

# **Longfield Solar Farm**

Applicant Comments on Submissions Received - Deadlines 1A and 1B

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Deadline 2

Revision 1.0

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Longfield Solar Energy Farm Ltd



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### 1. Introduction

#### 1.1 Introduction

- 1.1.1 This report responds to the submissions made by Interested Parties at Deadlines 1A and 1B of the Longfield solar examination.
- 1.1.2 This report is structured as follows:
- Section 2 responds to matters raised by Braintree District Council, Chelmsford City Council and Essex County Council (the Host Authorities) in their Local Impact Reports (LIRs);
- Section 3 responds to matters raised in Written Representations at Deadline 1A and 1B;
- Section 4 responds to responses given by Interested Parties to the Examining Authority's First Written Questions.
- 1.1.3 The above responses are collated by topic.



## 2. Applicant's Comments on Local Impact Reports

#### 2.1 Overview

- 2.1.1 This section provides the Applicant's comments to matters raised in the LIRs produced by Braintree District Council (BDC), Chel msford City Council (CCC) and Essex County Council (ECC) (the Host Authorities). The responses below should be read alongside the updated Statement of Common Ground with the Host Authorities that is submitted at Deadline 2, which records further engagement undertaken.
- 2.1.2 The references below correspond to the relevant paragraph numbers in each of the LIRs submitted at Deadline 1B.

#### 2.2 Principle of Development, Likely Significant Effects and Adequacy of the DCO

LIR Ref.	Summary	Applicant Response
BDC 5.12 and 5.14	The Development Plan is supportive of the general principle of renewable energy schemes and actively encourages them where the benefits outweigh the harms, subject to the satisfaction of a number of detailed criteria. Therefore, the general principle of the proposed development is in accordance with the adopted Development Plan and it is the detailed assessment of such schemes against the required criteria which is important when establishing whether a proposal is likely to be acceptable or not. The DCO is adequate with respect to the description of the development which it proposes to authorise.	No comment. Please refer to Table 3.1 of the <b>Statement of Common Ground between the Applicant and the Host Authorities [EN010118/EX/8.4(A)]</b> for details.
CCC 6.3-6.5	The proposed development would provide a positive impact in terms of contributing towards a reduction in carbon emissions. However, the positive impact in reducing carbon emissions must be balanced against the environmental impacts of the proposal as considered below. CCC supports the development of solar energy development in principle provided that there are no significant adverse environmental impacts that cannot be appropriately managed and/or mitigated through the Development Consent Order (DCO) process.	No comment. Please refer to the <b>Statement of Common Ground between the Applicant and the Host Authorities [EN010118/EX/8.4(A)]</b> for details on the position between the parties on each of the matters raised.



LIR Ref.	Summary	Applicant Response
	The following are identified as main issues / key areas of concern.  Landscape character and visual amenity Natural environment and loss of agricultural land Historic Environment Residential living environment Noise, Vibration, Air Quality, and contamination Traffic and Highway Safety Flooding and Drainage Socio economic and other matters	
ECC 6.10- 6.11 and 6.13	The proposed development would provide a positive impact in terms of clean green, low carbon energy production. The development would contribute to a reduction in the carbon emissions of the energy supply in the UK and contribute to securing a stable energy source for over 25 years.  ECC recognises the positive impact on renewable energy generation will need to be balanced against the potential positive and negative impacts of the proposed scheme. Due to the scale of the DCO application, there will be significant adverse effects upon landscape character and visual amenity which, with the exception of harm to the Ter Valley and PDA1, can be managed and over time lessened as the mitigation proposals in the form of landscaping establish. These matters including the loss of agricultural land, are covered in the LIRs of Braintree District Council and Chelmsford City Council. ECC fully supports the conclusions on these matters and endorses the conclusions in these LIRs.  The draft DCO is adequate with respect to the description of the development it proposes to authorise, including that the scheme would make a direct contribution to the provision of low carbon generation capacity that is urgently required in order to meet the Government's objectives and commitments for the development of a secure, affordable and low carbon energy system.	No comment. Please refer to the <b>Statement of Common Ground between the Applicant and the Host Authorities [EN010118/EX/8.4(A)]</b> for details on the position between the parties on each of the matters raised.



# 2.3 Air Quality and Emissions

LIR Ref.	Summary	Applicant Response
BDC 6.10-6.11 BE that en ide ca	BDC Environmental Health agrees with the conclusions in regards to air quality impacts. Environmental Health would support the submission of comprehensive dust control measures which would need to be adopted by the contractor at the time of construction if the project proceeds and when the contractor has been appointed. The DCO requires this by way of a Construction Environmental Management Plan.	No comment. Please refer to Section 3.9 of the <b>Statement of Common Ground between the Applicant and the Host Authorities</b> [EN010118/EX/8.4(A)] for details on the position between the parties on matters relating to air quality.
	BDC consider that there is a comprehensive assessment of Air Quality and that subject to controls being put in place to limit dust levels and employment of best practice means then no significant adverse effects are identified. BDC do not therefore envisage any impacts on air quality that cannot be adequately controlled by the DCO and its requirements and subject to these controls the development complies with Local Policy.	
	In relation to air quality, the ES has considered this against the impact upon traffic flows, dust and the construction of Battery Energy Storage System, which has been assumed to be constructed in a single phase, the worst in terms of road traffic numbers and expose of sensitive receptors to dust.	
	CCC will be guided by Essex County Council on those matters in relation to the effect upon the local highway network.	
CCC 6.223- 6.228	In relation to decommissioning, whilst details are not fixed at this stage, it is expected that the decommissioning stage would be similar in nature to construction, albeit of a slightly shorter duration with fewer traffic movements and equipment.	No comment. Please refer to the <b>Statement of Common Ground between the Applicant and the Host Authorities [EN010118/EX/8.4(A)]</b> for details on the position between the parties on matters relating to air quality.
	The air quality within the site is generally considered to be good and there are no Air Quality Management Areas within 5 km of the Order limits. Dust generation is expected to occur during the duration of the site works and a large dust emissions magnitude is anticipated for construction phase activities mainly attributable to piling works. There is medium risk of dust soiling to sensitive receptors.	
	The sensitivity of the area is low for human health impacts due to low background particulate matter concentrations. This means the risk of dust	



LIR Ref.	Summary	Applicant Response
	impact for construction activities is classified as having low risk to human health.	
	The operation of the scheme is not anticipated to have a significant impact upon local air quality, meaning the effect would be negligible.	



# 2.4 Biodiversity, Ecology and Designated Sites

LIR Ref.	Summary	Applicant Response
BDC 7.18- 7.19	Baseline information/legislation  The desktop assessment has been prepared in consultation with the Essex Field Club and these records have informed the survey requirements. In addition, designated sites, protected and priority habitats and species have been appropriately considered within the desk study of the assessment. (Records from new or updated surveys undertaken should be shared with the Essex Field Club to update the Local Biological Records Centre database).  The reports accompanying the DCO application follow the Chartered Institute of Ecology and Environmental Management (CIEEM) guidelines and relevant expertise/qualifications of the competent experts involved in the preparation of the Environment Statement have been provided, in accordance with Regulation 14 of the EIA Regulations. Furthermore, BDC are satisfied that the summary of the relevant legislation is up to date and complete.	No comment. Please refer to Section 3.3 of the <b>Statement of Common Ground between the Applicant and the Host Authorities</b> [EN010118/EX/8.4(A)] for details on the position between the parties on matters relating to ecology and the habitat regulations assessment.
BDC 7.22	Shadow Habitats Regulations Assessment  BDC agree that the site is not functionally linked, nor functionally important, to the designated sites.	No comment. Please refer to Section 3.3 of the Statement of Common Ground between the Applicant and the Host Authorities [EN010118/EX/8.4(A)] for details on the position between the parties on matters relating to ecology and the habitat regulations assessment.
BDC 7.33	Shadow Habitats Regulations Assessment – Atmospheric Pollution  BDC agree with the approach to the assessment of atmospheric pollution and the assumption regarding changes in air quality.	No comment. Please refer to Section 3.3 of the Statement of Common Ground between the Applicant and the Host Authorities [EN010118/EX/8.4(A)] for details on the position between the parties on matters relating to ecology and the habitat regulations assessment.
BDC 7.34	Shadow Habitats Regulations Assessment – impacts on European Sites (watercourses)	No comment. Please refer to Section 3.3 of the Statement of Common Ground between the Applicant and the Host Authorities



LIR Ref.	Summary	Applicant Response
	BDC support the conclusion that the dilution factors due to distance from the European Sites will be so great that any pollution is likely to be well below the limits of detection. BDC are satisfied that the measures proposed within the Outline Construction Environmental Management Plan [EN010118/APP/7.10] (Table 3-4: Flood Risk, Drainage and Surface Water) would further prevent any issues from pollution upon the River Ter due to surface water run-off.	[EN010118/EX/8.4(A)] for details on the position between the parties on matters relating to ecology and the habitat regulations assessment.
BDC 7.35	Shadow Habitats Regulations Assessment – in-combination effects  BDC are satisfied that there are no in-combination effects on the European sites identified due to the distances from the designated sites to the referenced Schemes.	No comment. Please refer to Section 3.3 of the <b>Statement of Common Ground between the Applicant and the Host Authorities</b> for details on the position between the parties on matters relating to ecology and the habitat regulations assessment.
BDC 7.41	Nationally Designated Sites  BDC have considered the proposed measures and agree that the scheme would not result in adverse impacts upon any nationally designated ecological sites. As a result, BDC are satisfied that it can demonstrate that it has met its statutory duties for designated sites under the Wildlife Countryside Act 1981 (as amended). The scheme also therefore accords with local planning policy by avoiding impacts on nationally designated ecological sites.	No comment. Please refer to Section 3.3 of the Statement of Common Ground between the Applicant and the Host Authorities [EN010118/EX/8.4(A)] for details on the position between the parties on matters relating to ecology and the habitat regulations assessment.
BDC 7.44- 7.45	Locally Designated Sites – Boreham Road Gravel Pits Local Wildlife Site  It is noted that the works would require a grid connection through the LoWS, but impacts would be minimised by carrying out Horizontal Directional Drilling (HDD). BDC support this methodology to minimise the loss of habitat, as well as the precautionary measures contained within the Outline Construction Environmental Management Plan [EN010118/APP/7.10]. However, BDC note that Figure 10 – 15 (Vegetation Removal Plan) outlines an area south of this grid connection where vegetation may be removed. This vegetation is within the Boreham Road Gravel Pits LoWS and is not	A Cable Route and Substation Ecology Survey was undertaken in July 2022 [EN010118/EX/8.7]. The habitats within the possible vegetation removal area stated comprises a line of trees and scrub along the bank to the east, tall ruderal herbs (thistles and nettles) and bramble scrub up to and around the Boreham Brook and young broad-leaved plantation to the west (see Photo P6 in [EN010118/EX/8.7]). Any habitat losses here, if required for access to facilitate construction of the grid connection, would be minimal and temporary. In addition, an arboricultural survey was carried out in August 2022 and an Arboriculture Impact Assessment will be submitted for Deadline 3 that confirms that the Scheme will avoid affecting all veteran and mature trees. Some vegetation management, such as tall ruderal herb and scrub cutting in the



LIR Ref.	Summary	Applicant Response
	referenced as a potential impact within the referenced documents [EN010118/APP/6.1] or [EN010118/APP/7.10].	LoWS is likely to benefit the grassland interest of the LoWS as it is overgrown at this location.
	As a result, further clarification is sought on this matter to determine whether any vegetation clearance is required. This is necessary to confirm whether 14 there will be any additional impacts upon the Boreham Road Gravel Pits Local Wildlife Site (LoWS). However, BDC agree that the scheme will not affect the LoWS during the operational phase or decommissioning phase.	
BDC 7.60- 7.61	Ancient Woodland and Veteran Trees  BDC are also satisfied that sufficient information has been provided to demonstrate that all Veteran trees would be protected through the lifetime of the development, with protection measures in line with British Standard BS 5837: Trees in relation to design, demolition and construction.8 15 7.61 As a result, BDC are satisfied that Ancient woodland and veteran trees would be protected and that the development would accord with local planning policy requirements in this regard.	No comment. Please refer to Section 3.3 of the Statement of Common Ground between the Applicant and the Host Authorities [EN010118/EX/8.4(A)] for details on the position between the parties on matters relating to ecology and the habitat regulations assessment.
BDC 7.68	Appendix 8B Preliminary Ecological Appraisal  BDC note that minor vegetation removal may be required within Boreham Road Gravel Pits Local Wildlife Site (LoWS), as outlined within Figure 10 – 15 (Vegetation Removal Plan) [EN010118/APP/6.3] and that approximately 450.6m of hedgerow sections would be removed across the Order limits. Therefore, whilst it is considered potentially not reasonable to carry out dormouse surveys for minor vegetation removal, BDC query whether presence/likely absence surveys and/or precautionary mitigation measures should be implemented for Hazel Dormouse if the habitat is suitable for the species at these locations.	Previous walkover surveys within the Scheme and an update Cable Route and Substation Ecology Survey [EN010118/EX/8.7] of the cable route/grid connection corridor was undertaken in July 2022 found no change to baseline for Hazel Dormouse, with no desk study records and limited suitable habitat present within or close to the Scheme. Therefore, no further consideration of this species is required at this stage. However as stated in the Outline Construction Environmental Management Plan [EN010118/APP/7.10(A)], prior to work, pre-construction surveys will be undertaken to validate and, where necessary, update the baseline survey findings. As stated in the Outline Landscape and Ecology Management Plan [EN010118/APP/7.13(A)] these surveys will be undertaken in advance of the preparation of the detailed Landscape and Ecology Management Plan (LEMP) and the LEMP will be developed in line with the findings of these surveys and will include precautionary methods of working for protected species where required.



LIR Ref.	Summary	Applicant Response
BDC 7.69- 7.70	Appendix 8C Flora Survey Report  BDC are satisfied with the conclusions of the Flora Survey Report [EN010118/APP/6.2]. This identified that no protected plant species were present within the Order limits (Wildlife and Countryside Act - Schedule 9). However, some rare arable flora was noted within the site, including Corn Chamomile (classified as endangered in the Red Lists for UK and England), albeit no specific area within the site has been defined as Arable Field Margin Priority habitat.  Furthermore, no invasive (Wildlife and Countryside Act -Schedule 9) plant species were noted during the surveys within the Order limits. However, the presence of New Zealand Pigmyweed was recorded in aquatic habitat within nearby lakes to the west of the development. Given there is always a risk that invasive species may quickly spread on to suitable habitats within the Order limits (e.g. via machinery used during the construction phase), BDC support the proposal within the Outline Construction Environmental Management Plan [EN010118/APP/7.10] to provide a Biosecurity Management Plan which would set out procedures to ensure that no invasive species are brought onto the site.	No comment. Please refer to Section 3.3 of the Statement of Common Ground between the Applicant and the Host Authorities [EN010118/EX/8.4(A)] for details on the position between the parties on matters relating to ecology and the habitat regulations assessment.
BDC 7.71	Appendix 8D Aquatic Ecology Survey Report  BDC support the conclusions of the Aquatic Ecology Surveys. The surveys identified a number of rare/notable macroinvertebrate species, which will be reliant on specific requirements in order to reproduce. Therefore, BDC support the proposal to maintain riparian vegetation around the ponds and ensure good water quality.	No comment. Please refer to Section 3.3 of the <b>Statement of Common Ground between the Applicant and the Host Authorities</b> [EN010118/EX/8.4(A)] for details on the position between the parties on matters relating to ecology and the habitat regulations assessment.
BDC 7.73- 7.75	Appendix 8E Great Crested Newt Survey Report  Given the design of the proposal, BDC agree that no breeding ponds would be lost to the scheme and that the development would result in significant benefits for the existing Great Crested Newt population. However, BDC note that neither Chapter 8: Ecology of the Environmental Statement [EN010118/APP/6.1] nor the Outline Construction Environmental Management Plan [EN010118/APP/7.10] contain any reasonable	There is a single pond within an arable field in the Order limits and nine further ponds within 500m of the Order limits with Great Crested Newt present. The pond within the Order limits and those adjacent will be suitably buffered from the Order limits and any terrestrial habitat lost will be limited to intensively managed arable fields of negligible suitability to this species. Where there is other vegetation loss (such as minor hedge removal for access) as stated in the Outline Landscape and Ecology Management Plan



LIR Ref.	Summary	Applicant Response
	avoidance measures for this European Protected Species. As a result, BDC recommend that this should be undertaken for this scheme, given the known low population present within the Order limit, unless further reasonable justification can be provided on why the applicant's ecologist thinks that precautionary measures are not required for this European Protected Species.  Alternatively, the scheme could be registered under Natural England's District Level Licensing (DDL) for Great Crested Newt.  BDC recommend good practice measures to avoid impacts to mobile species including amphibians are embedded into the Outline Construction Environmental Management Plan [EN010118/APP/7.10] and it is suggested that there are significant opportunities to enhance the habitat within the site boundary for Great Crested Newt.	[EN010118/APP/7.13(A)], surveys will be undertaken in advance of the preparation of the final LEMP and the risk will be assessed for Great Crested Newt. The LEMP will be developed in line with the findings of these surveys and will include precautionary methods of working for protected species where required.  The Applicant agrees that there are significant opportunities to enhance the habitat within the Order limits for Great Crested Newt and have included such measures in the Outline Landscape and Ecology Management Plan [EN010118/APP/7.13(A)], including pond restoration, uncut grass margins, and hibernacula.
BDC 7.76	Appendix 8F Reptile Survey Report  The Reptile Survey did not confirm the presence of reptiles within the site. As a result, BDC support the proposed reasonable avoidance measures contained within the Outline Construction Environmental Management Plan [EN010118/APP/7.10], to minimise any potential risk of killing and injury to these protected species. It is also considered that the development would result in significant enhancements for reptiles and could also be a good receptor site (following the establishment of habitat) for future developments within Braintree DC and Chelmsford BC.	No comment. Please refer to Section 3.3 of the <b>Statement of Common Ground between the Applicant and the Host Authorities</b> [EN010118/EX/8.4(A)] for details on the position between the parties on matters relating to ecology and the habitat regulations assessment.
BDC 7.77- 7.79	Appendix 8G Breeding Birds Survey  The Breeding Bird Survey indicates that the scheme would retain as much of the existing boundary habitat as is practicable. BDC support this approach to ensure minimal habitat loss. In addition, BDC are satisfied that the landscape masterplan would create further breeding and foraging options for the recorded bird species.  BDC requested further clarification on whether the development would result in impacts to Skylark, a ground nesting Priority species. As a result, BDC are pleased to see that Chapter 8: Ecology of the Environment	No comment. Please refer to Section 3.3 of the <b>Statement of Common Ground between the Applicant and the Host Authorities</b> [EN010118/EX/8.4(A)] for details on the position between the parties on matters relating to ecology and the habitat regulations assessment.



LIR Ref.	Summary	Applicant Response
	Statement [EN010118/APP/6.1] outlines that the development would result in the conversion of 275 hectares of arable habitats (which are often temporary in nature) to permanent grassland beneath and between the solar arrays, including the provision of 83 hectares of new habitats managed for biodiversity.	
	BDC note that the development would potentially result in a temporary disturbance during construction and decommissioning to breeding Red Kite, Hobby and Barn Owl (during the breeding season only), where these species are breeding within 200m of the Order limits. As a result, BDC support the proposal to provide pre-commencement surveys for sensitive breeding birds, as listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended).	
	Appendix 8H Wintering Birds Survey	The Applicant notes these comments.
BDC 7.80- 7.83	BDC still agree that impacts (habitat loss, disturbance of habitats and pollution) from the development can be minimised/avoided during the construction and operation phases as set out within Table 8-10 of Chapter 8: Ecology of the Environmental Statement [EN010118/APP/6.1]. 7.81 It is highlighted that BDC requested further clarification on whether the site contains functionally linked land, due to presence of foraging habitat Golden Plover during the overwintering period. Consequently, BDC support the conclusions of the 'shadow' Habitats Regulations Assessment.	
	Further clarification was also sought for Lapwing, given that a peak count of 17 individuals was also recorded in March 2020. This species is a Priority Species and BoCC Red list species and is listed as being at risk due to the loss of open arable habitat from solar farms. In addition, Lapwing is also a qualifying feature of the Dengie Special Protection Area (SPA) and Ramsar site, Stour and Orwell Estuaries SPA and Ramsar site, Foulness SPA and Ramsar site and the Thames Estuary and Marshes SPA and Ramsar site, due to the presence of important nonbreeding over- wintering assemblages.	
	It is acknowledged that Lapwing was not included within the submitted Shadow Habitats Regulations Assessment, as the above designated sites were scoped out due to the distance of the Habitats sites to the site boundary. In addition, that site does not contain a significant proportion (i.e.	



