency of solar energy generation. Solar power reduces the market price of electricity by displacing more expensive forms of generation from the cost stack. This</p>

<p>method of renewable energy and results in a loss of high-grade agricultural land.</p>	<p>delivers benefits for electricity consumers. Due to technological advances, power generated by solar plants is already at or below grid parity cost in Great Britain and solar power is economically attractive in Great Britain compared to many other forms of conventional and renewable generation. Larger solar schemes deliver more quickly and at a lower unit cost than multiple independent schemes which make up the same total capacity, bringing forward carbon reduction and economic benefits in line with government policy. The Scheme proposes a substantial infrastructure asset, which if consented will deliver large amounts of cheap, low-carbon electricity both during and beyond the critical 2020s timeframe. Maximising the capacity of generation in the resource-rich, accessible and technically deliverable proposed location, represents a significant and economically rational step forwards in the fight against the global climate emergency. Very little agricultural land will be permanently lost. The vast majority of the Order limits will be available for return to agriculture after decommissioning, and the soil resource will have benefitted from a recovery of soil organic matter. An element of agriculture may also be retained over the life of the Solar Farm Site, with low density grazing an option being considered for the management of some of the habitats to be created on the Order limits.</p>
<p><b>Other</b></p>	
<p>The Parish Council has concerns regarding the Applicant's financial status.</p>	<p>The Applicant is able to deliver its financial commitments. Further evidence is provided in the <b>Funding Statement [APP-015]</b>.</p>
<p><b>Socio-economics</b></p>	
<p>The economic model charging the BESS from solar (daytime) then night-time alternatives has been glossed over. This is the main economic driver for the quantum and scale of the BESS - Longfield should evidence this.</p>	<p>The BESS is designed, as its main and primary function, to provide peak generation electric energy time-shifting and grid balancing services. It will do this by capturing electricity generated from the PV Panels and storing it in the batteries in order to dispatch to the electricity grid when it is most required. As a supplementary and secondary service, it may also import surplus energy from the National Grid and provide other ancillary and energy time-shifting services to help National Grid Electricity Transmission (NGET) manage the increasing penetration of (variable) renewable generation on the transmission network. This is fully detailed in <b>ES Chapter 2: The Scheme [APP-034]</b>.</p>
<p><b>Transport and access</b></p>	
<p>The proposal includes several Chelmsford City Council/Braintree District Council designated and adopted 'protected lanes'.</p>	<p>An appropriate routing and access strategy has been identified which seeks to limit the usage of Protected Lanes and local roads through Boreham and Hatfield Peverel to the south. HGVs will be routed to / from the west via the A130, Wheelers Hill, and Cranham Road, with supporting highway improvements (carriageway widening) where necessary. There will be the potential to utilise the Radial Distributor Road following its completion prior to the construction phase. For further information, please see Sections 13.5 and 13.9 in <b>ES Chapter 13: Transport and Access [APP-045]</b>.</p>
<p>The DCO extends to Cranham Road connecting to the Chelmsford NE bypass. The last Longfield</p>	<p>The Applicant believes this comment refers to materials produced for the first period of additional consultation, which took place between 26 October 2021 and 23 November 2021. Following the consultation, it came to the Applicant's attention that the plan showing the changes to the Scheme</p>



<p>newsletter plan did not show this, their preferred access route.</p>	<p>boundary omitted a small part of the new boundary at its western edge. This was due to a formatting error. The Applicant notes that the leaflet accompanying the plan set out the nature of the changes and included labelling on the plan to help identify these. The Applicant therefore wrote to consultees with a corrected Scheme boundary plan to provide the opportunity to respond to the consultation on the basis of the corrected plan included with this letter. The period for responding to the consultation lasted from 11 January 2022 until 8 February 2022. Further information is set out in section 8.3 of the <b>Consultation Report [APP-018]</b>.</p>
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**Table A-2: Interest Groups**

<p><b>Boreham Conservation Society [RR-009]</b></p>	
<p>Alternatives and site selection</p>	
<p>There is an abundance of alternative brownfield sites and plenty of potential for solar on roofs in industrial areas as opposed to the delicately balanced ecosystems and high-grade farmland.</p>	<p>Consideration of alternatives is presented in <b>ES Chapter 3: Alternatives and Design Evolution [APP-035]</b>. In summary, the vast majority of land within the area of search is of similar Agricultural Land Classification (ALC) to the Order limits. The Order limits comprises approximately: 60% Grade 3b, 22% Grade 3a, 12% Grade 2 and 6% non-agricultural or unknown. There are no alternative sites considered by the Applicant that are clearly of a lower non-BMV ALC grade than the Order limits (whilst also meeting other criteria of the Applicant, as set out in <b>ES Chapter 3: Alternatives and Design Evolution [APP-035]</b>) within a reasonable distance of Bulls Lodge Substation (for which the Applicant has obtained a grid connection agreement). The Applicant is committed to developing reliable sources of renewable energy, this includes developing both utility scale and rooftop solar developments. Rooftop generation is often the quickest and cheapest way to deploy renewable energy, however rooftop generation is rarely able to generate the total demand of the site it occupies. Typically, rooftop generation is capable of providing 15% of demand for the intensive industrial or commercial site on which it is deployed – leaving the remaining 85% of demand to be supplied by the national grid, and utility scale solar developments such as Longfield Solar Farm, which supply that grid. In summary, the applicant believes that all forms of deployment of Solar are required in order to generate renewable energy to contribute to meeting the Government's legally binding commitment for the country to reach net-zero by 2050, and to address the cause of climate change. For further details, please see the <b>Statement of Need [APP-203]</b> submitted as part of the DCO application.</p>
<p>There are many locations in the county between the A12 and A127 with direct access to the National Grid and the quality of land is significantly poorer.</p> <p>There is no justification or comparison exercise to show why this site has been chosen over other</p>	<p>Consideration of alternatives is presented in <b>ES Chapter 3: Alternatives and Design Evolution [APP-035]</b>. In summary, the vast majority of land within the area of search is of similar Agricultural Land Classification (ALC) to the Order limits. The Order limits comprises approximately: 60% Grade 3b, 22% Grade 3a, 12% Grade 2 and 6% non-agricultural or unknown. There are no alternative sites considered by the Applicant that are clearly of a lower non-BMV ALC grade than the Order limits (whilst also meeting other criteria of the Applicant, as set out in <b>ES Chapter 3: Alternatives and</b></p>

<p>potential sites in the Essex region. We are told that this is not necessary which defies any sense of community involvement or indeed for the Local Plan process, which has undergone full consultation and inspection prior to adoption.</p>	<p><b>Design Evolution [APP-035]</b>) within a reasonable distance of Bulls Lodge Substation (for which the Applicant has obtained a grid connection agreement).</p>
<p><b>Amenity and recreation</b></p>	
<p>Numerous footpaths and rights of way that are enjoyed by hundreds of people every year crisscross the site. This experience will be lost if the surrounding countryside is covered by solar panels and pathways are bounded by 1.8m high deer fencing. The pleasure of country walks will be totally lost. There are no proposals to mitigate this experience and to preserve the entitlement to walk rights of way and view the natural countryside.</p>	<p>The Applicant has assessed potential impacts on the landscape and visual amenity of users of the PROW network in <b>ES Chapter 10: Landscape and Visual Amenity [APP-042]</b>. Once screening and planting included as mitigation in the Scheme has matured, people walking on the Essex Way to the west or south of Fuller Street (VP45 and VP46) would experience minor adverse effects, which are not considered to be significant. The level of effect is reduced from year 1 because existing and proposed vegetation would be in leaf, filtering views of the PV Arrays such that the Scheme would be unobtrusive. People walking on the Essex Way on the south western corner of Sandy Wood would experience close range views of the Scheme, however this would be for a very short duration of the route such that the overall effect on people walking the Essex Way would remain minor adverse. People walking on PRoW 213_19 and PRoW 113_25 within the Order limits would experience major adverse effects because of close range views of the proposed PV Arrays in the immediate foreground. These effects are considered significant. People walking on the wider PRoW network beyond the Order limits boundary would not experience significant effects resulting from operation during year 15. Proposed fencing has been designed to minimise its visual prominence. The fence will be a deer fence or other wire mesh security fencing on timber poles approximately 2.5m in height. Fencing will be set back or screened from sensitive receptors. Further information on the landscape impacts of fencing is presented in <b>ES Chapter 10 Landscape and Visual Amenity [APP-042]</b>. In line with the information provided in <b>ES Chapter 13: Transport and Access [APP-045]</b>, the PRoW and permissive paths will be a minimum 1.5m wide for footpaths and 3.0m for bridleways, with at least 5m either side of the centreline of PRoW or permissive path that will remain undeveloped outside of the solar PV fence line. This will ensure a 10m wide passageway will be maintained on all routes.</p>
<p>This proposal contributes nothing new or beneficial to the local community.</p>	<p>The Applicant has committed to providing a Community Benefit Fund (CBF), and has also made multiple donations to the Essex community foundation prior to the start of examination. The applicant is keen to support the local community:</p> <ul style="list-style-type: none"> <li>- A local skills and employment plan will be prepared prior to the commencement of construction. This will set out measures that the Applicant will implement in order to advertise and promote employment opportunities associated with the Scheme in construction and operation locally.</li> <li>- The Applicant will also make a skills and education contribution. This will assist and encourage local people to access apprenticeships and training.</li> </ul>



	<p>- A community liaison group (CLG) will be established. This will enable local community representatives to have a formal channel for monitoring and influencing the construction and operational aspects of the Scheme.</p>
<p><b>BESS</b></p>	
<p>Concern over the safety of the BESS regarding fires and toxic fume leaks. With local wind directions variable from both southwest and northeast this puts Boreham and Terling in direct line of exposure. The siting of the battery storage and substation next to Toppinghoehall Wood is a poor site selection. Significant fire hazards such as battery storage adjacent to woodland are a possibility.</p>	<p>A plume assessment has been undertaken with respect to the BESS to assess the likelihood of a fire occurring, and the level of impact on receptors in the unlikely event a fire occurs. The assessment demonstrates that under day-to-day operation there is a low risk of an incident, and in the event of an incident the credible hazards are understood and have been evaluated to demonstrate that the risk to the local population would be very low. The Plume Assessment has been submitted as part of the Application as <b>ES Appendix 16B: BESS Plume Assessment [APP-103]</b>. The Applicant has prepared an <b>Outline Battery Safety Management Plan (BSMP) [APP-210]</b> which details design measures and controls for the BESS to minimise the risk of a fire and includes a framework for responding to an incident. The design of the BESS and its impacts are controlled in several ways. Prior to commencement of construction of the BESS, a Battery Safety Management Plan (in accordance with the <b>Outline Battery Safety Management Plan (BSMP) [APP-210]</b> submitted with the Application) is required to be submitted to the relevant local planning authority and approved, in consultation with the Health and Safety Executive, the Essex County Fire and Rescue Service and the Environment Agency. The Applicant must operate the BESS in accordance with the approved plan. Further, pursuant to a requirement of the DCO, the detailed design of the BESS must be in accordance with the <b>Outline Battery Safety Management Plan (BSMP) [APP-210]</b> (which includes safety requirements for the BESS design) and the <b>Design Principles [APP-206]</b>. The Outline Design Principles contain controls over the BESS, which include: 1) that the chemistry of the BESS will be lithium ion, and 2) that an assessment will be undertaken, based on the detailed design for the BESS, to demonstrate that the risk of fire and impacts from such a fire will be no worse than as assessed in the Plume Assessment submitted with the Application as Appendix 16B of the <b>ES Appendix 16B: BESS Plume Assessment [APP-103]</b>. In this way, the Applicant can confirm that if the BESS constructed is different to that assessed in the plume assessment, its impacts in the event of a fire would be no worse than those assessed in the plume assessment, and therefore the risk to the local population would be very low.</p>
<p><b>Bulls Lodge Substation Extension</b></p>	
<p>Strongly object strongly to the proposed connection into an enlarged Bulls Lodge Substation, which is not screened and will be clearly visible from the approach to Boreham from Chelmsford and from the long views east and west from north of the A12.</p>	<p>The Applicant considered building a new substation connecting directly into the 400kV lines within the site, but this was discounted at the optioneering stage due to significant environmental impacts. Further information is presented in <b>ES Chapter 3: Alternatives and Design Evolution [REF-]</b>. The existing Bulls Lodge Substation will have new screening planting along the east side of the compound, which will screen the existing and new substation from views further east. This is shown in the plans which accompany the <b>Outline Landscape and Ecology Management Plan (OLEMP) [APP-217]</b>.</p>

<p>There is no justification for the connection into the Bulls Lodge Substation unless it is about cost, which in itself is not an acceptable reason. This defies common sense. The main National Grid power lines run through the proposed site and it makes far more sense to connect within the site than to dig up more agricultural land and potentially damage historic trees to run cables unnecessary distances.</p>	
<p>Some of the land proposed is identified for possible gravel extraction and reinstated as Country Park. This proposal will sterilise this important resource and possibly compromise its reinstatement as a country park.</p>	<p>The Applicant has carried out a <b>Mineral Infrastructure Impact Assessment (MIIA) [APP-212]</b>. This concludes that the Scheme would not experience significant adverse effects as a result of the on-going operations at Bulls Lodge Quarry and that the quarry would not experience significant adverse effects as a result of the construction and operation of the Scheme. The <b>Planning Statement [APP-204]</b> sets out that the point of connection to the NETS at Bulls Lodge Substation is located adjacent to an existing consented sand and gravel quarry. The Applicant has carefully designed the Scheme, including careful siting of the Grid Connection Route, to avoid and minimise impact on the operation of the quarry. A small area of permanent land take from within the quarry will be required in order to construct the Bulls Lodge Substation Extension as part of the Scheme. This will result in the sterilisation of a small amount (c.18,000 m3) of consented mineral. The Applicant has prepared assessments to consider the impact of the Scheme on safeguarded and consented minerals and considers that the small amount of mineral sterilised would not impact the viability of the quarry or the supply of minerals to the local market. The Applicant has also considered prior extraction of the sterilised minerals and concluded that this would be unlikely to be viable or warranted given the very small volume affected. Furthermore, due to the small scale of sterilisation, it is suggested that there is no impact on the proposed development of a country park, after mineral extraction has occurred. Away from the Bulls Lodge Substation Extension, the Applicant has also considered the impact of the Scheme on safeguarded mineral and has concluded that no sterilisation of mineral within the Solar Farm Site or the Grid Connection Route would result, as no impediment to mineral extraction would remain after the Scheme has been decommissioned.</p>
<p><b>Climate</b></p>	
<p>The solar panels and batteries for the proposed solar farm are manufactured overseas and with emissions caused by production, transport and installations together with the sterilisation of farm land no justification of green benefits have been shown.</p>	<p>The Applicant has assessed the Scheme's impact on carbon dioxide and other greenhouse gases in <b>ES Chapter 6: Climate Change [APP-038]</b>. This concludes that the residual effect for greenhouse gas emissions is that the Scheme will have a major positive benefit.</p>
<p><b>Cultural heritage</b></p>	

<p>The development will involve cabling under the Waltham Road and through an area of special interest with trees of an historic interest.</p>	<p>Since the statutory consultation, the cable corridor has been selected and narrowed and will not pass through the orchard or boundary hedges to the west of Toppinghoehall Wood. Although the small, leafed lime pollard falls within the development area, it is sufficiently far away from the cable corridor as to be unaffected.</p>
<p>The decision to run cables between an enlarged Bulls Lodge Substation and the site will involve multiple landowners.</p>	<p>The Solar Farm Site is within the control of a single landowner as set out in the <b>Book of Reference [APP-016]</b> and explained in the <b>Statement of Reasons [APP-014]</b> and the Applicant has reached agreement with this landowner. The Applicant has obtained a grid connection agreement for a connection at Bulls Lodge Substation. The Applicant is in discussions in relation to additional land and rights required in relation to the Grid Connection Route, Bulls Lodge Substation Extension and land required for access to the Scheme, with a view to reaching agreement with relevant landowners. The Applicant seeks compulsory acquisition powers in the DCO in order that, should it not be able to reach agreement with landowners, this nationally significant infrastructure project may still be delivered in line with the proposed programme, in order to meet the urgent need for renewable energy in the UK. The approach taken is common amongst energy infrastructure schemes. The <b>Statement of Reasons [APP-014]</b> includes more detail in respect of the powers sought over land and the status of discussions with affected landowners.</p>
<p>Two listed buildings overlook the solar farm site. No provision is made within the documentation and we believe the setting of these listed building will be compromised by the proposal.</p>	<p>The potential for impact on built heritage has been rigorously assessed throughout the application process in line with the requirements of the National Policy Statement EN-1 and National Planning Policy Framework (NPPF) 2021. At the EIA scoping stage, the baseline conditions of the site were set out including a list of all listed buildings in close proximity to the site boundary. Prior to the impact assessments in the <b>Preliminary Environmental Impact Report (PEI Report) [APP-151]</b> and <b>ES Appendix 7A: Heritage Desk-Based Assessment [APP-057]</b> a baseline was produced which identified all designated built heritage assets within a 1km study area, the study area having been agreed following consultation with the Principal Historic Environment Consultant (PHEC) for Essex County Council (ECC), undertaken between 27th July 2020 and 28th July 2020. The applicant can confirm that in accordance with current planning policy and guidance, the significance of all built heritage assets within the study area and with the potential to receive impact as a result of the Scheme was assessed after desk-based research and site visits. The settings of the identified assets were assessed together with the contribution that setting makes to significance. Finally, the impact on all identified assets was assessed in the PEI Report and <b>ES Chapter 7: Cultural Heritage [APP-039]</b>.</p>
<p><b>Ecology</b></p>	
<p>The impact of this building programme and the running of it will seriously affect the woodland and the integrity of the delicate eco-system surrounding and supporting it.</p>	<p>Potential impacts to habitats including woodland are evaluated and included within <b>ES Chapter 8: Ecology [APP-040]</b>. A minimum 15m buffer zone is embedded into Scheme as per standard guidance for ancient woodland. In addition, extensive new tree/woodland planting is provided as part of the embedded design. Further information is provided in section 8.8 of the <b>Outline Landscape and Ecology Management Plan (OLEMP) [APP-217]</b>. The Applicant believes the Scheme will deliver</p>

	<p>significantly more in terms of biodiversity than standard practice in agricultural estate management. Biodiversity net gain (BNG) has been calculated using the Biodiversity Metric 3.0 and is reported in the DCO application through the <b>Biodiversity Net Gain Report [APP-200]</b>. An overall gain of approximately 79% of habitat units and 20% of hedgerow habitats is predicted. This is reflected in the <b>Outline Landscape and Ecology Management Plan (OLEMP) [APP-217]</b>, which includes new woodland, scrub, grassland and hedge habitats to buffer and enhance connectivity across the site. Due to the above BNG gain, the applicant believes that this development will improve the integrity of the local eco-system. Badger gates will be used in the fence design to allow passage of Badger and other mammals such as small deer, rabbits and hare. Large species of deer will be able to move through the Order limits along verges, hedges and tracks. See Section 8.8 of <b>ES Chapter 8: Ecology [APP-040]</b> and refer to the <b>OLEMP [APP-217]</b> for further details.</p>
<p>There seems to be nothing provided which is anything other than token gesture to mitigate the disturbance and destruction of the natural ecosystems and biodiversity, which has developed over hundreds of years. The proposals provide nothing more than any good farmer or landowner would do to protect and maintain their estate.</p>	<p>The Applicant believes the Scheme will deliver significantly more in terms of biodiversity than standard practice in agricultural estate management. Biodiversity net gain has been calculated using the Biodiversity Metric 3.0 and is reported in the DCO application through the <b>Biodiversity Net Gain Report [APP-200]</b>. An overall gain of approximately 79% of habitat units and 20% of hedgerow habitats is predicted. This is reflected in the <b>Outline Landscape and Ecology Management Plan (OLEMP) [APP-217]</b>, which includes new woodland, scrub, grassland and hedge habitats to buffer and enhance connectivity across the site.</p>
<p>To site the compound adjacent to Toppinghoehall Wood would be detrimental to the natural flora and fauna and ruin a local community amenity.</p>	<p>The site selected for the Longfield Substation and BESS was chosen due to the natural screening provided by Toppinghoehall Wood and Lost Wood. The mature trees therein provide excellent visual screening to the north, south and east. Additional planting will be implemented to screen the BESS and Longfield substation to the south west and will be allowed to mature to a substantial height. Phase 2 of the BESS is intended to be undertaken five years after the Scheme becomes operational, to allow sufficient time for screening implanted to the south east of the BESS to mature and provide sufficient screening – this will provide a “bridge” between Toppinghoehall and Lost Woods until planting has had sufficient time to mature to a point that it provides sufficient screening. Further information is presented in <b>ES Chapter 10: Landscape and Visual Amenity [APP-042]</b>.</p>
<p>Clause 180c in the NPPF states: ‘Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons.</p>	<p>Potential impacts to habitats including woodland are evaluated and included within <b>ES Chapter 8: Ecology [APP-040]</b>. Loss or deterioration of irreplaceable habitats such as ancient woodland is not expected as a result of the Scheme. A minimum 15m buffer zone is embedded into Scheme as per standard guidance for ancient woodland. In addition, extensive new tree/woodland planting is provided as part of the embedded design. Further information is provided in section 8.8 of the <b>Outline Landscape Environmental Management Plan [APP-217]</b>.</p>
<p><b>Glint and Glare</b></p>	
<p>Solar reflections may also impact wildlife in these woodlands.</p>	<p>Solar panels are designed to absorb as much light as possible and are coated with an anti-reflective film. There is no published evidence to suggest that solar reflection would impact wildlife in adjacent</p>

	woodland (Taylor et al, 2019). In addition, the solar panels are located at least 15m from woodlands, with the south facing orientation of the panels further reducing their visibility to wildlife using many of the retained woodland areas.
<b>Land use</b>	
The development is located on good quality agricultural land including best and most versatile (BMV) that has been successfully farmed for as long as local people can remember and is designated as such in the Local Plan. This land will be sterilised for decades by this proposal. This will impact the UK's ability to be more self-sufficient in food production.	The use of agricultural land for the Scheme is justified by the urgent need for renewable energy generation. The Scheme is urgently needed in order to generate renewable energy to contribute to meeting the Government's legally binding commitment for the country to reach net-zero by 2050, and to address the cause of climate change. This is set out further in the <b>Statement of Need [APP-203]</b> . Whilst the Scheme will result in best and most versatile agricultural land not being available for agricultural use over its lifetime, the non-intrusive and reversible nature of solar development means that there will be very little permanent loss of agricultural land. The soil will have undergone recovery through less intensive farming such as being left fallow, or sheep grazing and is expected to be the same or better quality as it is currently. Section 12.8 of <b>ES Chapter 12: Socio-economics and Land Use [APP-044]</b> concludes this is not significant in EIA terms.
<b>LVIA</b>	
We do not see any contributions to the local community that enhances the natural landscape, as it currently exists. Most of the proposals in the consultation documents are gestures to sweeten the bitter pill of having the landscape and easily accessible amenity taken away from the local community. The gesture of cycle routes and green corridors are designer and developer words that describes facilities that exists already.	The Landscape and Visual Impact Assessment in <b>ES Chapter 10: Landscape and Visual Amenity [APP-042]</b> establishes that, with the exception of major adverse effects experienced by people walking on PRoW 213_19 and PRoW 113_25 within the Order limits because of close range views of the proposed PV Arrays in the immediate foreground, no significant visual effects are expected once mitigation planting has established. Proposed planting is shown on <b>ES Figure 10-12: Outline Landscape Masterplan [APP-179]</b> . This figure was also included as an appendix to the OLEMP. The <b>Outline Landscape and Ecology Management Plan (OLEMP) [APP-217]</b> includes new woodland, scrub, grassland and hedge habitats to buffer and enhance connectivity across the site. In identifying the Solar Farm Site, the Applicant identified that it is remote from nearby villages and that the relatively flat landform and existing woodland and hedgerow limits views into the site. The new permissive paths embedded into the Scheme's design include a new north-south green route and east-west green links which improve access through the Solar Farm Site rather than replicating existing routes. More information can be found in <b>ES Chapter 10: Landscape and Visual Amenity [APP-042]</b> .
<b>Noise and vibration</b>	
The whole of the southernmost section of Toppinghoehall Wood will be enveloped in constant noise from the BESS to a level of 60db.	Impacts from noise from the Scheme are assessed in <b>ES Chapter 11: Noise and Vibration of the Environmental Statement [APP-043]</b> . No significant residual adverse effects due to construction/decommissioning or operational phase noise and vibration have been identified. Noise predictions at the southernmost section of Toppinghoehall Wood range from 55 dB LAeq,1h at the north boundary to 45 dB LAeq,1h at the south boundary (see <b>ES Figure 11-2 Noise Contour Plot - Operational Noise [APP-188]</b> ). Noise predictions were undertaken based on plant operating at full



	capacity to be representative of a worst-case scenario. In reality, plant will operate at lower capacity and the level of noise predicted is unlikely to be reached.
<b>Transport and access</b>	
The proposal for site access from Regiment Way via Wheelers Hill and Cranham Road, a narrow country lane where lorries struggle to pass each other and is impractical and unenforceable which leaves access from Boreham as being the default route to site.	The route from Essex Regiment Way via Wheelers Hill and Cranham Road provides the most direct route from higher order roads and will minimise disruption in the nearby villages of Boreham and Hatfield Peverel. Where necessary, Cranham Road and Wheelers Hill will be widened to allow vehicles to pass safely. More information regarding access can be found in <b>ES Chapter 13: Transport and Access [APP-045]</b> .
Extensive road widening is proposed to the Regiment Way route but this is ill considered as it requires further land acquisition that has found to be impossible when another recent planning application went to appeal. Other local developments have proved that traffic orders for deliveries and site operative are unenforceable.	No carriageway widening is proposed on Essex Regiment Way. It is proposed to carry out carriageway widening on Wheelers Hill, Cranham Road and Waltham Road, to accommodate larger vehicles / HGVs during the construction phase of the Scheme where necessary. These improvements are expected to mainly comprise relatively minor verge clearance or hedge cutting, to achieve a minimum carriageway width of 6.0m where possible, as reviewed and agreed with ECC Highways. There is only one location along the Wheelers Hill/ Cranham Road corridor where it will only be possible to widen the carriageway to 5.5m due to land ownership constraints which have been considered. All proposed widening is expected to be achievable within the existing highway boundary and the ability to acquire the necessary land to carry out the proposed widening is not expected to be an issue as the required land falls within both the highway boundary (ECC Highways' ownership) and the Order limits. <b>ES Appendix 13B: Framework Construction Traffic Management Plan [APP-094]</b> includes details of the agreed routing strategy for HGVs (again, as agreed with ECC Highways) and how this would be managed and enforced. Notwithstanding the above, the 'Land north of Cranham Road' planning application (Ref 16/01394/OUT), which was granted permission at appeal (Ref APP/W1525/W/17/317/6484), also proposed to implement carriageway widening improvements along Wheelers Hill and Cranham Road. The Inspector concluded that <i>"whilst Wheelers Hill and Cranham Road are narrow in places, should oncoming HGVs meet where the carriageway is or is perceived to be narrow the condition of the road/verges and the accident records indicate that they are able to pass safely. Given the acknowledged negligible increase in traffic generated by the mill, some of which would travel outside peak traffic times, I consider that this proposal would not have a severe impact on the safety and free flow of traffic on the highway network."</i>
Main Road (B1137) through Boreham gives access to Waltham Road, to the south of the site. According to the Application, both these roads are classified as Priority Road 2 (PR2) a county classification, but they could hardly be more different from each other.	HGVs will utilise the Strategic Road Network (SRN) to travel to/ from the Order limits, including the A12(T) to the south and north, as well as the A130 and A131 to the north. These larger vehicles would then follow the agreed routing strategy via Wheelers Hill, Cranham Road, and Waltham Road to access the Solar Farm Site. Therefore, HGVs would only use a short (circa. 125m) section of Waltham Road between the junction with Cranham Road and the proposed site access when travelling to/ from

