

PELHAM SPRING SOLAR FARM ENVIRONMENTAL STATEMENT MAIN STATEMENT <u>CHAPTER 2 – ASSESSMENT SCOPE &</u> <u>METHODOLOGY</u>

On behalf of Low Carbon Solar Park 6 Limited

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Document Management.

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2.1 INTRODUCTION

- 2.1.1 This chapter explains the methodology used to prepare the technical chapters of this Environmental Statement and describes its structure and content. In particular, it sets out the process of identifying and assessing the likely significant environmental effects of the development.
- 2.1.2 This chapter is supported by the following technical appendices:
 - **Appendix 2.1** Uttlesford District Council's Planning Committee Report Dated 14 September 2022, Agenda Item 7 Officers Report for Planning Application UTT/21/1833/FUL.
 - **Appendix 2.2** Planning Inspectorate Regulation 12 EIA Screening letter on behalf of the Secretary of State dated 5 October 2022.
 - Appendix 2.3 Site Location Plan & Layout for Planning Application Ref S62A/22/0006
 - Appendix 2.4 Site Location Plan & Layout for Planning Application UTT/21/0688/FUL
 - Appendix 2.5 Site Location Plan & Layout for Planning Application UTT/21/2846/FUL
 - **Appendix 2.6** Site Location Plan & Layout for East Herts Planning Application 3/22/0806/FUL / Uttlesford District Council Planning Application UTT/22/1203/FUL
 - **Appendix 2.7** Site Location Plan & Layout for Planning Application 3/21/2601
 - **Appendix 2.8** Site Location Plan & Layout for Planning Application 3/21/0969/FUL

2.2 GENERAL APPROACH TO ENVIRONMENTAL STATEMENT

2.2.1 The Environmental Statement must contain the information specified in regulation 18(3) and must meet the requirements of Regulation 18(4). It must also include any additional information specified in Schedule 4 to the 2017 Regulations which is relevant to the specific characteristics of the particular development or type of development and to the environmental features likely to be significantly affected. Significance is generally determined on the basis of expert professional judgement and this is provided by the competent expert(s) for each EIA topic.

2.2.2 Regulation 18(3) and 18(4) states: -

(3) An environmental statement is a statement which includes at least—

(a) a description of the development comprising information on the site, design, size and other relevant features of the development;

(b) a description of the likely significant effects of the development on the environment;

(c) a description of any features of the development, or measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment;

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(d) a description of the reasonable alternatives studied by the developer, which are relevant to the development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the development on the environment;

(e) a non-technical summary of the information referred to in sub-paragraphs (a) to (d); and

(f) any additional information specified in Schedule 4 relevant to the specific characteristics of the particular development or type of development and to the environmental features likely to be significantly affected.

(4) An environmental statement must-

(a) where a scoping opinion or direction has been issued in accordance with regulation 15 or 16, be based on the most recent scoping opinion or direction issued (so far as the proposed development remains materially the same as the proposed development which was subject to that opinion or direction);

(b) include the information reasonably required for reaching a reasoned conclusion on the significant effects of the development on the environment, taking into account current knowledge and methods of assessment; and

(c) be prepared, taking into account the results of any relevant UK environmental assessment, which are reasonably available to the person preparing the environmental statement, with a view to avoiding duplication of assessment.

2.2.3 Schedule 4 states: -

1. A description of the development, including in particular: (a) a description of the location of the development; (b) a description of the physical characteristics of the whole development, including, where relevant, requisite demolition works, and the land-use requirements during the construction and operational phases; (c) a description of the main characteristics of the operational phase of the development (in particular any production process), for instance, energy demand and energy used, nature and quantity of the materials and natural resources (including water, land, soil and biodiversity) used; (d) an estimate, by type and quantity, of expected residues and emissions (such as water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation and quantities and types of waste produced during the construction and operation phases.

2. A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.

3. A description of the relevant aspects of the current state of the environment (baseline scenario) and an outline of the likely evolution thereof without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.

4. A description of the factors specified in regulation 4(2) likely to be significantly affected by the development: population, human health, biodiversity (for example

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fauna and flora), land (for example land take), soil (for example organic matter, erosion, compaction, sealing), water (for example hydromorphological changes, quantity and quality), air, climate (for example greenhouse gas emissions, impacts relevant to adaptation), material assets, cultural heritage, including architectural and archaeological aspects, and landscape.