BDC 7.90	Solar schemes.  Appendix 8J Badger Survey	No comment. Please refer to Section 3.3 of the Statement of Common Ground between the Applicant and the Host Authorities
	It is also accepted that it is too early to fully predict long-term effects on bat populations from solar farms, as large-scale solar farms have not been routinely monitored to predict long-term effects on bat populations. Therefore, BDC strongly support the proposal to include monitoring to improve confidence in the assessment of residual adverse or beneficial effects, which would provide a greater dataset to inform future large scale	
BDC 7.84- 7.86	BDC also note that commuting and foraging habitat for bats is assessed as of up to County/District Importance. Sensitive lighting measures will be required for foraging and commuting bats during the construction, operation and de-commissioning phases of the development. BDC support the outlined measures contained within the Outline Construction Environmental Management Plan [EN010118/APP/7.10] and Outline Operational Environmental Management Plan [EN010118/APP/7.11]. However, it is advised that a lighting design condition should be secured for each phase of development.	
	Appendix 8l Bat Survey Report  BDC note that minor vegetation removal may be required within Boreham Road Gravel Pits Local Wildlife Site (LoWS), as outlined within Figure 10 – 15 (Vegetation Removal Plan) [EN010118/APP/6.3] and that this area (ref. 1022, 1023) could not be accessed as part of the Preliminary Bat Roost Assessment (Figure A4.3). Consequently, BDC query whether any vegetation to be removed within this area would contain trees with potential roost features for bats and seek clarification for these European Protected Species.	An update survey of the cable route/grid connection corridor was undertaken in July 2022 within previously inaccessible areas (the Cable Route and Substation Ecology Survey [EN010118/EX/8.7]). The cable route and substation extension land contains trees and adjacent woodlands and buildings which have the potential to support roosting bats. However, none will be impacted by the Scheme. Therefore, there is no change to the assessment presented in Chapter 8: Ecology of the ES [EN010118/APP/6.1]. This will also be confirmed in the Arboriculture Impact Assessment to be submitted for Deadline 3 confirming that the Scheme can avoid impacts to all veteran and mature trees.
	1%) of the Lapwing population for the relevant Habitats Sites.  Consequently, BDC are satisfied that no further measures are required, but it would have been more robust to have this clarified further within the Chapter 8: Ecology of the Environmental Statement [EN010118/APP/6.1].	
LIR Ref.	Summary	Applicant Response



LIR Ref.	Summary	Applicant Response
	BDC support the proposal to undertake a pre-commencement check, as outlined within the <b>Outline Construction Environmental Management Plan [EN010118/APP/7.10],</b> to fully determine the potential impacts upon this mobile species and identify whether any further mitigation/enhancement measures or a development licence application would be required for this scheme.	[EN010118/EX/8.4(A)] for details on the position between the parties on matters relating to ecology and the habitat regulations assessment.
BDC 7.91	Appendix 8K Riparian Mammal Survey Report  BDC are satisfied the conclusions of the Riparian Mammal Survey [EN010118/APP/6.2], which confirmed Water Vole to be absence from the River Ter and that Otter were using the water course for foraging and commuting purposes. Based on the scheme layout, BDC agree that the development would provide a suitable buffer to the River Ter. As a result, no further measures are required for riparian mammals.	No comment. Please refer to Section 3.3 of the Statement of Common Ground between the Applicant and the Host Authorities [EN010118/EX/8.4(A)] for details on the position between the parties on matters relating to ecology and the habitat regulations assessment.
BDC 7.93	Priority Habitats  The Biodiversity Net Gain Report [EN010118/APP/6.5] outlines that a total of 6.35 units of Lowland Mixed Deciduous Woodland Priority habitat would be removed for this development. As a result, the habitat would be compensated by 80.20 units of other woodland; broadleaved/mixed. Consequently, the development would result in a trading issue, as the proposed habitat to be created would be less distinctive than the habitat lost. It is not clear where this 6.35 units of Lowland Mixed Deciduous Woodland would be removed within the Order limit. Therefore, BDC query whether there is scope to remove this trading issue from the development.	Under the current BNG proposals, 0.46ha of broadleaved woodland would be lost during the development with a value of 6 units. However, the scheme will deliver 25.72ha of mixed and deciduous woodland with a value of 80 units.  Options to remove the trading rule issue include:  • reassessing the ratios of grassland, scrub and woodland provided by the scheme to see, if under the revised Metric 3.1, the trading rules can be met;  • the client entering into a bespoke management agreement that extends beyond the typical 30 year BNG management period to enable the delivery of higher distinctiveness woodland types onsite; or  • the client seeking offsite solutions and/or the purchase of biodiversity credits to offset the loss.  We will update the Metric to 3.1 for Deadline 3.
BDC 7.97	Biodiversity Net Gain/Landscape Management	The Applicant notes these comments.



LIR Ref.	Summary	Applicant Response
	It is highlighted that the <b>Biodiversity Net Gain Report</b> [EN010118/APP/6.5] uses the Defra Biodiversity Metric 3.0, which is not the most recent iteration of the Defra Biodiversity Metric, as '3.1' is now available. However, this update was released in May 2022 and it is not expected that the Biodiversity Net Gain Report should now be updated, in line with guidance set out by Natural England.	
BDC 7.100	In terms of the Outline Landscape and Ecology Management Plan [EN010118/APP/7.11], BDC support the indicative planting specification and schedule, as well as the outlined aftercare measures for the proposed habitats. However, BDC do recommend that a 40-year work schedule (in a table format) would be beneficial to be included within this document. Furthermore, it would be beneficial to have the persons responsible for the implementation of the management measures to be outlined within an updated document, to ensure accountability if the objectives of the site are not being reached. In addition, the product details, location, heights and orientations of the proposed habitat boxes should be provided, along with designs and locations of the proposed habitats piles. This is necessary to ensure the appropriate implementation of these bespoke enhancement measures	BDC is correct that a long term plan is needed, but this needs to be more far reaching in terms of its remit (e.g. covering the different habitat types, species and management). An ecological advisory group will be established comprising the relevant stakeholders to ensure inclusivity and a fully informed process (e.g. linking biodiversity enhancement into local and regional green infrastructure). The scope of the group and how this is secured will be discussed and agreed with the relevant stakeholders and further details will be provided at a subsequent deadline.
BDC 7.101	Deer fencing  BDC have reviewed Figure 2-12 (Deer Fencing/CCTV)  [EN010118/APP/6.3] and have the following comments to ensure the successful establishment of the fencing, based on published guidance:  The fencing will be installed at appropriate height and will avoid Muntjac entering the site. However, the specifications may need to be 2.6-2.8 m in height to fully rule out large deer (i.e. Fallow Deer) from jumping over the fence.  The wire mesh will need to prevent animals from passing through the openings. Therefore, mesh size at the base of fences should be no more than 75 x 75mm due to the presence of muntjac across the wider landscape.	This is still being considered by the Applicant and a final position is reflected in the Statement of Common Ground between the Applicant and the Host Authorities [EN010118/EX/8.4(A)].



LIR Ref.	Summary	Applicant Response
	Wires should have a diameter of at least 2.5 mm and should consist of a rust-free material.  The mesh should be fixed such that deer cannot pass under the fence. This may involve burying the wire mesh 20-40cm underground, with contingencies to still allow Badger through if possible (i.e. badger gates').  No lighting should be installed as part of the CCTV, unless it includes infrared lighting.	
BDC 7.103	Finally, it is suggested that both of the below planning conditions would be appropriate: A) PRIOR TO COMMENCEMENT: BIODIVERSITY MONITORING STRATEGY  No development shall take place, including demolition, ground works and vegetation clearance, until a biodiversity monitoring strategy has been submitted to, and approved in writing by, the local planning authority. The purpose of the strategy shall be to monitor the habitat creation and the presence of Protected and priority species. The content of the Strategy shall include the following.  a) Aims and objectives of monitoring to match the stated purpose.  b) Identification of adequate baseline conditions prior to the start of development.  c) Appropriate success criteria, thresholds, triggers and targets against which the effectiveness of the various conservation measures being monitored can be judged.  d) Methods for data gathering and analysis.  e) Location of monitoring.  f) Timing and duration of monitoring.  g) Responsible persons and lines of communication.  h) Review, and where appropriate, publication of results and outcomes.  A report describing the results of monitoring shall be submitted to the local planning authority at intervals identified in the strategy. The report shall also	The Applicant has some initial thoughts on the wording of the commitments as follows below. Notwithstanding, the detailed wording and securing mechanism will be discussed and agreed with the Host Authorities and a position reflected in the relevant SoCG and the certified documents, as appropriate, at a subsequent deadline.  A) PRIOR TO COMMENCEMENT: BIODIVERSITY MONITORING STRATEGY (1) No phase of the solar farm works or grid connection works may commence until a biodiversity monitoring strategy has been submitted to and approved in writing by the relevant planning authority for that phase or, where the phase falls within the administrative areas of both Braintree District Council and Chelmsford City Council, both relevant planning authorities.  (2) For the purposes of sub-paragraph (1), "commence" shall include site clearance including vegetation removal.  (3) The purpose of the strategy submitted under sub-paragraph (1) will be to monitor the habitat creation pursuant to the landscape and ecological management plan approved pursuant to paragraph 9 and the presence of protected and priority species within the Order limits. The strategy must include-a) Aims and objectives of such monitoring;  b) Identification of agreed adequate baseline conditions prior to the start of development;  c) Appropriate success criteria, thresholds, triggers and targets against which the effectiveness of the various biodiversity measures can be monitored and judged;



#### **Summary**

set out (where the results from monitoring show that conservation aims and objectives are not being met) how contingencies and/or remedial action will be identified, agreed with the local authorities, and then implemented so that the development still delivers the fully functioning biodiversity objectives of the originally approved scheme. The monitoring strategy will be implemented in accordance with the approved details.

Reason: To ensure the development complies with NPS, Draft NPS, NPPF and local planning policies, the Conservation of Habitats and Species Regulations 2017 (as amended), the Wildlife & Countryside Act 1981 (as amended) and the NERC Act 2006 (Priority habitats & species).

## B) PRIOR TO COMMENCEMENT: WILDLIFE SENSITIVE LIGHTING DESIGN SCHEME

A lighting design scheme for biodiversity, to cover all phases of development, shall be submitted to and approved in writing by the local planning authorities. The scheme shall identify those features on site that are particularly sensitive for bats and that are likely to cause disturbance along important routes used for foraging; and show how and where external lighting will be installed (through the provision of appropriate lighting contour plans, Isolux drawings and technical specifications) so that it can be clearly demonstrated that areas to be lit will not disturb or prevent bats using their territory.

All external lighting shall be installed in accordance with the specifications and locations set out in the scheme and maintained thereafter in accordance with the scheme.

Reason: To ensure the development complies with NPS, Draft NPS, NPPF and local planning policies, the Conservation of Habitats and Species Regulations 2017 (as amended), the Wildlife & Countryside Act 1981 (as amended) and the NERC Act 2006 (Priority habitats & species).

#### **Applicant Response**

- d) Methods for data gathering and analysis;
- e) Location of monitoring;
- f) Timing and duration of monitoring;
- g) Responsible persons and lines of communication;
- h) Review, and where appropriate, publication of results and outcomes;
- i) Implementing contingencies and remediation as necessary based on feedback from the monitoring; and
- j) A requirement for a report describing the results of monitoring to be submitted to the relevant planning authority at intervals to be identified in the strategy. The report must also set out (where the results from monitoring show that conservation aims and objectives are not being met) how contingencies and/or remedial action will be identified, agreed with the relevant planning authority, and then implemented so that the authorised development delivers the fully functioning biodiversity objectives of the originally approved scheme.
- (4) Any approved strategy must be implemented as approved.
- B) PRIOR TO COMMENCEMENT: WILDLIFE SENSITIVE LIGHTING DESIGN SCHEME
- (1) No phase of the solar farm works or grid connection works may commence until a lighting design scheme has been has been submitted to, and approved in writing by the relevant planning authority for that phase or, where the phase falls within the administrative areas of both Braintree District Council and Chelmsford City Council, both relevant planning authorities.
- (2) The scheme submitted under sub-paragraph (1) must-
- (a) identify those features of the solar farm works and grid connection works that are particularly sensitive for bats, breeding birds and other wildlife species and that are likely to cause disturbance along important routes used by bats for foraging and birds for nesting; and
- (b) show how and where external lighting will be installed in connection with the solar farm works and grid connection works, through the provision of



LIR Ref.	Summary	Applicant Response
		appropriate lighting contour plans, Isolux drawings and technical specifications, so that it can be clearly demonstrated that areas to be lit will not impact bats, bird nesting and other wildlife species.
		(3) All external lighting in connection with the solar farm works and grid connection works must be installed in accordance with the specifications and locations in any approved scheme and maintained throughout the construction and operation of the solar farm works and grid connection works in accordance with the approved scheme.
BDC 7.106	Trees and Hedgerows  Submitted documents cover satisfactorily most elements of the proposal, however whilst there is inclusion of every Ecological Species within reports, a satisfactory Arboriculture Report, both regarding Impact and Methodology, is absent. As the proposed Solar Farm is in such close proximity to Woodlands of value and of Ancient categorisation, Arboricultural reporting should be included within the submitted documentation and not submitted pursuant to the DCO. Highlighting this matter further, identifying the proposed 469.1m2 of Woodland loss in not achievable within the submitted 'Vegetation Removal Plan' due to lack of clarity and the large scope of area covered by the site within one sheet. This can easily be rectified with a dedicated Arboricultural Impact Statement, breaking the site down into its individual PDAs. RPAs, Tree Protective Fencing and Removals can all be documented this way, rather than after the DCO when impact would be harder to remedy. Tree Protective Fencing and its location should be seen as a priority when considering the close proximity of Ancient Woodlands and other trees on the proposed site, critically during construction.	An Arboricultural Impact Assessment (AIA) will be submitted for Deadline 3. The survey has been carried out during August 2022 and is currently being written up and will be shared with the Host Authorities in September 2022. The survey findings confirm that the Scheme can avoid affecting veteran and mature trees, and it verifies the conclusions of the ES.
BDC 7.107- 7.111	Trees and Hedgerows – OLEMP  The OLEMP [EN010118/APP/7.13] sets out good guidelines for planting and for future management of vegetation, both existing and proposed planting. The guidance needs to be firmed up within the official LEMP in order to be assured of the enhancements proposed and to create the	The Applicant agrees. The intention, as stated in the <b>Outline Landscape and Ecology Management Plan [EN010118/APP/7.13(A)]</b> , is a final detailed Landscape and Ecology Management Plan (LEMP) will be developed and agreed with the stakeholders prior to the commencement of works, in accordance with the Requirements contained in Schedule 2 of the <b>draft DCO [EN010118/APP/3.1(A)]</b> .



LIR Ref.		Applicant Response
	screening required to lower the visual impact to surrounding sensitive landscape from the proposed Solar Farm.	



### 2.5 Flood Risk, Drainage and Surface Water

LIR Ref.	Summary	Applicant Response
BDC 8.9	In general terms the scheme complies with Local Policy however for a detailed technical assessment of flood risk BDC defer to the Lead Local Flood Authority, ECC.	No comment. Please refer to Section 3.4 of the <b>Statement of Common Ground between the Applicant and the Host Authorities</b> [EN010118/EX/8.4(A)] for details on the position between the parties on matters relating to the water environment.
CCC 6.267- 6.269	The effect of the proposal on flooding and SUDS will be a matter for ECC SUDS and the Environment Agency.  However, it is not expected that the proposal would lead to significant adverse impacts upon flood risk, drainage and surface water such that they could warrant a specific objection on this ground. Any impacts arising from the scheme could be most likely designed in/conditioned such that that the proposal is not expected to be harmful on water management grounds.  CCC will be guided by ECC SUDS and the Environment Agency regarding the provision of appropriate requirements.	No comment. Please refer to Section 3.4 of the Statement of Common Ground between the Applicant and the Host Authorities [EN010118/EX/8.4(A)] for details on the position between the parties on matters relating to the water environment.
ECC 10.9- 10.14	The surface water modelling undertaken by ARCUS, November 2021 (Flood Risk Assessment annex D [EN010118/APP/6.2]) is satisfactory. The effective use of sustainable drainage principles to manage runoff from the site has satisfied the localised impact of surface water flood risk.  The Longfield Solar Farm Surface Water Drainage Strategy [EN010118/APP6.2] prepared by ARCUS February 2022 includes the incorporation of SuDS measures and will ensure that greenfield runoff rates are maintained during the construction and operational phases of the Scheme. Rural Sustainable Drainage System measures are proposed to limit possible channelisation from surface water runoff from the PV panels by promoting interception and infiltration.  The Lead Local Flood Authority (LLFA) is satisfied with the SuDS measures proposed in the DCO application including:  The ground surrounding and between the PV Arrays will be planted with native species rich grassland and wildflower mix which will act as dripline planting. This will allow surface water which falls from the drip line across	No comment. Please refer to Section 3.4 of the Statement of Common Ground between the Applicant and the Host Authorities [EN010118/EX/8.4(A)] for details on the position between the parties on matters relating to the water environment.



#### **Summary**

#### **Applicant Response**

the face of PV arrays to be intercepted by the vegetation and limit the potential of surface water to concentrate and run across the surface. The introduction of ponds and swales to capture flows from the site, swales with check dam to manage flows during operational phase of the scheme. Shallow filter drains are incorporated to facilitate interception and infiltration for the runoff generated from Ancillary Building.

The Surface Water Drainage Strategy is satisfactory from the Battery Energy Storage System (BESS) compound. The runoff rates are limited to 1-year greenfield rates for all storm events including 100 year plus climate change event. A pond is proposed to attenuated runoff from the site and the final outfall will be to an existing open land drain to the east.

The Surface Water Drainage Strategy and water quality measures are satisfactory for the extension of the Bull Lodge Substation. A Hybrid drainage system is provided which is ECC's preference where onsite infiltration is not fully achieved. Any rainfall for events up to and including the 1 in 5-year return period will discharge via infiltration. A piped outfall is provided for rainfall events greater than 5 years up to and including 100 years plus climate change events and the discharge rate limited to 1-year greenfield rates.

The incorporation of Sustainable Drainage Systems across the Longfield Solar Farm development has mitigated the localised impact of surface water flooding across the site.



### 2.6 Historic Environment and Archaeology

LIR Ref.	Summary	Applicant Response
BDC 9.9	A number of Protected Lanes were identified in the Heritage Assessment. BDC wish to identify Rolls Farm Lane which also lies immediately to the east of the DCO site (Terling Hall Road leads into Rolls Farm Lane and both run along the site's eastern boundary). In addition, Waltham Road starts immediately adjacent to the DCO's eastern site boundary, leading away in an easterly direction.	Although the assessment assesses the protected lane of Terling Hall Road, it is noted that the northern portion of this lane is in fact Rolls Farm Lane which turns east as Waltham Road, both of which are also protected lanes. These have not been assessed separately within the ES as they were considered as part of Terling Hall Road. However, it is noted that they do not fall within the Order limits and that their value as defined within the Braintree District Protected Lanes Assessment is similar to that of Terling Hall Road. Waltham Road only differs from Terling Hall Road in having lower aesthetic, group, and archaeological association values. Rolls Farm Lane has lower group value but higher biodiversity value. The Scheme will not directly impact these lanes and any impact will be the same or lower than that assessed for Terling Hall Road (negligible adverse effect, not significant). Notwithstanding, discussions are ongoing with the Host Authorities on this matter and an updated position will be reflected in the SoCG through the progression of the examination.
BDC 9.11	It is concluded that the DCO would result in less than substantial harm to the significance of Ringer's Farmhouse, due to the change in its setting, which the Council agree with.	No comment. Please refer to Section 3.2 of the <b>Statement of Common Ground between the Applicant and the Host Authorities</b> [EN010118/EX/8.4(A)] for details on the position between the parties on matters relating to cultural heritage.
BDC 9.12	The impacts are determined to be negligible to low in all cases (except Ringer's Farm, as described above), which is deemed not significant in EIA terms. Whilst the Council agree with this statement, BDC would like to highlight that the proposals will result in harm to the significance of a high number of listed buildings and structures, through impact to their setting. These are (*unless stated, all buildings are Grade II):  Terling Conservation Area (magnitude of impact: very low, resulting in a negligible effect)  Terling Place Registered Park and Garden (magnitude of impact: low, resulting in a minor adverse effect)  Parish Church of All Saints Grade II* (magnitude of impact: very low, resulting in a minor adverse effect)	No comment. Please refer to Section 3.2 of the <b>Statement of Common Ground between the Applicant and the Host Authorities</b> [EN010118/EX/8.4(A)] for details on the position between the parties on matters relating to cultural heritage.



#### **Summary**

#### **Applicant Response**

Barn approximately 5m SE of Ringer's Farmhouse (magnitude of impact: low, resulting in a minor adverse effect)

Leylands Farmhouse (magnitude of impact: low, resulting in a minor adverse effect)

Barn and Stable Range Approximately 15 Metres North of Leylands Farmhouse (magnitude of impact: low, resulting in a minor adverse effect) Scarlett's Farmhouse (magnitude of impact: low, resulting in a minor adverse effect)

Little Russells (magnitude of impact: low, resulting in a minor adverse effect)

Sparrows Farmhouse and two associated listed buildings (magnitude of impact: low, resulting in a minor adverse effect)

Rolls Farmhouse and associated listed barn (magnitude of impact: low, resulting in a minor adverse effect)

Brent Hall (magnitude of impact: low, resulting in a minor adverse effect) Birds Farmhouse (magnitude of impact: very low, resulting in a negligible effect)

Barn at Noakes Farm (magnitude of impact: low, resulting in a minor adverse effect)

Lawns Farmhouse (magnitude of impact: low, resulting in a minor adverse effect)

Little Holts (magnitude of impact: low, resulting in a minor adverse effect) Toppinghoe Hall and associated garden walls, two listings (magnitude of impact: very low, resulting in a negligible adverse effect)

Wallaces Farmhouse (magnitude of impact: very low, resulting in a negligible effect)

Church of St Mary the Virgin, Great Leighs Grade I listed (magnitude of impact: low, resulting in a minor adverse effect)

Wakerings Farmhouse (magnitude of impact: very low, resulting in a negligible effect)

Edenvale (magnitude of impact: very low, resulting in a negligible effect) Poplars Cottage (magnitude of impact: very low, resulting in a negligible effect)



LIR Ref.	Summary	Applicant Response
	The Parish Church of St Mary the Virgin, Fairstead, Grade I (magnitude of impact: low, resulting in a minor adverse effect)  Shuttleworth (magnitude of impact: very low, resulting in a negligible effect)  Hobbits (magnitude of impact: very low, resulting in a negligible effect)  Shoulderstick Haul (magnitude of impact: very low, resulting in a negligible effect)  Powers Farmhouse (magnitude of impact: very low, resulting in a negligible effect)	
	Further impact is identified to numerous non-designated heritage assets, including Berwick Hall and Stocks Farm (see paragraphs 7.8.58 - 7.858). Not all of these assets are within Braintree District, yet they are relevant and require consideration.	
CCC 6.163 and 6.169	The level of harm identified within the assessment is generally concurred with, but there are several locations where there is additional harm. The group of buildings comprising Stocks Farm, The Thatched Cottage, Stocks Cottages, Little Holts (Grade II listed) and Whalebone Cottages which are sited to the east and west of Boreham Road, rely on a rural setting which contributes to their significance, especially Stocks which was directly associated with the agricultural landscape. Stocks Farm is a traditional farmstead with group value and should be considered as medium value/significance.	A meeting is arranged between the Applicant and the Host Authorities to discuss this topic, the conclusions of which will be incorporated into a subsequent version of the relevant SoCG.
	There is a need for further mitigation works at Stocks Farm and the adjacent buildings). The detail, phasing and management of the landscaping will also be important in maximising mitigation.	
CCC 6.164	The landscaping and offset proposed to the western side of field PDA 28 is not adequate to mitigate the impacts. It has previously been suggested the western limit of PDA 28 should be moved away from this group of historic buildings, which is not reflected in the current scheme.	A meeting is arranged between the Applicant and the Host Authorities to discuss this topic, the conclusions of which will be incorporated into a subsequent version of the relevant SoCG.