<p>Main Road has an OS classification, Waltham Road has not. Main Road (a Roman road) is straight from end to end with excellent visibility, wide enough to carry HGVs, speed limit of 40 mph (soon to be 30mph) footpaths on both sides, pedestrian crossings, street lighting. Waltham Road is narrow, in places hazardous, winding, curtailed visibility, upper speed limit of 60 mph (dangerous), concealed entrances, no footpaths, no pedestrian crossings, no street lighting.</p>	<p>the Solar Farm Site. This will be supported by carriageway widening on Waltham Road (to 6.0m where necessary) and sufficient visibility splays will also be provided at the proposed site access based on recorded 85<sup>th</sup> percentile vehicle speeds of 45mph (i.e. speeds are much lower than 60mph). HGVs would therefore avoid the 3km section of Waltham Road between Main Road and the proposed site access. In addition, all HGVs would avoid Main Road and those travelling to/ from Bulls Lodge Substation would also avoid Waltham Road entirely. <b>ES Appendix 13B: Framework Construction Traffic Management Plan [APP-094]</b> includes details of the agreed routing strategy for HGVs (agreed with ECC Highways) and how this routing would be managed and enforced. Due to the rural nature of the site and lack of pedestrian provision in the surrounding area, the Scheme is not expected to attract any pedestrian movements.</p>
<p><b>Water Resources</b></p>	
<p>This proposal suggests that it is preferred to disturb existing ecosystems including local streams and water systems for a distance of approximately 2000 meters to access an existing substation only constructed in the past two years.</p>	<p>The grid connection cable to Bulls Lodge Substation will cross Boreham Brook using trenchless techniques, with the crossings requiring no direct works to the watercourse. As such, no significant effects have been identified to the morphology or quality of the watercourse related to these crossings. This approach also avoids impacts on sensitive habitats including Boreham Brook (a small stream), hedges and under a section of Boreham Pits Local Wildlife Site (grassland and scrub habitat). The send and receive pit excavations would be located at least 10m from the watercourse from where they would be directional drilled. The depth of drilling beneath the watercourse bed will be a minimum of 1.5m. A site-specific hydraulic fracture (frac-out) risk assessment will be produced prior to drilling the cable crossings, as is standard practice, to mitigate any water quality deterioration from the drilling process associated with 'break out' into the watercourse. There would also be a new drainage outfall to Boreham Brook to facilitate drainage of surface water runoff from the extended Bull's Lodge Substation. This outfall would be appropriately sited based on a hydro morphological survey to minimise any local impacts on river processes. A SuDS system has been proposed to treat runoff from the substation prior to discharge to the watercourse, as well as storage and containment measures for any spills on the substation site in order to mitigate any adverse water quality impacts. On completion of the cabling any habitats would be restored back to their former land-use.</p> <p>Given these various mitigation measures, no significant effects on the Boreham Brook watercourse have been identified related to the grid connection to the substation.</p>
<p><b>British Transport Police [RR-013]</b></p>	
<p>No objections to the planned application.</p>	<p>This is noted.</p>
<p><b>Campaign to Protect Rural England – Essex [RR-014]</b></p>	
<p>Alternatives and site selection</p>	

Smaller sites utilising 'brownfield' or low-grade agricultural land would be much more appropriate and acceptable.

The size of the scheme is proportionate to the size and urgency of the national need, which is substantial. There is also a need to make the most of the connection to the Grid - this is a limited resource. Estimates from National Grid, the National Infrastructure Commission and the Energy Systems Catapult of the capacities of new solar generation needed in order to meet Net Zero include 44 to 76GW of additional solar capacity by 2050, with approximately one quarter of this needed in the next ten years. In order to meet those projections (noting that, consistent with the NPSs, these capacities are not presented as a target, nor indeed a quota, and therefore could be gone further than) a very high proportion of (if not all) solar projects of any scale which come forward for consent will need to be approved. Falling short on solar development at any stage in the next decades will risk causing the UK falling behind on decarbonisation and will increase the magnitude of the task (and therefore the intolerable risk of failure) of meeting its 2050 legal commitments to achieve Net Zero. Please see Section 11.4 in the **Statement of Need [APP-203]** for further information. Figure 116 in this document also shows the results of an analysis which illustrates that development of one large solar scheme brings carbon savings and economic benefits versus developing combinations of smaller independent schemes, each combination matching to the same total installed generation capacity. The analysis assesses the relative costs and construction timeframes associated with the development of different sized independent solar schemes against the total cost and carbon benefit achievable through the development of one large solar scheme such as the proposed Scheme. Consideration of alternatives is presented in **ES Chapter 3: Alternatives and Design Evolution [APP-035]**. In summary, the vast majority of land within the area of search is of similar Agricultural Land Classification (ALC) to the Order limits. The Order limits comprises approximately: 60% Grade 3b, 22% Grade 3a, 12% Grade 2 and 6% non-agricultural or unknown. There are no alternative sites considered by the Applicant that are clearly of a lower non-BMV ALC grade than the Order limits (whilst also meeting other criteria of the Applicant, as set out in Chapter 3 of the ES) within a reasonable distance of Bulls Lodge Substation (for which the Applicant has obtained a grid connection agreement). The Applicant is committed to developing reliable sources of renewable energy, this includes developing both utility scale and rooftop solar developments. Rooftop generation is often the quickest and cheapest way to deploy renewable energy, however rooftop generation is rarely able to generate the total demand of the site it occupies. Typically, rooftop generation is capable of providing 15% of demand for the intensive industrial or commercial site on which it is deployed – leaving the remaining 85% of demand to be supplied by the national grid, and utility scale solar developments such as Longfield Solar Farm, which supply that grid. In summary, the applicant believes that all forms of deployment of Solar are required in order to generate renewable energy to contribute to meeting the Government's legally binding commitment for the country to reach net-zero by 2050, and to address the cause of climate change. For further details, please see the **Statement of Need [REF-]** submitted as part of the DCO application.



<p>There has been no evidence given that other sites have been considered, with this site being favoured by the convenience of having a single landowner - despite the scale of the project being totally inappropriate to the area.</p>	<p>The Applicant selected the Solar Farm Site following a process to identify land which is suitable from a technical, environmental and planning perspective, as set out in <b>ES Chapter 3: Alternatives and Design Evolution [APP-035]</b>. It references each of the matters identified by section 2.48 of draft National Policy Statement for Renewable Energy (EN-3) (Draft NPS EN-3) as factors influencing solar farm site selection by the Applicant. The size of the scheme is proportionate to the size and urgency of the national need, which is substantial. There is also a need to make the most of the connection to the Grid – this is a limited resource. Estimates from National Grid, the National Infrastructure Commission and the Energy Systems Catapult of the capacities of new solar generation needed in order to meet Net Zero include 44 to 76GW of additional solar capacity by 2050, with approximately one quarter of this needed in the next ten years. In order to meet those projections (noting that, consistent with the NPSs, these capacities are not presented as a target, nor indeed a quota, and therefore could be gone further than) a very high proportion of (if not all) solar projects of any scale which come forward for consent will need to be approved. Falling short on solar development at any stage in the next decades will risk causing the UK falling behind on decarbonisation and will increase the magnitude of the task (and therefore the intolerable risk of failure) of meeting its 2050 legal commitments to achieve Net Zero. Please see Section 11.4 in the <b>Statement of Need [APP-203]</b> for further information.</p>
<p><b>Amenity and recreation</b></p>	
<p>The proposals will fundamentally change the nature of the landscape for both residents and visitors who enjoy access to the open countryside for recreational purposes with its extensive network of public rights of way both within and adjacent to the site as well as the area's quiet lanes.</p>	<p>The Landscape and Visual Impact Assessment in <b>ES Chapter 10: Landscape and Visual Amenity [APP-042]</b> establishes that, with the exception of major adverse effects experienced by people walking on ProW 213_19 and ProW 113_25 within the Order limits because of close range views of the proposed PV Arrays in the immediate foreground, no significant visual effects are expected once mitigation planting has established. Proposed planting is shown on <b>ES Figure 10-12: Outline Landscape Masterplan [APP-179]</b> which is an appendix to the OLEMP. The <b>Outline Landscape and Ecology Management Plan (OLEMP) [APP-217]</b> includes new woodland, scrub, grassland and hedge habitats to buffer and enhance connectivity across the site. The new permissive paths embedded into the Scheme's design include a new north-south green route and east-west green links which improve access through the Solar Farm Site rather than replicating existing routes. More information can be found in <b>ES Chapter 10: Landscape and Visual Amenity [APP-042]</b>.</p>
<p><b>Construction</b></p>	
<p>The prolonged construction phase will generate a significant amount of construction traffic using the local (inadequate) road network. Within the whole site, temporary infrastructure - such as internal roads, construction and welfare compounds - together with noise from percussive groundworks will</p>	<p>A robust construction management plan will be implemented, with due consideration to be given to the management of construction traffic both in terms of the impact of vehicle movements upon the highway network but also in terms of the potential for noise and air pollution impact. The Applicant has set out details of its approach to managing impacts from construction in the <b>Outline Construction Environmental Management Plan (CEMP) [APP-214]</b> and <b>ES Appendix 13B: Framework Construction Traffic Management Plan [APP-094]</b>. The route from Essex Regiment Way via Wheelers Hill and Cranham Road provides the most direct route from higher order roads and will</p>

<p>seriously affect the amenity and tranquillity of the area.</p>	<p>minimise disruption in the nearby villages of Boreham and Hatfield Peverel. Where necessary, Cranham Road and Wheelers Hill will be widened to allow vehicles to pass safely. More information regarding access can be found in <b>ES Chapter 13: Transport and Access [APP-045]</b>. Impacts from noise during construction are assessed in <b>ES Chapter 11: Noise and Vibration of the Environmental Statement [APP-043]</b>. No significant residual adverse effects due to construction/decommissioning or operational phase noise and vibration have been identified.</p>
<p><b>Decommissioning</b></p>	
<p>It is highly likely that the PV panels will, one way or another, become redundant before the expiry of the 40-year lease term and quite possible that more efficient sources of electricity production will have been found, thereby rendering the panels obsolete.</p>	<p>It is a correct analysis that solar technology is still improving. This is why the applicant is seeking consent for a development based on design principles – so at the time of procurement the project is not forced to use technology from 3 years previous. The Applicant is therefore seeking development consent on the basis of <b>Design Principles [APP-206]</b> which will allow it to ensure appropriate and current technology is used.</p>
<p>There is huge uncertainty as to whether the site will ever be returned to agriculture or to a natural state.</p>	<p>Solar farms are temporary and typically have an operational lifespan of approximately 40 years. Once Longfield Solar Farm reaches the end of its lifespan, infrastructure on the Solar Farm Site will be removed and the Solar Farm Site returned to the landowner. Post-decommissioning, it is expected that the landowner would return the Solar Farm Site to arable use, although it is assumed that established habitats such as hedgerows and woodland would be retained. The DCO will require the decommissioning of the Scheme in accordance with a Decommissioning Environmental Management Plan (DEMP). A <b>Decommissioning Strategy [APP-216]</b> has been prepared as part of the DCO application. This provides the outline mitigation measures to be adhered to during decommissioning. The DCO includes a requirement to prepare and approve of the DEMP substantially in accordance with the Decommissioning Strategy, and for the approved DEMP to be implemented. There will be very little permanent loss of agricultural land. The soil will have undergone approximately 40 years of recovery through less intensive farming such as being left fallow, or sheep grazing and is therefore expected to be the same or better quality as it is currently. Section 12.8 of <b>ES Chapter 12: Socio-economics and Land Use [APP-044]</b> concludes this is not significant in EIA terms.</p>
<p>In addition, the cost of de-commissioning and re-cycling is likely to considerably outweigh the value of what is created, leaving an abandoned and derelict site.</p>	<p>The DCO will require that the Scheme is decommissioned after 40 years of operation, and that requirement will be enforceable through the Planning Act 2008 against the person with the benefit of the Order at that time. The DCO will also require the decommissioning of the Scheme in accordance with a Decommissioning Environmental Management Plan (DEMP). A <b>Decommissioning Strategy [APP-216]</b> has been prepared as part of the DCO application. This provides the outline mitigation measures to be adhered to during decommissioning. The DCO includes a requirement to prepare and approve of the DEMP substantially in accordance with the Framework DEMP, and for the approved DEMP to be implemented. That requirement is also enforceable via the Planning Act 2008. In light of</p>
<p>There is then a possibility that the site could be classified as 'brownfield' - which could lead to pressure to redevelop for another unsuitable use.</p>	

	<p>this, the Applicant does not consider there is a need for any additional measures to be put in place. In short, the land used for the Scheme will not be reclassified as brownfield.</p>
<p><b>Ecology</b></p>	
<p>The site is of significant biodiversity value with its range of habitats and important species identified in the surveys. Despite the proposed mitigation and enhancement measures, a solar farm on this scale will certainly damage traditional habitats through the concentrated development of industrial plant and infrastructure.</p>	<p>A biodiversity net gain report has been produced and biodiversity net gain has been calculated using the Biodiversity Metric 3.0. This is available as part of the DCO application as the <b>Biodiversity Net Gain Report [APP-200]</b>. An overall gain of approximately 79% of habitat units and 20% of hedgerow habitats is predicted. No adverse significant effects on ecology or biodiversity are predicted in <b>ES Chapter 8: Ecology [APP-040]</b>.</p>
<p>Security fencing surrounding large areas of land will remove traditional pathways for transitory animals and bird deaths are likely to be a common occurrence as large areas of glazing are mistaken for water.</p>	<p>Badger gates will be used in the fence design to allow passage of Badger and other mammals such as small deer, rabbits and hare. Large species of deer will be able to move through the Order limits along verges, hedges and tracks. See Section 8.8 of <b>ES Chapter 8: Ecology [APP-040]</b> and refer to the <b>Outline Landscape and Ecology Management Plan (OLEMP) [APP-217]</b> for further details. The potential for water birds to mistake solar panels for water has been investigated. No studies in the UK or Europe substantiate these claims (Taylor, R., Conway, J., Gabb, O. &amp; Gillespie, J. (2019) 'Potential ecological impacts of ground mounted photovoltaic solar panels' [Online] Accessed:8/7/22); and panels are designed to absorb as much light as possible and are coated with an anti-reflective film. As set out in <b>ES Chapter 8: Ecology [APP-040]</b> and evidenced by the results of breeding and wintering bird surveys, there are no significant numbers of water birds occurring within the Order limits, nor does the Scheme sit on a migratory route or flight path between wetland sites. Monitoring is proposed of the bird populations on the site in response to the Scheme and biodiversity enhancement provided and will add to the evidence base for future solar Schemes.</p>
<p>New woodland creation will take a considerable time to mature, so any of the stated visual/habitat benefits would take years to become established.</p>	<p>In order to maximise growth of new woodland creation prior to the Scheme's operation, this has been included as Advanced Mitigation Planting. This will be carried out in the 2021/2022 planting season. In instances where planting required to mitigate adverse effects on people's views could not be undertaken in 2021/2022, it would be undertaken at the beginning of the construction phase. This planting is referred to as Construction Day 1 Planting. All remaining planting, referred to as Residual Mitigation Planting, would be undertaken at the end of the construction phase. Please refer to <b>ES Chapter 10: Landscape and Visual Amenity [APP-042]</b>. This is recognised. Phase 2 of the BESS is intended to be undertaken five years after the Scheme becomes operational, to allow sufficient time for screening implanted to the south east of the BESS to mature and provide sufficient screening – this will provide a “bridge” between Toppinghoehall and Lost Woods until planting has had sufficient time to mature to a point that it provides sufficient screening. Further information is presented in <b>ES Chapter 10: Landscape and Visual Amenity [APP-042]</b>.</p>
<p><b>Human Health</b></p>	

<p>It is increasingly acknowledged that exposure to natural environment is of great benefit in terms of wellbeing and good mental health. The benefits of exercise for both physical and mental health are even more widely recognised.</p>	<p>This comment is noted. During construction and decommissioning, the Scheme would retain the existing opportunities to interact with the Site through temporary diversions to Public Rights of Way (PRoW). During operation, impacts on PRoW users and human health, including mental health, are assessed to be positive on the basis that the permissive paths would increase active travel and therefore opportunities for exercise.</p>
<p><b>LVIA</b></p>	
<p>The Scheme have a significant impact on the landscape and a visual impact on an attractive part of the Essex countryside. The scheme would result in the loss of some key characteristics, namely the agricultural character of the area and reduction in the sense of openness.</p>	<p>The Landscape and Visual Impact Assessment in <b>ES Chapter 10: Landscape and Visual Amenity [APP-042]</b> establishes that, with the exception of major adverse effects experienced by people walking on PRoW 213_19 and PRoW 113_25 within the Order limits because of close range views of the proposed PV Arrays in the immediate foreground, no significant visual effects are expected once mitigation planting has established. Proposed planting is shown on <b>ES Figure 10-12: Outline Landscape Masterplan [APP-179]</b>. The <b>Outline Landscape and Ecology Management Plan (OLEMP) [APP-217]</b>, includes new woodland, scrub, grassland and hedge habitats to buffer and enhance connectivity across the site.</p>
<p>The visual impact on the landscape will be very significant and is a major concern. Mitigation will have limited impact since trees and hedgerows that will be planted to reduce the adverse impacts will have little effect through the early years of the scheme.</p>	<p>In order to maximise growth of new woodland creation prior to the Scheme's operation, this has been included as Advanced Mitigation Planting. This will be carried out in the 2021/2022 planting season. In instances where planting required to mitigate adverse effects on people's views could not be undertaken in 2021/2022, it would be undertaken at the beginning of the construction phase. This planting is referred to as Construction Day 1 Planting. All remaining planting, referred to as Residual Mitigation Planting, would be undertaken at the end of the construction phase. Further information is presented in <b>ES Chapter 10: Landscape and Visual Amenity [APP-042]</b>. Phase 2 of the BESS is intended to be undertaken five years after the Scheme becomes operational, to allow sufficient time for screening implanted to the south east of the BESS to mature and provide sufficient screening – this will provide a “bridge” between Toppinghoehall and Lost Woods until planting has had sufficient time to mature to a point that it provides sufficient screening. Further information is presented in <b>ES Chapter 10: Landscape and Visual Amenity [APP-042]</b>.</p>
<p><b>Land use</b></p>	
<p>All the land affected is good quality agricultural land, the majority being Grade 2. National planning guidance indicates a strong presumption against solar farm development on the 'best and most versatile farmland' (classified as Grades 1,2 and 3A). Similarly, the BRE 'Planning Guidance for the Development of Large Scale Ground Mounted Solar PV Systems' also underlines the fact that national</p>	<p>The use of agricultural land for the Scheme is justified by the urgent need for renewable energy generation. The Scheme is urgently needed in order to generate renewable energy to contribute to meeting the Government's legally binding commitment for the country to reach net-zero by 2050, and to address the cause of climate change. This is set out further in the <b>Statement of Need [APP-203]</b>. Consideration of alternatives is presented in <b>ES Chapter 3: Alternatives and Design Evolution [APP-035]</b>. In summary, the vast majority of land within the area of search is of similar Agricultural Land Classification (ALC) to the Order limits. The Order limits comprises approximately: 60% Grade 3b, 22% Grade 3a, 12% Grade 2 and 6% non-agricultural or unknown. There are no alternative sites</p>

<p>planning policy would not support development on higher grade agricultural land and specifically states that 'the best quality land should be used for agricultural purposes.</p>	<p>considered by the Applicant that are clearly of a lower non-BMV ALC grade than the Order limits (whilst also meeting other criteria of the Applicant, as set out in Chapter 3 of the ES) within a reasonable distance of Bulls Lodge Substation (for which the Applicant has obtained a grid connection agreement). Whilst the Scheme will result in best and most versatile agricultural land not being available for agricultural use over its lifetime, the non-intrusive and reversible nature of solar development means that there will be very little permanent loss of agricultural land. The soil will have undergone recovery through less intensive farming such as being left fallow, or sheep grazing and is expected to be the same or better quality as it is currently. Section 12.8 of <b>ES Chapter 12: Socio-economics and Land Use [APP-044]</b> concludes this is not significant in EIA terms. Using the most conservative value from the range, and assuming that all future solar capacity deployment is large-scale rather than micro-scale (another conservative assumption) implies that a further 80,000 to 300,000 acres of land (approximately 32,000 to 120,000 hectares) would need to be set aside for solar capacity by 2050 in order to meet the FES scenarios. This represents at a maximum, 0.5% of total UK land area, or between 0.2% and 0.9% of UK pastures and non-irrigated arable land [Alasdair Rae. A Land Cover Atlas of the United Kingdom. 2017, Author analysis].</p>
<p>Current events in Ukraine have underlined the urgent need to become more self-sufficient with less reliance on imports of basic foodstuffs.</p>	
<p>Concerns over the potential impact on the quality of the soil. Large arrays of solar panels will change the way rainwater falls on the ground, air currents will change, and large areas will be permanently shaded from sunlight. It is unknown what impact these environmental changes will have on the ability of the soil to store carbon and could potentially be counter-productive in the stated objective to reverse climate change.</p>	<p>An <b>Outline Soils Resource Management Plan</b> is provided as an <b>Appendix</b> to the <b>Outline Construction Environmental Management Plan [APP-214]</b>. This sets out principles for how soils will be managed and protected during construction, operation and decommissioning of the Scheme. A detailed soils resource management plan will be prepared prior to the commencement of construction, prior to operation, and prior to decommissioning, as set out by the Requirements of the <b>Draft DCO [APP-011]</b>.</p>
<p><b>Need</b></p>	
<p>Government guidance has for many years has indicated greater support for offshore wind farms and repeatedly aimed to discourage solar farms on productive agricultural land. The Government's Energy Security Strategy (April 2022) concentrates on offshore wind and nuclear, with no targets set for solar power.</p>	<p>Section 8.4 in the <b>Statement of Need [APP-203]</b> explains that without the development of additional solar projects, other measures will be required to fill the gap which solar will fill, effectively making it much harder for the UK to achieve Net Zero. While offshore wind makes the largest contribution to decarbonisation in most forward electricity system scenarios, solar complements offshore wind deployment. The first conclusion is therefore that the bringing forward of solar schemes such as this Scheme should be continued and progressed with determined rigour and drive, to enable their timely delivery. Secondly, that the further identification of solar schemes and other low-carbon initiatives which complement offshore wind generation should be progressed with urgency to ensure the required trajectory in reducing carbon intensity can be achieved or bettered. Estimates from National Grid, the National Infrastructure Commission and the Energy Systems Catapult of the capacities of new solar generation needed in order to meet Net Zero include 44 to 76GW of additional solar capacity by 2050,</p>



	with approximately one quarter of this needed in the next ten years. Please see Section 11.4 in the <b>Statement of Need [APP-203]</b> for further information.
<b>Essex Area Ramblers [RR-033]</b>	
Transport and access	
The development should conform to the Draft Overarching National Policy Statement for Energy (EN-1). Existing PRoWs, or acceptable alternatives, should remain open at all times.	Appropriate measures to mitigate temporary impacts on users of Public Rights of Way (PRoW) during the construction and decommissioning phases have been proposed, as part of <b>ES Appendix 13C: Public Rights of Way Management Plan [APP-095]</b> . The temporary closures which are currently proposed for short periods (less than one day and, where appropriate, diversions will be supported by clear signs and where possible will be planned and programmed to minimise disruption to users. Further information on management of PRoW is given in <b>ES Chapter 13: Transport and Access [APP-045]</b> .
The ambience of these PRoWs will be negatively affected by the construction and operation of this site, and measures should be taken to keep this to a minimum. It is essential that sufficient width and mitigation measures are implemented along the ProWs to ensure that users do not feel hemmed in by the fences and CCTV systems.	In line with the information provided in <b>ES Chapter 13: Transport and Access [APP-045]</b> the PRoW and permissive paths will be a minimum 1.5m wide for footpaths and 3.0m for bridleways, with at least 5m either side of the centreline of PRoW or permissive path that will remain undeveloped outside of the solar PV fence line. This will ensure a 10m wide passageway will be maintained on all routes.
Measures to increase the safety of walkers, cyclists and horse riders using the access roads will be needed.	PRoW will be carefully managed during the construction phase and a separate PRoW Management Plan has also been prepared as <b>ES Appendix 13C: Public Rights of Way Management Plan [APP-095]</b> . The safety of walkers, cyclists and horse riders is also addressed through <b>ES Appendix 13B: Framework Construction Traffic Management Plan [APP-094]</b> . This includes measures to physically segregate existing PRoW from proposed construction routes, as well as having controlled crossing points (with gates and banksmen) to safely accommodate pedestrians and cyclists. No PRoW will be permanently closed or diverted as a result of the Scheme, and the minimum legal PRoW widths will continue to be met or bettered in all instances. In line with the information provided in <b>ES Chapter 13: Transport and Access [APP-045]</b> , the PRoW and permissive paths will be a minimum 1.5m wide for footpaths and 3.0m for bridleways, with at least 5m either side of the centreline of PRoW or permissive path that will remain undeveloped outside of the solar PV fence line. This will ensure a 10m wide passageway will be maintained on all routes.
<b>Essex Bridleways Association</b>	
Transport and access	