5. A description of the likely significant effects of the development on the environment resulting from, inter alia: (a) the construction and existence of the development, including, where relevant, demolition works; (b) the use of natural resources, in particular land, soil, water and biodiversity, considering as far as possible the sustainable availability of these resources; (c) the emission of pollutants, noise, vibration, light, heat and radiation, the creation of nuisances, and the disposal and recovery of waste; (d) the risks to human health, cultural heritage or the environment (for example due to accidents or disasters); (e) the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources; (f) the impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change; (g) the technologies and the substances used. The description of the likely significant effects on the factors specified in regulation 4(2)should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the development. This description should take into account the environmental protection objectives established at Union or Member State level which are relevant to the project, including in particular those established under Council Directive 92/43/EEC(a) and Directive 2009/147/EC(b).

6. A description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved.

7. A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements (for example the preparation of a post-project analysis). That description should explain the extent, to which significant adverse effects on the environment are avoided, prevented, reduced or offset, and should cover both the construction and operational phases. prevented, reduced or offset, and should cover both the construction and operational phases.

8. A description of the expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters which are relevant to the project concerned. Relevant information available and obtained through risk assessments pursuant to EU legislation such as Directive 2012/18/EU(c) of the European Parliament and of the Council or Council Directive 2009/71/Euratom(d) or UK environmental assessments may be used for this purpose provided that the requirements of this Directive are met. Where appropriate, this description should include measures envisaged to prevent or mitigate the significant adverse effects of such events on the environment and details of the preparedness for and proposed response to such emergencies.

9. A non-technical summary of the information provided under paragraphs 1 to 8.

10. A reference list detailing the sources used for the descriptions and assessments included in the environmental statement.

- 2.2.4 Accordingly, in summary this Environmental Statement comprises the following information:
 - A description of the development comprising information about the site including the nature, size and scale of the development;
 - The data necessary to identify and assess the main effects which the development is likely to have on the environment;
 - A description of the likely significant effects of the development covering, direct effects and any indirect, secondary, cumulative, short, medium and long term, permanent and temporary, positive and negative effects, explained by reference to the development's possible effect on cultural and archaeological heritage, landscape and the interaction between any of the foregoing material assets (as appropriate);
 - Where significant adverse effects are identified with respect to any of the foregoing, mitigation measures will be proposed in order to avoid, reduce or remedy those effects; and
 - A summary in non-technical language of the information specified above.
- 2.2.5 In order to ensure the completeness and quality of the Environmental Statement, Regulation 5 (a) and (b) require that: -
 - the developer must ensure that the environmental statement is prepared by competent experts; and
 - the environmental statement must be accompanied by a statement from the developer outlining the relevant expertise or qualifications of such experts.
- 2.2.6 The relevant experience of the EIA team is discussed at Section 1.6 of Chapter 1.

2.3 DEVELOPMENT PARAMETERS

- 2.3.1 The development, which has been the subject of this Environmental Impact Assessment, is described in detail within Chapter 4 which also sets out the parameters and controls defining those aspects of the development capable of potentially having significant environmental effects, as defined by the Environmental Impact Assessment Regulations.
- 2.3.2 With regards to limitations, the cable route from the development proposal to the point of connection to the electricity grid is not assessed as part of the Environmental Statement.

2.4 CONSIDERATION OF ALTERNATIVES

2.4.1 The Environmental Statement provides a discrete section which details the reasonable alternatives and the reasoning for the selection of the chosen option. This is discussed at Chapter 4.

2.5 SCOPE OF ENVIRONMENTAL IMPACT ASSESSMENT

2.5.1 The scope of information and assessment set out within the Environmental Statement is considered to provide a clear understanding of the potential significant effects of the development upon its environment and the mitigation measures proposed to avoid or ameliorate those effects. The information, scope and knowledge required to undertake the Environmental Impact Assessment has been acquired from a number of varied sources to ensure that all impacts, whether explicit from the outset or coming to light during the projects; development, were appropriately assessed as part of the Environmental Impact

Assessment process or as standard technical documentation that support the wider planning application submission. These sources include: -

- Uttlesford District Council's Planning Committee Report Dated 14 September 2022, Agenda Item 7 - Officers Report for Planning Application UTT/21/1833/FUL.
- Planning Inspectorate Regulation 12 EIA Screening letter on behalf of the Secretary of State dated 5 October 2022.
- Discussion with statutory consultees and specialist consultee prior to the submission of the application to the Secretary of State.
- Specialist studies and technical documentation submitted in support of the planning application, and
- Expert knowledge from applicant and consultant team based on their individual qualifications and gain experience from working on similar schemes of similar scale elsewhere in the United Kingdom.
- 2.5.2 The Planning Inspectorate Regulation 12 letter identified how the Secretary of State consider that (inter alia) "the Secretary of State considers that the Proposed Development has the potential to give rise to significant visual effects and significant cumulative effects including those on the local landscape through an increase in the amount of electrical infrastructure within the locality". Accordingly, the environmental themes scoped into or out of the Environment Impact Assessment are given in **Table 2.1**.