LIR Ref.	Summary	Applicant Response
CCC 6.165- 6.166	There is disagreement to the assessment of significance of Whitehouse Farm and Birds Farm which are considered to have a negligible and minor adverse effect in the ES.  Whitehouse Farm should be considered to be of medium significance, reflecting its group value and moat. Birds Farm should be considered to be of high significance as high quality sixteenth century building. The level of significance impacts on the magnitude of impact.	A meeting is arranged between the Applicant and the Host Authorities to discuss this topic, the conclusions of which will be incorporated into a subsequent version of the relevant SoCG.
CCC 6.167 and 6.169	Noakes Lane is a protected lane, on the eastern part it forms part of the setting to Noakes Barn (grade II listed). Where PDA 11 and PDA 12 enclose the lane on both sides, the impact on its setting would be considerable. Further mitigation should be provided, with additional setbacks and landscaping.  The detail, phasing and management of the landscaping will also be important in maximising mitigation.	A meeting is arranged between the Applicant and the Host Authorities to discuss this topic, the conclusions of which will be incorporated into a subsequent version of the relevant SoCG.
ECC 12.3	Chapter 7 Cultural Heritage [EN010118/APP/6.1], Section 7.8.6 provides a list of construction related intrusive activities which have the potential to impact on archaeological remains. However, the cumulative impacts of the many, various areas of ground disturbance during construction, including excavation necessary for concrete pads for panels, all cabling, landscaping and ecological enhancements will also need to be considered as part of the mitigation as these are not included within list 7.8.6.	All intrusive activities will be adequately assessed through a programme of archaeological evaluation and mitigation prior to or during construction. The <b>Overarching Written Scheme of Investigation [EN010118/EX/8.11]</b> has been provided to the Host Authorities with the intention of reaching agreement of the document prior to the close of the examination. This will be reflected in the relevant SoCG.
ECC 12.5- 12.6	The results of the targeted trial trench evaluation suggest there is greater potential for the survival of further unknown archaeological assets within the Order limits than the geophysical survey detected, the nature and significance of which is unknown.  The assessment of likely impacts and effects, Chapter 7 Cultural Heritage [EN010118/APP/6.1] Section 7.8, identified the known non-designated archaeological assets where the effect is considered significant. The sensitivity/value of assets may need to be reassessed to take into account	No comment. Please refer to Section 3.2 of the <b>Statement of Common Ground between the Applicant and the Host Authorities</b> [EN010118/EX/8.4(A)] for details on the position between the parties on matters relating to cultural heritage.



LIR Ref.	Summary  the antiquity of the historic landscape and the need for more considered	Applicant Response
ECC 12.7- 12.8	understanding of the origins of the historic landscape within the Order limits.  There are two areas of significant (medium or high -value) archaeological activity (Sites A70 and A127-) which have been removed from the area of the Scheme within the Order limits and are now within an area for landscaping. A127 is identified as Site D from the trial trench evaluation, where an Upper Palaeolithic blade and possible prehistoric occupation layer with gravel surface was uncovered only 300-400mm below surface. A potential highly significant Palaeolithic tool has been recovered which, if related to in situ deposits would be of national significance. The trial trenching report states: 'The crested blade provides some proxy evidence for the site having highly significant evidence for Upper Palaeolithic activity. If the piece can be assigned sites A70 to an Earlier Upper Palaeolithic date, as is strongly suspected, the site would be highly significant in a North-west	No comment. Please refer to Section 3.2 of the Statement of Common Ground between the Applicant and the Host Authorities [EN010118/EX/8.4(A)] for details on the position between the parties on matters relating to cultural heritage.
12.0	European context.'  ECC would not support any intrusive proposals on these sensitive sites and the potential for disturbance to the possible prehistoric deposit from any vegetation planting or landscaping will need to be assessed through a detailed programme of further archaeological investigation in order for a suitable mitigation strategy to be proposed. These areas of landscaping will require further archaeological investigation prior to any works commencing in those areas.	matters relating to cultural hemage.
ECC 12.9- 12.10	The nature and significance of the World War I (WWI) practice trenches and possible associated features remains to be adequately assessed. The DCO application recognises that these assets are uncommon nationally and rare regionally in Essex and that the area may contain features of the trial trenches that survive to a greater extent than those evaluated. The Historic England (HE) publication "First World War fieldworks in England" (Brown, M 2017) has identified the need for better understanding of the archaeological resource for surviving WWI monuments and features, including training features and defences. It recognises that there are significant gaps in knowledge that should be addressed and improvements for the protection of any surviving features.	No comment. Please refer to Section 3.2 of the <b>Statement of Common Ground between the Applicant and the Host Authorities</b> [EN010118/EX/8.4(A)] for details on the position between the parties on matters relating to cultural heritage.



LIR Ref.	Summary	Applicant Response
	The fieldwork carried out was limited in extent and has not provided sufficient information to assess condition, survival and significance. The HE publication on WWI military features shows that the trenches identified through cropmark features may also be accompanied by underground tunnels and other subterranean features which would not be visible as cropmarks. The full extent of the practise ground may not have been realised along with the potential for unexploded ordnance. It would be preferable to preserve these elements through design (ground-based supports and cables above ground), however if this is not feasible then a site-specific mitigation strategy will need to be considered and a suitable programme of archaeological investigation proposed. Further investigation into the possible WWI military features to determine their significance and extent is required to ensure a suitable mitigation strategy is proposed.	
ECC 12.11- 12.12	There are some inaccuracies in paragraph 7.4.8 of <b>Chapter 7 Cultural Heritage [EN010118/APP/6.1]</b> , which need addressing. "Archaeological evaluations were also undertaken to refine and augment the desk-based data, including a geophysical survey (detailed magnetometry) of the whole scheme and targeted trial trenching."  This statement is incorrect, as geophysics was not completed for the whole scheme.	No comment. Please refer to Section 3.2 of the <b>Statement of Common Ground between the Applicant and the Host Authorities</b> [EN010118/EX/8.4(A)] for details on the position between the parties on matters relating to cultural heritage.
ECC 12.13	Paragraph 7.6.3 below also requires updating, with the results from the trial trenching which identified Roman activity.  'The Roman period is well attested in the area, and likely a focal point of Roman activity given the proximity of the Order limits to the London to Colchester Roman Road 100m south of the Order limits and an important Roman settlement at Chelmsford (Caesaromagus). The remains of a villa or small settlement were recorded at Great Holts Farm 300m west of the Order limits. A Roman isled hall, suggestive of a Roman Principa, were recorded at Bulls Lodge mineral extraction area 200m north-west of the south-western end of the Order limits. Cropmarks near Toppinghoe Hall suggest the possible presence of a small Roman settlement 200m south of	No comment. Please refer to Section 3.2 of the <b>Statement of Common Ground between the Applicant and the Host Authorities</b> [EN010118/EX/8.4(A)] for details on the position between the parties on matters relating to cultural heritage.



LIR Ref.	Summary  The Order limits, Nevertheless, no Reman period remains, have been	Applicant Response
	the Order limits. Nevertheless, no Roman period remains have been recorded within the Order limits.'	
ECC 12.14	Further, paragraph 7.6.35 should be updated to reflect the response at statutory consultation from the Council of the Essex Society for Archaeology and History; copied below:  'The sites investigated to the west of the LSF include not only a scatter of farms, as that paragraph suggests, but quite major settlements including what may have been a manorial centre (Clarke, 2003). More importantly it is not the case that 'the Bulls Lodge farms were abandoned during the emparkation of Newhall Palace in the 13th century' the abandonment of these sites happened long before Newhall and its park were created in the 16th (not 13th) century. The critical point is that the areas historically dispersed and polyfocal settlement pattern was also shifting. The predecessors of existing late medieval or early postmedieval farms are often some distance away rather than occupying precisely the same location.'	While the response from the Council of the Essex Society for Archaeology and History is acknowledged, their objection is one of professional opinion. Documentary evidence suggests that a manor and deer park are likely to have existed long before the 16th century. In fact, a manor is documented in the New Hall area from 1062 and New Hall itself was first mentioned in documentary evidence in 1301 as Nova Aula when it belonged to the Canons of Waltham Abbey (Burgess & Rance, 1988). It is likely that the first deer park at New Hall, was created during the medieval period with New Hall located at its centre; the hall was rebuilt as the Palace of Beaulieu by Henry VIII, after he acquired it in 1516 (Tuckwell, 2006). That it was rebuilt suggests an estate existed there prior to the 16th century.  The Applicant respectfully disagrees with the Council of the Essex Society for Archaeology and History that the medieval settlement pattern within the former New Hall estate followed a similar evolution to those within the Order limits.  Nevertheless, the potential for previously unrecorded archaeological remains to be encountered within the Order limits is assessed in the DBA and ES as 'high' and of up to regional significance. The points raised by the Council of the Essex Society for Archaeology and History would not alter this assessment or the archaeological investigations required to assess the significance of such remains or their mitigation as set out in the Overarching Written Scheme of Investigation [EN010118/EX/8.11].
ECC 12.17	The Environmental Statement includes Chapter 7 - Cultural Heritage [EN010118/APP/6.1]. This is supported by Figures 7-1 Archaeological Assets [EN010118/APP/6.3] and 7-2 Built Heritage Assets [EN010118/APP/6.3] and four technical appendices A7A to A7D. The Historic Environment Desk-Based Assessment (Appendix A7A [EN010118/APP/6.2]), Aerial Investigation and Mapping Report (A7B [EN010118/APP/6.2]), Geophysical Survey (A7C [EN010118/APP/6.2]) and a Trial Trenching Report (Appendix 7D [EN010118/APP/6.2]).	An Overarching Written Scheme of Investigation [EN010118/EX/8.11] has been issued to the Host Authorities for comment and is submitted as part of the Applicant's suite of documents at Deadline 2. It is intended that a final version will be agreed between the parties prior to the close of the examination; and the position will be reflected in the relevant SoCG.



LIR Ref.	Summary  Currently no Outline Written Scheme of Investigation has been submitted, however a summary mitigation schedule is included in Table 7.8.	Applicant Response
ECC 12.18	Chapter 7 Cultural Heritage [EN010118/APP/6.1] and the supporting Heritage Desk Based Assessment, Appendix 7A [EN010118/APP/6.2], provide a reasonable account of the archaeological and historical background of the area within the Order limits. However, this assessment has failed to recognise the antiquity of the historic landscape, which in turn has implications for the assessment of value of the known non-designated heritage assets identified within the Order limits and for the presence and significance of currently unknown non-designated heritage assets within the Order limits. There is a requirement for the Cultural Heritage Chapter to be revised in line with paragraphs 12.12, 12.13 and 12.14.	No comment. Please refer to Section 3.2 of the Statement of Common Ground between the Applicant and the Host Authorities [EN010118/EX/8.4(A)] for details on the position between the parties on matters relating to cultural heritage.
ECC 12.19	Chapter 7 Cultural Heritage [EN010118/APP/6.1], section 7.9.2 says that where no appropriate design mitigation can be applied to the management of the archaeological resource, additional mitigation measures will be applied. This is supported, however, the proposals submitted in section 7.9.2 are not appropriate. The form of mitigation will need to be assessed following the completion of a suitable programme of archaeological evaluation by trial trenching to adequately assess the age, nature and extent of archaeological remains within the Order limits.	No comment. Please refer to Section 3.2 of the Statement of Common Ground between the Applicant and the Host Authorities [EN010118/EX/8.4(A)] for details on the position between the parties on matters relating to cultural heritage.
ECC 12.20	Section 7.9.3 proposes no mitigation for assets consisting of postmedieval field boundaries (A146, A147 and A148) subject to negligible effects. It is agreed that where there is no impact on below ground archaeological remains there would not be a requirement for mitigation, however assets A146 and A148 are considered likely postmedieval field boundaries and their origin has not been established. The trial trenching exercise positively identified only one single medieval/postmedieval field boundary therefore the origin of these features cannot be assumed unless there is further evidence to establish this. The definition of 'negligible effects' on 29 below ground archaeological remains will also need to be re-considered in light of paragraph 12.3 above.	No comment. Please refer to Section 3.2 of the <b>Statement of Common Ground between the Applicant and the Host Authorities</b> [EN010118/EX/8.4(A)] for details on the position between the parties on matters relating to cultural heritage.



LIR Ref.	Summary	Applicant Response
ECC 12.21	Within the <b>Mitigation Schedule</b> [EN010118/APP/6.6] the terminology is misleading. Under the CH01 Mitigation measures the table states Archaeological Monitoring. This should be changed to archaeological investigation as it is unlikely to consist of archaeological monitoring and will require, in the first instance, a programme of further archaeological trial trenching potentially followed by a programme of open area excavation. The <b>Mitigation Schedule</b> [EN010118/APP/6.6]) will require amending.	No comment. Please refer to Section 3.2 of the <b>Statement of Common Ground between the Applicant and the Host Authorities</b> [EN010118/EX/8.4(A)] for details on the position between the parties on matters relating to cultural heritage.
ECC 12.22	Appendix 7D Trial Trenching Report [EN010118/APP/6.2] does not provide sufficient information to make a considered judgement on the validity of the geophysical survey. As a result, there is concern over whether the proposed mitigation strategy is appropriate. There will be a requirement for the trial trenching report to be revised and re-submitted.	No comment. Please refer to Section 3.2 of the <b>Statement of Common Ground between the Applicant and the Host Authorities</b> [EN010118/EX/8.4(A)] for details on the position between the parties on matters relating to cultural heritage.
ECC 12.23	ECC is of the view that the DCO submission documents have provided a moderate level of understanding of the site's archaeological potential. However, ECC is concerned over the lack of corroboration of results between the geophysical survey and the targeted trial trenching, and lack of previous investigation across the area. The limited targeted trial trenching has provided an indication on the nature and possible extent of archaeological remains within very specific areas within the Order limits although significantly it does not provide an overall understanding of the potential of the site.	No comment. Please refer to Section 3.2 of the <b>Statement of Common Ground between the Applicant and the Host Authorities</b> [EN010118/EX/8.4(A)] for details on the position between the parties on matters relating to cultural heritage.
ECC 12.24- 12.25	Section 7.9.6 of Chapter 7 Cultural Heritage [EN010118/APP/6.1], states that additional archaeological work would be secured by a DCO condition which would be secured by the production of a Written Scheme of Investigation (WSI). This programme of work would need to comprise a phased approach of investigation, the first covering archaeological trial trenching over the remaining areas which will require ground disturbance prior to any construction, and second, an open area excavation of deposits identified, unless an alternative programme of preservation or excavation is agreed.	No comment. Please refer to Section 3.2 of the <b>Statement of Common Ground between the Applicant and the Host Authorities</b> [EN010118/EX/8.4(A)] for details on the position between the parties on matters relating to cultural heritage.



#### Summary

**Applicant Response** 

Agreement on the detail of a WSI needs to be reached as part of the DCO process to ensure that archaeological deposits will be appropriately investigated. ECC notes there are no proposals for outreach and enhanced public understanding as part of the mitigation beyond appropriate publication of the results and archiving. It is considered there would be scope to demonstrate a commitment to delivering enhanced public understanding/benefit and legacy is part of the mitigation considering the significant size of the scheme and the interest in the heritage of the area. The details of outreach should be included within the WSI.



#### 2.7 Landscape and Visual Amenity

LIR Ref.	Summary	Applicant Response
BDC 10.6	The Local Authorities have jointly commissioned an external expert Landscape Consultant to assess the likely landscape impact of the Longfield proposal on behalf of the Council to be read in conjunction with the LIR.	A response to the Host Authorities' position paper on landscaping is provided as an appendix to this report.
BDC 10.20	Cumulative Impact  The Longfield ES identifies 40 proposals in the vicinity of the site which have passed their threshold test for shortlisting for inclusion in the cumulative assessment. The proposals are located with marker numbers on the map but have not been spatially plotted on the mapping in the ES.	The map provided was prepared to show the location of cumulative schemes. Planning drawings for each cumulative scheme were consulted to determine the extent of each cumulative scheme.
BDC 10.21- 10.23	Methodology – Landscape and Visual Assessment  The Council consider that the Landscape Character and Visual Impact Assessment has been carried out using the methodology set down in the Guidelines for Landscape and Visual Impact Assessment (3rd Edition) which is the current commonly applied professional guidance.  Definition and extent of local landscape character areas has been agreed with the LPAs and used in the assessment to give a more fine-grained approach to the LVIA.  There is however one point of the LVIA that the Council do not agree with which is the Applicant's assessment with reference to the Ter Valley.	With regard to the effect of the scheme on the Ter Valley North, please see the response to the Host Authorities' position paper on landscaping.
BDC 10.27	Ter Valley North  The Councils assessment is that there will be a moderate adverse impact for a short stretch of the Ter Valley to the west of Sandy Wood. Our view is that field PDA1 should be removed from the scheme to retain the valley character alongside the Essex Way footpath – see notes in sections on landscape and visual impact.	With regard to the effect of the scheme on the Ter Valley North, please see the response to the Host Authorities' position paper on landscaping.



#### **Summary**

#### **Protected Lanes**

The Landscape masterplan and discussions had focussed on enhancement to hedges alongside the protected lanes and this is illustrated on the Landscape Masterplan. The Vegetation Removal Plan in the ES appears to show removal of vegetation along part of Noakes Farm Lane.

Along part of Noakes Farm Lane vegetation removal is be proposed to each side of the carriageway. This part of the Lane is designated as a protected lane in BDC's Local Plan under Policy LPP69 and, as such, the policy is clear that any proposals that would have a materially adverse impact on the physical appearance of these protected lanes will not be permitted.

The Council have discussed this in detail with the Longfield Team. The vegetation removal is shown to allow for visibility splays during construction of the solar park where vehicles will be crossing Noakes Farm Lane.

The Council understand that the intention is to manage the roadside vegetation on the north-south length of the lane by mowing the verges during the construction stage to improve visibility. This is more landscape management than vegetation removal.

Where the Lane turns to run east-west the current proposal is to remove a length of hedgerow for approximately 93m. The hedgerow is not continuous at this point so approximately 42m of hedge planting would be removed. The Council understand that the trees would be retained and a replacement hedgerow planted following construction, nevertheless, this would adversely impact the physical appearance of the protected lane.

The hedgerow has not yet been surveyed in detail, although the Council understand that a detailed survey of the hedge and trees is to be undertaken. There may be alternatives to hedgerow removal which should be considered. The visibility splay lengths are generated by traffic speeds so a lower speed limit during construction could reduce the requirement. Traffic management of vehicles crossing the Lane could also avoid the need to remove the hedge. Management of the hedgerow by facing up or cutting back to improve visibility could also be explored.

#### **Applicant Response**

The Scheme proposes a visibility splay of c. 90m on Noakes Farm Lane. This requirement was raised through consultation with Essex County Council to facilitate a safe crossing of construction traffic and will require removal of c. 42m of hedgerow on the northern side of the lane. Minimising and mitigating the Scheme's impact on the protected lane has formed part of the Scheme's iterative design development. Such measures include:

- Construction traffic is not proposed to travel along Noakes Lane since this was considered inappropriate, given its protected status. The construction route is therefore proposed to cross the lane instead.
- The extent of vegetation loss on the protected lane has been minimised wherever possible. For example, the first iteration of a visibility splay extended for 125m. Further design iterations allowed this to be reduced to 90m to minimise vegetation removal.
- The crossing's location uses two existing field accesses, preventing the need for further vegetation clearance.
- The proposal includes gated access and a banksman in order to minimise the need for further measures.

**ES Appendix 13A: Transport Assessment [EN010118/APP/6.2]** states that the north-south construction route through the Solar Farm Site supports the proposals to provide a single point of access and to minimise the usage of other parts of the local highway network, including the Protected Lanes of Boreham Road to the west and Braintree Road to the north. Whilst it is acknowledged that some hedgerow clearance is proposed on the northern side of Noakes Lane to achieve visibility splays of 2.4m x 90m at the construction vehicle crossing point, the extent of hedgerow removal is expected to be minor following discussions with the council on 1st September. Also no hedgerow removal is expected to be required on the southern side of the construction vehicle crossing point.