<p>The proposed project includes a north to south green route via a new permissive path. This permissive path appears to be for use by pedestrians only, unless I am mistaken. We believe the new path should not discriminate against other users, and should therefore be available for use by, inter alia, equestrians, and should therefore be designated as a Bridleway.</p>	<p>There are no designated bridleways that the permissive path could connect to and therefore the Applicant is not seeking its designation as a bridleway. The permissive paths will be designed for pedestrians and cyclists.</p>
<p>There are c.16 PROW's affected by this development, and there is an opportunity to upgrade the status of this extensive footpath network to allow equestrians to benefit from greater and safe off-road access to the countryside.</p>	<p><b>ES Appendix 13C: Public Rights of Way Management Plan [APP-095]</b> has been prepared in support of the DCO Application to outline how PROW will be managed to keep them safe and accessible for the local community throughout construction, operation and decommissioning. During the operational phase, a number of green routes/ permissive paths will be provided to improve pedestrian and cycle connectivity throughout the Solar Farm Site including with existing PROW. The Scheme will also retain the existing links with Essex Way and National Cycle Network (NCN) Route 50 to the north of the Order limits. A minimum width has been incorporated into the Scheme design for PROW, as well as the corridor in which they will be provided (i.e. in between Scheme infrastructure). At least 5m spacing will be provided either side of the centreline of the PROW to deliver a minimum 10m space. This will avoid the perception of being channelled into narrow passages between PV Panels. It should be noted that the Applicant will be leasing the land for the Solar Farm Site and will return the land to the landowner after the decommissioning of the Scheme and therefore permanent public rights of way would not therefore be possible due to the landowner's requirements, as the land would most likely be returned back to agricultural use. Therefore, any proposed permissive paths, would be limited to the lifetime of the Scheme. This was discussed and acknowledged during a PROW meeting with ECC Officers on 12th August 2021.</p>
<p><b>Essex Local Access Forum (ELAF) [RR-037]</b></p>	
<p>Decommissioning</p>	
<p>Monies to cover the decommissioning costs should be deposited in a safe account / as a bond as much can happen to companies in 40 years.</p>	<p>Solar farms are temporary and typically have an operational lifespan of approximately 40 years. Once Longfield Solar Farm reaches the end of its lifespan, infrastructure on the Solar Farm Site will be removed and the Solar Farm Site returned to the landowner. Post-decommissioning, it is expected that the landowner would return the Solar Farm Site to arable use, although it is assumed that established habitats such as hedgerows and woodland would be retained. The DCO will require the decommissioning of the Scheme in accordance with a Decommissioning Environmental Management Plan (DEMP). A <b>Decommissioning Strategy [APP-216]</b> has been prepared as part of the DCO Application. This provides the outline mitigation measures to be adhered to during decommissioning. The DCO includes a requirement to prepare and approve of the DEMP substantially in accordance</p>

	with the Decommissioning Strategy, and for the approved DEMP to be implemented. This planning requirement is a legal commitment and as such no other enforcement is considered to be required.
<b>Transport and access</b>	
The development should conform to NPPF paragraph 100 at all stages.	<p>NPPF Paragraph 100 states '<i>Planning policies and decisions should protect and enhance public rights of way and access, including taking opportunities to provide better facilities for users, for example by adding links to existing rights of way networks including National Trails</i>'.</p> <p><b>ES Appendix 13C: Public Rights of Way Management Plan [APP-095]</b> has been prepared to outline how PRoW will be managed to keep them safe and accessible for the local community throughout construction, operation and decommissioning. During the operational phase, a number of green routes/ permissive paths will be provided to improve pedestrian and cycle connectivity throughout the Solar Farm Site including with existing PRoW. The Scheme will also retain the existing links with Essex Way and National Cycle Network (NCN) Route 50 to the north of the Order limits. A minimum width has been incorporated into the Scheme design for PRoW, as well as the corridor in which they will be provided (between Scheme infrastructure). At least 5m spacing will be provided either side of the centreline of the PRoW to deliver a minimum 10m space. This will avoid the perception of being channelled into narrow passages between PV Panels. A PRoW meeting was held with ECC Highway and PRoW Officers on 12th August 2021 to review the proposals to ensure that these would not have an unacceptable impact on existing PRoW. In view of the above, it is considered that the Scheme conforms with paragraph 100 of the NPPF.</p>
The development should conform to the Overarching National Policy Statement for Energy EN-1 Draft consultation document September 2021, in particular to Paragraph 5.11.23	<p>PRoW will be carefully managed during the construction phase and a separate PRoW Management Plan has also been prepared as <b>ES Appendix 13C: Public Rights of Way Management Plan [APP-095]</b>. The safety of the safety of walkers, cyclists and horse riders is also addressed through <b>ES Appendix 13B: Framework Construction Traffic Management Plan [APP-094]</b>. This includes measures to physically segregate existing PRoW from proposed construction routes, as well as having controlled crossing points (with gates and banksmen) to safely accommodate pedestrians and cyclists. No PRoW will be permanently closed or diverted as a result of the Scheme, and the minimum legal PRoW widths will continue to be met or bettered in all instances. In line with the information provided in <b>ES Chapter 13: Transport and Access [APP-045]</b> the PRoW and permissive paths will be a minimum 1.5m wide for footpaths and 3.0m for bridleways, with at least 5m either side of the centreline of PRoW or permissive path that will remain undeveloped outside of the solar PV fence line. This will ensure a 10m wide passageway will be maintained on all routes. The Scheme complies with local and national planning policy as set out in the <b>Planning Statement [APP-204]</b>.</p>
Development Consent Order (DCO), Schedule 6, Part 2 details... "Public Rights of Way to be temporarily stopped up" BUT there is NO diversion. Stopping up with no alternative route is NOT	<p>These temporary PRoW closures will only be required for a very short duration (no longer than one day) in order to install the secondary collector cables across the Solar Farm Site. Given the very short duration and localised nature of these PRoW closures (expected to be a few hours for each section), the installation of these secondary collector cables is not expected to result in a material impact and</p>



<p>acceptable - a suitable and convenient alternative route must be provided.</p>	<p>will be locally managed as appropriate. Access will also be retained for the remainder of the PRoW network during the construction phase, with no other PRoW closures and a limited number of temporary PRoW diversions around the Grid Connection Route works area when this is installed as well as a couple of temporary PRoW diversions within the Solar Farm Site. The PRoW will be managed throughout the construction phase to ensure that they can continue to be used safely. The existing PRoW will be unaffected during operation. All PRoW will have a minimum 5m spacing (each way) between the centreline of the PRoW and any infrastructure such as solar PV fencing and located within a minimum 10m wide undeveloped passageway. PRoW will be carefully managed during the construction phase and a separate PRoW Management Plan has also been prepared as <b>ES Appendix 13C: Public Rights of Way Management Plan [APP-095]</b>.</p>
<p>There must be a safe route where PROWs &amp; the primary and secondary construction access tracks appear to be contiguous. Where the construction access tracks cross PROWs, the crossings must remain passable on foot and be well signed so that construction vehicle drivers are aware.</p>	<p>PRoWs will be carefully managed during the construction phase and a separate PRoW Management Plan has also been prepared as <b>ES Appendix 13C: Public Rights of Way Management Plan [APP-095]</b>. The safety of walkers, cyclists and horse riders is also addressed through <b>ES Appendix 13B: Framework Construction Traffic Management Plan [APP-094]</b>. This includes measures to physically segregate existing PRoW from proposed construction routes, as well as having controlled crossing points (with gates and banksmen) to safely accommodate pedestrians and cyclists. No PRoW will be permanently closed or diverted as a result of the Scheme, and the minimum legal PRoW widths will continue to be met or bettered in all instances.</p>
<p>The fencing around the solar panels must be set back from the PROWs – as per the 5-metre offset proposed in the 2021 consultation. The fencing and the proposed plant / warehouse building must be softened by planting.</p>	<p>In line with the information provided in <b>ES Chapter 13: Transport and Access [APP-045]</b>, the PRoW and permissive paths will be a minimum 1.5m wide for footpaths and 3.0m for bridleways, with at least 5m either side of the centreline of PRoW or permissive path that will remain undeveloped outside of the solar PV fence line. This will ensure a 10m wide passageway will be maintained on all routes. Where appropriate, screening of PRoW is proposed as set out in <b>ES Chapter 10: Landscape and Visual Amenity [APP-042]</b>.</p>
<p>The proposed north – south green route /greenway is welcome, but it should be a multi-user route available for ALL users' walkers, cyclists, runners, horse-riders and mobility impaired / wheelchair users. There should be no stiles or gates across the route. This route and the permissive paths should be a permanent addition to the network.</p>	<p>The Applicant is discussing matters relating to right of way and access more broadly with ECC and the position between the parties will be reflected in the SoCG between the Applicant and host authorities.</p>
<p>As Cranham Road &amp; Wheelers Hill are within the Order Limits, measures to increase the safety of walkers, cyclists, runners and horse-riders using these west-east roads should be part of the widening works.</p>	<p>Where necessary, Cranham Road and Wheelers Hill will be widened to allow vehicles to pass safely. These measures are expected to improve the safety of walkers, cyclists, runners and horse-riders by creating sufficient passing room for vehicles.</p>

<p>There is no longer any means of crossing the railway line and the A12 at south end of Boreham FP 21 [213_21]. A new PROW bridleway connection is requested west &amp; north-east, within the Order Limits of the cable route corridor; west with Boreham Bridleway 48 [213-48] and north-east to Boreham PROWs 20 &amp; 19 [213_20 &amp; 213_19].</p>	<p>A new pedestrian footbridge (Payne's Lane footbridge) will be provided over the A12(T) as part of the National Highways' A120 to A12 Widening Scheme. This will allow users to cross the railway line whilst also providing a connection with the existing PROW network to the north of the A12(T). During the operational phase, a number of green routes/ permissive paths will be provided to improve pedestrian and cycle connectivity throughout the Solar Farm Site including with existing PROW. The Scheme will also retain the existing links with Essex Way and National Cycle Network (NCN) Route 50 to the north of the Order limits. It should be noted that the Applicant will be leasing the land for the Solar Farm Site and will return the land to the landowner after the decommissioning of the Scheme and therefore permanent public rights of way would not be possible due to the landowner's requirements, as the land would most likely be returned back to agricultural use. Therefore, any proposed permissive paths, would be limited to the lifetime of the Scheme. This was discussed and acknowledged during a PROW meeting with ECC Officers on 12th August 2021.</p>
<p><b>Network Rail Infrastructure Limited [RR-001]</b></p>	
<p>Compulsory acquisition</p>	
<p>The Book of Reference (BoR) identifies plots 1/1A, 1/1B, 1/2A, 1/2B, 1/2D/1, 1/2E and 1/2F (Plots) as land with rights of access belonging to Network Rail in respect of which compulsory acquisition powers to acquire new rights or (in the case of plot 1/1B) temporary possession is sought. Network Rail objects to the inclusion of the Plots in the Order and to the acquisition of Compulsory Powers in respect of it. The Plots constitute land, over which Network Rail has rights of access for the purpose of its statutory undertaking and, accordingly, this representation is made under section 56 and sections 127 and 138 of the Planning Act 2008.</p>	<p>The Applicant will update on this matter in the Statement of Common Ground with Network Rail. As recorded in the Statement of Common Ground, protective provisions are being negotiated with Network Rail, which are intended to address Network Rail's concerns, and allow it to withdraw any objection to the inclusion of compulsory acquisition powers. The Applicant notes Network Rail's concerns and is in the process of negotiating protective provisions that would enable Network Rail to withdraw its objection. The Applicant proposes including draft protective provisions with Network Rail in the next version of the draft DCO submitted to the Examination. As set out in paragraph 9.3.4 of the Applicant's <b>Statement of Reasons [APP-014]</b>, the exercise of compulsory acquisition powers in the DCO is subject to the protective provisions. The Applicant therefore considers that the effect of the protective provisions mentioned above is to avoid the powers sought in the Order from having a serious detriment to Network Rail's undertaking and so, notwithstanding Network Rail's objection (if not withdrawn), the Secretary of State can be satisfied that the tests in section 127 of the Planning Act 2008 will be met.</p>
<p>Network Rail considers that there is no compelling case in the public interest for the acquisition of the Compulsory Powers and Network Rail considers that the Secretary of State, in applying section 127 of the Planning Act 2008, cannot conclude that new rights and restrictions over the land can be created without serious detriment to Network Rail's undertaking; no</p>	

<p>other land is available to Network Rail which means that the detriment can be made good by them.</p>	
<p>In order for Network Rail to be in a position to withdraw its objection Network Rail requires:          (a) agreements with the Applicant that regulate:          (i) the manner in which rights over the Plots and any other railway property are acquired and the relevant works are carried out including terms which protect Network Rail's statutory undertaking and agreement that compulsory acquisition powers will not be exercised in relation to such land; and          (ii) the carrying out of works in the vicinity of the operational railway network to safeguard Network Rail's statutory undertaking;          (b) the inclusion of protective provisions in the DCO for its benefit.</p>	
<p>Network Rail requests that the Examining Authority treat Network Rail as an Interested Party for the purposes of the Examination and objects to the inclusion of the Compulsory Powers and any other powers affecting Network Rail.</p>	
<p><b>Ramblers – Essex Area [RR-081]</b></p>	
<p>Transport and access</p>	
<p>Development Consent Order (DCO), Schedule 6, Part 2 details... “Public Rights of Way to be temporarily stopped up” BUT there is NO diversion. FC-T1, FC-T2, FC-T3, FC-T4, FC-T5, FC-T6, FC-T7 and FC-T8 are all stopped up for cable works. Stopping up with no alternative route is NOT acceptable as it disrupts the PROW network. A suitable and convenient alternative route must be provided during the cable works.</p>	<p>These temporary PRoW closures will only be required for a very short duration (no longer than one day) in order to install the secondary collector cables across the Solar Farm Site. Given the very short duration and localised nature of these PRoW closures (expected to be a few hours for each section), the installation of these secondary collector cables is not expected to result in a material impact and will be locally managed as appropriate. This is currently being discussed with ECC and the position and/or actions will be reflected in the Statement of Common Ground to be submitted at Deadline 1B.</p> <p>Access will also be retained for the remainder of the PRoW network during the construction phase, with no other PRoW closures and a limited number of temporary PRoW diversions around the Grid Connection Route works area when this is installed as well as a couple of temporary PRoW diversions within the Solar Farm Site. The PRoW will be managed throughout the construction phase to ensure that they can continue to be used safely. The existing PRoW will be unaffected during operation. All</p>

	<p>PRoW will have a minimum 5m spacing (each way) between the centreline of the PRoW and any infrastructure such as solar PV fencing and located within a minimum 10m wide undeveloped passageway. PROWs will be carefully managed during the construction phase and a separate PRoW Management Plan has also been prepared as <b>ES Appendix 13C: Public Rights of Way Management Plan [APP-095]</b>.</p>
<p>It is not clear how pedestrian/walker and vehicle interactions will be managed where PROWs &amp; the primary and secondary construction access tracks appear to be contiguous.</p>	<p>PRoW will be carefully managed during the construction phase and a separate PRoW Management Plan has also been prepared as <b>ES Appendix 13C: Public Rights of Way Management Plan [APP-095]</b>. The safety of walkers, cyclists and horse riders is also addressed through <b>ES Appendix 13B: Framework Construction Traffic Management Plan [APP-094]</b>. This includes measures to physically segregate existing PRoW from proposed construction routes, as well as having controlled crossing points (with gates and banksmen) to safely accommodate pedestrians and cyclists. No PRoW will be permanently closed or diverted as a result of the Scheme, and the minimum legal PRoW widths will continue to be met or bettered in all instances.</p>
<p>There must be a safe route for walkers. Similarly, where the construction access tracks cross PROWs, the crossings must be well signed so that construction vehicle drivers are aware and the PROW crossings must remain passable on foot.</p>	<p>PRoW will be carefully managed during the construction phase and a separate PRoW Management Plan has also been prepared as <b>ES Appendix 13C: Public Rights of Way Management Plan [APP-095]</b>. The safety of walkers, cyclists and horse riders is also addressed through <b>ES Appendix 13B: Framework Construction Traffic Management Plan [APP-094]</b>. This includes measures to physically segregate existing PRoW from proposed construction routes, as well as having controlled crossing points (with gates and banksmen) to safely accommodate pedestrians and cyclists. No PRoW will be permanently closed or diverted as a result of the Scheme, and the minimum legal PRoW widths will continue to be met or bettered in all instances.</p>
<p>The fencing around the solar panels must be set back from the PROWs – a 5 metre offset was proposed in the 2021 consultation. The fencing must be softened by planting but NO advanced planting is shown along several PROWs where it is proposed to site solar panels on both sides of the footpaths e.g. Terling FP 33 [113_33], Terling FP 25 [113_25], Terling FP 30 [113_30], Terling FP 32 [113_32]. The proposed permissive paths are not shown in the Advanced Planting Plan (ES 6.3 Figure 10-14).</p>	<p>In line with the information provided in <b>ES Chapter 13: Transport and Access [APP-045]</b> the PRoW and permissive paths will be a minimum 1.5m wide for footpaths and 3.0m for bridleways, with at least 5m either side of the centreline of PRoW or permissive path that will remain undeveloped outside of the solar PV fence line. This will ensure a 10m wide passageway will be maintained on all routes. Where appropriate, screening of PRoW is proposed as set out in <b>ES Chapter 10: Landscape and Visual Amenity [APP-042]</b>.</p>

**Table A-3: Interests affected by the Order as listed in the Book of Reference**

<b>Roberta Mary Rance [RR-083]</b>	
<b>Alternatives and site selection</b>	
There are other sites available in Essex with poorer land and better connections.	Consideration of alternatives is presented in <b>ES Chapter 3: Alternatives and Design Evolution [APP-035]</b> . In summary, the vast majority of land within the area of search is of similar Agricultural Land Classification (ALC) to the Order limits. The Order limits comprises approximately: 60% Grade 3b, 22% Grade 3a, 12% Grade 2 and 6% non-agricultural or unknown. There are no alternative sites considered by the Applicant that are clearly of a lower non-BMV ALC grade than the Order limits (whilst also meeting other criteria of the Applicant, as set out in Chapter 3 of the ES) within a reasonable distance of Bulls Lodge Substation (for which the Applicant has obtained a grid connection agreement).
In single ownership, the land presented an inviting target to the developer, but now multiple owners are involved as Longfield have altered the proposal to link, not via the National Grid powerlines that cross the site, but by underground cable to an existing sub-station approximately 2kms distance away. This undermines the only clear reason for the selection of the Longfield site above other more suitable sites with similar proximity to the National Grid.	The Solar Farm Site is broadly within the control of a single landowner as set out in the <b>Book of Reference [APP-016]</b> and explained in the <b>Statement of Reasons [APP-014]</b> . The Applicant has reached agreement with that landowner thereby minimising the use of compulsory acquisition powers. The Applicant has obtained a grid connection agreement for a connection at Bulls Lodge Substation. However, the Applicant is in discussions in relation to additional smaller areas of land and rights required in relation to the Grid Connection Route, Bulls Lodge Substation Extension and land required for access to the Scheme, with a view to reaching agreement with relevant landowners. The Applicant seeks compulsory acquisition powers in the DCO in order that, should it not be able to reach agreement with landowners, this nationally significant infrastructure project may still be delivered in line with the proposed programme, in order to meet the urgent need for renewable energy in the UK. The approach taken is common amongst energy infrastructure schemes. The <b>Statement of Reasons [APP-014]</b> includes more detail in respect of the powers sought over land and the status of discussions with affected landowners. In addition to the willing landowner, <b>ES Chapter 3: Alternatives and Design Evolution [APP-035]</b> sets out the consideration of alternative sites and reasons for the selection of this site. In summary, the vast majority of land within the area of search is of similar Agricultural Land Classification (ALC) to the Order limits. The Order limits comprises approximately: 60% Grade 3b, 22% Grade 3a, 12% Grade 2 and 6% non-agricultural or unknown. There are no alternative sites considered by the Applicant that are clearly of a lower non-BMV ALC grade than the Order limits (whilst also meeting other criteria of the Applicant, as set out in <b>ES Chapter 3: Alternatives and Design Evolution [APP-035]</b> ) within a reasonable distance of Bulls Lodge Substation (for which the Applicant has obtained a grid connection agreement).
<b>BESS</b>	
Toppinghoehall Wood is a poor location selection: Clause 180c in the NPPF states: 'Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be	There will be no loss or deterioration of any ancient woodland and ancient or veteran trees as a result of the Scheme. Toppinghoehall Wood Local Wildlife Site (LoWS) is located adjacent to the Scheme and buffered by at least 15 m based on government standing advice on ancient woodland protected zones. As such there will be no habitat loss or fragmentation of Toppinghoehall Wood and with the implementation of standard environmental protection measures, there will be no direct or indirect impacts to Toppinghoehall Wood during construction,

<p>refused, unless there are wholly exceptional reasons...'</p>	<p>operation and, or decommissioning. As described in <b>ES Chapter 8: Ecology [APP-040]</b>, no significant effects are predicted to this woodland or any other LoWS as a result of the Scheme.</p>
<p>The impact of this building programme and the running of it will seriously affect the woodland and the integrity of the delicate eco-system surrounding and supporting it.</p>	
<p>The whole of the southernmost section of Toppinghoehall Wood will be enveloped in constant noise from the BESS to a level of 60db</p>	<p>Impacts from noise from the Scheme are assessed in <b>ES Chapter 11: Noise and Vibration of the Environmental Statement [APP-043]</b>. No significant residual adverse effects due to construction/decommissioning or operational phase noise and vibration have been identified. Noise predictions at the southernmost section of Toppinghoehall Wood range from 55 dB LAeq,1h at the north boundary to 45 dB LAeq,1h at the south boundary (see <b>ES Figure 11-2 Noise Contour Plot - Operational Noise [APP-188]</b>). Noise predictions were undertaken based on plant operating at full capacity to be representative of a worst-case scenario. In reality, plant will operate at lower capacity and the level of noise predicted is unlikely to be reached.</p>
<p><b>Ecology</b></p>	
<p>The disturbance will mean all sections of these woodlands will be threatened. They lie at the heart of The Terling Special Landscape Area. In addition, some areas around the woodlands will be permanently lost.</p>	<p>There are ten woodland Local Wildlife Sites (LoWS) (including Toppinghoehall Wood LoWS), of varying degrees of significance in the immediate vicinity of the Scheme, and all are located adjacent to the Scheme and buffered by at least 15 m based on government standing advice on ancient woodland protected zones. As such there will be no habitat loss or fragmentation of these woodlands and with the implementation of standard environmental protection measures, there will be no direct or indirect impacts to these woodlands during construction, operation and, or decommissioning. As described in <b>ES Chapter 8: Ecology [APP-040]</b>, no significant effects are predicted to the woodlands (including LoWS) as a result of the Scheme. The only habitats surrounding the woodlands that will be lost are arable and species poor grassland fields of low ecological value. As stated in the <b>Outline Landscape and Ecology Management Plan (OLEMP) [APP-217]</b> there will be tree and scrub planting and, or natural succession will be allowed, eventually forming woodland around the existing woods. Additional hedgerow planting will increase the area of woodland, strengthen buffers and improve habitat linkages to other woodlands.</p>
<p><b>Glint and Glare</b></p>	
<p>Solar reflections may also impact wildlife in these woodlands.</p>	<p>Solar panels are designed to absorb as much light as possible and are coated with an anti-reflective film. There is no published evidence to suggest that solar reflection would impact wildlife in adjacent woodland (Taylor et al, 2019). In addition, the solar panels are located at least 15m from woodlands, with the south facing orientation of the panels further reducing their visibility to wildlife using many of the retained woodland areas.</p>
<p><b>LVIA</b></p>	
<p>Taken as a whole, the estate is an area of high agricultural worth, developed and nurtured for generations by the</p>	<p>The introduction of a solar farm on this land does not prevent sheep grazing, which itself is a form of food production (lamb meat). Retention of the land for arable food production would fail to deliver the renewable energy set out by the Government as being needed as part of the UK Net Zero aspirations. Draft NPS EN-3 [BEIS. Draft</p>