ENVIRONMENTAL THEME	SCOPING IN / OUT	REASON FOR SCOPING OUT OR HOW/ WHERE WILL THIS BE ADDRESSED.
Accidents and Emergency	In	Article 8 of Schedule 4 of the EIA Regulations requires for an Environmental Statement to consider the vulnerability of the development to risk of major accidents and/or disasters which are relevant to the project concerned. The Environmental Statement includes a description and assessment of the likely significant effects resulting from potential accidents or disasters applicable to the development proposal. This is provided at Chapter 8
Climate Change	In	Article 5(f) of Schedule 4 of the EIA Regulations requires for an Environmental Statement to consider the impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change. Chapter 8 provides a proportionate assessment towards climate change.
Human Health	In	Residential amenity is discussed within Technical Chapter 6. Climate change is discussed in Chapter 8.
Waste	In	Article 1(d) of Schedule 4 of the EIA Regulations requires for an Environmental Statement to consider the quantities and types of waste to be produced during the constriction and operational phases. The potential for waste during construction is described in Chapter 8.

ENVIRONMENTAL THEME	SCOPING IN / OUT	REASON FOR SCOPING OUT OR HOW/ WHERE WILL THIS BE ADDRESSED.
Socio Economic	In	Socio economic matters are discussed in Chapter 7.
Agricultural Land	Out	A detailed soil survey was undertaken at the site during March and August 2021. The detailed survey determined the following grades: (i) approximately 42.7ha of Grade 2 (53.8% of the Site); (ii approximately 21.8ha of Subgrade 3a (27.5%); (iii approximately 13.1ha of Subgrade 3b (16.5%), and (iv) approximately 1.7ha of non-agricultural land (2.2%) along a track. MAFF provisional (pre-1988 ALC information indicates shows that Uttlesford District has a high proportion of agricultural land in Grade 2, i.e., 80.4% compared with 14.2% in England as a whole. Therefore, the presence of Grade 2 land at the Site is unsurprising, as it is widespread in the District.
		In terms of effects on the soil resource, the activities associated with the construction works would be comparable to the current farming activity. Accordingly, the potential impact on the soir resource effects is assessed as being short term reversible, local and of negligible significance. In relative terms, the development would not have a significant effect in agriculture productivity within Uttlesford. During the operational phase of development, the management of the land under solar PV panels can improve soil health, such as increasing soil organic matter (SOM), and hence soir organic carbon (SOC), increasing soil biodiversity and improving soil structure. Whilst the potentiat benefits would not be significant, it is consisten with aims and objectives for improving soil health in the Government's 25 Year Plan for the Environment For the reasons set out above, the applicant does not consider that the proposal require an EIA in terms of agricultural circumstances and the matter can be dealt with by way of normal planning practice. The application is duly supported by a Agricultural Land Classification Report.
Air Quality	Out	The site is not located near any Air Quality Management Area. The nearest AQMA is located a Saffron Walden, with the area centred on Elm Grove off Hill Street. 1 It is anticipated that the development would introduce additional road traffic and construction dust. However, due to the distances and intervening highway networks between the application site and the AQMA, no construction delivery traffic is expected to go through Saffron Walden.

¹ Uttlesford District Council 2022 Air Quality Annual Status Report.

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ENVIRONMENTAL THEME	SCOPING IN / OUT	REASON FOR SCOPING OUT OR HOW/ WHER WILL THIS BE ADDRESSED.
		There are a number of regulatory and legislativ constraints in place to control pollution from construction and demolition activities. The Buildin Act 1984 and subsequent Building Regulations 200 are in place to ensure the safety of people in an around the building during work. Part III of the Environmental Protection Act (EPA) 1990 identifies the emission of dust from construction sites a having the potential to be a statutory nuisance an requires its control under Section 80. A number of best practice guides are available, which provide basis against which Codes of Construction Practic may be benchmarked. The Greater Londo Authority (GLA) in partnership with London Counci has produced a guidance documents tha recommends mitigation measures, depending upo the scale of development and its location, to contro nuisance dust from various activities durin construction and demolition phases. BRE (Buildin Research Establishment) has also produced a repo that outlines the measures to control the emission of nuisance dust. In regards to construction phase vehicle movements, the average number of two way Heavy Duty Vehicles HDV movements per da is expected to be well below the 100 annual averag daily traffic criteria. Therefore, it is not considere that there will be any potential for significant a quality effects from development related road traff emissions during the construction phase. Suc potential impacts have therefore been scoped out from requiring a detailed assessment on the basis of their low and negligible impacts.
		Furthermore, impacts from dust emissions durin the construction phase would be not significant which is supported by the low levels of annual mea emissions. It is considered that despite there not being a defined risk present, it is still advisable that a number of good practice measures ar implemented, such as considerate traffic speed an observing minimal dust dispersion where at a possible during construction and transport activities and these can be incorporated in an Construction Environmental Management Plan. Maintenance vehicles are only expected to visit th site periodically. Therefore, it is unlikely that th number of vehicle movements during th operational phase will exceed those of th construction phase. As a result, operational phase impacts associated with road traffic emissions ar deemed to be not significant and therefore scope