The approach to remove vegetation was agreed with ECC Highways and the proposals (with hedgerow removal) have been subject to a Stage 1 Road

BDC 10.28 and 10.32-10.37



LIR Ref.	Summary	Applicant Response
	As the plans stand at present the proposals are contrary to the protected lanes policy.	Safety Audit which did not identify any problems relating to visibility at this location following the hedgerow removal.
		A targeted arboricultural survey has been completed. This survey found the hedgerow to be of low quality (category C) in arboricultural terms. Acknowledging that any vegetation loss on the protected lane is regrettable, agreement has been reached with ECC that opportunity for reducing vegetation removal in this location will continue to be reviewed and minimised where possible. The EIA presents a worst case scenario at this stage with respect to vegetation removal and opportunities to reduce the extent hedgerow removal will be explored during detailed design. Where hedge removal is found to be needed at detailed design, the ability to coppice (cut to just above ground level) or cut to a sufficient height to give visibility without being completely removed, will be explored with the council.  As such, it is considered that the Scheme is appropriate and in accordance with Policy LPP69. Notwithstanding, this matter is under discussion with the Host Authorities and the position will be reflected in the relevant SoCG.
BDC 10.49- 10.55 and CCC 6.63- 6.70	Local Landscape Character Areas	
	The assessment findings, stated in the ES, during operation of the scheme are summarised below:	
	Ter Valley North - high sensitivity – low magnitude of effect (due to only very small incursion of physical area of solar arrays 1%)- minor adverse significance in construction reducing to negligible in year 15 (due to mitigation planting establishing)	With regard to the effect of the scheme on the Ter Valley North, please see the response to the Host Authorities' position paper on landscaping.
	Western farmland Plateau – medium sensitivity - medium magnitude of effect (15% of character area) - moderate adverse impact in year 1 reducing to minor adverse impact in year 15 (due to mitigation planting)	
	Toppinghoehall Woods – medium sensitivity- moderate adverse effects in year 1 reducing to minor adverse by year 15 (due to mitigation planting)	



#### **Summary**

#### **Applicant Response**

**Boreham North** – medium sensitivity - low adverse effects in year 1 with negligible adverse effects in year 15.

The Council agree that following the methodology proposed and agreed for the assessment that the above is a reasonable conclusion if the character areas are assessed in isolation from each other. When considering the Ter Valley and its setting, the Council however reach a different conclusion to that stated in the ES.

The Council's assessment is that the interplay between the Ter Valley North Local Landscape Character Area and adjacent Western Farmland Plateau to the south of the river that should not be ignored. The lower slopes of the Western Farmland Plateau provide part of the setting for this northerly stretch of the River Ter.

The Ter valley is recognised as a highly sensitive landscape in the LCA studies at all scales. The solar arrays would be visible from the Essex Way footpath which runs along the valley floor at this point for some years before mitigation planting is fully established and the mitigation planting cannot be continuous along the valley side because of the presence of pylons with overhead cables which span across the valley and present a detracting factor in what is a sensitive view.

The ES concludes that there are insignificant adverse effects on the upper Ter Valley North and strictly speaking this is true if assessment is confined to the boundaries of the character area. The Council's conclusion (because of the loss of view through to farmland and the visual intrusion of the solar arrays) is that in year 1 there would be a moderate adverse effect on the environs of the River Ter at this point which would reduce to a minor adverse effect once the planting is established by Year 15.

This moderate adverse effect could be eliminated if field PDF1 was removed from the solar arrays area.

#### BDC 10.58

## Combining the character effects for Boreham and Terling Farmland Plateaus

The ES falls short of describing the combined cumulative effect across the two District LCAs and spatially mapping of the Chelmsford North-Eastern

Planning drawings showing the spatial extent of the Chelmsford North-Eastern Urban Extension, and other developments, were reviewed as part of the cumulative assessment.



	I	I
LIR Ref.	Summary	Applicant Response
	Urban Extension and other developments in combination with the Longfield proposal.	BDC's comment is an extract from the draft position statement on landscape matters provided by the Local Planning Authorities. The draft position statement confirms the LPA's agreement with the ES cumulative assessment of 'negligible adverse' effect on the Borham Farmland Plateau, and 'moderate adverse' effect on the Terling Farmland Plateau. These character areas constitute landscape receptors agreed as the basis of the assessment at scoping.
		As set out in the LPA's draft position statement, combining the cumulative effect across the two District LCAs seeks to record the likely change in the countryside between Chelmsford and Terling. However, as demonstrated by the agreed cumulative effect on the Boreham Farmland Plateau, any increase in the level of effect would be a result of the cumulative scheme, namely Chelmsford North-Eastern Urban Extension, rather than Longfield Solar Farm.
		The potential impact of Longfield Solar Farm on its landscape setting has been considered throughout design development. Features such as offsets from public highways and public rights of way have been included, as well as mitigation planting including the gapping up of existing hedgerows and new woodland planting. These design decisions and proposed mitigation reduces the perception of the Scheme such that the experience of leaving the urban extent of Chelmsford would remain.
	Viewpoint 45 – from the Essex Way footpath north of the River Ter looking south	With regard to the effect of the scheme on the Ter Valley North, please see the response to the Host Authorities' position paper on landscaping.
BDC 10.63- 10.67 and CCC 6.31	ES assessment is that the mitigation planting would reduce the impact on this view from moderate adverse in year 1 to minor adverse in year 15. Although the proposed planting will provide screening it is our view that enough of the solar farm is still visible in year 15 for the impact on the view to continue to be assessed as moderate adverse. Potentially a change to the proposed mitigation planting to include more trees as well as hedgerow would result in a benefit and a change from moderate adverse impact.	With regard to the effect of the scheme on the Districts Protected Lanes, the Scheme proposes a visibility splay of c. 90m on Noakes Farm Lane. This requirement was raised through consultation with Essex County Council to facilitate a safe crossing of construction traffic and will require removal of c. 42m of hedgerow on the northern side of the lane. Minimising and mitigating the Scheme's impact on the protected lane has formed part of the Scheme's iterative design development. Such measures include:
	Overall, the mitigation planting proposed is assessed to have a positive impact on the visual impact of the proposals and will successfully screen the solar arrays and other features for most of the viewpoints. There will,	- Construction traffic is not proposed to travel along Noakes Lane since this was considered inappropriate, given its protected status. The construction route is therefore proposed to cross the lane instead.



#### LIR Ref.

#### Summary

however, be a loss of longer views and the appreciation of the open character of the landscape from footpaths due to the mitigation planting.

In terms of Policy compliance, Local Plan (Section 2) Policy LPP67 identifies the Council's LCA's as being central in any landscape assessment and goes on to state that Development which would not successfully integrate into the local landscape will not be supported.

Neighbourhood Plan Policy HPE1 also requires development to respect the character of the landscape and its sensitivity to change. It is accepted that most major developments of any significant scale will not completely comply with these policy requirements and that it is a matter of weighing up the degree of identified landscape harm in the overall planning balance.

Policy LPP69 of the Adopted Local Plan seeks to conserve the District's Protected Lanes. Part of the proposal does not comply with this Policy as identified above.

#### **Applicant Response**

- The extent of vegetation loss on the protected lane has been minimised wherever possible. For example, the first iteration of a visibility splay extended for 125m. Further design iterations allowed this to be reduced to 90m to minimise vegetation removal.
- The crossing's location uses two existing field accesses, preventing the need for further vegetation clearance.
- The proposal includes gated access and a banksman in order to minimise the need for further measures.

**ES Appendix 13A: Transport Assessment [EN010118/APP/6.2]** states that the north-south construction route through the Solar Farm Site supports the proposals to provide a single point of access and to minimise the usage of other parts of the local highway network, including the Protected Lanes of Boreham Road to the west and Braintree Road to the north. Whilst it is acknowledged that some hedgerow clearance is proposed on the northern side of Noakes Lane to achieve visibility splays of 2.4m x 90m at the construction vehicle crossing point, the extent of hedgerow removal is expected to be minor following discussions with the council on 1st September. Also no hedgerow removal is expected to be required on the southern side of the construction vehicle crossing point.

The approach to remove vegetation was agreed with ECC Highways and the proposals (with hedgerow removal) have been subject to a Stage 1 Road Safety Audit which did not identify any problems relating to visibility at this location following the hedgerow removal.

A targeted arboricultural survey has been completed. This survey found the hedgerow to be of low quality (category C) in arboricultural terms. Acknowledging that any vegetation loss on the protected lane is regrettable, agreement has been reached with ECC that opportunity for reducing vegetation removal in this location will continue to be reviewed and minimised where possible. The EIA presents a worst case scenario at this stage with respect to vegetation removal and opportunities to reduce the extent hedgerow removal



LIR Ref.	Summary	Applicant Response
		will be explored during detailed design. Where hedge removal is found to be needed at detailed design, the ability to coppice (cut to just above ground level) or cut to a sufficient height to give visibility without being completely removed, will be explored with the council.
		As such, it is considered that the Scheme is appropriate and in accordance with Policy LPP69. Notwithstanding, this matter is under discussion with the Host Authorities and the position will be reflected in the relevant SoCG.



# 2.8 Noise and Vibration

LIR Ref.	Summary	Applicant Response
BDC 11.16	Operational Noise It is noted in ES Chapter 11: Noise and Vibration [EN010118/APP/6.1] Section 11.9.2 that there is a proposed acoustic barrier along PROW (proposed) although the design may change and in 11.9.3 that receptors may be closer. It would therefore be considered appropriate to restrict noise levels at the operational phase in the event that there are any design/equipment changes at any time during the operation of the scheme.	Requirement 16 of the draft DCO [EN010118/APP/3.1(B)] will restrict operational noise levels. This is also mentioned in the Outline Operational Environmental Management Plan [EN010118/APP/7.11(A)].
BDC 11.18- 11.23	Generally Environmental Health within Braintree District Council unless there are exceptional reasons restricts hours of working for construction to 0800 to 1800 hours weekdays and 0800 to 1300 hours on Saturdays and no work on Sundays and public holidays. There is reference to evening and night-time working within the submission – Environmental Health would wish to see time restrictions to the construction hours to protect the occupiers of nearby residential properties. There should not be any night time or evening working.  11.7.4 – Construction Noise Monitoring Scheme – BDC Environmental Health would encourage that this is provided and that where modifications are received that there is scope to review. It is noted that worst effects of construction noise should continue for no longer than a month at each sensitive receptor and also that the assessments do not further consider the use of further best practicable means such as partial screening which will improve levels.  Despite the mitigation then there may still be exceedances where heavy ground works take place within 10m where SOAEL of 75dB exceeded, (see Table 11-12) and the Sat pm /Sun daytime SOAEL of 65dB(A) (LAEq) when within 30m – 11.8.8 - exceedances at R 1-3, 5, 9, 10, 15 to 18, 21, 23, 25.  There is reference to a good communication strategy which is key. 11.8.10 – states that works in close proximity are unlikely to last longer than a period of 10 or more days and construction and decommissioning activities are not	Construction work periods are stated in the OCEMP [EN010118/APP/7.10(A)] as 07:00-19:00 Monday to Friday with overhead line works running from 07:00-19:00 Monday to Sunday.  The construction noise monitoring scheme will be developed and agreed with Braintree District Council as committed in the OCEMP [EN010118/APP/7.10(A)].  The period of 10 or more days is identified from section E.4 of BS 5228-1, which provides examples of eligibility of insulation or temporary rehousing. Properties would qualify if exposed to noise for 10 or more days in any 15 consecutive day period. Provision of insulation or temporary rehousing is considered as going beyond what is reasonably practicable and would be applicable for significant construction noise effects. As such, all mitigation measures adopted are considered appropriate for the duration of impact. All reasonably practicable measures (as covered in the OCEMP [EN010118/APP/7.10(A)]) will be adopted in additional to a communication strategy and monitoring to ensure that construction noise emissions are minimised as far as reasonably practicable.



# LIR Ref.

# Summary Applicant Response

significant. Environmental Health concludes that this still may give cause for complaint and there must be considerate and well managed working practices.

A detailed comprehensive Construction Environmental Management Plan would need to be provided and adhered to throughout the course of the construction and decommissioning phases.



## 2.9 Socio-economics, Agricultural Land and Community Part-Ownership and Local Benefits

2.9	2.9 Socio-economics, Agricultural Land and Community Part-Ownership and Local Benefits		
LIR Ref.	Summary	Applicant Response	
		The <b>Planning Statement [EN010118/APP/7.2(A)]</b> sets out compliance with Local Policy with regards to loss of BMV land.	
BDC 12.12 and CCC 6.144	Loss of BMV agricultural land  The scheme is not compliant with Local Policy insofar as it would result in the significant loss of best and most versatile agricultural land during the operational period of the scheme (circa 40 years). This impact is defined as temporary by the Applicant but is in fact a significant period of time during which the land would not be able to produce crops. There would be 150ha of land which sheep could graze upon (between the solar panels) and the Applicant has set out in their submission how they have sought to avoid BMV as far as possible and that only 33% of the site as a whole actually consists of BMV. Nonetheless, due to the scale of the proposal the impact would be significant and the scheme is not compliant with Local Policy in this regard.	The Applicant has submitted a detailed ALC assessment (ES Appendix 12A [EN010118/APP/6.2] that follows the recommendations given by Natural England in TIN049 as part of the DCO application. ALC assessment work has been undertaken in accordance with the available guidance by suitably qualified experts. This assessment work shows that the majority of the Order Limits (255ha) is in ALC Grade 3b and not Best and Most Versatile (BMV) land, with smaller areas being comprised of Grade 2 (53ha), and Grade 3a land (93ha) which are respectively the lowest qualities of agricultural land considered to be BMV. Regarding the poorer quality land that forms the majority of the Order limits, NPS EN-1 paragraph 5.10.15 states that the decision maker 'should give little weight to the loss of poorer quality agricultural land (in grades 3b, 4 and 5)'. This is reaffirmed by paragraph 5.11.14 of draft NPS EN-1. A total of approximately 6ha of Grade 2 and 3 land, or 4% of the total BMV land identified, would be disturbed and permanently required by the Scheme, with the remainder of the resource not lost as the development consent is temporary and the land still usable beneath the panels for farming activity such as low intensity grazing.	
		Paragraphs 6.7.19 to 6.7.27 of the <b>Planning Statement</b> [EN010118/APP/7.2(A)] explain how the Applicant has sought to minimise impacts on best and most versatile agricultural land, as per the first part of NPS EN-1 paragraph 5.10.8. Paragraph 6.7.28 of the <b>Planning Statement</b> [EN010118/APP/7.2(A)] sets out the justification for the inclusion of best and most versatile agricultural land within the Order limits. This makes the points summarised below:	

the urgent need for the delivery of a large amount of renewable energy;



		Solar Farm
LIR Ref.	Summary	Applicant Response
		<ul> <li>the lack of identifiable alternative sites in the vicinity of the 400 kV power line between Rayleigh and Braintree with a lower ALC rating than the vast majority of the Site;</li> <li>the non-permanent, reversible impact of the Scheme on agricultural land meaning the permanent agricultural resource is not lost;</li> <li>the possible retention of an element of agricultural use throughout the life of the Scheme; and</li> <li>the Applicant's careful design to limit the amount of BMV land included within Order limits.</li> </ul>
		Paragraphs 6.7.29 and 6.7.30 go on to explain why the specific areas of BMV agricultural land that are included within Order limits are justified and therefore represent an effective use of land with reference to their location and context within the Scheme, the wider landholding, and in relation to adjacent and surrounding land. The reasoning set out includes the matters summarised as follows:
		<ul> <li>Exclusion of the BMV land included within the Solar Farm Site would reduce the amount of generation capacity of the Scheme and would reduce the contribution it is able to make to delivering the government's objectives and commitments for the energy system and for combatting climate change, including decarbonisation of energy generation through provision of renewable energy generation capacity. The Applicant expects that this would be afforded substantial positive weight in the Secretary of State's decision.</li> <li>Exclusion of areas of BMV land from biodiversity mitigation and enhancement areas would affect the ability of the Scheme to provide biodiversity mitigation and enhancement, whilst having only a small impact on the agricultural use of the fields, which may continue to be grazed by livestock as part of habitat management arrangements.</li> <li>To make the most of the existing features of the landscape, in particular woodland blocks, to provide visual screening to the largest structures that form part of the Scheme.</li> <li>To create a single, contiguous site that is required to deliver an efficient and effective solar farm development.</li> <li>To avoid splitting agricultural units.</li> </ul>



LIR Ref.	Summary	Applicant Response
		<ul> <li>To avoid separating fields from the remainder of the agricultural land holding.</li> <li>Land in the vicinity of woodland blocks may be more prone to wildlife such as rabbits and pigeons damaging crops.</li> </ul>
		Together, paragraphs 6.7.28 to 6.7.30 of the <b>Planning Statement [EN010118/APP/7.2(A)]</b> explain why the Scheme's inclusion of 156 ha of BMV agricultural land represents an effective use of land.
CCC 6.276	Jobs and Training  It is not clear how the training provided, and experience gained could be transferred to other projects and vice versa, ultimately contributing to the creation of a sustainable, local workforce and not encouraging displacement or shortages in certain skills.	Details of the obligation to be secured in the legal agreement is under discussion between the Applicant and the Host Authorities. The SoCG will be used to provide an update of those discussions during the course of the examination.
CCC 6.277 and 6.280	Community Liaison Group  A Community Liaison Group would be established to provide the local community with a forum for discussion.  CCC asks that consideration is given to using the Community Liaison Group as a means of responding to day to day queries and monitoring the implementation and management of the site throughout its lifetime.	Details of the requirement to be secured in the DCO is under discussion between the Applicant and the Host Authorities. The SoCG will be used to provide an update of those discussions during the course of the examination.
ECC 13.11	Employment and Skills Plan  The applicant should cooperate and work with relevant partners and use the Employment and Skills Plan to reduce the risk of skills and construction worker shortages, as other projects may come forward within similar timeframes. This requires investment in further education, apprentices and training within the local area to deliver the required workforce for the construction and operational phases in order to reduce the risk of disruption to this development and other projects coming forward.	Details of the obligation to be secured in the legal agreement is under discussion between the Applicant and the Host Authorities. The SoCG will be used to provide an update of those discussions during the course of the examination.



LIR Ref.	Summary	Applicant Response
ECC 14.1- 14.4	Community Part-Ownership and Local Benefits  ECC would wish to see opportunities and options explored by the applicant for community ownership, together with detail of the scope and operation of a community fund open to applications from community projects or groups.	Details of the obligation relating to community benefits is under discussion between the Applicant and the Host Authorities. The SoCG will be used to provide an update of those discussions during the course of the examination.



# 2.10 Transport, Traffic and Highway Safety

		I
LIR Ref.	Summary	Applicant Response
CCC 6.247 and 6.255	Due to other construction commitments, currently access to Generals Lane is taken from the A130 Essex Regiment Way through Channels Drive, a residential area, rather than the historical route over the A12. To safeguard residential amenities and minimise traffic and disturbance on local roads, Chelmsford City Council considers it preferable if access to Generals Lane is taken from the A12 where possible.	Access to the private road to/from Bulls Lodge substation will be taken from the A12(T), Boreham Interchange and the RDR. It is not proposed to use Generals Lane to access the Scheme.
	Key local junctions identified at the scoping stage have been modelled for the 2025 future year scenario with construction traffic. These include the following junctions:  Longfield Solar Farm site access (off Waltham Road) • Waltham Road and	
	Cranham Road Junction B1137 Main Road/Waltham Road Junction	
ECC 7.9- 7.10	This modelling work is satisfactory and ECC generally agrees with the conclusions that no additional off-site highway improvements are necessary beyond those already identified in support of the scheme. This is however based on assumptions contained in the Transport Assessment and upon which further clarification is sought as covered in Appendix 2. ECC consider that it is important that both HGV traffic and construction workers traffic are monitored effectively by the Travel Plan Co-ordinator for the duration of the construction phase of the development and additional mitigation/interventions sought, if necessary, e.g., additional car parking at the park and ride site to reduce impacts on the local road network.	These points are being discussed with the Host Authorities and an updated position between the parties will be reflected in the SoCG at Deadline 3.
ECC 7.14	The Chelmsford North-East Bypass scheme includes provision of an overbridge on Cranham Lane/Drakes Lane, that forms part of the construction traffic routing for Longfield Solar Farm. It been identified that construction of the overbridge has the potential to coincide with the construction programme for Longfield Solar Farm, and therefore close coordination between the contractors delivering Longfield Solar Farm and Chelmsford North-East Bypass is essential to satisfactorily manage this situation. Alternative construction traffic routing and associated traffic	These points are being discussed with the Host Authorities and an updated position between the parties will be reflected in the SoCG at Deadline 3.