<p>same family. This is greenfield land at its best, adding significantly to the local amenity. The Order Limits in the Application cover 453ha while 275.26ha is given as the development area.</p>	<p>National Policy Statement for Renewable Energy Infrastructure (EN-3). 2021] includes an anticipated range of 2 to 4 acres for each MW of output generally required for a solar farm along with its associated infrastructure. Using the most conservative value from the range, and assuming that all future solar capacity deployment is large-scale rather than micro-scale (another conservative assumption) implies that a further 80,000 to 300,000 acres of land (approximately 32,000 to 120,000 hectares) would need to be set aside for solar capacity by 2050 in order to meet the FES scenarios. This represents at a maximum, 0.5% of total UK land area, or between 0.2% and 0.9% of UK pastures and non-irrigated arable land [Alasdair Rae. A Land Cover Atlas of the United Kingdom. 2017, Author analysis]. The Applicant considers that UK food security will not be adversely affected by proposals to increase the scale of onshore renewable energy in the UK.</p>
<p><b>Land use</b></p>	
<p>In the Agricultural Land and Soils Survey (Library APP-044 p38 at 12.6.40) Longfield claim that approximately 262ha of subgrade land (3b) makes up 58% of land within the Order limits, which suggests that 42% is BMV. It is admitted that even the lower grade land can grow a wide variety of crops. It should be used for food production rather than an industrial scale solar farm.</p>	<p><b>ES Appendix 12A: Soil Resources and Agricultural Land Quality of Land North East of Chelmsford [APP-092]</b> contains the site boundary and land data from December 2020. This data has now been superseded by the site boundary and land data at time of submission (<b>ES Figure 1-2: Order Limits [APP-105]</b> and <b>ES Chapter 12: Socio-economics and Land Use [APP-044]</b>). The ALC survey report was included to set the context of the wider ALC data, and show the work the applicant has taken to remove ALC land from within its site boundary. The applicant made efforts to reduce the land take of BMV land, and the final BMV land within the site boundary was 0% grade 1, 12% grade 2, 22% grade 3a. These figures are taken from <b>ES Chapter 12: Socio-economics and Land Use [APP-044]</b>. It is acknowledged that even agricultural land not classified as Best and Most Versatile can grow a variety of crops. The introduction of a solar farm on this land does not prevent sheep grazing, which itself is a form of food production (lamb meat). Retention of the land for arable food production would fail to deliver the renewable energy set out by the Government as being needed as part of the UK Net Zero aspirations or the substantial biodiversity net gains, as shown in the <b>Biodiversity Net Gain Report [APP-200]</b>, which demonstrates an overall gain of approximately 79% of habitat units and 20% of hedgerow habitats is predicted.</p>
<p><b>Noise and vibration</b></p>	
<p>It is acknowledged that noise will impact the Waltham Rd residents. This further supports the argument that the selected Longfield site is unsuitable.</p>	<p>Predicted operational noise levels consider a reasonable worst-case scenario with plant working under maximum load. This is only likely to be the case during sunny summer days and, typically, noise emissions will be lower than predicted. Noise emissions from the operational scheme for a reasonable worst-case scenario are predicted to Minor Adverse, which is not significant but can be defined as: noise can be heard and causes small changes in behaviour, attitude or other physiological response. In this case, all reasonable steps should be taken to mitigate and minimise adverse effects on health and quality of life while also taking into account sustainable development. This does not mean that such adverse effects cannot occur. Steps to minimise noise emissions have been taken by locating inverters away from sensitive receptors and through the use of barriers to screen receptors from inverter noise emissions.</p>
<p><b>Other</b></p>	
<p>I commenced plans to create a retirement hamlet here at Chantry Farm</p>	<p>Copies of detailed plans have been requested from this Affected Person and to date none have been provided. The applicant is keen to see these plans and work with this Affected Person to ensure any concerns regarding the</p>

<p>and have committed both time and money to it. I have detailed architect's plans, and following requests from Chelmsford CC Planning have delivered specialised reports. If Longfield gain their DCO and insist on using my land, I will lose a material asset.</p>	<p>Scheme can be resolved. The Scheme does not impact the Affected Person's land identified in the local Strategic Housing and Economic Land Availability Assessment (SHELAA). Where possible, the Applicant has and continues to make changes to mitigate impacts on landowners and resolve concerns through private treaty agreement. Where it is not possible to mitigate all impacts, private treaty agreements and the <b>dDCO [APP-011]</b> provide for compensation to be payable in accordance with the Compensation Code.</p>
<p>Heads of Terms have been revised and re-issued, but I still await plans. I have studied the Application and discovered for myself what disruption will be caused by the trenching and the picture is a great deal more drastic than the information I have been sent so far.</p>	<p>The Applicant engaged with the Affected Person in April 2021. In September 2021, the Applicant's agent, Gateley Hamer were advised to ensure all communications went through the Affected Person's appointed agent. Gateley Hamer issued Head of Terms to the agent on 20 December 2021 along with plans showing the proposed cable location and a request to meet on site to discuss the scheme. Between 20 December 2021 and 12 August 2022 Gateley Hamer has had numerous meetings with the Affected Person's appointed agent in relation to the proposed works and Heads of Terms, at these meetings Gateley Hamer has requested meetings with the Affected Person. New rights are to be acquired and restrictive covenants imposed on the Affected person's land for construction and maintenance of the high voltage electrical cables along the Grid Connection Route. No freehold acquisition is required, and the land will be able to be used as per its existing use following the installation of the cable.</p>
<p><b>Transport and access</b></p>	
<p>Two minor roads (Waltham and Cranham) lead to a network of narrow lanes threaded among fields where the site is proposed. During the construction period, given as two years, traffic on these minor roads will be heavy - a minimum of 100 HGV movements a day. Both roads will require significant improvement.</p>	<p>It is acknowledged that Cranham Road and Waltham Road are narrow in places and it therefore is proposed to carry out carriageway widening on Wheelers Hill, Cranham Road and the northern section of Waltham Road, to accommodate larger vehicles / HGVs during the construction phase of the Scheme where necessary. These improvements are expected to mainly comprise relatively minor verge clearance and hedge cutting works, to achieve a minimum carriageway width of 6.0m where possible as agreed with ECC Highways. All proposed widening is expected to be achievable within the existing highway boundary. <b>ES Appendix 13B: Framework Construction Traffic Management Plan [APP-094]</b> includes details of the agreed routing strategy for HGVs (again, as agreed with ECC Highways) and how this would be managed and enforced. In terms of additional traffic movements on Cranham Road and Waltham Road, there is expected to be a total of 50 daily HGVs (100 two-way movements) during the peak construction phase, equating to circa. 7-8 HGVs arriving to and departing from the Solar Farm Site per hour. HGVs would travel outside of the network and development peak hours and, at these levels, are not therefore expected to have any impact in terms of congestion or driver delay.</p>
<p>Transport and Access (Library APP-045) is very detailed, yet it is difficult to find much reference to Waltham Road. '...a mixture of residential, leisure, agriculture, commercial and industrial land uses' (ES Ch.13, 13.5.4) covers it, but the residential element is</p>	<p>As identified within the ES, the Scheme is not expected to have a material impact on Waltham Road (and the residents living on it) based on the expected increases in traffic levels during the peak construction phase with the proposed mitigation in place. For example, HGVs would travel to/ from the Solar Farm Site via Wheelers Hill, Cranham Road and a circa. 125m section of Waltham Road to the north of the proposed site access, in order to avoid the 3km section of Waltham Road to the south, as well as to avoid passing through Boreham. <b>ES Appendix 13B: Framework Construction Traffic Management Plan [APP-094]</b> includes details of the agreed routing strategy for HGVs (again, as agreed with ECC Highways) and how this would be managed and enforced.</p>



<p>the greatest. The 40-plus dwellings along both sides of the road are not mentioned. Elsewhere, Boreham is described as the nearest settlement at 500m south-west of the site. Waltham Road is not mentioned although it is part of the village.</p>	
<p>Main Road (B1137) through Boreham gives access to Waltham Road, to the south of the site. According to the Application, both these roads are classified as Priority Road 2 (PR2) a county classification, but they could hardly be more different from each other. Main Road has an OS classification, Waltham Road has not. Main Road (a Roman road) is straight from end to end with excellent visibility, wide enough to carry HGVs, speed limit of 40 mph (soon to be 30mph) footpaths on both sides, pedestrian crossings, street lighting. Waltham Road is narrow, in places hazardous, winding, curtailed visibility, upper speed limit of 60 mph (dangerous), concealed entrances, no footpaths, no pedestrian crossings, no street lighting. None of this is acknowledged in the Application.</p>	<p>HGVs will utilise the Strategic Road Network (SRN) to travel to/ from the Order limits, including the A12(T) to the south and north, as well as the A130 and A131 to the north. These larger vehicles would then follow the agreed routing strategy via Wheelers Hill, Cranham Road, and Waltham Road to access the Solar Farm Site. Therefore, HGVs would only use a short (circa. 125m) section of Waltham Road between the junction with Cranham Road and the proposed site access when travelling to/ from the Solar Farm Site. This will be supported by carriageway widening on Waltham Road (to 6.0m where necessary) and sufficient visibility splays will also be provided at the proposed site access based on recorded 85<sup>th</sup> percentile vehicle speeds of 45mph (i.e. speeds are much lower than 60mph). HGVs would therefore avoid the 3km section of Waltham Road between Main Road and the proposed site access. In addition, all HGVs would avoid Main Road and those travelling to/ from Bulls Lodge Substation would also avoid Waltham Road entirely. <b>ES Appendix 13B: Framework Construction Traffic Management Plan [APP-094]</b> includes details of the agreed routing strategy for HGVs (again, as agreed with ECC Highways) and how this would be managed and enforced. Due to the rural nature of the site and lack of pedestrian provision in the surrounding area, the Scheme is not expected to attract any pedestrian movements.</p>
<p>There will be significant impact on Main Road and Waltham Road on residents, cyclists, walkers and through traffic on this road and added rush hour delays.</p>	<p>The Scheme will not have a significant impact on Main Road and Waltham Road as identified within <b>ES Chapter 13: Transport and Access [APP-045]</b>. HGVs will utilise the Strategic Road Network (SRN) to travel to/ from the Order limits, including the A12(T) to the south and north, as well as the A130 and A131 to the north. These larger vehicles would then follow the agreed routing strategy via Wheelers Hill, Cranham Road, and Waltham Road to access the Solar Farm Site. Therefore, HGVs would only use a short (circa. 125m) section of Waltham Road between the junction with Cranham Road and the proposed site access when travelling to/ from the Solar Farm Site, and would avoid the 3km section of Waltham Road between Main Road and the proposed site access. In addition, all HGVs would avoid Main Road and those travelling to/ from Bulls Lodge Substation would also avoid Waltham Road entirely. <b>ES Appendix 13B: Framework Construction Traffic Management Plan [APP-094]</b></p>

	<p>includes details of the agreed routing strategy for HGVs (again, as agreed with ECC Highways) and how this would be managed and enforced. Further to the above, in terms of construction worker movements during the peak construction phase, there are only expected to be an additional 16 vehicle trips (equivalent to 11% daily construction worker vehicle arrivals/ departures) passing through the Main Road/ Waltham Road junction during each of the AM (08:00-09:00) and PM (17:00-18:00) network peak hours. This represents a circa. 1.2% increase in baseline traffic flows through this junction which is not considered to be significant. In addition, following discussions with ECC Highways there is expected to be a reduction in future baseline traffic flows (2025) on this part of the network following the completion of the Boreham Interchange improvements and the RDR, given that additional capacity will be available on the surrounding highway network. This in turn would reduce the sensitivity of Main Road and Waltham Road to increases in traffic as a result of the Scheme.</p>
<p>Terling Hall Road, on the eastern side of the project site, and where the adjacent land is in the same ownership as the project site, is unusable by HGVs owing to a low railway bridge, but could be utilised by the 500 workers who will work on the site during the construction period. This is not acknowledged and mentioned only for its limitation.</p>	<p>The limitations associated with Terling Hall Road are acknowledged and this route will be avoided as far as possible given that it is a Protected Lane. This is identified in both <b>ES Chapter 13: Transport and Access [APP-045]</b> and in <b>ES Appendix 13B: Framework Construction Traffic Management Plan [APP-094]</b> which supported the DCO Application. The proposed site access for the Solar Farm Site will be from Waltham Road (to the west of the site) and no vehicular access will be taken from Terling Hall Road to the east. HGVs will utilise the Strategic Road Network (SRN) to travel to/ from the Order limits, including the A12(T) to the south and north, as well as the A130 and A131 to the north. These larger vehicles would then follow the agreed routing strategy via Wheelers Hill, Cranham Road, and Waltham Road to access the Solar Farm Site. Therefore, no HGVs would use Terling Hall Road. Construction workers are also not expected to utilise Terling Hall Road as this would not form a logical route to access the site other than for those living within the village of Terling (given alternative, more direct routes exist). Construction workers are expected to use Waltham Road, either from the south via the A12(T) and the local highway network including Main Road, or from the north via the A130 and A131 and the local highway network including Wheelers Hill and Cranham Road.</p>
<p>I am concerned as to the impact upon the listed buildings, situated in close proximity to the roads which will suffer from the movements of HGVs. There will be significant harm to numerous listed buildings within and adjoining the application site, both to their settings and by development on their historic curtilages.</p>	<p>All impacts to designated and non-designated heritage assets within the study areas, including impacts from Site traffic, have been assessed in <b>ES Chapter 7: Cultural Heritage [APP-039]</b>. The effect on heritage assets is mainly not significant, with the exception being a moderate adverse, significant effect identified for Ringers Farmhouse during both construction and operation. This receptor is not near the road and the effect is due to changes to the rural setting and part of the view from the farmhouse to the Scheme rather than trip movements. The Harm Assessment (Appendix E of the <b>Planning Statement [APP-204]</b> discusses that the impact is not one of Substantial Harm. The effects on heritage assets are reversible following decommissioning of the Scheme at the end of its life.</p>
<p><b>Countryside Zest Beaulieu Park LLP [RR-029]</b></p>	
<p>Need</p>	

<p>CZ supports the principle of the Proposed Development which includes a solar farm co-located with battery storage, together with an extension to Bulls Lodge Substation and underground grid connection routes.</p>	<p>The Applicant welcomes Countryside Zest's in principle support for the Scheme. Engagement is ongoing with this landowner, the <b>Schedule of Negotiations and Powers Sought [APP-017]</b> sets out the status of negotiations and will be updated throughout Examination.</p>
<p><b>The Riley Family [RR-095]</b></p>	
<p>Alternatives and site selection</p>	
<p>The unprecedented size and industrial nature of the development is far too large and inappropriate for the location proposed. The motivation for this solar farm to be of this immense size and in this location is purely due to there being one willing land owner who owns all the land, not because it is the best location for a solar farm. The developer has confirmed that NO other sites were considered and that NO comparison with any other sites was made.</p>	<p>In addition to the willing landowner (detailed above), <b>ES Chapter 3: Alternatives and Design Evolution [APP-035]</b> sets out the consideration of alternative sites and reasons for the selection of this site. In summary, the vast majority of land within the area of search is of similar Agricultural Land Classification (ALC) to the Order limits. The Order limits comprises approximately: 60% Grade 3b, 22% Grade 3a, 12% Grade 2 and 6% non-agricultural or unknown. There are no alternative sites considered by the Applicant that are clearly of a lower non-BMV ALC grade than the Order limits (whilst also meeting other criteria of the Applicant, as set out in <b>ES Chapter 3: Alternatives and Design Evolution [APP-035]</b>) within a reasonable distance of Bulls Lodge Substation (for which the Applicant has obtained a grid connection agreement).</p>
<p>Other renewable energies such as nuclear are looking to develop modular units and place them in brownfield locations and industrial areas. Regeneration of existing brownfield and industrial sites should have had far more focus and discussion but this has been dismissed by the developer.</p>	<p>The Applicant is committed to developing reliable sources of renewable energy, this includes developing both utility scale and rooftop solar developments. Rooftop generation is often the quickest and cheapest way to deploy renewable energy, however rooftop generation is rarely able to generate the total demand of the site it occupies. Typically, rooftop generation is capable of providing 15% of demand for the intensive industrial or commercial site on which it is deployed – leaving the remaining 85% of demand to be supplied by the national grid, and utility scale solar developments such as Longfield Solar Farm, which supply that grid. In summary, the applicant believes that all forms of deployment of Solar are required in order to generate renewable energy to contribute to meeting the Government's legally binding commitment for the country to reach net-zero by 2050, and to address the cause of climate change. For further details, please see the <b>Statement of Need [REF-]</b> submitted as part of the DCO application.</p>
<p>Off shore wind farms are 3 times more efficient than solar farms and the construction/decommissioning (of which there is limited and vague information) of this huge solar farm will create large</p>	<p>The National Infrastructure Commission scenarios anticipate that 129 – 237GW of renewable capacity must be in operation by 2050, including 56 – 121GW of solar, 18 – 27GW of onshore wind, and 54 – 86GW of offshore wind. [40, p19]. Many forms of low-carbon generation will be required to meet the UK Climate objectives. A diverse mix of generation is required to minimise integration costs for those times when variable technologies are not generating electricity, but this does not mean that low-carbon generation developments should be curtailed to</p>

<p>green-house emissions. This solar farm proposal is therefore just a money-making vehicle for the land owner and the developer. If the developer was serious about helping to meet the Government's target for zero carbon electricity it would be investing in off shore wind farms and nuclear projects such as the modular nuclear units. The Energy Security Strategy concentrates on these areas of renewable energy, not solar and states that solar developments should be on previously developed or lower value land (not prime agricultural land) and encourages the use of roof-top solar panels.</p>	<p>promote diversity. Indeed, by increasing the installed capacity of diverse renewable generation technologies across a broad geography, intermittency impacts are lower than they would be from a single-source supply deployed across a tighter geography. Please refer to the <b>Statement of Need [APP-203]</b> for further information. The Applicant is committed to developing reliable sources of renewable energy, this includes developing both utility scale and rooftop solar developments. Rooftop generation is often the quickest and cheapest way to deploy renewable energy, however rooftop generation is rarely able to generate the total demand of the site it occupies. Typically, rooftop generation is capable of providing 15% of demand for the intensive industrial or commercial site on which it is deployed – leaving the remaining 85% of demand to be supplied by the national grid, and utility scale solar developments such as Longfield Solar Farm, which supply that grid. In summary, the applicant believes that all forms of deployment of Solar are required in order to generate renewable energy to contribute to meeting the Government's legally binding commitment for the country to reach net-zero by 2050, and to address the cause of climate change. For further details, please see the <b>Statement of Need [APP-203]</b> submitted as part of the DCO application.</p>
<p><b>BESS</b></p>	
<p>There are IMMENSE safety concerns regarding the enormous lithium battery storage unit and the potential for fire, explosion and emission of toxic gases. These concerns have not been addressed by the developer.</p>	<p>A plume assessment has been undertaken with respect to the BESS to assess the likelihood of a fire occurring, and the level of impact on receptors in the unlikely event a fire occurs. The assessment demonstrates that under day-to-day operation there is a low risk of an incident, and in the event of an incident the credible hazards are understood and have been evaluated to demonstrate that the risk to the local population would be very low. The Plume Assessment has been submitted as part of the Application as Appendix 16B of the Environmental Statement [REF-]. The Applicant has prepared an Outline <b>Battery Safety Management Plan (BSMP) that</b> details design measures and controls for the BESS to minimise the risk of a fire and includes a framework for responding to an incident. The design of the BESS and its impacts are controlled in several ways. Prior to commencement of construction of the BESS, a Battery Safety Management Plan (in accordance with the <b>Outline Battery Safety Management Plan (BSMP) [APP-210]</b> submitted with the Application) is required to be submitted to the relevant local planning authority and approved, in consultation with the Health and Safety Executive, the Essex County Fire and Rescue Service and the Environment Agency. The Applicant must operate the BESS in accordance with the approved plan. Further, pursuant to a requirement of the DCO, the detailed design of the BESS must be in accordance with the <b>Outline Battery Safety Management Plan (BSMP) [APP-210]</b> (which includes safety requirements for the BESS design) and the <b>Design Principles [APP-206]</b>. The Design Principles contain controls over the BESS, which include: 1) that the chemistry of the BESS will be lithium ion, and 2) that an assessment will be undertaken, based on the detailed design for the BESS, to demonstrate that the risk of fire and impacts from such a fire will be no worse than as assessed in <b>ES Appendix 16B: BESS Plume Assessment [APP-103]</b>. In this way, the Applicant can confirm that if the BESS constructed is different to that assessed in the plume assessment,</p>

	<p>its impacts in the event of a fire would be no worse than those assessed in the plume assessment, and therefore the risk to the local population would be very low.</p>
<p><b>Construction</b></p>	
<p>With reference to the construction of the solar farm, the roads surrounding the solar farm are rural roads and even with the vague, limited improvements proposed are totally unsuitable and dangerous for large construction vehicles and lorries, especially in the numbers that will be needed to build this solar farm. The enormous number of construction workers, 600 at the peak, highlights that this is a massive construction project totally inappropriate for the area and infrastructure. Initially the developer proposed working hours of 7am to 7pm, 6 days a week. They have now increased this to 7am to 7pm, 7 days a week. We feel this is to give them room to negotiate and achieve their aim of working 6 days a week. These working hours, 6 days a week are TOTALLY UNACCEPTABLE. Residents will be living right in the middle of a major construction site with substantial light, noise and dirt pollution. In reality we would be affected from 6am to 8pm and residents' mental health would be severely affected.</p>	<p>The <b>Outline Construction Environment Management Plan [APP-214]</b> and <b>ES Appendix 13B: Framework Construction Traffic Management Plan [APP-094]</b> restrict the hours of construction work. Construction working hours on the Solar Farm Site will run from 07:00 to 19:00 Monday to Saturday. Working days will generally be one 12-hour shift. Construction working hours on the Bulls Lodge Substation Extension will run from 07:00 to 19:00 Monday to Saturday, with the exception of overhead line works which will run from 07:00 to 19:00 Monday to Sunday. Where on-site works are to be conducted outside the core working hours, they will comply with the limits and controls detailed in the CEMPs, and any other restrictions agreed with the relevant planning authorities. An appropriate routing and access strategy has been identified which seeks to limit the usage of Protected Lanes and local roads through Boreham and Hatfield Peverel to the south. HGVs will be routed to/from the west via the A130, Wheelers Hill, and Cranham Road, with supporting highway improvements (carriageway widening) where necessary. There will be the potential to utilise the Radial Distributor Road following its completion prior to the construction phase. For further information, please see Sections 13.5 and 13.9 of <b>ES Chapter 13: Transport and Access [APP-045]</b>.</p>
<p><b>Ecology</b></p>	
<p>There is a general lack of information available relating to the effect on biodiversity and ecology of a solar farm of this massive scale over the period proposed. The developer has</p>	<p>The <b>Outline Landscape and Ecology Management Plan (OLEMP) [APP-217]</b> provides a framework for delivering the landscape strategy and the successful establishment and future management of proposed landscape works associated with the Scheme. A range of measures and practices will be implemented by the Applicant to establish, manage and monitor landscape and ecology mitigation and enhancement measures embedded in the design. The latter will achieve measurable biodiversity net gain using the method developed by Defra which will be</p>



<p>suggestion biodiversity net gains and positive ecological improvements that are unsubstantiated. This area should not be used as a learning tool for future solar farm developments. Once the solar farm has been built it will be too late, the damage will be irreversible.</p>	<p>achieved through habitat creation over and above that used for habitat mitigation. Monitoring the success of this is required to feedback into the management of the Scheme, as well as to help inform other solar schemes. Additional environmental gain will be achieved through the cessation of the application of pesticides and fertilizers across the Site and likewise for irrigation, all of which will be reflected in the water quality and hydrology of the River Ter and associated watercourses.</p>
<p><b>Land use</b></p>	
<p>A large proportion of the land earmarked for development is classified as Best and Most Versatile agricultural land. The UK should be looking to becoming more self-sufficient in the production of food and not use good quality agricultural land for industrial use. There are more suitable positions on lower grade agricultural land that have not even been considered. The developer confirmed that is much simpler and easier to deal with only one land owner. The developer's claims that only a third of the land is BMV is in contradiction to the original Agricultural Land Classification maps which state that the whole site consists of BMV land. All BMV land should be removed from the proposal and not retained just for the solar farm's operational convenience. This is not a viable reason to retain land of this quality in the development.</p>	<p>The site selection process is explained in <b>ES Chapter 3: Alternatives and Design Evolution [APP-035]</b>. An ALC survey was carried out and the findings are presented in <b>ES Appendix 12A: Soil Resources and Agricultural Land Quality of Land North East of Chelmsford [APP-092]</b> and is summarised in <b>ES Chapter 12: Socio-economics and Land Use [APP-044]</b>. The Order limits comprises approximately: 60% Grade 3b, 22% Grade 3a, 12% Grade 2 and 6% non-agricultural or unknown. There are no alternative sites considered by the Applicant that are clearly of a lower non-BMV ALC grade than the Order limits (whilst also meeting other criteria of the Applicant, as set out in <b>ES Chapter 3: Alternatives and Design Evolution [APP-035]</b>) within a reasonable distance of Bulls Lodge Substation (for which the Applicant has obtained a grid connection agreement). The Energy NPSs, draft Energy NPSs or the NPPF do not make reference to food supply in relation to the determination of applications for energy generation schemes. Further, NPS EN-1 and draft NPS EN-1 set out that energy is essential to our ability to produce and transport food, stating at paragraphs 3.2.1 and 2.3.1, respectively, that <i>'Energy underpins almost every aspect of our way of life. It enables us to heat and light our homes; to produce and transport food'</i>.</p> <p>Draft NPS EN-3 provides clarification and guidance on how policies relating to BMV agricultural land should be interpreted for solar NSIP schemes. It clarifies at paragraph 2.48.15 that the development of solar arrays on BMV agricultural land is not prohibited and that given the scale of NSIP solar projects, the use of some agricultural land is likely. At paragraph 2.48.13 it also sets out that <u>'land type should not be a predominating factor in determining the suitability of the site location'</u>.</p>
<p><b>LVIA</b></p>	
<p>The solar farm will have a wholly detrimental impact on the landscape, environment and substantial wildlife that relies on the land. The solar farm will completely destroy the visual aspect of</p>	<p>The <b>Outline Landscape and Ecology Management Plan (OLEMP) [APP-217]</b>, includes new woodland, scrub, grassland and hedge habitats to buffer and enhance connectivity across the Site. This results in the Scheme delivering a substantial biodiversity net gain. The Scheme has been designed, as far as possible, to avoid adverse effects on the landscape and views through option identification, appraisal, selection and refinement. This has included the sensitive siting of key elements, the inclusion of offsets and viewing corridors to protect people's views</p>



<p>the landscape and there are no possible mitigation proposals the developer has or could put forward that will improve this. A vast rural landscape will be replaced by industrial units and fencing on a huge scale, the character of the area will be lost forever. Where once residents lived within a rural setting they will be living in the middle of a huge industrial zone. Planting a new young hedgerow will not alter this.</p>	<p>and new planting, much of which is proposed to be delivered in advance of construction to maximise growth prior operation to provide effective visual mitigation.</p>
<p><b>Noise</b></p>	
<p>The solar farm will have a detrimental effect on the noise levels in the region. This is a rural area and it is well known that the components of a solar farm such as transformers, inverters etc. emit a level of noise and vibration that is significant. There is no possible mitigation to improve this.</p>	<p>The assessment of noise effects during the construction and operation of the proposed solar farm was undertaken with reference to national policy requirements and British Standards. The assessment methodology was discussed and agreed with the local planning authorities. The results of the noise assessment identified no significant residual effects. This does not mean that noise would be inaudible at all locations; however, noise would not be of sufficient level to result a material change in behaviour, attitude or physiological response. Matters relating to noise are being discussed with the host authorities and the position recorded in the Statement of Common Ground to be submitted at Deadline 1B.</p>
<p><b>Socioeconomics</b></p>	
<p>This programme of working hours is to entice travelling labour, not local workers. The workers will have to have experience of similar projects and be sourced nationwide. The developer's claim that it will create jobs for local people is a sop to try and push through planning approval.</p>	<p>Chapter 12: Socio economics and Land Use of the ES [Ref. EN010118/APP/6.1] explains that a Local Skills and Employment Plan will be developed following consent prior to construction, and agreed with the host councils. The purpose of this is to promote employment and training opportunities associated with the Scheme. It is recognised that some roles will need specialist skills that will not be available locally. The Applicant estimates that 45% of the employment will be sourced within a 60-minute travel area, which means 55% will be coming from outside the region. A Skills and Education contribution would be made available for utilisation to further enhance the beneficial effect arising from employment opportunities.</p>

## Appendix B – Responses to Relevant Representations by Topic

**Table B-1 Alternatives and site selection**

Matter	Summary of points raised	PINS' reference	Applicant's response
Grid connection	The connection to the grid is in the wrong place in Boreham and should be made elsewhere.	RR-04, RR-33	The Applicant has received a grid connection offer from National Grid Electricity System Operator Limited (NGESO) to connect the Scheme to the NETS. The Applicant considered building a new substation connecting directly into the 400kV lines within the site, but this was discounted at the optioneering stage due to significant environmental impacts. Further information is presented in <b>ES Chapter 3: Alternatives and Design Evolution [APP-035]</b> . The Applicant believes that connecting into Bulls Lodge substation is the best solution, due to the nature of the existing development being immediately adjacent to the proposed development.
Alternative sites	The Applicant has not considered using lower grade agricultural land elsewhere in Essex appropriately.	RR-07, RR-12, RR-15, RR-17, RR-27, RR-35, RR-38, RR-41, RR-47, RR-48, RR-59, RR-61, RR-63, RR-64, RR-67, RR-74, RR-77, RR-20, RR-39, RR-50	The use of agricultural land for the Scheme is justified by the urgent need for renewable energy generation. The Scheme is urgently needed in order to generate renewable energy to contribute to meeting the Government's legally binding commitment for the country to reach net-zero by 2050, and to address the cause of climate change. This is set out further in the <b>Statement of Need [APP-203]</b> . Consideration of alternatives is presented in <b>ES Chapter 3: Alternatives and Design Evolution [APP-035]</b> . In summary, the vast majority of land within the area of search is of similar Agricultural Land Classification (ALC) to the Order limits. The Order limits comprises approximately: 60% Grade 3b, 22% Grade 3a, 12% Grade 2 and 6% non-agricultural or unknown. There are no alternative sites considered by the Applicant that are clearly of a lower non-BMV ALC grade than the Order limits (whilst also meeting other criteria of the Applicant, as set out in Chapter 3 of the ES) within a reasonable distance of Bulls Lodge Substation (for which the Applicant has obtained a grid connection agreement).

<p>Site selection</p>	<p>Solar energy generation should be located on other types of land, such as residential/industrial rooftops/offshore/motorways.</p>	<p>RR-07, RR-08, RR-11, RR-12, RR-16, RR-18, RR-22, RR-26, RR-38, RR-44, RR-46, RR-47, RR-48, RR-49, RR-52, RR-55, RR-57, RR-59, RR-60, RR-61, RR-62, RR-68, RR-69, RR-76, RR-77, RR-20</p>	<p>Consideration of alternatives is presented in <b>ES Chapter 3: Alternatives and Design Evolution [APP-035]</b>. In summary, the vast majority of land within the area of search is of similar Agricultural Land Classification (ALC) to the Order limits. The Order limits comprises approximately: 60% Grade 3b, 22% Grade 3a, 12% Grade 2 and 6% non-agricultural or unknown. There are no alternative sites considered by the Applicant that are clearly of a lower non-BMV ALC grade than the Order limits (whilst also meeting other criteria of the Applicant, as set out in Chapter 3 of the ES) within a reasonable distance of Bulls Lodge Substation (for which the Applicant has obtained a grid connection agreement). The Applicant is committed to developing reliable sources of renewable energy, this includes developing both utility scale and rooftop solar developments. Rooftop generation is often the quickest and cheapest way to deploy renewable energy, however rooftop generation is rarely able to generate the total demand of the site it occupies. Typically, rooftop generation is capable of providing 15% of demand for the intensive industrial or commercial site on which it is deployed – leaving the remaining 85% of demand to be supplied by the national grid, and utility scale solar developments such as Longfield Solar Farm, which supply that grid. In summary, the applicant believes that all forms of deployment of Solar are required in order to generate renewable energy to contribute to meeting the Government's legally binding commitment for the country to reach net-zero by 2050, and to address the cause of climate change. For further details, please see the <b>Statement of Need [APP-203]</b> submitted as part of the DCO application.</p>
<p>Site selection</p>	<p>The scheme should be located on lower grade agricultural land.</p>	<p>RR-09, RR-12, RR-25, RR-30, RR-38, RR-41, RR-42, RR-44, RR-47, RR-48, RR-49, RR-53, RR-59, RR-61, RR-67, RR-74, RR-75, RR-39, RR-50</p>	<p>The use of agricultural land for the Scheme is justified by the urgent need for renewable energy generation. The Scheme is urgently needed in order to generate renewable energy to contribute to meeting the Government's legally binding commitment for the country to reach net-zero by 2050, and to address the cause of climate change. This is set out further in the <b>Statement of Need [APP-203]</b>. Consideration of alternatives is presented in <b>ES Chapter 3: Alternatives and Design Evolution [APP-035]</b>. In summary, the vast majority of land within the area of search is of similar Agricultural Land Classification (ALC) to the Order limits. The Order limits comprises approximately: 60% Grade 3b, 22% Grade 3a, 12% Grade 2 and 6% non-agricultural or unknown. There are no alternative sites considered by the Applicant that are clearly of a lower non-BMV ALC grade than the Order limits (whilst also meeting other criteria of the Applicant, as set out in Chapter 3 of the ES) within a reasonable distance of Bulls Lodge Substation (for which the Applicant has obtained a grid connection agreement). Whilst the Scheme will result in best and most versatile agricultural land not being available for agricultural use over its lifetime, the non-intrusive and reversible nature of solar</p>

			development means that there will be very little permanent loss of agricultural land. The soil will have undergone recovery through less intensive farming such as being left fallow, or sheep grazing and is expected to be the same or better quality as it is currently. Section 12.8 of <b>ES Chapter 12: Socio-economics and Land Use [APP-044]</b> concludes this is not significant in EIA terms.
Site selection	It is an area that is subject to large developments already (Chelmsford Garden Village).	RR-18, RR-29, RR-38, RR-57, RR-65	The Applicant has engaged with the developers of the Chelmsford Garden Community as set out in Table 8-1 of the <b>Consultation Report [APP-018]</b> . Discussions are ongoing with the host authorities in terms of cumulative impacts, with details to be captured in the Statement of Common Ground between the parties. Specifically in relation to cumulative impacts with the new transport infrastructure to support the Chelmsford Garden Community, including the Chelmsford North East Bypass, these are considered in section 13.11 of <b>ES Chapter 13: Transport and Access [APP-045]</b> . In summary, no cumulative impacts upon the highway network are envisaged based on the assessment in the ES. The cumulative effects are therefore expected to remain negligible.
Site selection	A brownfield site would be more suitable.	RR-18, RR-19, RR-22, RR-38, RR-42, RR-48, RR-53, RR-55, RR-59, RR-61, RR-62, RR-63, RR-68, RR-76, RR-77, RR-20	The use of agricultural land for the Scheme is justified by the urgent need for renewable energy generation. The Scheme is urgently needed in order to generate renewable energy to contribute to meeting the Government's legally binding commitment for the country to reach net-zero by 2050, and to address the cause of climate change. This is set out further in the <b>Statement of Need [APP-203]</b> . Consideration of alternatives is presented in <b>ES Chapter 3: Alternatives and Design Evolution [APP-035]</b> . In summary, the vast majority of land within the area of search is of similar Agricultural Land Classification (ALC) to the Order limits. The Order limits comprises approximately: 60% Grade 3b, 22% Grade 3a, 12% Grade 2 and 6% non-agricultural or unknown. There are no alternative sites considered by the Applicant that are clearly of a lower non-BMV ALC grade than the Order limits (whilst also meeting other criteria of the Applicant, as set out in Chapter 3 of the ES) within a reasonable distance of Bulls Lodge Substation (for which the Applicant has obtained a grid connection agreement).
Site selection	The Applicant initially claimed the site had been selected due to the presence of a single willing landowner, but land from more than one landowner is required for the Scheme.	RR-48, RR-53, RR-61, RR-64, RR-67, RR-76	The Solar Farm Site is within the control of a single landowner as set out in the <b>Book of Reference [APP-016]</b> and explained in the <b>Statement of Reasons [APP-014]</b> – this represents the vast majority of the land making up the Order limits over which the Applicant has reach an agreement with the landowner. The Applicant is in discussions in relation to additional much smaller areas of land and rights required in relation to the Grid Connection Route, Bulls Lodge Substation Extension and the land required for access to the Scheme, with a view to reaching agreement with relevant landowners. The Applicant seeks compulsory acquisition

			powers in the DCO in order that, should it not be able to reach agreement with landowners, this nationally significant infrastructure project may still be delivered in line with the proposed programme, in order to meet the urgent need for renewable energy in the UK. The approach taken is common amongst energy infrastructure schemes. The <b>Statement of Reasons [APP-014]</b> includes more detail in respect of the powers sought over land and the status of discussions with affected landowners.
Site selection	The Scheme is proposed in an area where the conditions for generating solar energy are not optimal.	RR-59	Essex represents a good location within the UK to construct a solar farm. This is because it benefits from high levels of solar irradiance compared to other parts of the UK and is characterised by a generally low lying and flat topography, which increases the likelihood of being able to identify a suitable site that is capable of producing a large amount of electricity. Essex is in the South East of England, in close proximity to London, which means it is near to high demand centres for electricity. The location of electricity generation infrastructure close to areas of high demand helps to minimise losses associated with the transfer of electricity over long distances. The Applicant therefore sought a suitable generation site and point of connection to the electricity network in this area.
Site selection	A proposal of this nature should not proceed until the Government has set out a policy on the siting of solar farms that is genuinely sustainable.	RR-62	The Scheme complies with local and national planning policy as set out in the <b>Planning Statement [APP-204]</b> .

**Table B-2 Amenity and recreation**

Matter	Summary of points raised	PINS' reference	Applicant's response
Permissive paths	The Applicant should ensure that permissive paths should be of sufficient quality and have appropriate supporting facilities, such as cycle racks in village centres, to encourage family use.	RR-33	The Applicant is discussing matters with ECC and an update will be included within the Statement of Common Ground between the Applicant and host authorities.
Recreation	There has been no serious assessment of recreation impacts.	RR-59	The Applicant respectfully disagrees with this statement. Impacts on recreation have been assessed in the Environmental Statement. Chapter 12 Socio-economics and Land Use assesses effects on Public Rights of Way (PRoW) and their users, which are considered to represent the current recreational opportunity at the Site as the rest of it is in agricultural use. The assessment concluded that

			<p>during construction and decommissioning there would be negligible effects on user journeys, and the recreational use of routes, owing to the provision of temporary diversions wherever diversions or closures are required that would add minimal lengths to journeys. During operation, effects on users of PRoW were assessed to be minor beneficial, arising from the provision of new permissive routes. This provision can be considered to expand recreational opportunities when compared to existing provision due to the network of routes being extended. <b>ES Chapter 15: Human Health [APP-047]</b> also assessed impacts of the Scheme on accessibility and active travel. This concluded that there was the potential for negative impacts on users of PRoW during construction and decommissioning arising from potential changes in amenity. These would be temporary in nature and experienced only in proximity to the Scheme works when travelling along the routes. <b>ES Appendix 13C: Public Rights of Way Management Plan [APP-095]</b> proposes measures to mitigate and manage these impacts. During operation, impacts on human health, including mental health, are assessed to be positive on the basis that the permissive paths would increase active travel and therefore recreation opportunities.</p>
Community benefit	There are no new benefits for the local community from the Scheme. The green corridors proposed already exist.	RR-19, RR-61	Refer to Table B-13 for details of the ecological benefits of the Project. Furthermore, the Planning Statement provides an overview of the wider benefits and overall planning balance.
Learning facility	Previous plans for the site included an education space to provide a facility for children to learn about the project. This has been removed.	RR-34	The Applicant has not proposed a formal educational facility at any stage and does not consider this to be within the scope of the Scheme.
Learning facility	Having an outside learning provision to learn about the Longfield development, the biodiversity and the environment but also that break out space would be useful	RR-34	The Applicant is open to hosting school trips once the Scheme is operational.
Community benefit	There needs to be investment in schools and support for future generations of students with their sensory needs.	RR-33	The Applicant is discussing the scope of the skills fund with the host authorities. The detail will be secured through a legal agreement that will be submitted into the examination before the close of the examination.



**Table B-3 BESS**

Matter	Summary of points raised	PINS' reference	Applicant's response
BESS	The BESS may become permanent.	RR-07	The DCO will require the decommissioning of the Scheme, including the BESS, in accordance with a Decommissioning Environmental Management Plan (DEMP). A <b>Decommissioning Strategy [APP-216]</b> has been prepared as part of the DCO Application. This provides the outline mitigation measures to be adhered to during decommissioning. The DCO includes a requirement to prepare and approve of the DEMP substantially in accordance with the Decommissioning Strategy, and for the approved DEMP to be implemented.
BESS	The BESS is unsafe due to the risk of fire and associated toxic fumes and ground contamination.	RR-03, RR-07, RR-10, RR-11, RR-12, RR-17, RR-23, RR-25, RR-26, RR-34, RR-35, RR-37, RR-38, RR-42, RR-44, RR-45, RR-46, RR-47, RR-48, RR-49, RR-52, RR-53, RR-57, RR-58, RR-59, RR-60, RR-61, RR-62, RR-63, RR-64, RR-67, RR-68, RR-69, RR-75, RR-77, RR-20, RR-39, RR-50	A plume assessment ( <b>ES Appendix 16B: BESS Plume Assessment [APP-103]</b> ) has been undertaken with respect to the BESS to assess the likelihood of a fire occurring, and the level of impact on receptors in the unlikely event a fire occurs. The assessment demonstrates that under day-to-day operation there is a low risk of an incident, and in the event of an incident the credible hazards are understood and have been evaluated to demonstrate that the risk to the local population would be very low. The Applicant has prepared an <b>Outline Battery Safety Management Plan (BSMP) [APP-210]</b> which details design measures and controls for the BESS to minimise the risk of a fire and includes a framework for responding to an incident. The design of the BESS and its impacts are controlled in several ways. Prior to commencement of construction of the BESS, a Battery Safety Management Plan (in accordance with the <b>Outline Battery Safety Management Plan (BSMP) [APP-210]</b> submitted with the Application) is required to be submitted to the relevant local planning authority and approved, in consultation with the Health and Safety Executive, the Essex County Fire and Rescue Service and the Environment Agency. The Applicant must operate the BESS in accordance with the approved plan. Pursuant to a requirement of the DCO, the detailed design of the BESS must be in accordance with the <b>Outline Battery Safety Management Plan (BSMP) [APP-210]</b> (which includes safety requirements for the BESS design) and the <b>Design Principles [APP-206]</b> . The Design Principles contain controls over the BESS, which include: 1) that the chemistry of the BESS will be lithium ion, and 2) that an assessment will be undertaken, based on the detailed design for the BESS, to demonstrate that the risk of fire and impacts from such a fire will be no worse than as assessed in the plume assessment submitted with the Application as <b>ES Appendix 16B: BESS Plume Assessment [APP-103]</b> . <b>ES Appendix 9C; Longfield Solar Farm SuDS Strategy [APP-079]</b> discusses firewater runoff and prevention of contamination of the ground. To enable any contaminants to be extracted from the system it is

			proposed that the BESS drainage network will have the ability to be bunged and a penstock to be implemented at the downstream extremity of the system to isolate the network. The penstock will then enable potential contaminated suppression waters to be isolated and stored within a sub-surface attenuation tank prior to extraction in order to be suitably tested and disposed of offsite without entering the surrounding hydrological network. In this way, the Applicant can confirm that if the BESS constructed is different to that assessed in the plume assessment, its impacts in the event of a fire would be no worse than those assessed in the plume assessment, and therefore the risk to the local population would be very low.
BESS	The fire safety plan included for the BESS is inadequate - further risk assessments must be undertaken.	RR-07, RR-11, RR-12, RR-17, RR-23, RR-25, RR-35, RR-42, RR-44, RR-46, RR-48, RR-52, RR-53, RR-59, RR-67, RR-68, RR-77, RR-20, RR-39, RR-50, RR-37, RR-42, RR-44, RR-46, RR-47, RR-52, RR-53, RR-59, RR-63, RR-20	The Applicant's <b>Outline Battery Safety Management Plan (BSMP) [APP-210]</b> has been developed by competent safety professionals in consultation with the Health and Safety Executive, the Essex County Fire and Rescue Service and the Environment Agency and is robust. Please see the <b>ES Appendix 1C: Statement of Competence [APP-053]</b> . In addition, prior to commencement of construction of the BESS, a Battery Safety Management Plan (in accordance with the <b>Outline Battery Safety Management Plan (BSMP) [APP-210]</b> submitted with the Application) is required to be submitted to the relevant local planning authority and approved, in consultation with the Health and Safety Executive, the Essex County Fire and Rescue Service and the Environment Agency. The Applicant must operate the BESS in accordance with the approved plan.
BESS	The BESS is too large.	RR-12, RR-48, RR-67, RR-69, RR-39, RR-50	The BESS included with the Scheme is important to maximising its benefits. There is a clear, direct relationship between the solar generation station and the electricity storage which means that there are substantial benefits to their colocation which will result in an improved contribution to low carbon UK electricity supplies when compared to either coming forward independent of the other. The colocation of those assets enables additional operational capabilities to be accessed for system benefit. Colocation is especially beneficial for National Grid where connections are to the transmission, rather than to the distribution network, because the combined asset is required to meet certain planning, notification and service obligations. Further information of the benefits of collocating the BESS with solar generation is set out in section 12.5 of the <b>Statement of Need [APP-203]</b> .
BESS	BESS is a new and untested technology	RR-59	Battery energy storage is a well-established technology within the UK. According to renewableUK's EnergyPulse Energy Storage report (2022), the UK currently has 1.6GW of operational battery storage project capacity.

BESS	Large amounts of water would be required to put fire out - no assurance that there is currently enough water storage.	RR-59, RR-68, RR-20	Through consultation with Essex County Fire and Rescue it was requested that fire water be available on site to enable firefighting / cooling by means of monitor jet @ rate of 1800l/min for 1h. As set out in the Battery Safety Management Plan ( <b>Outline Battery Safety Management Plan (BSMP) [APP-210]</b> Section 4.2, and secured in the <b>Design Principles [APP-206]</b> , the BESS layout includes four 110,000 litre tanks to ensure a supply is immediately available for one hour and to have a minimum of four hours of firefighting water.
BESS	The BESS is too close to Toppinghoehall Wood.	RR-36, RR-41, RR-61	Following the non-statutory consultation, the Applicant confirmed the proposed location of the BESS at the site close to Toppinghoehall Wood. This considered the potential to minimise and mitigate impacts from the BESS. The BESS and Longfield Substation have been sited to benefit from good screening from existing mature vegetation. The Applicant has also assessed impacts on landscape and visual impact, heritage and ecology from the BESS in <b>ES Chapter 7: Cultural Heritage [APP-039]</b> , <b>Chapter 8: Ecology [APP-040]</b> and <b>Chapter 10: Landscape and Visual Amenity [APP-042]</b> .
BESS	The BESS is too close to residential areas.	RR-42, RR-68, RR-77, RR-20	Within the Order limits the selection of the location of the BESS has been based on a number of factors. The most pertinent factor being the Scheme has been designed to minimise nuisance through maximising the distance between the Scheme and adjacent properties so far as possible. This has the benefit of reducing the visual and noise impact but also minimises any potential impacts on the local population should an event occur. The location of the proposed BESS is around 500m from any properties.

**Table B-4 Bulls Lodge Substation Extension**

Matter	Summary of points raised	PINS' reference	Applicant's response
Location	Grid connection infrastructure should be located on the solar farm site.	RR-36	The Applicant considered building a new substation connecting directly into the 400kV lines within the site, but this was discounted at the optioneering stage due to significant environmental impacts. Further information is presented in <b>ES Chapter 3: Alternatives and Design Evolution [APP-035]</b> .

**Table B-5 Climate change**

Matter	Summary of points raised	PINS reference	Applicant's response
Carbon	The scheme will have a large carbon footprint and a negative climate impact.	RR-07, RR-12, RR-17, RR-30, RR-35, RR-48, RR-56, RR-69,	The Applicant has assessed impacts on climate change through <b>ES Chapter 6: Climate Change [APP-038]</b> . The chapter sets out the direct carbon impact from the construction, operation and decommissioning of the scheme, and also its indirect impacts in terms of reduced emissions relative to the electricity generated

		RR-75, RR-20, RR-59, RR-60, RR-20	by a fossil-fuelled installation. It is estimated that the Scheme will lead to a saving of 4.4 million tonnes of CO <sub>2</sub> e over the Scheme lifetime compared to a gas fired CCGT generating facility.
Carbon	The Scheme will increase carbon use through the need to import food.	RR-09, RR-11, RR-13, RR-17, RR-27, RR-52, RR-53, RR-56, RR-67, RR-20,	The Applicant has assessed impacts on climate change through <b>ES Chapter 6: Climate Change [APP-038]</b> . This sets out that the Scheme will lead to a saving of 4.4 million tonnes of CO <sub>2</sub> e over the Scheme lifetime compared to a gas fired CCGT generating facility. Draft NPS EN-3 [BEIS. Draft National Policy Statement for Renewable Energy Infrastructure (EN-3). 2021] includes an anticipated range of 2 to 4 acres for each MW of output generally required for a solar farm along with its associated infrastructure. Using the most conservative value from the range, and assuming that all future solar capacity deployment is large-scale rather than micro-scale (another conservative assumption) implies that a further 80,000 to 300,000 acres of land (approximately 32,000 to 120,000 hectares) would need to be set aside for solar capacity by 2050 in order to meet the FES scenarios. This represents at a maximum, 0.5% of total UK land area, or between 0.2% and 0.9% of UK pastures and non-irrigated arable land [Alasdair Rae. A Land Cover Atlas of the United Kingdom. 2017, Author analysis]. The Applicant considers that UK food security will not be adversely affected by proposals.
Carbon	The importation of solar panels from China will increase the Scheme's carbon footprint.	RR-38, RR-52, RR-53, RR-59, RR-61, RR-20	The Applicant has assessed impacts on climate change through <b>ES Chapter 6: Climate Change [APP-038]</b> . This chapter included an assessment of emissions from transportation of components and materials to the DCO site from their countries of origin. Emissions resulting from the importation of solar panels by sea and land is estimated to contribute 7,654 tonnes CO <sub>2</sub> e, or 1.2% of the total lifetime emissions of the Scheme.
Carbon	The Applicant's sustainability claims are overstated.	RR-38, RR-62,	The application documents provide estimates of the Scheme's carbon impacts across all phases from land use change, embodied carbon in materials, transport of materials, operations and decommissioning. The carbon assessment was carried out on the basis of the best available information in terms of activity data from the proposed development, and the most reliable emissions factors for different materials and activities. Some emissions factors are more robust than others, but this is acknowledged in the application. It is anticipated that emissions data relating to the supply of electrical components will improve in quality over time, and that these emissions will fall as the carbon efficiency of the supply chain improves. <b>ES Chapter 6: Climate Change [APP-038]</b> sets out the direct carbon impact from the construction, operation and decommissioning of the scheme, and also its indirect impacts in terms of reduced emissions relative to the electricity generated by a fossil-fuelled installation. It is estimated that the Scheme will lead to a saving of 4.4 million tonnes of CO <sub>2</sub> e over the Scheme lifetime compared to a

			gas fired CCGT generating facility. For further information, please see <b>ES Chapter 6: Climate Change [APP-038]</b> .
Carbon	Solar farms are not carbon-neutral.	RR-44, RR-46, RR-47, RR-49, RR-52, RR-67, RR-71, RR-39, RR-50	The Applicant has assessed impacts on climate change through <b>ES Chapter 6: Climate Change [APP-038]</b> . The chapter assesses both the direct carbon impacts over the lifetime of the scheme but also the indirect impacts in terms of reduced carbon emissions from the operation of the scheme relative to the operation a fossil-fuelled installation generating the same electrical output. It is estimated that the net lifetime impact of the scheme is a saving of 4.4 million tonnes of CO <sub>2</sub> e over the Scheme lifetime compared to a gas fired CCGT generating facility.
Carbon	Farming techniques mean that the land can, at the same time, be used for carbon sequestration by improving the carbon content of the soil.	RR-62	The vast majority of the Order limits will be available for return to agriculture after decommissioning, and the soil resource will have benefitted from a recovery of soil organic matter. An element of agriculture may also be retained over the life of the Solar Farm Site, with low density grazing an option being considered for the management of some of the habitats to be created on the Order limits. Further information is set out in <b>ES Chapter 12: Socio-economics and Land Use [APP-044]</b> . An Outline Soil Resource Management Plan is provided as an Appendix to the <b>Outline Construction Environmental Management Plan [APP-214]</b> . This sets out principles for how soils will be managed and protected during construction, operation and decommissioning of the Scheme. A detailed soil resource management plan will be prepared prior to the commencement of construction, prior to operation, and prior to decommissioning, as set out by the Requirements of the <b>Draft DCO [APP-011]</b> .