LIR Ref.	Summary	Applicant Response
	management/works could therefore be required during the construction period for the Longfield Solar Farm.	Applicant response
ECC 7.17	ECC is generally satisfied that the construction and decommissioning traffic can be managed through a comprehensive traffic management plan the framework of which is set out in Appendix 13B: Framework Construction Traffic Management Plan [EN010118/APP/6.2].	No comment. Please refer to Section 3.8 of the <b>Statement of Common Ground between the Applicant and the Host Authorities</b> [EN010118/EX/8.4(A)] for details on the position between the parties on matters relating to transport and access
ECC 7.19	Mitigation is set out in Chapter 7 of the Framework Construction Traffic Management Plan [EN010118/APP/6.2] and the Mitigation Schedule [EN010118/APP/6.6]. This is generally satisfactory subject to the matters raised in Appendix 2 in need of resolution and Glint and Glare being satisfactorily addressed.	
ECC Appendix 2 Para 1	The Transport Assessment [EN010118/APP/6.2] is based on assumptions that were discussed with the Highway Authority at the pre submission stage. At that time assumptions including derivation of HGV trips, car share factors and the split of non-local construction workers were questioned, and this is contained within the meetings notes which form part of the Transport Assessment [EN010118/APP/6.2]. Whilst ECC appreciate that the Longfield Solar Farm team will have drawn upon their experience of other similar projects to establish the assumptions this work does not appear to be contained within the Transport Assessment [EN010118/APP/6.2].	These points are being discussed with the Host Authorities and an updated position between the parties will be reflected in the SoCG at Deadline 3.
	Clarification on these points is required:  Construction worker split local 45% and non-local 55% was discussed (ref 08 meeting minutes 14 July 2021), has local accommodation been identified and can an effective shuttle bus service be used to deliver 55% of the construction workforce to site from local accommodation?  Car share factor, it appears this is based on previous experience, and it has been decreased from 1.7 workers per vehicle to 1.5. However, ECC were citing 1.35. Is there evidence to corroborate the use of 1.5 workers per vehicle as contained within the Transport Assessment?  HGV generation was questioned within the Longfield Solar Farm Transportation Scoping Report Review. At this time it was 25 HGVs (50	



LIR Ref.	Summary	Applicant Response
	two way movements) travelling to and from the site, in the latest Transport Assessment it is 50 HGVs (100 two-way movements). It remains unclear how this level of HGV movements has been derived?  Monitoring of HGV traffic is mentioned within the supporting documentation to monitor compliance with routing/times and volumes of traffic but it is not clear if construction worker traffic will also be monitored to ensure that the car mode share referred to above and transfer of non-local construction workers is effective and are being met in accordance with the assumptions, and if not what further action/mitigation can take place should this be the case with additional private vehicles/LGVs arriving on site.  There are limited details contained within the supporting information regarding the shuttle bus service, location of non-local construction worker accommodation and how the Chelmer Valley Park and Ride will be utilised.  Speed Surveys were conducted in October 2019 on Waltham Road, the locations are shown in Appendix D1 but it is unclear as to the location of the speed detection loops in relation to the proposed site access and proposed Waltham Road crossing.	
ECC Appendix 2 Para 2	Road Safety Audits are referred to in the documentation. Policy DM14 requires and road safety audit report including designer's response where appropriate to accompany any planning application which seeks to materially alter the existing highway and that such audit has been carried out in accordance with current standards by an independent safety auditor. Road safety audits are required for the following locations:  Solar Farm site access from Waltham Road Waltham Road crossing point (for construction of the Grid Connection Route)  Proposed carriageway widening on Wheelers Hill, Cranham Road and Waltham Road. Noakes Farm crossing point Locations where permissive routes join or cross existing highway	These points are being discussed with the Host Authorities and an updated position between the parties will be reflected in the SoCG at Deadline 3.



LIR Ref.	Summary	Applicant Response
ECC Appendix 2 Para 3	It would generally be assumed that the cable crossing of Waltham Road connecting the Longfield Solar Farm to Bull's Lodge quarry sub-station would be installed via trenchless construction rather than an open trench that would likely require closure of Waltham Road.	
ECC Appendix 2 Para 4	ECC considers that despite the widening to 6 metres, where possible there remains the possibility that additional traffic could impact on the condition of the highway asset and verges adjacent to the highway. The Construction Traffic Management Plan should include reference to before and after studies for any vulnerable sections of the highway asset being required together with a programme for reinstatement of any defects both during and after the construction period.	These points are being discussed with the Host Authorities and an updated position between the parties will be reflected in the SoCG at Deadline 3.
ECC Appendix 2 Para 5	Permissive routes are to be provided through the works for the operational phase of the development. It will be necessary for the applicant to ensure that the locations where these permissive routes connect with and/or cross existing public highway are safe. Additional works within the highway may be required to achieve this as identified through Road Safety Audit.	



# 2.11 Public Rights of Way (PRoW)

LIR Ref.	Summary	Applicant Response
ECC	For the operational stage, paragraph 3.2.1 states that '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. This will avoid the tunnelling issue that ECC and Essex Police raised as a potential concern during statutory consultation i.e. 10m is considered sufficient width to allow safe passage for pedestrians/ cyclists along the PROW.'	The Applicant has taken into account comments on crime during statutory consultation in the design of permissive paths and set back from PRoW. The
9.5-9.7	The fear or crime would be at its most pronounced when the PROW widths provided are at their least (the aforementioned legal minimum widths) which is proposed to be the provision during the construction period.	Applicant will continue to liaise with the crime agencies and council on matters of security and crime prevention following receipt of a DCO, if granted, and during the detailed design stage.
	There would be a potential negative impact from a fear of crime for PROW users during the construction (and decommissioning) stages. Information on how the applicants will manage/mitigate the fear of crime during the construction period is consequently required.	
ECC 9.8	Clarification is also required as to which PROW the minimum 5m spacing (for the operational phase) applies to. The PROW Management Plan, paragraph 3.2.1 states 'all PROW'. However, the examples given are for PROW which run across PV fields. Reassurance is therefore sought from the Applicant that this applies to all PROW, including field-edge PROW and other PROW not routed through PV fields.	At least 5m spacing has been provided from all PROW, including those not routed across fields. In the majority of instances the offset exceeds 5m.
ECC 9.9	Similarly, to avoid the fear of crime, the same information is sought for PROW widths to be provided during/after decommissioning and clarification on whether the PROW will return to their legal minimum widths or retain the enhanced widths.	An Outline Public Right of Way (PRoW) Management Plan [EN010118/APP/6.2] was prepared in support of the Application to outline how PRoW will be managed to keep them safe and accessible for the local community throughout construction, operation and decommissioning.
ECC 9.10	The PROW within the Order limits is part of a much valued, interconnected, multiparish network. There are no proposals for any permanent new PROW routes to offset the loss of amenity from this development. This is contrary to the advice in the Essex Design Guide – Solar Farm Guiding Principles which requests 'Mitigation and enhancement measures such as	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 which would most likely be returned back to agricultural use. Therefore, it is expected that the PRoW will be returned back to their legal minimum widths subject to the landowner's requirements (which is not within the Applicant's control). This was



LIR Ref.	Summary	Applicant Response	
	consequential improvements to the PROW network through improving connectivity'. The applicant has suggested that they do not have the ownership to facilitate permanent new connections, however, they would have compulsory purchase powers available within the DCO and have presented no evidence to show that they have attempted to negotiate permanent new PROW connections with any landowners. Mitigation against the impact on the existing PROW network and especially the loss of amenity is therefore considered inadequate at this time.	discussed and acknowledged during a PRoW meeting with ECC Officers on 12th August 2021.	
ECC 9.16	There is a risk of surface damage along PROW during the construction phase, as a result of vehicle movements and the installation of new infrastructure required for the operation of the Solar Farm, such as the laying of cables. Construction traffic crossing and using PROW if monitored and addressed should have a neutral effect on the surface condition of PROW. A commitment by the applicants to survey and improve (as required) PROW surfaces could see this change to a positive effect.	A condition survey will be carried out at proposed PRoW crossing points preconstruction, during construction and post-construction, to identify any PRoW surfacing defects that arise during the construction phase of the Scheme for reinstatement. This will be secured within the Detailed CTMP where further details will be set out.	
ECC 9.18	It is noted that the proposed construction routes and crossing locations within the Order limits may be subject to minor changes during detailed design; these changes would not change the principles presented in the PROW Management Plan or result in any additional adverse impacts. Changing construction routes which will then affect temporary PROW closures/diversions will have a negative effect on PROW users in respect convenience and possible delays. This should be mitigated by minimising any changes and publicising/signing them to minimise the inconvenience to PROW users.	Noted, any changes to proposed construction routes and PRoW crossing locations arising from detailed design will be minimised as far as possible and these will be publicised/ signed to PRoW users to minimise any potential inconvenience caused.	
ECC 9.19	During operation, the existing PROW will have a minimum 5m spacing, either side of the PROW from the centreline of the PROW and any infrastructure such as solar PV fencing. Clarity is required to confirm that this applies to all PROW (not just those passing through the middle of PV fields), and whether the enhanced width will be retained during and after the decommissioning stage. Subject to clarification on the applicability (to all PROW) of the 5m width (and 5m either side e,g, 10m for cross-PV-field PROW) mitigation proposed is acceptable for the operational phase of the site. That notwithstanding, the overall effect on the PROW amenity, views	At least 5m spacing has been provided from all PROW, including those not routed across fields. In the majority of instances the offset exceeds 5m.	



LIR Ref.	Summary	Applicant Response
	etc. remains negative. Views will either be changed (PV fields and infrastructure i.e. rural fields) or lost through screening measures.	
ECC 9.22	Potential new permissive routes have been proposed, some of which would link to the existing PROW, while others will provide a connection to the Chelmsford Garden Village development. These permissive routes would be for the 40-year operational lifecycle of the site. The Highway Authority is concerned that no permanent PROW network improvements have been offered to offset the negative impact on the PROW within the Order limits. The lack of permanent PROW enhancements is contrary to the Essex Right of Way Improvement Plan (ROWIP) on both enhancing connectivity and safety, the ECC Solar Farm Policy on providing improved connectivity, and paragraph 100 of the National Planning Policy Framework: "100. 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."	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. Therefore, any new permanent public rights of way or PRoW network improvements would not be possible (this is not within the Applicant's control) as the land would most likely be returned back to agricultural use. In addition, 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.



# 2.12 Waste Management and Minerals

LIR Ref.	Summary	Applicant Response	
BDC 14.3	The Applicant's submission includes a <b>Decommissioning Strategy [EN010118/APP/7.12]</b> which states that a Decommissioning Environmental Management Plan would be required under the DCO and that the decommissioning process would involve the removal of all Solar PV array infrastructure and disposal in accordance with good practice and market conditions at the time. However, no specific information is set out with regard to how or where the huge number of Solar PV panels would be disposed of and whether they are likely to be able to be recycled in any way. In addition, the Strategy does not explain who would fund the decommissioning of the site or what safeguards would be in place to finance this should the energy company cease to exist (i.e. go bankrupt) during the operational phase. More information is therefore required with respect to these matters and at present it is not clear if the scheme would comply with Local Policy in this regard.	The Applicant is required to comply with the approved Decommissioning Strategy in due course.	
CCC 6.294	In line with the Making Places Supplementary Planning Document (SPD), CCC encourages all developers to register with the Considerate Constructors scheme to promote respect for the community, ensure safe building sites, and responsible site management.	The Applicant is considering this.	
ECC 11.2	Safeguarding Mineral Resources  In summary, the MWPA accepts that the majority of the development is temporary in nature and therefore prior extraction is not required. Where the site relates to the extension of a substation, which will be a permanent land use, it is accepted that it is not practical to prior extract this parcel in isolation. However, this land is already consented for extraction as part of the wider extraction of Brick Farm1, which is itself part of the wider Bulls Lodge Quarry. As such, the DCO application as it relates to Bulls Lodge Substation site would sterilise land that already has planning permission for extraction. Further, the MWPA has been provided with no indication that the mineral site operator, Hanson Aggregates do not intend to extract mineral in accordance with their planning permission.	Noted. No further comment.	



LIR Ref.	Summary	Applicant Response	
	Minerals Safeguarding Assessment (MRA) [EN010118/APP/7.7]		
ECC 11.7- 11.9	However, whilst the MWPA accepts the overall conclusion, the MWPA would draw attention to a further two observations made within the <b>MRA</b> [EN010118/APP/7.7] which require qualification. The first of these relates to land shown as an extension to Bulls Lodge Substation, which would be retained following decommissioning of the wider development.		
	Paragraph 5.4.5 of the MRA [EN010118/APP/7.7] states that: 'Regarding the land that on which the extension to Bulls Lodge Substation is proposed to be located, BGS Geological Mapping shows that Glacial Till, potentially underlain by fluvio-glacial sand and gravel, only outcrops in the northeastern half of this area. It is therefore unlikely that sand and gravel resources are present in the south-west of the Substation Extension area.'	The text at paragraph 5.4.5 is included for information. It is acknowledged that the whole of the land is safeguarded for mineral extraction.	
	The MWPA however notes Figure 4-1 of the MRA [EN010118/APP/7.7], which was originally supplied by the MWPA, which shows that land safeguarded for mineral covers the whole of the land pertaining to the Bulls Lodge Substation and therefore this statement is questioned.		
	Minerals Safeguarding Assessment (MRA)		
ECC 11.10- 11.12	The second observation relates to a matter of principle. The MRA [EN010118/APP/7.7] states at Paragraph 6.1.2 that 'the small area of extractable mineral within the Order limits in these areas means that prior extraction in these areas is unlikely to be either practicable or economic.' Whilst this statement is accepted in isolation, the MWPA would reference the wider context which is that the area of land within the Order limits is part of a far wider MSA, and this may have the potential to be worked on a greater scale in the future. Indeed, the land in question already benefits from planning permission to extract as part of larger extractive works. It is noted that any significant MSA could be sub-divided to the point that it is not economic to extract, and it is the subsequent avoidance of this piecemeal loss of MSA land that is, in part, the role of mineral safeguarding policy.	Paragraph 5.4.8 makes the case for why it is uneconomic to undertake prior extraction in isolation. The conclusion proposed by ECC in the final paragraph is not disputed.	
	Putting aside that the land is permitted for prior extraction as part of the permission to work the Brick Farm area of Bulls Lodge Quarry, in immediate		



LIR Ref.	Summary	Applicant Response	
	proximity to the land subject to the substation extension is land that includes the existing substation and associated pylons and electricity lines. Paragraph 5.4.8 of the MRA [EN010118/APP/7.7] states that: 'working of mineral would impact on the proposed development by reducing ground levels under part of the Substation Extension. Restoration to original ground levels to allow development would require the importation of suitable inert materials. This would further reduce the economic viability of any mineral extraction. The mineral extraction and restoration would also delay the start date for construction of the Substation which would affect the programme for delivery of this nationally important renewable energy infrastructure project'.		
	This conclusion is disputed. Putting aside again that the land has permission to extract as part of the wider quarry, an appropriate conclusion is that whilst development will lead to mineral sterilisation, it would not be 'practical' to prior extract this land in isolation, and therefore the test set out in NPPF Paragraph 210d is met, and any sterilisation would not be 'unnecessary', which meets the MLP Policy S8 test.		
ECC 11.17	The MWPA accepts that the proportion of land and mineral yield within Bulls Lodge Quarry which falls within the Order limits is small when compared to the total amount of land and yield. The MWPA would also not dispute that the sterilisation of the estimated 18,000m3 of mineral in the Brick Farm area would not impact on the overall viability of the quarry. However, the DCO application includes, however small, land allocated and permitted for mineral extraction, which if consented would prohibit the permitted extraction of that mineral. Further, the mineral operator has not expressed any intention to not work the land associated with Bulls Lodge Quarry to the extent permitted through their extant planning permission.	Noted. No further comment.	
ECC 11.19- 11.20	Minerals Infrastructure Impact Assessment  At Paragraph 4.1.3, the MIIA [EN010118/APP/7.8] further contends that: 'Prior extraction of this mineral may be possible but is unlikely to be economic as a standalone activity, or warranted by the extremely small area and volume that would be affected. If this mineral is removed, it may require	The Applicant disputes the suggestion that the proposed used of the land with extant permission for temporary overburden and topsoil stockpiling by Hanson will have unforeseen operational implications for the wider Bulls Lodge Quarry. ECC's decision on 26th August 2022 to resolve to grant planning permission for planning application ESS/147/20/CHL subject to a legal planning agreement,	



LIR Ref.	Summary	Applicant Response	
	subsequent replacement by inert materials to allow construction of the northern edge of the Bulls Lodge Substation Extension.'	provides confidence that this part of the Bulls Lodge Quarry will not be worked until 2035 at the earliest.	
	The MWPA questions the appropriateness of this conclusion given that this land already benefits from a permission granting extraction as part of the wider consent at Bulls Lodge Quarry. It is also noted that this same area is also permitted to be used for overburden and topsoil stockpiling as part of working Bulls Lodge Quarry. The MWPA therefore notes that its loss could have unforeseen operational implications for the wider Bulls Lodge Quarry. It is also noted that Figure 3.4 of the MIIA [EN010118/APP/7.8] shows that there is another area within the Order limits which is proposed to be used temporarily during construction of the solar farm to the north of the existing substation owned by the National Grid, which has planning permission for mineral extraction. The ability to extract mineral could potentially be compromised depending on the phasing/ delivery of the Solar Farm. The MIIA [EN010118/APP/7.8] does not comment on this piece of land.		
ECC 11.24- 11.25	Minerals Infrastructure Impact Assessment  It is additionally noted that the MIIA [EN010118/APP/7.8] states at Paragraph 5.1.3 that: 'Overall, it therefore follows that the Scheme complies with Policy S8 of the EMLP (2014), which requires that development proposals do not conflict with the effective workings of permitted minerals development or Preferred or Reserve Mineral Site allocations.'  The MWPA does not agree with this statement; it is recognised in the MIIA [EN010118/APP/7.8] itself that the proposed development conflicts with the existing permission of the existing quarry.	No comment.	
ECC 11.30- 11.32	Safeguarding Waste Infrastructure  The MWPA accepts that the majority of the proposed development is temporary and will therefore not result in the permanent sterilisation of significant amounts of mineral. It is accepted that where the proposed development is permanent, it would not be practical to prior extract this land when this land is considered in isolation.	No comment.	



#### LIR Ref.

#### Summary

#### **Applicant Response**

The MWPA also accepts that the proposed development will not have an impact on the operation of the coated roadstone plant at Bulls Lodge, the inert recycling facility at Bulls Lodge or the Boreham Recycling Centre.

However, the DCO application as it relates to Bulls Lodge Substation site, would result in permanent development; in an area where mineral extraction has been permitted through Application Reference CHL/1890/87. As such the DCO application does not comply with Policy S8 of the MLP, given that prior extraction of this parcel of land is not practical, and the mineral operator has not expressed any intention to not extract the land associated with Bulls Lodge Quarry to the extent permitted through their extant planning permission.



# 2.13 Design

LIR Ref.	Summary	Applicant Response	
BDC 16.14	Environmental Sustainability  Environmental sustainability throughout the construction phase could be addressed via a Construction Management Plan. A Decommissioning Plan could achieve the same for the demolition stage although further detail is needed in terms of how and where the solar panels could be disposed of.	The certified documents will ensure good design and manage the construction, operation and decommissioning phases. Whilst it is to possible to provide the level of detail sought by the Host Authorities at this stage, the Applicant will provide that detail through compliance with and subsequent approvals of the details required.	
BDC 16.15	Lighting  Lighting could also be controlled by way of condition and the applicant specifies in their submission that the scheme would not require permanent lighting although sensor activated security lighting would be needed.	Requirement 7 of the <b>DCO</b> [EN010118/APP/3.1(B)], as currently drafted, requires the submission of details on lighting for approval prior to commencement of the relevant works.	



#### 2.14 Glint and Glare

LIR Ref.	Summary	Applicant Response
BDC 17.9- 17.10	At face value the submitted <b>Assessment [EN010118/APP/6.2]</b> appears to be a detailed and thorough report. However, Braintree District Council do not have available the relevant specialist expertise to make a technical assessment of the Applicant's Report in this respect and are aware that Chelmsford City Council do not either. Essex County Council are able to assess the highway impact of glint and glare only and their assessment will be included within their own LIR. Therefore BDC defer to ECC in relation to highway impact. Overall BDC are not in a position to make any particular commentary in relation to glint and glare but are aware that the Planning Inspectorate and Secretary of State will assess the Applicant's Glint and Glare Report as part of their assessment and decision making process. It is however clear that the temporary wooden hoarding required as part of the proposed mitigation would be substantial in size and the duration for which it would be present is not clear. The visual impact of this is of concern to BDC.	The Applicant has offered to fund the Host Authorities should they wish to commission an independent review of the glint and glare assessment submitted as part of the planning application, and the additional information confirming the robustness of the landscaping submitted at this Deadline 2.
CCC 6.203	Further, as hedgerows and planting are likely to be sited next to the hoarding, there may be challenges in removing it once the mitigation planting has grown up, as the roots of the new planting may be entwined within the foundations. The effect of this would need to be considered as part of the requirements and Outline Ecological Management Plan (OLEMP).	An aboricultural specialist, landscape specialist, and ecology specialist would be engaged to deliver the planting to allow any hoarding to be removed, through including sufficient setback from the planting. The hoarding does not need to be immediately adjacent to the planted stems to be effective.
ECC 8.4	The Glint and Glare Assessment [EN010118/APP/6.2] raises a number of questions including whether calculations consider every vehicle type with HGV's ride height for example being significantly different to a low sports car. As such all road user groups need to be taken into consideration within the assessment / calculations. Additionally, there does not appear to be any reference to users of the PROW network across the site, in particular equestrian users of the Public Bridleway.	Road receptors are modelled at 1.5m in height to obtain theoretical glare values, while the visibility is assessed at 2.5m height, mitigation is then considered for all vehicle types to ensure views are screened. A site visit has further shown that the impacts are overstated in the desk-based report. Impacts along the roads are also likely to be outside the field of view for the driver, with impacts largely occurring at almost 90 degrees to the east/west of the roads. Any PRoWs are taken into consideration by the landscape design. Also, from inspection of the OS maps there are no bridleways through the Order limits.



LIR Ref.	Summary	Applicant Response	
	It is unclear whether there be a management regime in place to ensure that hedgerows, taken into consideration as part of this glint and glare study; that act as screening, will remain in place and effective for the duration of the project and will not inadvertently be coppiced, cut back drastically, or removed.	The hedgerows will be managed in accordance with the <b>OLEMP</b> [EN010118/APP/7.13(A)], so where mitigation is required, hedgerows will be maintained.	
ECC 8.5-8.6	Further, are there situations that could arise seasonally, when due to leaf fall hedgerows loose some of their screening effectiveness. In such circumstances mitigation would need to be doubled up with additional manmade screening.	Due to the time of year when glare is predicted to theoretically impact the site (April – End of September), leaf fall is not expected to cause an issue with screening by bare vegetation expected to be sufficient still some of the Google	
	ECC is also mindful that as this is a rural area and planting of additional screening/construction of man-made screening should not compromise forward visibility around tight bends etc.	Earth images used in the visibility assessment are taken in October).	
ECC 8.8	ECC is unclear on what basis a 1km survey area has been taken, or whether this is based on any guidelines which may exist for investigating impacts from glint and glare on the road network.	1km survey area is based on best practice and professional opinion from completing G&G assessment for over 2GW of solar developments. The findings demonstrate that impacts at this distance are not significant and there is therefore not considered benefit extending the survey area.	
ECC 8.9	In summary if the 1km survey area is appropriate and the glint and glare study has taken place in accordance with current best practice then the mitigation propose, as set out in Chapter 7 of the Glint and Glare report appears logical. However, the locations for screening and hedgerows cannot be seen in Figure 6 Appendix A, due to the key being unclear.	The mitigation can be found in the <b>OLEMP [EN010118/APP/7.13(A)]</b> .	
ECC 8.10	Imagery in the latter part of the report appears to be based on google street view imagery. If this be the case ECC is concerned that since the nature and environment of the land / roads / hedges changes significantly then it may be necessary for additional survey data to be collected on site.	The imagery was based off Google Earth; however, a site visit has been undertaken following DCO submission to confirm the conclusions within the report. The site visit showed that impacts were overstated within the desk-based report.	



# 3. Applicant's Responses to Written Representations

#### 3.1 Overview

3.1.1 The tables below provide the Applicant's response to Written Representations submitted at Deadlines 1A and 1B. The responses are tabulated by topic.

#### 3.2 Battery Safety

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PINS Ref.	Respondent	Summary	Applicant Response
REP1b- 071	Alison and Paul Harrison	Lithium-ion batteries are not recyclable & all components are destined to landfill - where multiple highly toxic minerals will cause long term or permanent environmental damage & threaten water quality.	The Applicant has outlined their approach to the use of lithium-ion batteries within the <b>Outline Battery Safety Management Plan</b> [EN010118/APP/7.6], and in their response to ExA Round 1 Written <b>Questions</b> [PINS Ref REP1b-042]. The Applicant continues its engagement with statutory consultees.
REP1b- 071	Alison and Paul Harrison	The course of the River Ter and the Ter Valley pass through the entire Longfield site. This river empties into the Chelmer & thence the Blackwater Estuary. The Ter's route passes within 1/2 mile of the proposed BESS on lower land. It's highly probable that any large scale or even moderate fire incident or explosion will result in tens or potentially hundreds of thousands of gallons of highly toxic polluted water run-off entering the Ter causing widely dispersed environmental damage to water & fauna.	ES Chapter 9: Water Environment [EN010118/APP/6.1] considers runoff from the BESS. The Applicant further considers responses regarding BESS in their response to ExA Round 1 Written Questions [PINS Ref REP1b-042]. The Applicant continues its engagement with statutory consultees.
REP1b- 071	Alison and Paul Harrison	The location of the BESS Battery is sited behind Toppinghoehall Wood (itself a fragment of Ancient Woodland) to "hide it" rather than for any operational or logistical advantage. The BESS site is not located adjacent to the Bulls Lodge substation & its costly connection will result in avoidable visual damage to the local amenity & landscape when alternative options are available through	The Applicant has outlined their approach to locating the BESS within the <b>Design Statement [EN010118/APP/7.3].</b> The Applicant continues its engagement with statutory consultees.



PINS Ref.	Respondent	Summary    connections to National Grid Power lines running through	Applicant Response
		the site.	
REP1b- 071	Alison and Paul Harrison	The battery site will be difficult to access without additional avoidable & intrusive infrastructure & roads. Large scale onsite water storage will be required to deal with the potential risks of fire & explosions. A 15 metre buffer is entirely inadequate as large blast proof banks will be required in a worst case scenario to restrict the effects of explosion & contain egress of polluted water in the event of a major incident.	The Applicant has outlined their approach to safety within the <b>Outline Battery Safety Management Plan [EN010118/APP/7.6].</b> The Applicant continues its engagement with statutory consultees.



# 3.3 Biodiversity, ecology and designated sites

PINS Ref.	Respondent	Summary	Applicant Response
REP1b- 095	Natural England	Natural England has not undertaken a detailed review of species surveys and mitigation as the applicant has advised that no licences are required. Natural England welcomes confirmation in chapter 8 of the environmental statement that Natural England's standing advice has been/will be followed in relation to species licencing.	The Applicant notes Natural England's response.



# 3.4 Compulsory acquisition and powers sought

PINS Ref.	Respondent	Summary	Applicant Response
REP1b- 070	Network Rail Infrastructure Limited	Network Rail objects to all compulsory powers in the Order to the extent that they affect, and may be exercised in relation to, Network Rail's property and interests, particular those affecting the ability of Network Rail to safely operate its undertaking. However, Network Rail is willing to enter into agreements with the Applicant to enable the Proposed Development to be carried out while safeguarding Network Rail's undertaking.	
REP1b- 070	Network Rail Infrastructure Limited	Network Rail also objects to the seeking of powers to carry out works on and/or under operational and non-operational railway land belonging to Network Rail without first securing appropriate protective provisions for Network Rail's statutory undertaking.	Please refer to the Statement of Common Ground between the Applicant and Network Rail Infrastructure Limited submitted at Deadline 1B. A further revision will be provided in due course, in the meantime an update on the position can be seen in the <b>Compulsory Acquisition Schedule</b> [[EN010118/EX/8.6(A)] included in Deadline 2.
REP1b- 070	Network Rail Infrastructure Limited	Whilst negotiations with the Applicant are progressing, as relayed via the Statement of Common Ground (SoCG), and Network Rail is hopeful that its concerns can be resolved during the course of the Examination, in the absence of an agreement that safeguards its interests, Network Rail requests that the ExA recommend that the attached Protective Provisions are included in Schedule 15 to the Order.	
REP1b- 070	Network Rail Infrastructure Limited	Network Rail has a right of access over the line hatched brown on the ROW Plan in Appendix 1 and labelled 'ROW reserved' (NR Right of Access). 2.4 The NR Right of Access was granted under a Transfer dated 31 March 2017 between (1) Countryside Zest (Beaulieu Park) LLP and (2) Network Rail Infrastructure Limited. Network Rail and any successors in title and those authorised by it hold the right to pass at all times with or without vehicles, plant and machinery and for all purposes in connection with use of	The Applicant does not believe the proposed Works would be impacted, but will continue to engage in relation to this matter.



PINS Ref.	Respondent	Summary	Applicant Response
		the transferred property as a feeder station over and along the access land.	
		The Works require rights of access over the private road shaded brown to Bulls Lodge Substation, located alongside Bridleway 213 4 (as per the Land Plan in Appendix 2) for the movement of construction vehicles (Proposed Right of Access). The Applicant has confirmed that Network Rail does not hold any interests in the Plots but the use of the Proposed Right of Access could affect the ability of NR to exercise the NR Right of Access.	
		Network Rail is in the process of determining whether the NR Right of Access will be adversely affected by the proposed volume of and residual effects arising from traffic resulting from the Proposed Development. The Applicant has provided details of construction traffic for this Proposed Right of Access where it has been projected that the daily traffic flows will include 46 heavy goods vehicles and 48 large goods vehicles. This provides a projected total of 94 vehicles equating to 188 two-way movements per day. Until such time as confirmation has been obtained in relation to the NR Right of Access, Network Rail is unable to confirm whether the proposed Works affecting the NR Right of Access are acceptable.	



# 3.5 Flood risk, drainage and surface water

PINS Ref.	Respondent	Summary	Applicant Response
REP1b- 083	Environment Agency	In our response to the statutory consultation dated 25 May 2022 and referenced AE/2022/127023/01-L01, we provided our position on Flood Risk. We identified that the applicant had not undertaken site specific hydraulic modelling of the River Ter and Boreham Brook (tributary) but have instead used the Braintree SFRA outlines to define the fluvial Flood Zones. We outlined two options for the applicant to explore:  1. Undertake site specific hydraulic modelling of the River Ter and Boreham Brook (tributary). Or  2. Assess that there is no 'critical infrastructure' within Flood Zones 2 or 3 or ideally that critical infrastructure is outside the 0.1% (1 in 1000) annual probability event with allowance for future climate change (maximum credible scenario).  We are pleased to see that the applicant has now provided further information to us that shows the PV solar panels would not be affected by floodwaters as they are raised. The Flood Zones depicted in the SFRA's are an over estimation compared with the latest requirements for climate change, even the maximum credible scenario (Upper End) of 37%. Therefore, we are satisfied that there are no features of the infrastructure that are critical to its operation close to the boundaries of the flood zones and	The Applicant notes these comments.
		therefore flood risk modelling will not need to be undertaken.	



#### 3.6 Historic Environment

PINS Ref.	Respondent	Summary	Applicant Response
	Historic England	Historic England's focus in this representation is to advise on impacts to highly graded designated heritage assets within the 1km study area, specifically to the grade I listed Church of St Mary the Virgin, Great Leighs; Church of St Andrew, Boreham and Ringers Farmhouse, together with the grade II* listed The Old Rectory.	
REP1b- 089		Within the 1km study area there are also the Terling, Boreham Road/Plantation Road and Boreham Church Road Conservation Areas. There are no highly graded registered parks and gardens or scheduled monuments within the 1km study area. Within the 3km study are an additional two grade I listed buildings, 20 grade II* listed buildings, three scheduled monuments and four registered parks and gardens. However, we acknowledge that due to the level of intervening topography and screening, no impact in relation to these designated assets is anticipated and we accept that for this reason they have not been assessed in further detail in Appendix 7A, Heritage Desk Based Assessment of the Environmental Statement.	Noted. This will be discussed on the meeting with Historic England on 09/09/2022, as it is contrary to the points raised in the SoCG.
		We previously stated that we are therefore keen to ensure the avoidance of significant impacts to the numerous highly graded designated heritage assets in the vicinity. In this respect we were pleased to see that the Environmental Statement included specific Cultural Heritage and Landscape and Visual Amenity Chapters (ES Volume Chapters 7 and 10) in addition to visualisations and photomontages.	
		Whilst we note that overall the new development will be notably visible, resulting in change to the landscape as a whole, the visual material provided by the applicants indicates that the development will generally be visible in limited views from many of the highly graded designated	



PINS Ref.	Respondent	Summary	Applicant Response
		heritage assets. The magnitude of the impact on the grade I listed Ringers Farmers is anticipated as being low, resulting in a moderate adverse effect. In relation to the other highly graded assets, the magnitude of the impact is expected to be very low, which would therefore result in either a minor adverse or a negligible effect upon their setting.	
		We consider that the visualisations and accompanying analysis in the Environmental Statement provide sufficient information to allow the level of harm to be established and the balance to be weighed by the determining authority.	
		In policy terms any resulting harm would in our view be less than substantial and would need to be considered in relation to policy 202 of the National Planning and Policy Framework, although the determining authority would need to give due regard to policies 199 and 200. We do not consider it necessary to explore these issues any further, but would be happy to provide further clarification upon request.	



# 3.7 Land use, agricultural land and socio-economics

PINS Ref.	Respondent	Summary	Applicant Response
REP1b- 071	Alison and Paul Harrison	The Solar Farm Revised draft NPS on renewable energy infrastructure under heading Planning for Nationally Significant Infrastructure Projects "Large Solar Farms March 2022 para 1.2 states: Agricultural Land Classification: Where possible, ground mounted Solar PV projects should utilise previously developed land, brownfield land, contaminated land, industrial land, or agricultural land preferably of classification 3b, 4, and 5 (avoiding the use of "Best and Most Versatile" cropland where possible).  Currently over much of the Longfield site, a range of high value crops are grown including potatoes, legumes, wheat, rape & sugar beet - all of which may be irrigated through a complex network of underground irrigation pipes sourcing water indirectly from the River Ter & intermediate reservoirs. Much of the land in question is undoubtedly of a high grade 2a/b, which is borne out by previous land classification studies; please see Professor Alders paper 3 below An expert report published by Professor Alder challenges the conclusions of consultants appointed by the developers. One of the key strategic issues yet to be resolved by this and similar planning applications is how best as a Nation we may reasonably manage the competing & inherently irreversible uses to which our most precious resource, land, may be utilised.	Climate change is one of the biggest threats to the production of food. Food security is an important issue but there is no requirement to consider food security in decision making set out in either the designated or draft energy NPSs. The land take for the Scheme is negligible relative to the agricultural land available in the County (or UK), with the land still available for optional sheep grazing (which itself is a food product).



#### 3.8 Protective Provisions

PINS Ref.	Respondent	Summary	Applicant Response
REP1b- 092	National Grid Electricity Transmission	We have seen the updated draft form of protective provisions which the Promoter intends to submit at Deadline 1B. Whilst these draft protective provisions address some of NGET's concerns, there are still significant outstanding issues which need to be resolved before NGET can be satisfied that its interests are adequately protected. NGET continues to discuss the protective provisions with the Applicant and the parties will keep the Examining Authority updated in relation to the progress of negotiations. NGET reserves the right to submit further representations in relation to the protective provisions if necessary.	The parties continue to engage and will keep the SoCG up to date to reflect the position between the parties.



### 3.9 Public Rights of Way

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PINS Ref.	Respondent	Summary
	Essex Area Ramblers	The Essex Area Ramblers supports the principle of Solar Farms, but are concerned that PRoWs are adequately maintained and where possible improved, during the construction, operation and decommissioning phases and have concerns about the impact on the visual amenity for the users of PRoW.
REP1b- 084		The Ramblers accept that there will be some disruption to the PRoW and visual impact during the Construction and Decommissioning phases but are satisfied that the applicant intends to mitigate their impact as far as is practical, although footpaths should have a minimum width of 1.8m to allow for people to pass each other safely. The Ramblers also accept that during the operational phase, all the PRoW will be reinstated with adequately wide corridors, provided that all the mitigation measures described in their Environmental Statement are implemented. However, the Ramblers are very concerned that the Applicant has identified that there will be a significant visual impact to users of some of the PRoW during the operational stage lasting 40 years.
		The Ramblers therefore object to the application because the siting of the PV panels does not minimise the harm to the landscape as required by paragraph 5.9.8 of EN-1 and consider that the visual effects outweigh the benefits of the project. (Paragraph 5.9.18 of EN-1).
		Should the DCO be granted, the Ramblers request that :
		Footpaths should be at least 1.8 metres wide and bridleways or byways should be at least 5 metres wide to allow for users to pass each other easily.
		Trees, hedges or other plants should be planted so that fences are screened from path users and do not spoil the

### **Applicant Response**

#### **Transport**

PRoW will be carefully managed during the construction phase and a separate PRoW Management Plan has been prepared as Appendix 13C of the Environmental Statement [EN010118/APP/6.2]. The safety of walkers, cyclists and horse riders is also addressed through the Framework Construction Traffic Management Plan included as Appendix 13B of the Environmental Statement [EN010118/APP/6.2]. 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 **Chapter 13: Transport and Access of the Environmental Statement [EN010118/APP/6.1]**, 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 suggestion for 1.8m wide PRoW will be considered by the Applicant at detailed design, but at this time the Applicant proposes to align with guidance such as Inclusive Mobility (2002), which suggests 1.5m. This is more than the minimum required by Natural England (Guidance document 'Public rights of way: landowner responsibilities') which is 1m for a footpath.

In terms of appearance, we are happy to agree that the fencing provided at the edges of PRoW will not be palisade fencing and that hedges will be planted adjacent to them. This is already secured by the **Outline Design** 



PINS Ref.	Respondent	Summary	Applicant Response
		experience of using the path. This may mean that more width is needed to leave enough space for both planting and the path.  The solar farm developer should provide plans for maintenance of plants and the PRoW so that the path condition and widths are maintained.  Close boarding or metal palisade-type fencing, should not be used. The fences should be open mesh fencing, as they are less intrusive or intimidating for path users.  Materials and designs of buildings and fencing should always be given careful consideration, including colours and materials.  The applicant should commit to keeping the PRoW routes open at the end of the operational phase, and  They are kept informed of progress on the scheme and be consulted as detailed plans and construction details are produced and the project is implemented.	Principles [EN010118/APP/7.3 A (B)], which states that perimeter fencing in Works No 6B will be "deer fence" design, which constitutes wooden posts and a hi tensile wire mesh, as shown on Figure 2-12 Deer Fencing [EN010118/APP/6.3].  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 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 as public rights of way and other routes have been protected where possible and opportunities taken to improve networks.  Landscape The proposed Scheme has been through an extensive and iterative design process, seeking to minimise potential harm to landscape character and visual amenity. Specific measures are set out in Section 10.7 of the Landscape and Visual Impact Assessment [EN010118/APP/6.1(A)].  With regard to the fencing proposed adjacent to PRoW, the Design Principles [APP-206] confirm that 'Fencing around the Solar PV Array Work Areas will not exceed 2.5m in height and Fencing around the

Solar PV Array Work Areas will be a "deer fence' design, with wooden

post supports and metal stock fencing'.



PINS Ref.	Respondent	Summary	Applicant Response
			With regard to the request for trees, hedges or other plants to be planted so that fences are screened, this has been incorporated across the majority of the design, including adjacent to PRoW. In instances where PRoW currently run parallel to a hedgerow, additional planting has not been proposed on the opposite side of the PRoW in order to maintain a sense of openness and avoid the perception of a 'corridor'. This proposal can be considered further through detailed planting plans that would be prepared in advance of implementation. Similarly, regarding the request for plans for "maintenance of plants", the approach to management for the first five years (covering establishment) and then long term management is set out in the Outline Landscape and Ecology Management Plan [EN010118/APP/7/13(A)]. A detailed management plan and specification will be prepared prior to implementation.  PRoW will remain in place after decommissioning of the Scheme. Their existence is not affected by the Scheme.
REP1b- 085	Essex Bridleways Association	EBA has previously made representations that the proposed north to south green route via a new permissive path should be available to all user groups (including horse riders) and not just pedestrians and cyclists. The Applicant responded to this representation via Document reference EN010118/EX/8.1 with the following response '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'.  However, there are public roads closer to and through the site that can be used by WCH users now (walkers cyclists horse-riders) and to which any new permissive path will naturally link. EBA continues to consider therefore that the new permissive path (s) should be accessible to all, and is disappointed that the Applicant appears unwilling to improve accessibility for horse riders, which would be both	It is noted that EBA would like the north to south green route made available to horse riders. There are no designated bridleways or highways that the permissive path could connect to. EBA notes that there are public roads close by, which is true, but these do not directly connect to any permissive paths. There is a tarmacked track leading to Scarlott's Farm which does, but this is private only for use by the farmer – there are no plans by the Applicant to open this up as a PRoW with bridleway status. PRoW 113_25, 213_1 and 221_57 all link to the permissive paths, but are footpath status only.  Horse users would have no way to access the permissive paths unless they leave the highway and use the farmers private track or existing footpaths.



PINS Ref.	Respondent	Summary	Applicant Response
		straight forward and equitable. Given that the permissive path (s) will link to public roads that horse riders can currently use, we request that the Applicant reconsiders its response.	On balance, it is not considered helpful for the Applicant to encourage horse users to access the Order limits unless the Council is planning to upgrade the existing PRoW to bridleways.
REP1b- 086	Essex Local Access Forum	It is repeated that the development should conform to NPPF paragraph 100 which states that – ELAF bold: 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'. The proposed scheme does NOT enhance and does NOT add links to existing the existing PROW network.	PRoW will be carefully managed during the construction phase and a separate PRoW Management Plan has been prepared as Appendix 13C of the Environmental Statement [EN010118/APP/6.2]. The safety of walkers, cyclists and horse riders is also addressed through the Framework Construction Traffic Management Plan included as Appendix 13B of the Environmental Statement [EN010118/APP/6.2(A)]. 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 Chapter 13: Transport and Access of the Environmental Statement [EN010118/APP/6.1], 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.  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.



PINS Ref.	Respondent	Summary	Applicant Response
			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 as public rights of way and other routes have been protected where possible and opportunities taken to improve networks.
			With respect to multi user routes, the permissive paths will be available to pedestrians and runners. The Applicant has sought to avoid tarmacking the paths to minimise the environmental impacts, so although wheelchair users would be welcome, the paths would not be levelled tarmac. It is not proposed that the paths would be accessible to horse riders; the permissive paths do not connect with any bridleways or highways, therefore horse riders would not be able to access these.
			With respect to a permanent multi user route north from Ringer's Wood, after decommissioning of the Scheme the Applicant will return the land to the landowner, and it is therefore not within its control to commit to permanent new permissive paths beyond the operation of the Scheme.
			With reference to concerns around funding decommissioning, the Order, if made, would require the decommissioning of the Scheme in accordance with a Decommissioning Environmental Management Plan (DEMP). A Decommissioning Strategy [EN010118/APP/7.12(A)] 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 [EN010118/APP/7.12(A)], and for the approved DEMP to be implemented. The requirement with respect to decommissioning is enforceable via the Planning Act 2008 against the person with the benefit of the Order of the



PINS Ref.	Respondent	Summary	Applicant Response
			time. The Applicant is aware of its obligations in this respect (should the Order be made) and that it is a criminal offence to fail to comply with the terms of an Order granting development consent.
			Hedge planting is proposed adjacent to some PRoW and permissive paths, as shown in Annex A (Outline Landscape Masterplan) in the Outline Landscape and Ecology Management Plan [EN010118/APP/7.13(A)].
REP1b- 086	Essex Local Access Forum	The undertaking that the PROWs and permissive paths will be inside a 10 metre wide passageway is welcome. However several (sections of) the paths appear to be in the same space or very close to the proposed vehicular access tracks. For example, Terling FP 30 [113_30], Boreham FP 4 [213_4] / Terling FP 32 [113_32] and Terling FP 25 [113_25] & 33 [113_33] (at Scarlet's Farm). The diagram in the Transport Assessment [APP-093] included in the discussion with Essex Highways PROW in August 2021 shows that the 10 metre space will be shared with the vehicular access track. No new hedge planting alongside the solar panel field fencing is shown in these diagrams. Whilst the access tracks are stated as not being used intensively by vehicles in the 40 year operational phase, this juxtaposition is objected to.	Covered by the response in relation to REP1b-086 above.
REP1b- 086	Essex Local Access Forum	The environment of the on-site public footpaths will of course be negatively affected by passing between or alongside fields of solar panels. This is particularly the case at the south of the site. For example Boreham FP 18 [213_18] & extensive lengths of Terling FP 32 [113_30] /also Boreham 4 [213_4] and Terling FP 30 [113_3] and continuing north Terling 25 & 33 [113_25 & 113_33]. Planting alongside the proposed 2.5 metre high solar panel	Covered by the response in relation to REP1b-086 above.