**Table B-6 Compulsory acquisition**

Matter	Summary of points raised	PINS reference	Applicant's response
Compulsory acquisition	The potential use of compulsory purchase is threatening and disrespectful to farmers and landowners.	RR-67, RR-39	It is very much the Applicant's intention to reach voluntary agreements with all landowners. The Applicant seeks compulsory acquisition powers in the DCO in order that, should it not be able to reach agreement with landowners, this nationally significant infrastructure project may still be delivered in line with the proposed programme, in order to meet the urgent need for renewable energy in the UK. The approach taken is common amongst energy infrastructure schemes. The <b>Statement of Reasons [APP-014]</b> includes more detail in respect of the powers sought over the Order land. As shown in the Schedule of Negotiations and Powers Sought, the Applicant has taken pro-active steps to engage with persons affected by compulsory acquisition powers and negotiations are ongoing to secure the rights needed by agreement.

**Table B-7 Construction**

Matter	Summary of points raised	PINS reference	Applicant's response
Working practices	Will there be a construction camp and the hours of work conditioned as Monday-Friday 0730-1700, Saturday 0730-1300, No work on Sunday?	RR-07	All works will be undertaken within the Order limits. The <b>Outline Construction Environmental Management Plan [APP-214]</b> and <b>ES Appendix 13B: Framework Construction Traffic Management Plan [APP-094]</b> restrict the hours of construction work. Construction working hours on the Solar Farm Site will run from 07:00 to 19:00 Monday to Saturday. Working days will generally be one 12-hour shift. Construction working hours on the Bulls Lodge Substation Extension will run from 07:00 to 19:00 Monday to Saturday with the exception of overhead line works which will run from 07:00 to 19:00 Monday to Sunday. Where on-site works are to be conducted outside the core working hours, they will comply with the limits and controls detailed in the CEMPs, and any other restrictions agreed with the relevant planning authorities.
Traffic	Concern about heavy construction traffic in the local area.	RR-09, RR-10, RR-11, RR-22, RR-23, RR-34, RR-44, RR-47, RR-61, RR-67, RR-68, RR-70, RR-77, RR-20, RR-33, RR-39,	A robust construction management plan will be implemented, with due consideration to be given to the management of construction traffic both in terms of the impact of vehicle movements upon the highway network but also in terms of the potential for noise and air pollution impact. The Applicant has set out details of its approach to managing impacts from construction in the <b>Outline Construction Environmental Management Plan [APP-214]</b> and <b>ES Appendix 13B: Framework Construction Traffic Management Plan [APP-094]</b> . The route from Essex Regiment Way via Wheelers Hill and Cranham Road provides the most direct route from higher order roads and will minimise disruption in the nearby villages of Boreham and Hatfield Peverel. Where necessary, Cranham Road and Wheelers Hill will be widened to allow vehicles to pass safely. More information regarding access can be found in <b>ES Chapter 13: Transport and Access [APP-045]</b> .
Amenity	There will be a significant impact on local communities and infrastructure during the construction phase.	RR-12, RR-17, RR-24, RR-67, RR-68, RR-73, RR-75, RR-77	A robust construction management plan will be implemented, with due consideration to be given to the management of construction traffic both in terms of the impact of vehicle movements upon the highway network but also in terms of the potential for noise and air pollution impact. The Applicant has set out details of its approach to managing impacts from construction in the <b>Outline Construction Environmental Management Plan [APP-214]</b> and <b>ES Appendix 13B: Framework Construction Traffic Management Plan [APP-094]</b> .



			The route from Essex Regiment Way via Wheelers Hill and Cranham Road provides the most direct route from higher order roads and will minimise disruption in the nearby villages of Boreham and Hatfield Peverel. Where necessary, Cranham Road and Wheeler's Hill will be widened to allow vehicles to pass safely. More information regarding access can be found in <b>ES Chapter 13: Transport and Access [APP-045]</b> .
Ecology	Construction will impact negatively on ecosystems.	RR-23	The Applicant has prepared environmental management plans setting out how impacts from the Scheme on the environment will be managed and mitigated during the construction, operation and decommissioning of the Scheme. The Applicant has set out details of its approach to managing impacts from construction in the <b>Outline Construction Environmental Management Plan [APP-214]</b> and <b>ES Appendix 13B: Framework Construction Traffic Management Plan [APP-094]</b> included in the DCO application.
Cabling	Construction of cable route near Waltham Road should be managed so that there is no impact to access or use of the allotments.	RR-06	There may be some temporary traffic control measures used on Waltham Road to facilitate the crossing of the road by construction vehicles, detailed in the <b>Framework Construction Traffic Management Plan [APP-094]</b> . These temporary traffic control measures will not prevent the allotments from being accessed.

**Table B-8 Consultation**

Matter	Summary of points raised	PINS reference	Applicant's response
Publicity	Publicity of the consultation was inadequate. Consultation information was either not received or received late.	RR-30, RR-53	The Applicant publicised the consultation widely, as set out in Chapter 6 of the <b>Consultation Report [APP-018]</b> . In summary, publicity measures included: <ul style="list-style-type: none"> <li>• Writing to all addresses within consultation zone 1 set out in the Statement of Community Consultation at the start of the consultation period.</li> <li>• Writing to elected representatives, parish councils, and community groups with details of the consultation at the start of the consultation period.</li> <li>• Advertising the consultation in the following newspapers circulating in the consultation zone: the Braintree and Witham Times, Chelmsford and Mid Essex Times, Essex Chronicle.</li> </ul>

			<ul style="list-style-type: none"> <li>• Sending local broadcasters a press release for the scheme.</li> <li>• Publishing details of the consultation online at the consultation website.</li> <li>• Advertising the consultation online.</li> </ul> <p>In deciding whether to accept the Application for Examination, the Secretary of State must only accept the Application if it considers the Applicant has complied with all pre-application consultation requirements, including the statutory requirement to have regard to the consultation responses received. The Secretary of State must also have regard to adequacy of consultation responses received from Local Authorities. Given the Application was accepted by the Secretary of State, it can be assumed the Applicant has satisfied all consultation requirements and consulted adequately. The Applicant would also note that all Interested Parties now have an opportunity to be involved in the Examination and to make written submissions to the Examining Authority about matters they are concerned about, and/or to appear at hearings.</p>
Regard had to comments	The Applicant has not been sincere in its approach to consultation and has pre-conceived responses to issues raised.	RR-59	This is not the case. The Applicant has set out the regard had to consultation responses through the <b>Consultation Report [APP-018]</b> , particularly in <b>Appendices J-1 – J-5 [APP-028]</b> .
Community liaison	The Applicant should set out clearly how it will communicate with the community during construction and operations.	RR-33	The Applicant will establish a community liaison group (CLG) that will enable local community representatives to have a formal channel for monitoring and influencing developments at the site. This will be secured as a requirement secured by the DCO, if granted.
Maintenance	The Applicant should be held to clear 'standards of service' for the maintenance of the Scheme once operational.	RR-33	The <b>Outline Operational Environmental Management Plan [APP-215]</b> outlines how maintenance of the site and panels will be undertaken.

**Table B-9 Cultural heritage**

Matter	Summary of points raised	PINS reference	Applicant's response
Heritage	The Scheme will have a negative impact on the heritage of the local area.	RR-48, RR-55, RR-59, RR-72.	In developing the design, care has been taken to avoid, reduce and mitigate impacts on the heritage assets and their settings. This has included <b>excluding</b> areas of archaeological remains and other heritage assets been entirely excluded from the Order Limits. All impacts to designated and non-designated heritage assets within the study areas, including impacts from Site traffic, have been assessed in <b>ES Chapter 7: Cultural Heritage [APP-039]</b> . The effect on heritage

			assets is mainly not significant, with the exception being a moderate adverse, significant effect identified for Ringers Farmhouse during both construction and operation. This receptor is not near the road and the effect is due to changes to the rural setting and part of the view from the farmhouse to the Scheme rather than trip movements. The Harm Assessment (Appendix E of the <b>Planning Statement [APP-204]</b> discusses that the impact is not one of Substantial Harm. The effects on heritage assets are reversible following decommissioning of the Scheme at the end of its life.
Archaeology	The Scheme will have a negative impact on archaeology.	RR-55.	In developing the design, care has been taken to avoid, reduce and mitigate impacts on the heritage assets and their settings. Further design mitigation is now set out in <b>ES Chapter 7: Cultural Heritage [APP-039]</b> . Two areas of significant (medium or high value) archaeological activity have been removed from the Order limits. The areas of archaeological remains comprise of a single multi-occupation prehistoric and/or Roman settlement associated with medieval, post-medieval and modern features (A70) and a prehistoric settlement (A127). Both assets have been entirely removed from the Order Limits. Asset A127 was subject to an archaeological trial trench evaluation (Site D).

**Table B-10 Cumulative impacts**

Matter	Summary of points raised	PINS reference	Applicant's response
Other projects	Two other DCOs taking place; A12 widening and East Anglia Green will cause added disruption to the area and further loss of agricultural land Will developers co-ordinate on this issue?	RR-07, RR-09, RR-16, RR-27, RR-38, RR-53, RR-67, RR-68, RR-77, RR-20	The Applicant had engaged with National Highways regarding the A12 widening scheme to understand the potential for cumulative impacts as well as synergies between the projects. As indicated in the <b>ES Appendix 13B: Framework Construction Traffic Management Plan [APP-094]</b> the Construction Traffic Management Plan will include details of how the projects will liaise on an ongoing basis during the construction phase. National Grid's East Anglia Green project was publicised after the acceptance of this project as a DCO application. The Applicant will engage with National Grid through its pre-application consultation and engagement to understand potential impacts from East Anglia Green, and how any combined impacts can be managed.

**Table B-11 Decommissioning**

Matter	Summary of points raised	PINS reference	Applicant's response
Restoration of land	There are insufficient guarantees that agricultural land will be restored as part of decommissioning.	RR-08, RR-26, RR-38, RR-60, RR-20, RR-39, RR-50	Solar farms are temporary and typically have an operational lifespan of approximately 40 years. Once Longfield Solar Farm reaches the end of its lifespan, infrastructure on the Solar Farm Site will be removed and the Solar Farm Site returned to the landowner. Post-decommissioning, it is expected that the landowner would return the Solar Farm Site to arable use, although it is assumed that established habitats such as hedgerows and woodland would be retained. A <b>Decommissioning Strategy [APP-216]</b> has been prepared as part of the DCO Application. This provides the outline mitigation measures to be adhered to during decommissioning. The DCO includes a requirement to prepare and approve of the DEMP substantially in accordance with the Decommissioning Strategy, and for the approved DEMP to be implemented.
Decommissioning strategy	Plans for decommissioning are inadequate.	RR-19, RR-38, RR-41, RR-57, RR-59, RR-20	
Restoration of land	The land will be categorised as brownfield following decommissioning and may be used for development.	RR-19, RR-51, RR-59	The land will not be classified as brownfield following decommissioning. Solar farms are temporary and typically have an operational lifespan of approximately 40 years. Once Longfield Solar Farm reaches the end of its lifespan, infrastructure on the Solar Farm Site will be removed and the Solar Farm Site returned to the landowner. Post-decommissioning, it is expected that the landowner would return the Solar Farm Site to arable use, although it is assumed that established habitats such as hedgerows and woodland would be retained. For the land to be used for other development following decommissioning of the Scheme, development consent or planning permission would be required.
Methods	There will be a major disruption during decommissioning.	RR-24	A <b>Decommissioning Strategy [APP-216]</b> has been prepared as part of the DCO application. This provides the outline mitigation measures to be adhered to during decommissioning. The DCO includes a requirement to prepare and approve of the DEMP substantially in accordance with the Decommissioning Strategy, and for the approved DEMP to be implemented.
Waste management	The recycling of the BESS at the end of the Scheme's operating life could cause environmental damage.	RR-32, RR-59, RR-20	A Decommissioning Strategy <b>[APP-216]</b> has been prepared as part of the DCO application. The impacts of decommissioning have been assessed in each of the technical chapters of the EIA, presented in the ES. The impacts during decommissioning will be similar in nature and scale to construction, albeit slightly less and quicker in duration. Consequently, there will be some significant effects during this phase of the Scheme, which is explained in the technical chapters of the ES. The Decommissioning Strategy explains that the recycling would be carried out in accordance with regulations and guidance at the time of decommissioning. A Decommissioning Resource Management Plan will be
Waste management	Further detail is required regarding waste disposal and recycling.	RR-38, RR-52, RR-53, RR-57, RR-60, RR-20, RR-33	

			prepared prior to decommissioning and agreed with the host councils to manage recycling and disposal.
Restoration of land	More land should be made publicly accessible following decommissioning than is currently the case.	RR-41	Once Longfield Solar Farm reaches the end of its lifespan, infrastructure on the Solar Farm Site will be removed and the Solar Farm Site returned to the landowner. Post-decommissioning, it is expected that the landowner would return the Solar Farm Site to arable use, although it is assumed that established habitats such as hedgerows and woodland would be retained. The use of the land following decommissioning is not within the Applicant's control.
Restoration of land	There is no assurance that soil quality will be the same as before the Scheme.	RR-07	An <b>Outline Soils Resource Management Plan</b> is provided as an appendix to the <b>Outline Construction Environmental Management Plan [APP-214]</b> . This sets out principles for how soils will be managed and protected during construction, operation and decommissioning of the Scheme. A detailed soils resource management plan will be prepared prior to the commencement of construction, prior to operation, and prior to decommissioning, as set out by the Requirements of the <b>Draft DCO [APP-011]</b> . The <b>Outline Operational Environmental Management Plan [APP-215]</b> outlines how maintenance of the site and panels will be undertaken. This includes increasing recyclability by segregating waste to be re-used and recycled where reasonably practicable and operating the Scheme in such a way as to minimise the creation of waste and maximise the use of alternative materials with lower embodied carbon such as locally sourced products and materials with a higher recycled content. The DCO will require the decommissioning of the Scheme in accordance with a Decommissioning Environmental Management Plan (DEMP). A <b>Decommissioning Strategy [APP-216]</b> has been prepared as part of the DCO application. This provides the outline mitigation measures to be adhered to during decommissioning. The DCO includes a requirement to prepare and approve of the DEMP substantially in accordance with the Decommissioning Strategy, and for the approved DEMP to be implemented. The Decommissioning Strategy sets out that decommissioning will involve the removal of all solar PV array infrastructure including modules, mounting structures, cabling inverters and transformers, for recycling or disposal in accordance with good practice and market conditions at that time.
Waste management	BESS cannot be recycled and will end up contaminating soil in landfill.	RR-59	

**Table B-12 Design**

Matter	Summary of points raised	PINS reference	Applicant's response
Size	The scheme is too large.	RR-07, RR-09, RR-14, RR-15, RR-25, RR-27, RR-36, RR-41, RR-48, RR-52, RR-53, RR-57, RR-58, RR-60, RR-63, RR-69, RR-75, R-74	Chapter 11 of the <b>Statement of Need [APP-203]</b> provides an analysis of the economic viability of large-scale solar generation as a future contributor to a low-carbon Great Britain electricity supply system in comparison to alternate technologies; and an analysis of why the Scheme will be most beneficial to the achievement of government's aims if it is consented to the scale proposed. Solar power reduces the market price of electricity by displacing more expensive forms of generation from the cost stack. This delivers benefits for electricity consumers. Due to technological advances, power generated by solar plants is already at or below grid parity cost in Great Britain. Solar power is economically attractive in Great Britain against many other forms of conventional and renewable generation. Size remains important and maximising the generating capacity of schemes improves their economic efficiency, so bringing power to market at the lowest cost possible. Larger solar schemes deliver more quickly and at a lower unit cost than multiple independent schemes which make up the same total capacity, bringing forward carbon reduction and economic benefits in line with government policy. The Scheme proposes a substantial infrastructure asset, which if consented will deliver large amounts of cheap, low-carbon electricity both during and beyond the critical 2020s timeframe. Maximising the capacity of generation in the resource-rich, accessible and technically deliverable proposed location, represents a significant and economically rational step forwards in the fight against the global climate emergency. The Applicant has assessed the impacts of delivering a scheme of this scale through the Environmental Statement.
Materials	The Scheme makes excessive use of metal, glass, fencing, floodlights.	RR-42, RR-69	The Scheme is designed as efficiently as practicable – for example there is no permanent lighting, with only motion activated lighting being proposed at relevant locations on the site, as secured in the <b>Design Principles [APP-206]</b> . In addition, the deer fencing which is proposed to surround the site is one of the most efficient forms of enclosure (in terms of material use) available on the market. The project has considered the embodied carbon of materials required for the solar and battery infrastructure in <b>ES Chapter 6: Climate Change [APP-038]</b> .
BESS design	Containers should be used to shield the visual impact of infrastructure. These should be painted in neutral colours and not bright primary colours.	RR-33	Components of the BESS will be enclosed by a metal container which will be white or light grey or green in colour, as set out in the <b>Design Principles [APP-206]</b> . A photomontage ( <b>ES Figure 10-13: Type 3 Visualisations 4 of 5 [APP-183]</b> ) has been prepared from Viewpoint 50, looking north looks towards the BESS. The BESS has been modelled to be 4.5m high, therefore representing the 'worst case' scenario. A new belt of woodland is proposed to be planted to screen



			views of the BESS. This is planned to be planted in advance of construction in order to maximise growth and therefore provide effective mitigation sooner. The Landscape and Visual Impact Assessment ( <b>ES Appendix 10F: Visual Assessment [APP-086]</b> ) found that people would experience minor adverse visual effects as a result of the BESS during Construction and Year 1 of operation. The visual effect would reduce to negligible adverse by year 15 of operation.
Cabling	All cable routes should be underground.	RR-41	The Applicant has sought to maximise the amount of cabling that will be underground; and the grid connection would be underground and there will be no overhead pylons. However, there will be some cabling (typically secured on cable trays) that would be above ground.
Layout	No PV panels should be placed in the field to the north of White House Farm and considerable effort should be made to lessen the impact from PV panels to the south east.	RR-28	The protection of views from White House Farm has informed the design. With reference to <b>ES Figure 10-12: Outline Landscape Masterplan [APP-179]</b> , no PV panels are proposed in the western part of the field north of White House Farm. This is to retain a clear and open view from the rear of the property through an existing gap in the vegetation on field's southern boundary. A hedgerow will be planted along a historic field boundary, running north to south across the field, to screen views of proposed PV panels in the eastern part of the field. A new belt of woodland and a new hedgerow will be planted to screen views of PV panels proposed to the south east of the property, connecting Scarlett's Wood to the wider hedgerow network.

**Table B-13 Ecology**

Matter	Summary of points raised	PINS reference	Applicant's response.
Habitats	The Scheme will result in a loss of wildlife habitats.	RR-01, RR-09, RR-11, RR-18, RR-27, RR-35, RR-42, RR-44, RR-46, RR-56, RR-59, RR-64, RR-67, RR-77, RR-39, RR-50.	The Applicant is committed to operating the Scheme in the long-term and would take responsibility for aspects of management such as this. Long-term habitat management treatment has been embedded in the Scheme design and further within the <b>Outline Landscape and Ecology Management Plan (OLEMP) [APP-217]</b> . The OLEMP sets out the key measures required to avoid, mitigate and compensate for impacts and effects to terrestrial biodiversity and landscape from the construction and operation of the Scheme. The Applicant will deliver an overall net gain of 79% habitat units for biodiversity and 20% of hedgerow habitats as set out in the <b>Biodiversity Net Gain Report [APP-200]</b> .
Nature	The Scheme will have a negative impact on flora and fauna.	RR-10, RR-12, RR-17, RR-19, RR-30, RR-59, RR-61, RR-39, RR-18, RR-22,	

		RR-23, RR-48, RR-49, RR-51, RR-52, RR-53, RR-58, RR-65, RR-66, RR-70, RR-73, RR-75, RR-77.	
Biodiversity	The Scheme will result in a net loss in biodiversity.	RR-12, RR-22, RR-23, RR-34, RR-42, RR-44, RR-46, RR-47, RR-49, RR-52, RR-58, RR-62, RR-63, RR-64, RR-77, RR-39, RR-50.	The Applicant will deliver an overall net gain of 79% habitat units for biodiversity and 20% of hedgerow habitats as set out in the <b>Biodiversity Net Gain Report [APP-200]</b> .
Biodiversity	The Applicant's claims of generating a net gain in biodiversity are exaggerated.	RR-12, RR-59, RR-15, RR-17, RR-19, RR-52, RR-61, RR-67, RR-39, RR-50.	The Applicant will deliver an overall net gain of 79% habitat units for biodiversity and 20% of hedgerow habitats as set out in the <b>Biodiversity Net Gain Report [APP-200]</b> . The <b>Outline Landscape and Ecology Management Plan (OLEMP) [APP-217]</b> , includes new woodland, scrub, grassland and hedge habitats to buffer and enhance connectivity across the site. The OLEMP also includes the provision for monitoring to assess how successful the biodiversity planting and management has been.
Nature	The proposed wildlife corridors are not sufficient for the roaming wildlife.	RR-14, RR-30	Specific provision has been made for wildlife movement within the Scheme. Badger gates will be used in the fence design to allow passage of badger and other mammals such as small deer, rabbits and hare. Large species of deer will be able to move through the Order limits along verges, hedges and tracks. See Section 8.8 of <b>ES Chapter 8: Ecology [APP-040]</b> and refer to the <b>Outline Landscape and Ecology Management Plan (OLEMP) [APP-217]</b> for further detail.
Fencing	The buffers of fencing to woodland areas should be 100 metres not 25 metres to preserve woodland habitats	RR-14	The layout of the Scheme has been designed to minimise the loss of, and avoid significant impacts on, existing landscape features. With reference to the <b>Works Plans [APP-007]</b> this includes minimum offsets of: i. 15m from ancient woodland; ii. 15m from other woodland; iii. 15m from hedgerows; iv. 15m from individual trees; v. 10m from existing ponds

			vi. 8m from banks of watercourses, to avoid requirements for Land Drainage Consent or an Environmental Permit (LLFA / EA governance respectively). Please refer to the <b>Outline Landscape and Ecology Management Plan (OLEMP) [APP-217]</b> for further detail.
Habitats	The River Ter, a SSSI, has many valuable woodland areas	RR-15, RR-64	The River Ter SSSI is adjacent to the Order limits and a short undesignated section of the River Ter bisects the north of the Order limits. The SSSI is designated for geological importance, but the river itself does support aquatic macroinvertebrates, notable/protected fish and Otter. A full assessment has been undertaken of the impact on any designated sites, including SSSIs within the 5km of the Scheme. The impact assessment, detailed in <b>ES Chapter 8: Ecology [APP-040]</b> and has been undertaken in accordance with best practice guidance for Ecological Impact Assessment (EclA), issued by the CIEEM (the CIEEM guidelines) entitled 'Guidelines for Ecological Impact Assessment in the UK and Ireland Terrestrial, Freshwater, Coastal and Marine'. This assessment identified potential impacts, but with the implementation of embedded mitigation measures during construction, operation and decommissioning concluded no potential for significant effects.
Biodiversity	Boreham Road, Chelmsford has biodiversity and environmental value	RR-16.	The Applicant recognises this and will seek to enhance the ecological value of land within the Order limits. The Applicant will deliver an overall net gain of 79% habitat units for biodiversity and 20% of hedgerow habitats as set out in the <b>Biodiversity Net Gain Report [APP-200]</b> . The <b>Outline Landscape and Ecology Management Plan (OLEMP) [APP-217]</b> , includes new woodland, scrub, grassland and hedge habitats to buffer and enhance connectivity across the site. The OLEMP also includes the provision for monitoring to assess how successful the biodiversity planting and management has been.
Biodiversity	There is no proposed mechanism for accountability on biodiversity and wildlife issues, with no independent verification	RR-19.	Ecological monitoring will be implemented across the site. This will include as a minimum fixed-point quadrat for plant species and a measure of soil health/carbon. This has been secured in the <b>Outline Landscape and Ecology Management Plan (OLEMP) [APP-217]</b> which must be submitted to and approved by the relevant planning authorities. The Applicant will establish a community liaison group (CLG) that will enable local community representatives to have a formal channel for monitoring and influencing developments at the site.
Mitigation	Proposed mitigation of ecological impacts is too weak.	RR-19, RR-42, RR-48, RR-39, RR-50.	The Applicant is committed to operating the Scheme in the long-term and would take responsibility for aspects of management such as this. Long-term habitat management treatment has been embedded in the Scheme design and further within the <b>Outline Landscape and Ecology Management Plan OLEMP [APP-217]</b> . The OLEMP sets out the key measures required to avoid, mitigate and compensate for impacts and effects to terrestrial biodiversity and landscape from

			the construction and operation of the Scheme. The Applicant will deliver an overall net gain of 79% habitat units for biodiversity and 20% of hedgerow habitats as set out in the <b>Biodiversity Net Gain Report [APP-200]</b> .
Wildlife	High fencing will impact wildlife negatively.	RR-19, RR-38, RR-52.	The plans allow movement of deer and other mammals across the site along public rights of way, habitat buffer strips and through fenced fields via sufficient gaps for smaller animals under boundary fencing. There may be conservation grazing by sheep in future and they will be securely fenced in where grazing is undertaken.
Wildlife	Nesting birds, notably Skylark, Golden Plover, Lapwing, Yellowhammer and Linnet, will be negatively impacted by the solar panels.	RR-22, RR-42, RR-44, RR-46, RR-47, RR-49, RR-59, RR-64, RR-39, RR-50.	As described in <b>ES Chapter 8: Ecology [APP-040]</b> , no significant effects are predicted to nesting birds as a result of the Scheme. Mitigation measures and habitat enhancement for nesting birds are provided in the <b>Outline Landscape and Ecology Management Plan (OLEMP) [APP-217]</b> and <b>Outline Construction Environmental Management Plan [APP-214]</b> . A range of new habitats will replace the current arable land, including bare ground, grassland, 'cover crops', hedgerow, tree and scrub planting to increase the biodiversity of the Scheme. These habitats will provide landscape scale benefits for wildlife through increased habitat provision and connectivity and will be of value to a wide range of fauna, including farmland birds such as Skylark and Yellowhammer. This includes the provision of 83 hectares of new habitats managed for biodiversity (see <b>Outline Landscape and Ecology Management Plan (OLEMP) [APP-217]</b> ).
Habitats	The Scheme will lead to a potential loss of red/amber list birds, Great Crested Newts and bats.	RR-23, RR-39, RR-50.	As described in <b>ES Chapter 8: Ecology [APP-040]</b> , no significant effects are predicted to birds, great crested newts or bats as a result of the Scheme. Mitigation measures and habitat enhancement for these species are provided in the <b>Outline Landscape and Ecology Management Plan (OLEMP) [APP-217]</b> and <b>Outline Construction Environmental Management Plan [APP-214]</b> . A range of new habitats will replace the current arable land, including bare ground, grassland, 'cover crops', hedgerow, tree and scrub planting to increase the biodiversity of the Scheme. These habitats will provide landscape scale benefits for wildlife through increased habitat provision and connectivity and will be of value to a wide range of fauna, including farmland birds such as Skylark and Yellowhammer. This includes the provision of 83 hectares of new habitats managed for biodiversity (see <b>Outline Landscape and Ecology Management Plan (OLEMP) [APP-217]</b> ).