PINS Ref.	Respondent	Summary  fence MUST occur before or at the latest on day 1 of construction to be effective. Path widths must be	Applicant Response
REP1b- 086	Essex Local Access Forum	maintained bearing in mind that hedges grow sideways.  North of Ringer's Wood there are fewer public rights of way so the use of the vehicular access tracks as permissive paths is an enhancement. As noted in ELAF's submission of 3 June 2022, the permissive route should be a multi-user route available for ALL users - walkers, cyclists, runners, horse-riders and mobility impaired / wheelchair users - not just for walkers and cyclists. There should be no stiles or gates across the route.	
REP1b- 086	Essex Local Access Forum	A permanent multi-user route north from Ringer's Wood to Sandy Wood and Terling 11 (the Essex Way) and a link between Boreham footpaths 18 & 19 [213_18 & 213_19], west of Toppinghoehall Wood, would be adding links to the PROW network as per NPPF paragraph 100. A permanent route that followed the access track and /or field boundaries should be included in the decommissioning plan. Noakes Farm Road, a protected lane, would provide a useful cycling and horse-riding access point – see also point 6).	Covered by the response in relation to REP1b-086 above.
REP1b- 086	Essex Local Access Forum	ELAF repeat the request made ELAF's submission of 3 June 2022 for a new multi-user route connection from Boreham Bridleway 48 [213-48], near Bull's Lodge substation, east /north-east to Boreham 17 and then Boreham 19 & 20 on the east side of Waltham Road, within the Order Limits of the cable route corridor – see the map below. This connection would mitigate the historic loss of safe crossings of the railway line and the A12 and would link in with the new WCH bridge at Payne's Lane / Boreham bridleways 45 & 23 [213_45 & 213_23].	



PINS Ref.	Respondent	Summary	Applicant Response
REP1b- 086	Essex Local Access Forum	As noted in ELAF's submission of 3 June 2022 and also noted in submissions made by other interested parties, much can happen to companies in 40 years, so money to cover the decommissioning costs should be deposited in a safe account / as a bond to ensure that the finances are there when needed.	



## 3.10 Transport and traffic

PINS Ref.	Respondent	Summary	Applicant Response
REP1b- 091	Little Waltham Parish Council	It is noted that the main access to the proposed solar farm would use Cranham Road. The Parish Council wishes it to be noted that this road is a wholly inappropriate road to use to access the solar farm in its current condition. The road is a narrow rural road that can barely accommodate existing traffic as evidenced by damage to the grass verges over recent years. Therefore, unless work is carried out to the road to widen and improve it, then the Parish Council objects to Cranham Road being used as the main access to the site.	Following discussions with ECC Highways, it was agreed that the Scheme will implement carriageway widening improvements on Cranham Road to accommodate HGVs travelling to/from the Solar Farm Site. This was incorporated into the Application and includes widening the carriageway to 6.0m where possible, and providing a minimum width of 5.5m where this is not possible (i.e. due to constraints such as third-party land ownership and existing buildings (although there is only one instance of this)). This is considered to resolve the concern that has been raised; but discussions will continue between the Applicant and the Host Authorities and the final position will be reflected in the relevant SoCG.
REP1b- 094	National Highways	National Highways concerns regarding the construction phase relate to the interaction of the Proposed Development with the proposed A12 Chelmsford to A120 Widening Scheme (A12 Scheme), preparing for a Summer 2022 submission. National Highways and the Applicant have identified a number of areas from ongoing discussions with the Applicant and associated DCO documentation which remain to require clarification and agreement between parties. The Statement of Common Ground (SoCG) submitted in the context of the application for the DCO application identifies those issues which remain under discussion. The matters on which National Highways requires further information and/or clarification are set out below in each relevant section and listed in full at the end of the document.  National Highways may seek requirement(s) to be imposed by the DCO to manage the impact of the construction phase, particularly relating to A12 Scheme use of the private road from the Radial Distributor Road (RDR) for construction.	These points are covered within the SoCG with National Highways which has been updated at Deadline 2 [EN010118/EX/8.4(A)].



PINS Ref.	Respondent	Summary	Applicant Response
		The strategic highway impacts during LSF construction, are reported in Environmental Statement, Chapter 13: Transport and Access and the Framework CTMP.	
		As mentioned in the Framework CTMP and shown in 'Appendix B – Surrounding Highway Network', LSF proposes to utilise a private road via Boreham Interchange/RDR for Bulls Lodge Substation compound and construction. Plate 2 shows the location and extent of the private road in question.	
	The A12 Scheme also proposes to utilise this private road's access for construction purposes including but limited to:		
		Haul route. Satellite Construction Compound. Construction of Paynes Lane Bridge. Materials delivery.	Covered by the response in relation to REP1b-094 above.
		Construction traffic movements expected at the private road are detailed in 6.13-6.14. National Highways require to understand how the maintenance and liability for the use of this private road will be apportioned and agreed between the parties.	Covered by the response in relation to REP 15-094 above.
REP1b- 094	National Highways	Paragraph 5.4 of LSF Framework CTMP states there is expected to be no daytime closures at Boreham Interchange during the A12 Scheme construction, which National Highways can confirm is correct for Monday to Friday, only with weekend closures occurring.  The A12 Scheme will require narrow lane running through this section to create the necessary working space. Single carriageway night-time or weekend closures will be required to install and remove the narrow lane running. Installation of beams and temporary works to widen the bridge will require infrequent off-peak total closures. Further phased	



PINS Ref.	Respondent	Summary	Applicant Response
		restrictions will be required on the junction 19 slip roads, including lane and full closures. Some construction activities will require a directional closure or total closure of Boreham Bridge.	
		The narrowing of lanes may have an impact on the Proposed Development at LSF HGV movements, particularly abnormal loads. As mentioned in the relevant representation submitted June 2022, National Highways suggest the Applicant should be reflect on Boreham Interchange highway constraints within the detailed CTMP.	
		Payne's Lane Bridge will require full carriageway closures of the A12, A138 slip road and junction 19 northbound entry slip for construction activities such as installation of the bridge spans. Subject to the details that will be identified during the detailed design, it may be that these highway closures need to be coordinated with the closure of the Great Eastern Main Line (GEML). In such circumstances, particular care will be needed to Page 7 ensure diversion routes for the highway and replacement rail services are coordinated, if required.	
		Traffic would be diverted onto a temporary junction 19 northbound onslip from the junction 19 northern roundabout to minimise disruption whilst constructing a retaining wall between the A12 and the adjacent railway. This will require closure of the A138 slip road and the junction 19 northbound entry slip. This closure will enable more of the works to be carried out during daytime hours, facilitating the works and reducing the nuisance. However, to create additional working space and off-peak lane restrictions will be required on the A12.	
REP1b- 094	National Highways	As mentioned in the TA, LSF construction period is 2024-2026, peak construction in 2025. The A12 Scheme construction programme and peak construction of 2025	Covered by the response in relation to REP1b-094 above.



PINS Ref.	Respondent	Summary  mirrors that of the Applicant. It is noted within 3.5 of the	Applicant Response
		Framework CTMP, that the A12 Scheme's construction will begin in 2025, however it is 2024-2027.	
REP1b- 094	National Highways	The Applicant will utilise Boreham Interchange, which at the time of their construction will be the responsibility of National Highways. There is a proposed movement total of 84 HGVs and 123 cars/ LGVs arriving and departing at the Boreham Interchange per day at 2025 peak construction, equating to a total of 207 vehicles (414 two-way movements) per day. 6.14 The A12 Scheme's construction traffic movements at Boreham Interchange are shown in Table 1 and scheme wide movements displayed on Plate 2. Due to the construction programme, the A12 Scheme's peak traffic at Boreham Interchange will be at the start of the programme (2024- 2025) for the construction of Payne's Lane Bridge. This mirrors the applicants peak construction of 2025.	
		The Applicant has estimated 46 HGVs per day and 48 LGVs/ cars per day (during peak construction phase) utilising the private road. The A12 Scheme will detail construction traffic movements on the private road as the design develops. However, the project does not foresee having vast amount of construction traffic movement using the private road due to this route being required only for Paynes Land Bridge construction and potentially material deliveries.	
REP1b- 094	National Highways	It is noted within the Framework CTMP (paragraph 7.3.5) the Applicant proposes to provide road safety measures including signage and banksmen who will increase awareness of construction activity. However there remains uncertainty with regards to which entity will act as Principal Contractor and therefore leaving ambiguity relating to what	



PINS Ref.	Respondent	Summary	Applicant Response
		highway rules and requirements are to be complied with and plans relating to maintenance and liability.	
REP1b- 094	National Highways	There is a need for agreement to be sought prior the Applicant's DCO decision to ensure appropriate maintenance and liability responsibilities in relation to the impact of the use of the private road for the construction of the Proposed Development and the A12 Scheme are in place prior to any Page 9 construction programme beginning.	Covered by the first response in relation to REP1b-094 above.
REP1b- 094	National Highways	Additionally, National Highways are seeking to ensure access is retained from the RDR/private road to A12 site for construction purposes. National Highways will seek to implement this as a requirement within LSF DCO if necessary.	Covered by the first response in relation to REP1b-094 above.



# 4. Applicant's Comments on Responses to ExA's First Written Questions

#### 4.1 Overview

4.1.1 This section of the report provides the Applicant's responses to responses given by stakeholders and other parties to the ExA's First Written Questions at Deadline 1B.

### 4.2 Air Quality

PINS Ref.	Respondent	Summary	Applicant Response
REP1b- 061	Braintree District Council (ExA WQ 1.1.3)	Braintree District Council (BOC) has no objection in principle to the use of a Dust Management Plan (DMP) to ensure appropriate monitoring of dust deposition. This document would need to be submitted to and approved by the Host Authorities at the appropriate time. It may be more appropriate for the DMP to be a freestanding document rather than being incorporated within a wide ranging CEMP. The wording should also be changed to 'should' rather than 'may' to make the required detail of the DMP more certain/robust.  As highlighted above the Outline CEMP does include the following paragraph:  'The DMP may include monitoring of dust deposition, dust flux, real-time PM10 continuous monitoring and/or visual inspections'.	No further comments.



Good practice guidance for controlling dust is available within the IAQM 'Guidance on the Assessment of dust from demolition and construction' (2014).

BDC Environmental Health requires that any CEMP or DMP must contain clear statements of intent and absolute requirements rather than optional ones. The measures and controls undertaken must be in line with appropriate guidance and the submission makes reference to adopting good practice for high risk sites (as detailed within the aforementioned IAQM guidance) as being embedded within the mitigation. As the DMP is developed then the applicant will need to confirm what emissions to air monitoring is to be carried out and it will need to be agreed with the local authorities for specific activities/incidents. Appropriate monitoring would be a combination of that highlighted in bold above but as a minimum there would be the expectation of documented visual inspections to assess any emissions beyond the boundary of the site.

From the Ecology perspective BDC would comment as follows:

A 'Dust Risk Assessment' (DRA) has been undertaken based on the IAQM guidance1 and has been included within the Air Quality ES Chapter 14 (Air Quality) [APP-046]. This has identified the River Ter SSSI and five Ancient Woodlands as being High sensitivity receptors, as the ecological sites are Nationally designated or are sensitive ecosystems situated within 20m of the Order Limits.

Therefore, a Dust Management Plan (DMP) has been prepared for the construction, operation and decommissioning of the solar farm, which includes all relevant mitigation measures which are highly recommended for High sensitivity receptors, in line with IAQM guidance. This has been outlined within the Outline CEMP [EN010118/APP/7.10], Outline OEMP [EN010118/APP/7.11] and Decommissioning Strategy [EN010118/APP/7.12].



		Therefore, from the Ecology perspective BDC are satisfied that proposed measures are adequately secured to avoid impacts upon Nationally designated sites or sensitive ecosystems and are in line with best practice methodology. In terms of impacts of dust upon European sites, the Habitats Regulations Assessment [EN010118/APP/6.7] outlines that the nearest European site is over 9km from the Order Limits. Therefore, given that IAQM guidance outlines airborne dust is unlikely to adversely effect habitat from up to 200m from the source, BOC agree that there is no risk of impacts upon European Sites from airborne dust emissions and that this impact can be scoped out.	
		Furthermore, given the distance of the European sites, BOC also agree that any dust pollution upon any water courses will likely be well below detectable levels and therefore a Likely Significant Effect can be ruled out upon the European site. However, any potential impacts will be further avoided via the proposed dust control measures for the River Ter SSSI and other watercourses within the site.	
REP1b- 064	Chelmsford City Council (ExA WQ 1.1.3)	Chelmsford City Council (CCC) has no objections in principle to the Dust Management Plan (DMP). Please also refer to the Local Impact Report (LIR); Noise, Vibration, Air Quality and Contamination section, (paragraphs 6.236 - 6.239 refer) and the Statement of Common Ground (SoCG) (Section 10 Air Quality, Table 10.1).	No further comments.
REP1b- 068	Essex County Council (ExA WQ 1.1.3)	With respect to dust deposition, the interests of the Mineral and Waste Planning Authority (MWPA) extend solely to the potential impacts of dust arising from the proximate Bulls Lodge sand and gravel quarry impacting on the proposed solar farm development.  Paragraph 187 of the NPPF sets out the Agent of Change principle. This states, inter-alia, that 'Existing businesses and facilities should not have unreasonable restrictions placed on them as a result of development permitted after they were established.' In this case, the existing business is	No further comments.



Bulls Lodge Quarry and the Agent of Change is the proposed Longfield Solar Farm.

In ECC's representation to the Applicant, dated 18th January 2022, the MWPA noted that 'The MWPA however contends that the principle of the Agent of Change does extend to potential dust impacts. In the absence of any information justifying that energy generation at the proposed development would not be compromised by any dust originating as a consequence of the working and wining of material at Bulls Lodge quarry, the MWPA requests an acknowledgement from the developer that any such impacts are the responsibility of the future managers of the proposed solar farm to mitigate, such as through an enhanced cleaning schedule, and not the responsibility of the operators of Bulls Lodge Quarry.'

This has subsequently been addressed in the Mineral Infrastructure Impact Assessment [EN010118/APP/7.8] which states, at Paragraph 4.2.5 that 'It is not anticipated that the Scheme would experience significant adverse effects relating to dust generated by Bulls Lodge....Outputs from the solar farm will also be monitored and if generation drops due to dust this will be addressed by cleaning.'

The MWPA is satisfied with this response.



## 4.3 Biodiversity, ecology and the natural environment; Habitats Regulations Assessment

PINS Ref.	Respondent	Summary	Applicant Response
REP1b- 099	Prof Mike Alder (ExA WQ 1.2.5)	This question is directed at the Solar Campaign Alliance (SCA) which I Chair. The statement made is that the applicant's assessment of the impacts on diversity are inadequate. In my written representation I will be addressing the issue of biodiversity in more depth. The key point that the SCA would make is that there is little to no evidence of the impact of solar farms on biodiversity (BSG Ecology 2019) until there is adequate research on the effects of solar farms on biodiversity the SCA believe it would be premature to approve schemes which could be environmentally damaging.  The SCA have analyzed the ES survey details and note that a survey of reptiles is recommended in 2022 and this is not available, the badger survey is confidential and not available, the recommendation for birds is that a significant number of extra surveys are required. The Breeding Bird Survey notes that the construction phase has the potential to affect the breeding bird assemblage and the loss of arable farmland will have an impact on the birds it supports. Flora surveys were carried out in 2020 but are only valid for 18 months and not all sites were surveyed. The report notes there is no scientific literature available on the impact to bats from solar farms in fact two studies have indicated a negative impact.  The SCA note there is 1 SSSI near the proposal and 31 non statutory sites within 2km. There are also considerable areas of valuable woodland within and near the site boundaries, There is a reference to an OLEMP but this is not available for comment.	The Applicant is satisfied that its assessment is robust, as provided in Chapter 8 Ecology [EN010118/APP/6.1] and the Biodiversity Net Gain Report [EN010118/APP/6.5].
		SCA cannot justify and evidence will be provided in a paper on the BMG metric. It must be noted that the BNG	



PINS Ref.	Respondent	Summary	Applicant Response
		calculations do not accord with BNG trading rules as set out in JPO 39.	
		In summary the notes above are the reasons the SCA state the applicant's assessment of the impacts on biodiversity are inadequate. BNG trading rules must be adhered to and more surveys are needed, existing surveys do indicate possible ecological damage. The SCA note that propose mitigation could take place in an agricultural context and funded though the government's ELMs scheme.	



## 4.4 Compulsory Acquisition and Temporary Possession

PINS Ref.	Respondent	Summary	Applicant Response
REP1b- 069	Network Rail Infrastructure Limited (ExA WQ 1.3.17)	Network Rail and the Applicant have been in discussions regarding the potential impacts to operational railway of the proposed development. Network Rail understands that the principal interaction results from the Applicant's proposed use of a road for construction traffic which adjoins an access track over which Network Rail have a right of way to access operational railway line. In addition, the Applicant proposes to route electric cables in close proximity to operational railway.  Network Rail has the benefit of a right of way (full details of which are set out in Network Rail's Written Representation) which needs to be retained and protected.  Network Rail's asset protection team and its engineers are considering the impacts on the railway that may arise as a result of these works in proximity the railway as well as Network Rail's unimpeded use of its right of way.  Once this further detail has been established, Network Rail will be in a position to confirm the extent to which its undertaking will be affected. It is anticipated that, as a minimum, its protective provisions should be included in the Order to ensure that its existing rights are not interfered with and works in proximity to the railway do not impact on its operation.	Protective provisions are detailed in the draft DCO to ensure Network Rail's assets and activities would not be impacted.



## 4.5 Battery Storage Technology

PINS Ref.	Respondent	Summary	Applicant Response
REP1b- 061	Braintree District Council (ExA WQ 1.4.3)	BOC consider that the Outline Battery Safety Management Plan [EN010118/APP/7.6] is a comprehensive document which appears to provide a robust set of safety management measures.  BOC understand that the applicant has been pursuing this matter directly with Essex County Fire and Rescue and the HSE. BOC defers to these organisations in terms of their specialist input to this document.	
REP1b- 064	Chelmsford City Council (ExA WQ 1.4.3)	CCC understand that the applicant has been pursuing this matter separately Essex County Fire and Rescue and the UK the Protection Agency and defers to them in this regard. Please note further detail is included in the LIR; Noise, Vibration, Air Quality and Contamination section (paragraph 6.234) and the SoCG (Section 11 Human Health, Table 11.1).	No further comments.
REP1b- 068	Essex County Council (ExA WQ 1.4.3)	ECC defers to CCC and BDC Environment Health, the HSE and Essex County Fire and Rescue.	
REP1b- 082	Environment Agency (ExA WQ 1.4.3)	Our only comments in relation to the oBSMP [EN010118/APP/7.6] are that section 5.5 of the emergency plan should contain:  Details on how to isolate the SuDS to contain firefighting water.  Reference to the potential for re-using firefighting water contained in the SuDS.	The Applicant submitted <b>Appendix 9C Longfield Solar Farm SuDS Strategy [EN010118/APP/6.2],</b> which outlined the measures that will be taken to ensure firefighting water will be isolated. The detail of this control device will be progressed at detailed design stage.  Development of re-use of firefighting water contained in SuDS will also be addressed at detailed design.



## 4.6 Draft Development Consent Order

PINS Ref.	Respondent	Summary	Applicant Response
REP1b- 068	Essex County Council (ExA WQ 1.5.7)	ECC has proposed/drafted Protected Provisions (PPs) wording (Section 23 LDA consents) for consideration by the Applicant. The Applicant has agreed to the draft PPs in an email dated 12th August, in which the Applicant has also confirmed they would include the PPs in the next draft of the DCO for submission Deadline 1B.	No further comments.
REP1b- 061	Braintree District Council (ExA WQ 1.5.22)	BOC consider that an absolute minimum of an 8 week period is required. (Note that for major planning applications condition discharges are normally 13 weeks).	This is reflected in the DCO as drafted. No further comments.
REP1b- 061	Braintree District Council (ExA WQ 1.5.23)	BOC consider that an absolute minimum of an 8 week period is required. (Note that for major planning applications condition discharges are normally 13 weeks).	This is reflected in the DCO as dialted. No further comments.
REP1b- 068	Essex County Council (ExA WQ 1.5.23)	ECC consider that the proposed 6-week timescale should be increased to a minimum 8-weeks. Further, there is a need for the applicant to resource ECC to enable it to respond in a timely and effective way to the DCO post consent, without degradation to its performance standards.	The timescales are reflected in the DCO as drafted. Discussions are ongoing between the Applicant and the Host Authorities regards appropriate resourcing to enable them to discharge the requirements in due course; and an update on this position will be reflected in the SoCG between the Applicant and the Host Authorities.
REP1b- 061	Braintree District Council (ExA WQ 1.5.26)	A meeting is scheduled to be held on 5th September 2022 between the Applicant and Host Authorities to discuss the requirements and drafting changes. Please also refer to the UR which comments on the adequacy of the DCO under the appropriate topic sections and the SoCG in relation to requirements.	Discussions on the drafting of the DCO are ongoing and the position between the parties reflected in the SoCG, which will be kept up to date during the course of the examination.
REP1b- 064	Chelmsford City Council (ExA WQ 1.5.26)	A meeting is scheduled to be held on 5th September 2022 between the Applicant and Host Authorities to discuss the Requirements and drafting changes. Please also refer to the LIR which comments on the adequacy of the DCO	daming the escrete of the examination.



PINS Ref.	Respondent	Summary  under the appropriate topic sections and the SoCG in relation to requirements.	Applicant Response
REP1b- 068	Essex County Council (ExA WQ 1.5.26)	A meeting is scheduled to be held on 5th September 2022 between the Applicant and the Host Authorities to discuss the Requirements and drafting changes. Please also refer to the Local Impact Report (LIR) which comments on the adequacy of the DCO under each topic heading and the Statement of Common Ground (SoCG) in relation to requirements.	
REP1b- 061	Braintree District Council (ExA WQ 1.5.29)	A meeting is scheduled to be held on 5th September 2022 between the applicant and Host Authorities to discuss the requirements and drafting changes. BDC consider that the overall approach to battery safety management as set out in the Outline Battery Safety Management Plan [EN010118/APP/7.6] is comprehensive and appears to provide a robust set of safety management measures. However, BDC defer to ECC Fire & Rescue and the HSE with regard to their specialist expertise on the relevant areas of battery safety management.	
REP1b- 064	Chelmsford City Council (ExA WQ 1.5.29)	A meeting is scheduled to be held on 5th September 2022 between the applicant and Host Authorities to discuss the Requirements and drafting changes. Please also refer to the LIR; Noise, Vibration, Air Quality and Contamination section (paragraphs 6.234, 6.236 - 6.239) and the SoCG (Section 11 Human Health, Table 11.1 and Section 13 Others, Table 13.1).	
REP1b- 082	Environment Agency (ExA WQ 1.5.29)	We have no comments to make on Schedule 2, R8. Please see our response above to ExQ1.4.3.	No further comments.



PINS Ref.	Respondent	Summary	Applicant Response
REP1b- 068	Essex County Council (ExA WQ 1.5.29)	ECC defers to CCC Environmental Health, BDC Environmental Health, HSE, the Environment Agency and Essex County Fire and Rescue Service.	
REP1b- 061	Braintree District Council (ExA WQ 1.5.31)	BDC defers to Essex County Council in respect of archaeology.	No further comments.
REP1b- 064	Chelmsford City Council (ExA WQ 1.5.31)	CCC defers to Essex County Council in respect of archaeology. A meeting is scheduled to be held on 5th September 2022 between the applicant and Host Authorities to discuss the Requirements and drafting changes.	
REP1b- 068	Essex County Council (ExA WQ 1.5.31)	ECC Historic Environment confirm that the proposed wording of draft R12 and R25 will be acceptable once the draft oCEMP is agreed.  Additional comments: the approach to the draft WSI does not include any provision for outreach and enhanced public understanding. The draft oCEMP is currently not agreed for the reasons stated in the draft SoCG. The potential impact of construction to cultural heritage does not accurately reflect the effect to archaeological remains. The effect of the impact is likely to be permanent and not temporary as stated. There is no assessment on the visual and noise impact to archaeological remains and no mitigation proposed in relation to the visual and noise impact on built heritage.  A meeting is scheduled to be held on 5th September 2022 between the Applicant and the Host Authorities to discuss the Requirements and drafting changes.	Discussions on the drafting of the DCO are ongoing and the position between the parties reflected in the SoCG, which will be kept up to date during the course of the examination.



PINS Ref.	Respondent	Summary	Applicant Response
REP1b- 061	Braintree District Council (ExA WQ 1.5.32)	BDC are currently content in principle with the wording of R13 and R14 and the contents of both OCEMPs. However, these remain under discussion and consideration with the applicant.  A meeting is scheduled to be held on 5th September 2022 between the applicant and Host Authorities to discuss the requirements and drafting changes. A further update will be provided subsequent to the meeting.	
REP1b- 064	Chelmsford City Council (ExA WQ 1.5.32)	CCC are currently content in principle with the wording of R13 and R14 and the contents of both OCEMPs. However, these 4 remain under discussion and consideration with the applicant. A meeting is scheduled to be held on 5th September 2022 between the applicant and Host Authorities to discuss the Requirements and drafting changes. A further update will be provided subsequent to the meeting.	
REP1b- 082	Environment Agency (ExA WQ 1.5.32)	The GPPs (including R13 and R14) & PPGs referred to are not endorsed by the Environment Agency. The guidance within the documents should help mitigate environmental risks during the construction stage, but reference should be made to guidance on environmental regulations in England, which can be found on www.gov.uk.  In relation to Horizontal Direct Drilling under Boreham Brook, there is little detail provided within the CEMP [EN010118/APP/7.10]. However, as highlighted in our response to the statutory consultation in our letter referenced AE/2022/127023 and dated 25 May 2022, we agree that a Frac out assessment should be completed as highlighted in the Environmental Statement. It is important to undertake a detailed risk assessment to demonstrate that	Noted.



PINS Ref.	Respondent	Summary  the likely event of the unintentional return of drilling fluids to	Applicant Response
		the surface is low.	
REP1b- 068	Essex County Council (ExA WQ 1.5.32)	The wording of R13 and the R14 and the contents of the oCEMP [EN010118/APP/7.10] and oOEMP [EN010118/APP/7.11] is not agreed. These remain under discussion with a meeting scheduled for 5th September 2022 between the Applicant to discuss Requirements and drafting changes. A further update will be provided subsequent to the meeting on 5th September 2022.	Discussions on the drafting of the DCO are ongoing and the position between the parties reflected in the SoCG, which will be kept up to date during the course of the examination.
REP1b- 061	Braintree District Council (ExA WQ 1.5.47)	BDC consider that an absolute minimum of an 8 week period is required. (Note that for major planning applications condition discharges are normally 13 weeks).  A meeting is scheduled to be held on 5th September 2022 between the applicant and Host Authorities to discuss the requirements and drafting changes.  BDC wishes to undertake further review of Schedule 16 and will provide further response and agreement to the acceptability of the Schedule as part of on- going discussion with the Applicant to the SoCG.	The draft DCO reflects an 8-week determination date for discharging the requirements. Furthermore, discussions on the drafting of the DCO are
REP1b- 064	Chelmsford City Council (ExA WQ 1.5.47)	A meeting is scheduled to be held on 5th September 2022 between the applicant and Host Authorities to discuss the Requirements and drafting changes.  CCC disagrees with the proposed specified 6-week period for notification of the decision, and considers that a minimum of an 8-week period, as is standard with the discharge of planning conditions on planning applications should be specified.  CCC considers that Schedule 16 should contain provisions for extending the decision-making period, to enable further consideration of the Requirements where appropriate. CCC	ongoing and the position between the parties reflected in the SoCG, which will be kept up to date during the course of the examination.



PINS Ref.	Respondent	Summary	Applicant Response
		wishes to undertake further review of Schedule 16 and will provide further response and agreement to the acceptability of the Schedule as part of ongoing discussion with the Applicant to the SoCG.	
REP1b- 068	Essex County Council (ExA WQ 1.5.32)	A meeting is scheduled to be held on 5th September 2022 between the Applicant and the Host Authorities to discuss the Requirements and drafting changes.  ECC considers that a minimum 8-week period should be specified. ECC will undertake further review of schedule 16 and will provide further response to the acceptability of Schedule 16 at the meeting on 5th September and via ongoing SoCG discussions.	



#### 4.7 Environmental Statement: General Matters

PINS Ref.	Respondent	Summary	Applicant Response
REP1b- 061	Braintree District Council (ExA WQ 1.6.9)	BDC are content with the approach to cumulative impacts in principle and that all relevant developments/plans/projects have been identified. Please also refer to the UR and the SoCG where cumulative impacts are further considered under the appropriate topic sections.	No further comments.
REP1b- 064	Chelmsford City Council (ExA WQ 1.6.9)	CCC are content with the approach to cumulative impacts in principle. Please also refer to the LIR and the SoCG where the matters are further considered under the appropriate topic sections.	
REP1b- 068	Essex County Council (ExA WQ 1.6.9)	ECC is content in principle to the approach to cumulative impacts. However, ECC disagrees with paragraph 12.6.7 of the ES [EN010118/APP/6.1] which states that 'There are no planning site allocations within the Order limits boundary'. This is not correct. Bulls Lodge Quarry, with planning consent for mineral extraction, falls within the Order limits.  This also contradicts Paragraph 12.8.33 of the ES [EN010118/APP/6.1] which states that 'Land take from within the consented quarry will be needed permanently during and beyond the construction period of the Scheme to accommodate the Bulls Lodge Substation extension.'  Paragraph 12.8.34 of the ES [EN010118/APP/6.1] further states that 'Construction of the Scheme at this location will also require temporary land take from extraction areas within the consented mineral site. This temporary land take will occur for approximately 24 months, and is expected to commence not earlier than the first quarter of 2024 and be completed not earlier than the first quarter of 2026 covering approximately 140,000 square metres (sqm) of the consented mineral site. Although this land would not be	To clarify, Bulls Lodge is a permitted minerals operation and is not a site allocation. The timescales of temporary land take between 2024 and 2026 are very unlikely to cause operational issues at the Brick Farm part of Bulls Lodge. ECC resolved to grant planning permission for planning application ES/147/20/CHL on 26 <sup>th</sup> August 2022 subject to a section 106 agreement. This is expected to be issued by the end of October 2022. The new planning permission will put back planned operational working at Brick Farm until 2035 at the earliest. Consequently, there will be a gap of nine years between the completion of the substation extension and the expected start of topsoil stripping at Brick Farm, prior to mineral extraction. The ability for the site to be used for overburden and topsoil stockpiling as part of working Bulls Lodge Quarry will not be compromised or lost. There will be no unforeseen operational implications.



PINS Ref.	Respondent	Summary	Applicant Response
		able to be used during this period, it is not likely that it would be required for quarrying activity within this timeframe.'	
		The MWPA has not to date confirmed whether the above timescales would cause operational issues at Bulls Lodge Quarry.	
		Paragraph 12.8.34 of the <b>ES [EN010118/APP/6.1]</b> further states, 'Further detail is given in the Mineral Infrastructure Impact Assessment which concludes that the construction and operation of the Scheme will not experience adverse effects a result of operations at Bulls Lodge Quarry, and vice versa.'	
		This conclusion is not supported.	
		The MWPA notes that the area in question is also permitted to be used for overburden and topsoil stockpiling as part of working Bulls Lodge Quarry. The MWPA therefore notes that its loss could have unforeseen operational implications for the wider Bulls Lodge Quarry, although the MWPA has not sought to examine this further. It is also noted that Figure 3.4 of the MIIA shows that there is another area within the Order Limits which is proposed to be used temporarily during construction of the solar farm to the north of the existing substation owned by the National Grid which has planning permission for mineral extraction. The ability to extract mineral could potentially be compromised depending on the phasing/ delivery of the solar farm. The MIIA does not comment on this piece of land.	
		As has also been raised in previous correspondence, including in a consultation response in January 2022, the proposed development, as currently configured, would potentially sterilise 18,000 m3 of mineral with planning permission for extraction in the south-west of the Brick Farm area of Bulls Lodge Quarry (CHL/1890/87). Whilst it is	



PINS Ref.	Respondent	Summary	Applicant Response
		noted that this is a small proportion of the wider Bulls Lodge Quarry, the MWPA objects in principle to the loss of mineral with planning permission for extraction.	
		Further, it is the understanding of the MWPA that the mineral operator has not expressed any intention to not work the land associated with Bulls Lodge Quarry to the extent permitted through their extant planning permission.	
		Please also refer to the LIR and the SocG where these matters are covered in more detail.	
REP1b- 095	Natural England (ExA WQ 1.6.9)	Natural England is not aware of any other plans and project which are likely to result in cumulative or in combination effects together with the proposed development.	No further comments.



#### 4.8 Historic Environment

PINS Ref.	Respondent	Summary	Applicant Response
REP1b- 061	Braintree District Council (ExA WQ 1.7.3)	Yes, the DCO order site (developable area) could be further reduced so as not to not encroach as close to the listed building to the north (between Roll's Farm and Ringers).	The examiner's question was as follows: "The Applicant considers there is no further mitigation that can be implemented to minimise the effect on the
REP1b- 064	Chelmsford City Council (ExA WQ 1.7.3)	Ringers Farmhouses rural setting is a feature which contributes to its significance. It would be possible to further reduce the impacts by setting back the development further to give more breathing space and proving additional landscape screening. The development could be set back further on the north/northwest and deeper planting belts provided, which would reduce the harm further, but not avoid it.  Please also refer to the LIR; Historic Environment section (paragraphs 6.150 - 1.173) and the SoCG (Section 3 Cultural Heritage, Table 3.1).	setting of the Grade I listed Ringers Farmhouse, which is assessed as significant adverse. Do Historic England and the Host Authorities consider there are any additional mitigation measures which could reduce the significant of effect on Ringers Farmhouse?"  It is acknowledged that further mitigation is possible which would reduce the impact to the grade I listed Ringers Farmhouse but this needs to be considered in the balance with the need for renewable energy generation, as set out in the Statement of Need. The proposed set-backs have reduce the significance of effect to such a degree that the harm would be considered less than substantial.



## 4.9 Landscape and Visual Effects

PINS Ref.	Respondent	Summary	Applicant Response
REP1b- 061	Braintree District Council (ExA WQ 1.8.1)	BDC can confirm that we are content with the methodology.	No further comments.
REP1b- 064	Chelmsford City Council (ExA WQ 1.8.1)	CCC confirm it is content with the methodology. Please refer to the LIR; Landscape and Visual amenity section (paragraphs 6.6 -6.96) and Residential Living Environment section (paragraphs 6.178-6.211) and the SoCG (Section 6 Landscape and Visual Amenity, Table 6.1).	No further comments.
REP1b- 061	Braintree District Council (ExA WQ 1.8.3)	BDC confirm it is content in principle subject to further discussion on the following three items:  Approach to vegetation removal/ management on Noakes Farm Lane (Protected Lane)  Screening of view from Viewpoint 45 (Essex Way north of River Ter)  Advance planting of PDA 1 scrub area	Discussions are ongoing, and the status of those discussions reflected in
REP1b- 064	Chelmsford City Council (ExA WQ 1.8.3)	CCC confirm it is content in principle subject to further discussion on the following three items:  Approach to vegetation removal/ management on Noakes Farm Lane (Protected Lane)  Screening of view from Viewpoint 45 (Essex Way north of River Ter)  Advance planting of PDA 1 scrub area	the SoCG between the Applicant and the Host Authorities.
REP1b- 061	Braintree District Council (ExA WQ 1.8.5)	BDC can confirm that these have been agreed.	No further comments.



PINS Ref.	Respondent	Summary	Applicant Response
REP1b- 064	Chelmsford City Council (ExA WQ 1.8.5)	CCC can confirm that these have been agreed.	



## 4.10 Land Use, Agriculture and Socio-economics

PINS Ref.	Respondent	Summary	Applicant Response
REP1b- 061	Braintree District Council (ExA WQ 1.9.2)	The S106 agreement is under discussion with the applicant, and they will provide an update on timescales. BDC confirms that an executed agreement will be provided prior to the close of the Examination.	
REP1b- 064	Chelmsford City Council (ExA WQ 1.9.2)	The S106 agreement is under discussion with the applicant, and they will provide an update on timescales. CCC confirms that an executed agreement will be provided prior to the close of the Examination.	
REP1b- 068	Essex County Council (ExA WQ 1.9.2)	ECC consider that at this stage, the question is best answered by the Applicant. ECC confirms that an executed agreement will be provided prior to the close of the Examination. ECC has provided the following generic Heads of Terms in relation to education, employment and skills: ECC require all proposals for NSIPs to use a Skills and Employment Plan to set out a strategy for supporting and delivering any S106 and nonS106 education, skills and employment obligations. We encourage developers to use best practice guidance) which, as a minimum, should include commitments, clear plans and targets as below:  1. Working within the existing education, skills and employment partnership(s) as advised by ECC and maximising the number of local skills and job opportunities on offer  2. Recruiting through Jobcentre Plus and other local employment vehicles  3. Advertising jobs through the Essex Opportunities portal or any other portal as advised by ECC  4. Setting targets and monitoring systems for:	Discussions are ongoing, and the status of those discussions reflected in the SoCG between the Applicant and the Host Authorities.



PINS Ref.	Respondent	Summary	Applicant Response
		a) New jobs created	
		b) Diversity and inclusion for both jobs created, and apprenticeship and employment opportunities offered	
		c) Work trials and interview guarantees	
		d) Pre-employment training	
		e) Apprenticeships and traineeships both offered and completed	
		f) Vocational training (NVQ)	
		g) Paid and unpaid work experience (14-16 years, 16- 19 years and 19+ years) and engagement with T Levels	
		h) School, college and university site visits, career events and courses sponsored	
		i) Construction Skills Certification Scheme (CSCS) cards	
		j) Supervisor training	
		k) Leadership and management training	
		I) Support with transport, childcare and work equipment	
		m) In-house training schemes	
REP1b- 099	Prof Mike Alder (ExA WQ 1.9.4)	The question has been addressed to the applicant "sought to minimize the impact on BMV land and what alternatives have been considered. Explain how the loss of 156 ha of BMV land would be an effective use of land ref. Para. 5.10 of NPS-EN1".  The order limits for the Longfield Solar Farm are 453 ha (nearly 4 times the figure above) and according to the definition of BMV recently confirmed by the Secretary of State George Eustice the whole area is BMV. This combined with all the other schemes in the system will lead to a very significant loss of valuable farmland which in turn	Please refer to our previous submissions on this matter for details.



PINS Ref.	Respondent	Summary	Applicant Response
		will impact the UKs food security this must be a very serious issue in making in planning decisions.	
		In the current food supply situation, the loss of BMV land is not an effective change of land use. The inference is that the change is temporary the reality is that no one knows what will happen after 40 years and the likelihood is that the site will become a brownfield area. In any event 40 years without food production will have a big impact.	
		The question is asked have alternative sites have been considered. It would appear not. The developers say there is no suitable land to the north and use the strategic ALC maps to show this. These are the maps that show the current Longfield site as Grade 2 and in fact there are areas of lower grade land on these sites. The developer further says land to the south is nor convenient as they could not have a contiguous site because of various obstacles. There are many solar farms in existence that are not contiguous and easily connect together. No attempt has been made to consider this possibility. Overall, there are 30000 ha of poorer grade land in the County of Essex. The fact is a one owner site is a convenient way for the developer and alternatives have not been sought, Developments should not be permitted on BMV land especially when alternatives are available. I will provide further evidence in my written submission.	



#### 4.10 Noise and Vibration

PINS Ref.	Respondent	Summary	Applicant Response
REP1b- 061	Braintree District Council (ExA WQ 1.10.1)	BDC agree - although it is noted that there is the possibility of a 'continuous hum' and whilst this is taken into account by a relevant correction factor in accordance with BS4142 methodology within the noise assessment any further information that becomes available on the likelihood of this phenomenon and its control/prevention would be of interest.	The noise assessment in the ES has considered worst case parameters and data. The Applicant is happy to share further information with the Council at detailed design following receipt of sound power levels and tonal data from suppliers, as well as the chosen locations for noise generating equipment.
REP1b- 064	Chelmsford City Council (ExA WQ 1.10.1)	CCC confirms its agreement to this. Please refer to the LIR; Noise, Vibration, Air Quality and Contamination section, (paragraphs 6.212 - 6.239) and the SoCG (Section 7 Noise and Vibration, Table 7.1).	
REP1b- 061	Braintree District Council (ExA WQ 1.10.2)	BDC accepts the monitoring locations and the applicants reasoning for those locations relative to the noise sensitive receptors.	No further comments.
REP1b- 064	Chelmsford City Council (ExA WQ 1.10.2)	CCC confirms its agreement to this. Please refer to the LIR; Noise, Vibration, Air Quality and Contamination section, (paragraphs 6.212 - 6.239) and the SoCG (Section 7 Noise and Vibration, Table 7.1).	



#### 4.11 Water Environment

PINS Ref.	Respondent	Summary	Applicant Response
REP1b- 082	Environment Agency (ExA WQ 1.11.5)	We have sent the current set of protective provisions that are acceptable to the Environment Agency to the applicant for their consideration. The Environment Agency has a standard set of provisions that have been used for some years now and work has recently been undertaken to revise these. We await comments from the applicant before we agree to a version being included in the draft DCO.	Given that the Environment Agency has agreed matters with respect to biodiversity through the Statement of Common Ground, the Applicant has no further comments with respect to biodiversity.



## **4.12** Transport and Traffic

PINS Ref.	Respondent	Summary	Applicant Response
		National Highways agree the methodologies and models used in the Applicants Transport Assessment and its conclusions. In addition, National Highways agree that the solar farm development will have very little impact on the A12 Chelmsford to A120 widening scheme.	
		Although there are up to 533 workers per day only 55% are likely to be non-local and impact on A12 J19. It is also anticipated that non-local staff would stay within local accommodation and then be transferred to/ from the Solar Farm Site by shuttle service to be provided as part of the scheme.	
REP1b- 093	National Highways (ExA WQ 1.12.5)	As a result of the construction vehicle numbers and worker distributions there are only 77 total vehicles (2 HGVs) using the Boreham Interchange during the AM peak (07:00-08:00) which will have very little impact on the operation. There is also very little impact to the junction during the AM peak from the A12 Chelmsford to A120 widening scheme.	No further comments.
		The PM peak hour for the solar farm's construction workers is also anticipated to be during (18:00-19:00) which is the hour after the peak of the A12 Chelmsford to A120 widening scheme (17:00-18:00). Although there will be issues with the junction already, as shown with the A12 Chelmsford to A120 widening scheme, the distribution of the Solar Farm construction traffic means that very little traffic will actually interfere with the Boreham Interchange operation between 17:00-18:00. Only 13 total vehicles will head southbound on the A12 from Boreham while only 2 will travel to the NB slip road, with a further 5 vehicles accessing the NB slip from the RDR.	



PINS Ref.	Respondent	Summary	Applicant Response
		It is therefore apparent that there will be negligible impact to the operation of J19 during the AM, IP or PM peaks as a result of this scheme.	

Longfield Solar Farm Applicant Comments on Submissions Received - Deadlines 1A and 1B