Habitats	Toppinghoehall Wood is mixed ancient/newer woodland and rich habitat for invertebrates, reptiles (slow worms), bats, owls, hobby, red kites and buzzards	RR-23	Toppinghoehall Wood Local Wildlife Site (LoWS) is located adjacent to the Scheme and buffered by at least 15 m based on government standing advice on ancient woodland protected zones. As such there will be no habitat loss or fragmentation of Toppinghoehall Wood and, with the implementation of standard environmental protection measures, there will be no direct or indirect impacts to Toppinghoehall Wood during construction, operation and, or decommissioning. As described in the <b>ES Chapter 8: Ecology [APP-040]</b> , no significant effects are predicted to this woodland or any other LoWSs as a result of the Scheme.
Maintenance	Confirmation needs to be provided of who will manage the wildflower meadows.	RR-30, RR-59	The <b>Outline Operational Environmental Management Plan (OEMP) [APP-215]</b> outlines how the Scheme will be managed through the operational phase. The works would be undertaken by a contractor appointed by the developer.
Wildlife	The Scheme will negatively impact on badgers.	RR-38, RR-39, RR-50	<b>ES Appendix 8J: Badger Survey Report (Confidential) [APP-073]</b> concludes that no impacts to these badger setts are predicted as they are within buffer areas of the Scheme (i.e. hedgerows, woodlands). However, a re-survey will be undertaken prior to construction in case badger setts are found; and if necessary any works undertaken in accordance with a licence agreed with Natural England.
Habitats	Important natural wildlife land corridors would be disrupted	RR-44, RR-46, RR-47, RR-49, RR-52, RR-57, RR-39, RR-50	Specific provision has been made for wildlife movement within the Scheme. Badger gates will be used in the fence design to allow passage of badger and other mammals such as small deer, rabbits and hare. Large species of deer will be able to move through the Order limits along verges, hedges and tracks. See Section 8.8 of <b>ES Chapter 8: Ecology [APP-040]</b> , and refer to the <b>Outline Landscape and Ecology Management Plan [APP-217]</b> for further detail.
Habitats	Ancient Woodland with mature oak trees will be affected.	RR-59, RR-74, RR-39, RR-50	A buffer of at least 15m has been applied to all existing woodlands and ancient woodlands. This buffer has been integrated into the Scheme's Outline Landscape Masterplan to protect trees located on, and adjacent to, the Order limits. Please see <b>ES Figure 10-12: Outline Landscape Masterplan [APP-179]</b> and Section 10.7 in <b>ES Chapter 10: Landscape and Visual Amenity [APP-042]</b> .
Maintenance	A regime of appropriate financial penalties must be in place to ensure compliance with rigorous environmental assessment	RR-59	Ecological monitoring will be implemented across the site. This will include as a minimum fixed-point quadrat for plant species and a measure of soil health/carbon. This has been secured in the <b>Outline Landscape and Ecology Management Plan (OLEMP) [APP-217]</b> which is required to be submitted to and approved by the relevant local planning authority. The DCO requirement provides that the approved Landscape and Ecological Management Plan must be implemented as approved, and that requirement is enforceable against the operator of the Scheme. It is not considered that financial penalties are appropriate. The Applicant will establish a community liaison group (CLG) that will enable local community representatives to have a formal channel for monitoring and influencing developments at the site.

Birds	The Scheme will have a negative impact on migratory birds	RR-59, RR-64, RR-39, RR-50	No significant effects are expected on wintering birds. For further information please see <b>ES Appendix 8G: Wintering Bird Survey [APP-071]</b> and the <b>Habitat Regulations Assessment (HRA) [APP-202]</b> .
Biodiversity	No detailed guidance has been made regarding long-term land management other than designating small fragmented areas designated "biodiversity enhancement"	RR-59	The <b>Outline Landscape and Ecology Management Plan (OLEMP) [APP-217]</b> , includes new woodland, scrub, grassland and hedge habitats to buffer and enhance connectivity across the site. The OLEMP also includes the provision for monitoring to assess how successful the biodiversity planting, as well as provision for ongoing management.
Habitats	Breeding population of birds, animals and insects will be displaced and lost for ever.	RR-64, RR-39, RR-50	As part of the mitigation strategy, suitable areas of grassland/set-aside will be created and managed within the Order limits for ground nesting birds, including Skylark, but would also be utilised by other ecology. This includes ecologically enhanced set aside land of approximately 83 hectares outside the solar PV Array area. Please refer to <b>ES Appendix 8H: Breeding Birds Survey Report [APP-072]</b> and section 8.8 of <b>ES Chapter 8: Ecology [APP-040]</b> .
Wildlife	Two studies show solar farms to negatively impact bats	RR-67, RR-59	On the basis that no ancient woodland loss and minimal temporary hedgerow loss with buffers from the Scheme, and no permanent lighting, it is assessed that there will not be any significant impacts to roosting/commuting or foraging bats. The change from arable to grassland habitats, new tree, hedge and scrub planting, new and restored ponds will enhance the habitats for bats. Long-term monitoring will be undertaken of the bat populations as detailed in the <b>OLEMP [APP-217]</b> . Further detail is presented in <b>ES Chapter 8: Ecology [APP-040]</b> .
Habitats	The existing site is of significant value with its woodland areas, ponds, proximity of valuable sites and the range of species identified in the surveys.	RR-67, RR-39, RR-50	The Applicant recognises this and will seek to enhance the ecological value of land within the Order limits. The Applicant will deliver an overall net gain of 79% habitat units for biodiversity and 20% of hedgerow habitats as set out in the <b>Biodiversity Net Gain Report [APP-200]</b> . The <b>Outline Landscape and Ecology Management Plan (OLEMP) [APP-217]</b> , includes new woodland, scrub, grassland and hedge habitats to buffer and enhance connectivity across the site. The OLEMP also includes the provision for monitoring to assess how successful the biodiversity planting and management has been.

**Table B-17 Glint and glare**

Matter	Summary of points raised	PINS reference	Applicant's response
General	General concern about glint and glare.	RR-24, RR-30, RR-20	<b>ES Appendix 10G: Glint and Glare Assessment [APP-087]</b> analyses the effects of glint and glare and their impact on local receptors in detail and there is predicted to be low impacts at seven residential receptors, whilst the remaining ground-based receptors are expected to have no impacts once mitigation



			measures have been considered. Impacts upon aviation receptors are predicted to be none. Therefore overall impacts are negligible.
Animals	Glint and glare will negatively affect wildlife.	RR-72, RR-20	<b>ES Appendix 10G: Glint and Glare Assessment [APP-087]</b> analyses the effects of glint and glare on people rather than ecology. Through discussions with statutory bodies through the Statement of Common Ground process we will identify whether they consider additional work is required in respect of ecology; and if necessary, provide supplementary information.

**Table B-18 Human health**

Matter	Summary of points raised	PINS reference	Applicant's response
Air quality	Pollution will impact on health (asthmatic people).	RR-70	Air quality impacts have been assessed in full and have been detailed in <b>ES Chapter 14: Air Quality [APP-046]</b> . The potential impact of the Scheme on local air quality has been determined at sensitive (human and ecological) receptors identified in the vicinity of the Order limits and has been assessed as not significant. This comprises sensitive receptors within 350m of the Order limits, within 50m of roads expected to be affected by the construction phase traffic, and up to 500m from the site access points.
Mental health	Loss of open space will negatively affect residents' mental health.	RR-28, RR-48, RR-67, RR-77	Primary mitigation measures are embedded within the Scheme, as set out in the respective chapters, to reduce operational effects (such as noise, air quality and landscape) which in turn will mitigate the effects on the local community and existing facilities from a human health perspective. The health and well-being assessment is presented in Table 154 to Table 158 in <b>ES Chapter 15: Human Health [APP-047]</b> . The assessment comprises an assessment of impacts during construction, operation and decommissioning including on access to work and training, active travel, and social cohesion. Consideration is given to the potential for impacts on mental health through assessing an overall outcome in respect of each of these. The assessment does not identify any significant negative impacts on the amenity of residents from air quality, noise or neighbourhood amenity where embedded design mitigation measures and further mitigation measures are followed.
Mental health	Noise from the Scheme will have a negative impact on residents' mental health.	RR-39, RR-50	Primary mitigation measures are embedded within the Scheme, as set out in the respective chapters, to reduce operational effects (such as noise, air quality and landscape) which in turn will mitigate the effects on the local community and existing facilities from a human health perspective. The health and well-being assessment is presented in Table 154 to Table 158 in <b>ES Chapter 15: Human Health [APP-047]</b> . The assessment comprises an assessment of impacts during construction, operation and decommissioning including on access to work and

			training, active travel, and social cohesion. Consideration is given to the potential for impacts on mental health through assessing an overall outcome in respect of each of these. The assessment does not identify any significant negative impacts on the amenity of residents from air quality, noise or neighbourhood amenity where embedded design mitigation measures and further mitigation measures are followed.
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**Table B-19 Land use**

Matter	Summary of points raised	PINS reference	Applicant's response
Agricultural land	The Scheme will lead to an unacceptable loss of high-grade and valuable agricultural land.	RR-01, RR-02, RR-07, RR-08, RR-09, RR-10, RR-11, RR-12, RR-13, RR-15, RR-17, RR-18, RR-19, RR-22, RR-23, RR-25, RR-26, RR-27, RR-29, RR-30, RR-35, RR-36, RR-37, RR-38, RR-40, RR-42, RR-44, RR-45, RR-46, RR-47, RR-48, RR-49, RR-52, RR-53, RR-55, RR-56, RR-57, RR-58, RR-59, RR-60, RR-61, RR-62, RR-63, RR-64, RR-67, RR-68, RR-69, RR-70, RR-72, RR-73, RR-74, RR-75, RR-76,	The use of agricultural land for the Scheme is justified by the urgent need for renewable energy generation. The Scheme is urgently needed in order to generate renewable energy to contribute to meeting the Government's legally binding commitment for the country to reach net-zero by 2050, and to address the cause of climate change. This is set out further in the <b>Statement of Need [APP-203]</b> . Whilst the Scheme will result in best and most versatile agricultural land not being available for agricultural use over its lifetime, the non-intrusive and reversible nature of solar development means that there will be very little permanent loss of agricultural land. The soil will have undergone recovery through less intensive farming such as being left fallow, or sheep grazing and is expected to be the same or better quality as it is currently. Section 12.8 of <b>ES Chapter 12: Socio-economics and Land Use [APP-044]</b> concludes this is not significant in environmental impact assessment terms. Consideration of alternatives is presented in <b>ES Chapter 3: Alternatives and Design Evolution [APP-035]</b> . In summary, the vast majority of land within the area of search is of similar Agricultural Land Classification (ALC) to the Order limits. The Order limits comprises approximately: 60% Grade 3b, 22% Grade 3a, 12% Grade 2 and 6% non-agricultural or unknown. There are no alternative sites considered by the Applicant that are clearly of a lower non-BMV ALC grade than the Order limits (whilst also meeting other criteria of the Applicant, as set out in Chapter 3 of the ES) within a reasonable distance of Bulls Lodge Substation, for which the Applicant has obtained a grid connection agreement.

		RR-77, RR-20, RR-39, RR-50	
Agricultural land	Concern that loss of productive farmland will challenge UK's ability to be self-sufficient in terms of food production, particularly in the context of Russia's invasion of Ukraine.	RR-07, RR-08, RR-09, RR-11, RR-12, RR-13, RR-17, RR-18, RR-19, RR-22, RR-23, RR-25, RR-26, RR-29, RR-37, RR-42, RR-44, RR-46, RR-47, RR-48, RR-49, RR-52, RR-53, RR-55, RR-57, RR-59, RR-60, RR-62, RR-63, RR-64, RR-67, RR-68, RR-69, RR-70, RR-72, RR-75, RR-76, RR-77, RR-20, RR-39, RR-50	The use of agricultural land for the Scheme is justified by the urgent need for renewable energy generation. The Scheme is urgently needed in order to generate renewable energy to contribute to meeting the Government's legally binding commitment for the country to reach net-zero by 2050, and to address the cause of climate change. This is set out further in the <b>Statement of Need [APP-203]</b> . Whilst the Scheme will result in best and most versatile agricultural land not being available for agricultural use over its lifetime, the non-intrusive and reversible nature of solar development means that there will be very little permanent loss of agricultural land. The soil will have undergone recovery through less intensive farming such as being left fallow, or sheep grazing and is expected to be the same or better quality as it is currently. Section 12.8 of <b>ES Chapter 12: Socio-economics and Land Use [APP-044]</b> concludes this is not significant in environmental impact assessment terms.

**Table B-20 LVIA**

Matter	Summary of points raised	PINS reference	Applicant's response
Mitigation	The Applicant has not delivered visual mitigation proposed during discussions with the Interested Party.	RR-05	The mitigation was consulted on and agreed prior to submission of the application. However, the Applicant will re-engage with the relevant Party.

Landscape character	The Scheme is industrialising and will result in a loss of countryside/green space.	RR-07, RR-12, RR-14, RR-15, RR-17, RR-18, RR-19, RR-22, RR-23, RR-28, RR-30, RR-35, RR-38, RR-44, RR-47, RR-49, RR-51, RR-52, RR-53, RR-55, RR-57, RR-59, RR-60, RR-62, RR-65, RR-66, RR-67, RR-68, RR-69, RR-71, RR-76, RR-20, RR-33, RR-39, RR-50	The Landscape and Visual Impact Assessment in <b>ES Chapter 10: Landscape and Visual Amenity [APP-042]</b> establishes that, with the exception of major adverse effects experienced by people walking on PRoW 213_19 and PRoW 113_25 within the Order limits because of close range views of the proposed PV Arrays in the immediate foreground, no significant visual effects are expected once mitigation planting has established. Proposed planting is shown on <b>ES Figure 10-12: Outline Landscape Masterplan [APP-179]</b> . The <b>Outline Landscape and Ecology Management Plan (OLEMP) [APP-217]</b> , includes new woodland, scrub, grassland and hedge habitats to buffer and enhance connectivity across the site.
Landscape character	The Scheme will have a negative impact on local landscapes.	RR-07, RR-10, RR-12, RR-14, RR-15, RR-17, RR-19, RR-22, RR-23, RR-24, RR-28, RR-30, RR-35, RR-38, RR-44, RR-47, RR-48, RR-49, RR-52, RR-53, RR-55, RR-59, RR-60, RR-62, RR-63, RR-65, RR-66, RR-67, RR-68, RR-69, RR-72, RR-74, RR-39, RR-50	The Landscape and Visual Impact Assessment in <b>Chapter 10: Landscape and Visual Amenity of the Environmental Statement [REF-]</b> establishes that, with the exception of major adverse effects experienced by people walking on PRoW 213_19 and PRoW 113_25 within the Order limits because of close range views of the proposed PV Arrays in the immediate foreground, no significant visual effects are expected once mitigation planting has established. Proposed planting is shown on <b>ES Figure 10-12: Outline Landscape Masterplan [APP-179]</b> . The <b>Outline Landscape and Ecology Management Plan (OLEMP) [APP-217]</b> , includes new woodland, scrub, grassland and hedge habitats to buffer and enhance connectivity across the site.
Mitigation	Proposed planting to mitigate visual impacts will take many years to develop.	RR-22, RR-30, RR-52, RR-53, RR-68, RR-20,	This is recognised. Phase 2 of the BESS is intended to be undertaken five years after the Scheme becomes operational, to allow sufficient time for screening implanted to the south east of the BESS to mature and provide sufficient screening – this will provide a 'bridge' between Toppinghoehall and Lost Woods

		RR-33, RR-39, RR-50,	until planting has had sufficient time to mature to a point that it provides sufficient screening. Further information is presented in <b>ES Chapter 10: Landscape and Visual Amenity [APP-042]</b> .
Mitigation	The proposed hedgerow buffer zone to protect views is not sufficient.	RR-24, RR-44, RR-47, RR-48, RR-52, RR-53, RR-59, RR-39, RR-50, RR-19	The Landscape and Visual Impact Assessment in <b>ES Chapter 10: Landscape and Visual Amenity [APP-042]</b> establishes that, with the exception of major adverse effects experienced by people walking on PRoW 213_19 and PRoW 113_25 within the Order limits because of close range views of the proposed PV Arrays in the immediate foreground, no significant visual effects are expected once mitigation planting has established. The Applicant considers the mitigation included is sufficient.
Assessment	A Residential Visual Amenity Assessment (RVAA) should have been submitted with the application.	RR-24	The design of the Scheme has been reviewed and amended to avoid or mitigate potential significant adverse effects on residents. As such a RVAA is not required. This was agreed via email, dated 15 October 2021, by the host authorities' adviser on this matter. Further information is presented in <b>ES Chapter 10: Landscape and Visual Amenity [APP-042]</b> .
Landscape character	The Applicant should provide a fully integrated account of the historic development of the landscape and its interrelationship with the natural environment to inform the long-term management of the landscape.	RR-55	The Applicant has comprehensively examined designated heritage assets within the vicinity of the Order limits, including scheduled monuments, listed buildings, registered parks and gardens, and conservation areas. Non-designated heritage assets, including archaeological remains, historic buildings, and the historic landscape, have also been considered. An assessment of the historical and archaeological background of the Site can be found in <b>ES Appendix 7A: Heritage Desk-Based Assessment [APP-057]</b> . This includes consideration of the well-recorded and relatively recent enclosure of the landscape within the Order Limits as presented by the Essex County Council Historic Landscape Characterisation. Great efforts have been made to retain historic landscape features such as field boundaries, trackways, and relationships between cultural heritage assets in order to preserve our ability to view and understand the historic landscape. <b>ES Chapter 10: Landscape and Visual Amenity [APP-042]</b> establishes that no significant visual effects are expected once mitigation planting has established. Proposed planting is shown on <b>ES Figure 10-12: Outline Landscape Masterplan [APP-179]</b> .
Visual impact	Fencing and CCTV will have a negative visual impact.	RR-60, RR-72	Proposed fencing has been designed to minimise its visual prominence. The fence will be a deer fence or other wire mesh security fencing on timber poles approximately 2.5m in height. Fencing will be set back or screened from sensitive receptors. Further information on the landscape impacts of fencing is presented in <b>ES Chapter 10: Landscape and Visual Amenity [APP-042]</b> .

Mitigation	The Applicant should provide reassurance that there will be enough staff to maintain planting for visual screening.	RR-33	The Applicant will establish the appropriate roles and responsibilities for site staff set out in the <b>Outline Construction Environmental Management Plan [APP-214]</b> . An Environmental Clerk of Works (ECoW) will be responsible for ensuring construction environmental mitigation measures are correctly implemented, monitored and maintained. These measures will include, but not be limited to, vegetation clearance, species identification and exclusion (protected or otherwise). The ECoW's role will cover activities that have the potential to impact biodiversity, for example by advising on methods and techniques to prevent or minimise light spill and the delivery of Toolbox Talks prior to the start of works that could potentially affect habitats and species. The contractor appointed to construct the Scheme will be responsible for establishing, managing and monitoring the implementation and establishment of landscape and ecological mitigation within the five-year establishment aftercare period. The Applicant will inspect and report on the success of establishment during this period. The long-term biodiversity monitoring and management requirements are set out the <b>Outline Landscape and Ecology Management Plan (OLEMP) [APP-217]</b> .
Visual impact	There will be a negative visual impact from lighting.	RR-48, RR-59	The visual impact of lighting has been assessed against Campaign to Protect Rural England (CPRE) Dark Skies mapping. The methodology followed is set out in <b>ES Appendix 10B: LVIA Methodology [APP-082]</b> . Landscape and visual mitigation has been described in Section 10.7 of <b>ES Chapter 10: Landscape and Visual Amenity [APP-042]</b> and is shown on <b>ES Figure 10-12: Outline Landscape Masterplan [APP-179]</b> . The proposed lighting has been designed to avoid and minimise the potential for adverse landscape and visual effects. An assessment of the proposed lighting, including any temporary lighting during construction, on ecology has been undertaken in <b>ES Figure 10-12: Outline Landscape Masterplan [APP-179]</b> . Throughout the Scheme, the use of motion detection security lighting to avoid permanent lighting will be utilised and the inward distribution of light will avoid light spill on to existing boundary features and impacts on ecology.



**Table B-22 Need**

Matter	Summary of points raised	PINS reference	Applicant's response
Efficiency	Solar is a highly inefficient means of energy generation.	RR-07, RR-12, RR-17, RR-35, RR-41, RR-42, RR-44, RR-47, RR-49, RR-52, RR-53, RR-56, RR-59, RR-60, RR-63, RR-65, RR-66, RR-71, RR-72, RR-75, RR-77, RR-20, RR-39, RR-50	The Applicant has set out the case for the need for the Scheme in detail in the <b>Statement of Need [APP-203]</b> . This also considers the efficiency of solar energy generation. Solar power reduces the market price of electricity by displacing more expensive forms of generation from the cost stack. This delivers benefits for electricity consumers. Due to technological advances, power generated by solar plants is already at or below grid parity cost in Great Britain. Solar power is economically attractive in Great Britain compared to many other forms of conventional and renewable generation. Larger solar schemes deliver more quickly and at a lower unit cost than multiple independent schemes that make up the same total capacity, bringing forward carbon reduction and economic benefits in line with government policy. The Scheme proposes a substantial infrastructure asset, which if consented will deliver large amounts of cheap, low-carbon electricity both during and beyond the critical 2020s timeframe. Maximising the capacity of generation in the resource-rich, accessible and technically deliverable proposed location, represents a significant and economically rational step forwards in the fight against the global climate emergency.
Technology	There are other, more reliable and less disruptive ways of producing energy in the UK (hydro, tidal, wind, nuclear and fracking).	RR-12, RR-26, RR-41, RR-42, RR-44, RR-48, RR-49, RR-59, RR-65, RR-72, RR-20, RR-07, RR-12, RR-17, RR-44, RR-48, RR-49, RR-52, RR-53, RR-59, RR-62, RR-63, RR-72, RR-75, RR-20, RR-39, RR-50	Chapter 11 of the <b>Statement of Need [APP-203]</b> provides an analysis of the economic viability of large-scale solar generation as a future contributor to a low-carbon Great Britain electricity supply system in comparison to alternate technologies; and an analysis of why the Scheme will be most beneficial to the achievement of government's aims if it is consented to the scale proposed. Section 8.4 in the <b>Statement of Need [APP-203]</b> explains that without the development of additional solar projects, other measures will be required to fill the gap which solar will fill, effectively making it much harder for the UK to achieve Net Zero.
Climate change	The Scheme is needed to combat climate change.	RR-54	The Applicant agrees and has set out the benefits of the form of electricity generation that will be delivered at Longfield Solar Farm in the <b>Statement of Need [APP-203]</b> . The Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity. The Scheme, along with other solar schemes, is of critical importance on the path to Net Zero, especially given

			the context of the Climate Change Committee's recent identification of the need for urgent action to increase the pace of decarbonisation in the electricity sector in Great Britain, and government's adoption of their recommendations for the Sixth Carbon Budget (2033 – 2037). The Applicant has assessed impacts on climate change through <b>ES Chapter 6: Climate Change [APP-038]</b> . This sets out that the Scheme will lead to a saving of 4.4 million tonnes of CO2e over the Scheme lifetime compared to a gas fired CCGT generating facility.
Technology	Solar will be a redundant technology and replaced as more efficient technologies are developed.	RR-56, RR-65, RR-66	The Applicant has set out the benefits of the form of electricity generation that will be delivered by the Scheme in the <b>Statement of Need [APP-203]</b> . In short, the Scheme is a substantial infrastructure asset, capable of delivering large amounts of low-carbon electricity. The Scheme, along with other solar schemes, is of critical importance on the path to Net Zero, especially given the context of the Climate Change Committee's recent identification of the need for urgent action to increase the pace of decarbonisation in the Great Britain electricity sector, and government's adoption of their recommendations for the Sixth Carbon Budget (2033 – 2037). The Scheme will also deliver large amounts of low-carbon power ahead of other potential technologies, for example those that have longer construction timeframes or have potentially not yet been proven at scale. The meaningful and timely contributions offered by the Scheme to UK decarbonisation and security of supply, while helping lower bills for consumers throughout its operational life, will be critical on the path to Net Zero.
Contribution to UK energy need	It is estimated that a fully operational Longfield Solar Scheme may contribute 0.05% of the UK's electricity.	RR-59	The Applicant has set out the benefits of the form of electricity generation that will be delivered by the Scheme in the <b>Statement of Need [APP-203]</b> . This also sets out in greater detail the benefits of delivering the Scheme at the scale and location proposed.
Contribution to UK energy need	The electricity will be sold back to National Grid for profit during times of high demand	RR-59, RR-69, RR-20	The BESS is designed, as its main and primary function, to provide peak generation electric energy time-shifting and grid balancing services. It will do this by capturing electricity generated from the PV Panels and storing it in the batteries in order to dispatch to the electricity grid when it is most required. As a supplementary and secondary service, it may also import surplus energy from the National Grid and provide other ancillary and energy time-shifting services to help National Grid Electricity Transmission (NGET) manage the increasing penetration of (variable) renewable generation on the transmission network.
Contribution to UK energy need	The Scheme is principally motivated by desire for profit.	RR-08, RR-38, RR-48, RR-56, RR-63	The Applicant is bringing forward Longfield Solar Farm to meet an urgent national need for new, renewable, sources of electricity. Further information on this is provided within the <b>Statement of Need [APP-203]</b> .

Contribution to local energy need	The Scheme should have a community ownership model or supply energy free to those affected.	RR-30, RR-33	The Applicant has already committed to providing a Community Benefit Fund (CBF). Matters relating to wider community benefits are being discussed with the host authorities and will be secured through a legal agreement submitted prior to the close of the examination.
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**Table B-23 Noise and Vibration**

Matter	Summary of points raised	PINS reference	Applicant's response
BESS	Concern about the effects of noise from BESS	RR-07, RR-23	The Applicant has set out its assessment of potential noise impacts in <b>ES Chapter 11: Noise and Vibration of the Environmental Statement [APP-043]</b> . The design of the Scheme has incorporated measures such as distancing of inverters away from sensitive receptors and locating the BESS compound area away from large concentrations of receptors, as well as towards the A12 where existing ambient noise levels are higher (such that noise emissions from the BESS are less impactful). As set out in the <b>Design Principles [APP-206]</b> inverters within 250m of residential dwellings will be treated with acoustic barriers to achieve a minimum 10dB(A) sound reduction, or an inverter selected with sound power levels at least 10dB lower than 96dB, which has been applied to inverters in the EIA. A requirement will be imposed through the DCO in relation to operational noise. It will require <i>"(1) No part of numbered works 1, 2 or 3 may commence until an operational noise assessment containing details of how the design of that numbered work has incorporated mitigation to ensure the operational noise rating levels as set out in the environmental statement are to be complied with for that part has been submitted to and approved by the relevant planning authority for that part or, where the part falls within the administrative areas of both Braintree District Council and Chelmsford City Council, both relevant planning authorities. (2) The design as described in the operational noise assessment must be implemented as approved."</i>
Construction noise	Concern over the effects of noise and vibration during construction process	RR-10, RR-24, RR-28, RR-34, RR-44, RR-46, RR-47, RR-49, RR-59, RR-67, RR-70, RR-39, RR-50,	Impacts from noise during construction are assessed in <b>ES Chapter 11: Noise and Vibration of the Environmental Statement [APP-043]</b> . Measures to manage construction noise are set out in the <b>Outline Construction Environmental Management Plan [APP-214]</b> . No significant residual adverse effects due to construction/decommissioning or operational phase noise and vibration have been identified. Construction noise limits have been identified for nearby noise sensitive receptors during evening and night-time periods, as well as Sunday daytime. Sensitive receptors have been identified and noise monitoring locations have been determined through desktop study during the scoping process and confirmed during site visits. The levels will be controlled through the

			Construction Environmental Management Plan, secured through a requirement imposed on the DCO.
General	Concern about noise generated by the Scheme in general	RR-24, RR-35, RR-44, RR-45, RR-48, RR-49, RR-20, RR-39, RR-50,	<b>ES Chapter 11: Noise and Vibration of the Environmental Statement [APP-043]</b> identifies that there would be no significant residual adverse effects due to construction/decommissioning, or operational phase noise and vibration. Residual effects are listed in Table 11-17 (Scheme construction and decommissioning) and Table 11-18 (Scheme operation) in the chapter. The design of the Scheme has incorporated measures such as distancing of inverters away from sensitive receptors and locating the BESS compound in an area away from large concentrations of receptors as well as towards the A12 where existing ambient noise levels are higher (such that noise emissions from the BESS are less impactful). As set out in the <b>Design Principles [APP-206]</b> inverters within 250m of residential dwellings will be treated with acoustic barriers to achieve a minimum 10dB(A) sound reduction, or an inverter selected with sound power levels at least 10dB lower than 96dB, which has been applied to inverters in the EIA. Refer to the two responses above for details as to how construction and operational noise will be controlled.
Assessment	The ES underestimates the impact of noise	RR-39, RR-50,	A full independent assessment of environmental impacts of the Scheme has been undertaken by suitably qualified technical consultants, using the methods set out in <b>ES Chapter 5: Environmental Impact Assessment Methodology [APP-037]</b> . The Applicant has set out an assessment of potential noise impacts in <b>ES Chapter 11: Noise and Vibration of the Environmental Statement [APP-043]</b> .

**Table B-24 Other**

Matter	Summary of points raised	PINS reference	Applicant's response
Procurement	The PV panels are likely to be manufactured in China in an environment involving human rights violations.	RR-38, RR-56	EDF Renewables have policies relating to sustainability and people, including matters relating to modern day slavery.
Procurement	The PV panels used should be manufactured in the UK	RR-41	The objective of the Skills and Employment Plan (proposed to be secured by a legal agreement) is to, where economically and practically feasible, procure goods and services from local contractors, subcontractors and suppliers to support the employment of the local community. The Applicant will also make a skills and education contribution. This will assist and encourage local people to access apprenticeships and training. Further information is set out in <b>ES Chapter 12: Socio-economics and Land Use [APP-044]</b> .

**Table B-25 Socio-economics**

Matter	Summary of points raised	PINS reference	Applicant's response
Lack of job creation	The Scheme will not generate more employment, locally or further afield	RR-19, RR-41, RR-48, RR-59	An assessment of the number of jobs created during the construction phase is provided in <b>ES Chapter 12: Socio-economics and Land Use [APP-044]</b> . It is expected that an average of 380 jobs will be created during the construction period. Of these, 171 jobs per annum are expected to be taken-up by residents within the study area. During the operational phase, 8 full time staff would be employed on the site. A Local Skills and Employment Plan will be prepared prior to the commencement of construction. This will set out measures that the Applicant will implement to advertise and promote employment opportunities associated with the Scheme in construction and operation locally. The Applicant will also make a skills and education contribution. This will assist and encourage local people to access apprenticeships and training. Further information is set out in <b>ES Chapter 12: Socio-economics and Land Use [APP-044]</b> .
Local businesses	Scheme will negatively impact the local economy, including local businesses	RR-38, RR-68	An assessment of the number of jobs created during the construction phase is provided in <b>ES Chapter 12: Socio-economics and Land Use [APP-044]</b> . It is expected that an average of 380 jobs will be created during the construction period. During the operational phase, 8 full time staff would be employed on the site. The expected operational employment at the Scheme will be equivalent to the current amount of employment on the agricultural land at the Scheme, meaning there will be net no change in the amount of employment. This information is based on estimates informed by the Applicant's prior experience of similar schemes, and details provided by the current landowner. In addition, a local Skills and Employment Plan will be prepared prior to the commencement of construction. This will set out measures that the Applicant will implement in order to advertise and promote employment opportunities associated with the Scheme in construction and operation locally. The Applicant will also make a skills and education contribution. This will assist and encourage local people to access apprenticeships and training.
Lack of job creation	The Scheme will not generate more local employment	RR-59	An assessment of the number of jobs created during the construction phase is provided in <b>ES Chapter 12: Socio-economics and Land Use [APP-044]</b> . It is expected that an average of 380 jobs will be created during the construction period. Of these, 171 jobs per annum are expected to be taken-up by residents within the study area. During the operational phase, 8 full time staff would be employed on the site. A Local Skills and Employment Plan will be prepared prior to the commencement of construction. This will set out measures that the Applicant will implement to advertise and promote employment opportunities associated with

			the Scheme in construction and operation locally. The Applicant will also make a skills and education contribution. This will assist and encourage local people to access apprenticeships and training. Further information is set out in <b>ES Chapter 12: Socio-economics and Land Use [APP-044]</b> .
Local businesses	The Scheme should be delivered by local companies or by using local labour	RR-41, RR-48, RR-59	An assessment of the number of jobs created during the construction phase is provided in <b>ES Chapter 12: Socio-economics and Land Use [APP-044]</b> . It is expected that an average of 380 jobs will be created during the construction period. Of these, 171 jobs per annum are expected to be taken-up by residents within the study area. During the operational phase, 8 full time staff would be employed on the site. A local Skills and Employment Plan will be prepared prior to the commencement of construction. This will set out measures that the Applicant will implement to advertise and promote employment opportunities associated with the Scheme in construction and operation locally. The Applicant will also make a skills and education contribution. This will assist and encourage local people to access apprenticeships and training. Further information is set out in <b>ES Chapter 12: Socio-economics and Land Use [APP-044]</b> .
Local businesses	The Scheme is likely to be delivered by contractors from outside the local area	RR-59	It is not possible to ascertain the exact number of jobs that would be taken up by residents in any local authority or statistical area, given that take-up of jobs will be dependent on individual skill levels and suitability. Overall, the Scheme will support, on average, 380 total jobs per annum during the construction period. Of these, 171 jobs per annum are expected to be taken-up by residents within the study area. A Local Skills and Employment Plan will be prepared prior to the commencement of construction. This will set out measures that the Applicant will implement to advertise and promote employment opportunities associated with the Scheme in construction and operation locally. Further information is set out in <b>ES Chapter 12: Socio-economics and Land Use [APP-044]</b> .
Employment	Rural unemployment will increase as a result of the Scheme	RR-63, RR-67	An assessment of the number of jobs created during the construction phase is provided in <b>ES Chapter 12: Socio-economics and Land Use [APP-044]</b> . It is expected that an average of 380 jobs will be created during the construction period. During the operational phase, 8 full time staff would be employed on the site. The expected operational employment at the Scheme will be equivalent to the current amount of employment on the agricultural land at the Scheme, meaning there will be net no change in the amount of employment. This information is based on estimates informed by the Applicant's prior experience of similar schemes, and details provided by the current landowner. In addition, a Local Skills and Employment Plan will be prepared prior to the commencement of construction. This will set out measures that the Applicant will implement in order to advertise and promote employment opportunities associated with the Scheme in construction and operation locally. The Applicant will also make a skills and



			education contribution. This will assist and encourage local people to access apprenticeships and training.
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**Table B-26 Transport and access**

Matter	Summary of points raised	PINS reference	Applicant's response
Safety	Construction traffic is unsafe on small local roads	RR-09, RR-12, RR-17, RR-19, RR-22, RR-23, RR-27, RR-31, RR-48, RR-49, RR-61, RR-63, RR-67	An appropriate routing and access strategy has been identified which seeks to limit the usage of Protected Lanes and local roads through Boreham and Hatfield Peverel to the south. HGVs will be routed to/from the west via the A130, Wheelers Hill, and Cranham Road, with supporting highway improvements (carriageway widening) where necessary. There will be the potential to utilise the Radial Distributor Road following its completion prior to the construction phase. For further information, please see Sections 13.5 and 13.9 in <b>ES Chapter 13: Transport and Access [APP-045]</b> . A review of the existing highway collision record has been carried out as part of <b>ES Appendix 13A: Transport Assessment [APP-093]</b> which reviews data over a 3 to 5-year period within the study area. This review reveals that the Scheme is not expected to exacerbate the existing collision record of the highway network.
Traffic	The Scheme will increase traffic on smaller village/local roads	RR-09, RR-23, RR-27, RR-30, RR-31, RR-35, RR-36, RR-44, RR-46, RR-47, RR-48, RR-67, RR-70, RR-33	An appropriate routing and access strategy has been identified which seeks to limit the usage of Protected Lanes and local roads through Boreham and Hatfield Peverel to the south. HGVs will be routed to/from the west via the A130, Wheelers Hill, and Cranham Road, with supporting highway improvements (carriageway widening) where necessary. There will be the potential to utilise the Radial Distributor Road following its completion prior to the construction phase. For further information, please see Sections 13.5 and 13.9 in <b>ES Chapter 13: Transport and Access [APP-045]</b> .
Safety	Roads should be enlarged for safety	RR-09, RR-27	Due to the nature of the Scheme, consideration has been given to a number of locations within the surrounding highway network that could potentially be impacted. The Applicant intends to restrict HGV movements to certain routes (i.e. via the A130, Wheelers Hill and Cranham Road to the west) to prevent construction vehicles from using the B1137 Main Road and passing through Hatfield Peverel and/or Boreham. Where necessary, Cranham Road and Wheelers Hill will be widened to allow vehicles to pass safely. More information regarding access can be found in <b>ES Chapter 13: Transport and Access [APP-045]</b> .

Routing	The Applicant has not considered the importance of limiting traffic flow on Boreham Road	RR-16	The Applicant is not expecting to use Boreham Road for access to the site. The Solar Farm Site is expected to have a single point of access with traffic being routed through the site to different areas during the phases of construction. The route from Essex Regiment Way via Wheelers Hill and Cranham Road provides the most direct route from higher order roads and will minimise disruption in the nearby villages of Boreham and Hatfield Peverel. Where necessary, Cranham Road and Wheelers Hill will be widened to allow vehicles to pass safely. More information regarding access can be found in <b>ES Chapter 13: Transport and Access [APP-045]</b> .
Traffic	The Scheme will exacerbate existing congestion	RR-12, RR-17, RR-31	The peak construction year is anticipated to be 2025, based on an assumed commencement of construction in Q1 2024 and that the Scheme is built out over a 24-month period. This is a likely worst case from a traffic generation point of view because it compresses the trip numbers into a shorter duration and represents the greatest impact on the highway network. A lengthened construction phase would be expected to result in lower traffic impacts; therefore, the likely worst-case scenario has been assessed within <b>ES Chapter 13: Transport and Access [APP-045]</b> . There are not expected to be any significant effects as a result of the scheme based on this worst-case assessment within the ES, including in terms of driver delay or congestion. Moreover, as part of the consultation process, a number of principles have been agreed with ECC Highways, including the proposed site access location, visibility splays, crossing points on Noakes Lane and the approach for surveys and supporting assessment work. In addition, it has been agreed that the routing of HGVs should take place to/from the west via the RDR, A130 Essex Regiment Way, Wheelers Hill, Cranham Road and Waltham Road to prevent these larger vehicles from passing through the villages of Hatfield Peverel and Boreham (e.g. along the B1137 Main Road). Further details, including drawings showing the locations of access points, visibility splays and swept paths are held within <b>ES Appendix 13A: Transport Assessment [APP-093]</b> .
Roads	Roads are not wide enough for HGVs	RR-22, RR-67	Due to the nature of the Scheme, consideration has been given to a number of locations within the surrounding highway network that could potentially be impacted. The Applicant intends to restrict HGV movements to certain routes (i.e. via the A130, Wheelers Hill and Cranham Road to the west) to prevent construction vehicles from using the B1137 Main Road and passing through Hatfield Peverel and/or Boreham. Where necessary, Cranham Road and Wheelers Hill will be widened to allow vehicles to pass safely. More information regarding access can be found in <b>ES Chapter 13: Transport and Access [APP-045]</b> .

Management	A construction management/traffic management plan must be submitted with restrictions on deliveries all construction traffic and site workers outside peak hours	RR-31	HGVs will only travel to/from the site between 09:00-17:00, avoiding the traditional network peak hours of 08:00-09:00 and 17:00-18:00. No construction HGVs will arrive before 09:00 or depart after 17:00. Only construction workers (cars/ vans/ shuttle services) will travel to/from the site before 09:00 and after 17:00. The Applicant has set out details of its approach to managing impacts from construction traffic in <b>ES Appendix 13B: Framework Construction Traffic Management Plan [APP-094]</b> . A requirement within the DCO will secure the submission, approval and implementation of the CTMP. In addition, the Applicant intends to create a Community Liaison Group that will enable local community representatives to have a formal channel for monitoring and influencing developments at the site. This will provide a structured framework to exchange views and better understand and resolve issues, where it is appropriate to do so.
Mitigation	All HGVs accessing the site should be euro5 and above. No contractors, suppliers or deliveries to site can utilise the village of Terling to reach the site. There should be restricted areas that are not necessary to use. When spotted traveling through the village and reported to the construction compound site manager (email and telephone number made available to all with links to Terling) the offending company has a 5-strike policy and if reached will be fined first and if happens again will lose their contract. This applies to all size vehicles (car, van and truck).	RR-33	HGVs will utilise the Strategic Road Network (SRN) to travel to/from the site, including the A12(T) to the south and north and the A130 and A131 to the north. These larger vehicles would then follow the agreed routing strategy, via Wheelers Hill, Cranham Road, and Waltham Road, to access the site. Therefore, HGVs will not pass through the village of Terling to access the site. <b>ES Appendix 13B: Framework Construction Traffic Management Plan [APP-094]</b> includes details of the agreed routing strategy for HGVs (agreed with ECC Highways) and how this routing would be managed and enforced. The Applicant is satisfied with committing its contractors to Euro5 emissions standards and above for HGVs accessing the site. The Applicant will explore whether AILs can meet this standard, however these are specialised vehicles are not typically categorised as HGVs; therefore, they may not be capable of being subject to the same emissions controls. The number of AILs accessing the site will be low and infrequent. This commitment will be incorporated into an update of the Outline CEMP, as appropriate.
Transport and access	Access for emergency vehicles would be hampered by the road system.	RR-47, RR-49, RR-68	The Applicant has engaged with Essex Fire and Rescue, as set out in Table 8-1. The Applicant is also engaging the East of England Ambulance Service to progress a Statement of Common Ground. Prior to commencement of construction of the BESS, a Battery Safety Management Plan (in accordance with the <b>Outline Battery Safety Management Plan (BSMP) [APP-210]</b> submitted with the Application) is required to be submitted to the relevant local planning authority for approval, in consultation with the Health and Safety Executive, the Essex

			County Fire and Rescue Service and the Environment Agency. Should it be necessary, access for emergency vehicles will be achievable via several alternative existing access points (e.g. should the proposed site access for the Solar Farm Site become blocked or unavailable). This includes existing access points on Waltham Road, Boreham Road to the west of the Solar Farm Site and Terling Hall Road to the east. Bulls Lodge Substation has two accesses and therefore should there be any issues with one of the proposed access points then it will be possible to utilise the alternative access point to gain access.
PROW	Concern about potential loss of bridleways and walking paths.	RR-01, RR-11, RR-12, RR-17, RR-61, RR-01, RR-28, RR-30, RR-57, RR-59, RR-63, RR-39, RR-50,	There will be no loss of bridleways and walking paths as a result of the Scheme. PRow will be carefully managed during the construction phase through <b>ES Appendix 13C: Public Rights of Way Management Plan [APP-095]</b> . The safety of walkers, cyclists and horse riders is also addressed through <b>ES Appendix 13B: Framework Construction Traffic Management Plan [APP-094]</b> . This includes measures to physically segregate existing PRow from proposed construction routes, as well as having controlled crossing points (with gates and banksmen) to safely accommodate pedestrians and cyclists. No PRow will be permanently closed or diverted as a result of the Scheme, and the minimum legal PRow widths will continue to be met or bettered in all instances. In line with the information provided in <b>ES Chapter 13: Transport and Access [APP-045]</b> the PRow and permissive paths will be a minimum 1.5m wide for footpaths and 3.0m for bridleways, with at least 5m either side of the centreline of the PRow or permissive path that will remain undeveloped outside of the solar PV fence line. This will ensure a 10m wide passageway will be maintained on all routes. All pathways, including temporary diversions and the establishment of a new permissive route, will be maintained. Several meetings have been held with ECC Highways (including PRow officers) to agree the proposed strategy for managing PRow during the construction and decommissioning phases of the Scheme, as set out in Table 8-1 of the <b>Consultation Report [APP-018]</b> . This includes measures to physically segregate existing PRow from proposed construction routes, as well as having controlled crossing points (with gates and banksmen) to safely accommodate pedestrians and cyclists. No PRow will be permanently closed or diverted as a result of the Scheme. <b>ES Appendix 13C: Public Rights of Way Management Plan [APP-095]</b> illustrates the proposed strategy which supports <b>ES Appendix 13B: Framework Construction Traffic Management Plan [APP-094]</b> . See also <b>ES Figure 13-4: Public Rights of Way Management Plan (Construction Phase) [APP-196]</b> .

Routing	There are a number of protected lanes in and around the site. Non-use of these needs to be conditioned during construction and operation.	RR-07	The proposed access strategy for the Solar Farm Site consists of a single-point of access on Waltham Road and an agreed routing strategy for large construction vehicles to access the Solar Farm Site from the west via A130, Wheelers Hill and Cranham Road (with supporting improvements to the carriageway). The single access point and routing strategy has been advised (and therefore agreed) with ECC highways and has been identified as a way to limit the usage of Protected Lanes (i.e. Boreham Road) and local roads through Boreham and Hatfield Peverel to the south (i.e. Waltham Road to the South and Main Road). Further information on construction vehicle routing is presented in the <b>ES Appendix 13B: Framework Construction Traffic Management Plan [APP-094]</b> .
PROW	Greater public access around to land around Boreham should be included within the Scheme.	RR-41, RR-55	It is proposed that PROW in the vicinity of the Scheme remain available and convenient for public use. PROW will be carefully managed during the construction phase through <b>ES Appendix 13C: Public Rights of Way Management Plan [APP-095]</b> . Additional permissive routes will be provided for pedestrians and cyclists during the operational phase to facilitate connections across the Order limits, as well as with National Cycle Route 50 and Essex Way. Further information is provided in Section 13.7 of <b>ES Chapter 13: Transport and Access [APP-045]</b> .

**Table B-27 Water resources**

Matter	Summary of points raised	PINS reference	Applicant's response
Water supply	Access to water supplied through pipes running under the Solar Farm site should be maintained	RR-30	All third-party assets within the Order limits will be protected through appropriate protective provisions, which will set out methods to physically protect the assets through construction and operation. The protective provisions in Schedule 15, Part 1 of the <b>draft DCO [APP-011]</b> for the Protection of Electricity, Gas, Water and Sewerage Undertakers, have been amended slightly from the standard form to include other mains, pipelines or cables not ordinarily falling within the definition of "apparatus" and the owner of such mains, pipelines and cables as a "utility undertaker". This is to capture and protect the water supply to tenants that is privately provided within the Order Limits. Other water pipelines owned and operated by utility undertakers are also protected by Part 1 of Schedule 15.
Contamination	Concern about run-off into drinking water supplies	RR-72	Drainage strategies have been produced indicating how surface water run-off from the various parts of the Scheme will be managed (see <b>ES Appendix 9C: Longfield Solar Farm SuDS Strategy [APP-079]</b> and <b>ES Appendix 9D: Bulls Lodge Substation Extension Drainage Strategy [APP-080]</b> ). This includes management of any firefighting water that might be required within the BESS in case of emergency. The drainage strategies are designed to control surface water

			<p>run-off from the site for up to the 1 in 100-year event, including a 20% allowance for climate change, reducing flood risk off site. Two new surface water drainage outfalls would be required by the Scheme. The first is to an unnamed ditch (a tributary of the River Ter), and the second to Boreham Brook. In both cases water is treated using sustainable drainage systems (SuDS) prior to discharge to ensure no adverse impacts on water quality. The rate of discharge is also controlled to prevent any increase in flood risk or morphological impacts to the channel such as scour. An assessment of water quality impacts from the scheme is provided in <b>ES Chapter 9: Water Environment [APP-041]</b> and <b>ES Appendix 9B: Water Framework Directive (WFD) Assessment [APP-078]</b>. No adverse impacts have been identified with regard to water quality or flood risk.</p>
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