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ENVIRONMENTAL THEME	SCOPING IN / OUT	REASON FOR SCOPING OUT OR HOW/ WHERI WILL THIS BE ADDRESSED.
		Environmental Statement.
Landscape and Visual	In	Landscape and visual matters are discussed i Technical Chapter 6.
Cultural Heritage and archaeology	Out	This topic is scoped out of the Environments Statement. Historic England have previousl provided consultee comments for a renewabl energy development at this site. As part of UD consideration of the original planning applicatio (Decision Notice UTT/21/1833/FUL), a consulter response was provided by Historic England wh acknowledge that whilst a degree of harm would b caused to the significance of the setting of a number of the designated and non-designated heritage assets within a 1.0km radius of the site, they wer are satisfied that the level of that harm would be a a low level of less than substantial. Historic Englan therefore offered no objections to the approval of that application. The application is in agreemer over how the level of harm for this revise development proposal would be less tha substantial. The application is therefor appropriately supported by a Heritage Statement The Heritage Statement provides information wit regards to the significance of the histori environment, to fulfil the requirement given i paragraph 194 of the Government's Nationa Planning Policy Framework (the NPPF) whic requires "an applicant to describe the significance of any heritage assets affected, including an contribution made by their setting." The Heritage Statement identifies that there are no designate heritage assets recorded within the Site. It goes o to state that only two heritage assets have the potential to be sensitive to the developmer proposals on the basis of distance, intervisibility an a historical, functional association. These are th Scheduled Moated site at Battles Manor c. 150r south of the site (1011630); and The Grade II Listed Battles Hall c. 150m south of the site an cartlodge c. 195m south of the site (1276720 1239462, 1239353). Following detaile assessment, the heritage statement concludes tha the development is anticipated to result in less tha substantial harm at the lower end of the spectrur to the heritage significance of the Grade II Listes Battles Hall, the Grade II Listed Dovecote and th G

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ENVIRONMENTAL THEME	SCOPING IN / OUT	REASON FOR SCOPING OUT OR HOW/ WHERE WILL THIS BE ADDRESSED.
		were identified during the geophysical survey within the site. There is some evidence for earlier prehistoric activity within the study area in the form of cropmarks indicative of features of this date, and a small quantity material of this date within the site. A Bronze Age Beaker burial was recorded at Berden to the north and prehistoric pottery was identified during evaluation at Manuden. On this basis, the potential for significant archaeological remains of earlier prehistoric date within the site is considered to be low.
		The geophysical survey identified two areas which were suggestive of archaeological activity of possible Iron Age to Romano-British date, in the northernmost extent of the site and in the western extent of the site. These comprised anomalies comprising a series of enclosures which could tentatively be dated to these periods based on their form. There is some evidence for Iron Age to Roman activity in the site, including an apparent loose concentration of findspots of artefacts of Romano- British date in the northern extent of the site. The findspot of a fragment of quern stone was recorded immediately south of the site. A large quantity of findspots of this date have also been identified in the wider area. On this basis, the potential for significant archaeological remains of Iron Age to Roman date within the site is considered to be moderate to hight.
		The geophysical survey within the site identified anomalies suggestive of activity of medieval date. Three sides of the previously identified moated enclosure as well as some internal features and other ditch-like anomalies and outlying enclosures suggestive of a wider area of fields and enclosures. The series of enclosures located within the northern and western areas of the site may be contemporary with the moated sites and may be of medieval date.
		Following the results of the geophysical survey, an informal discussion was undertaken with the Archaeological Advisor, and it was suggested that panels should be removed along the northern extent of the site and to the north of the moated enclosure. This has been taken into account in the revised proposals.
		With regards to significance, around 6,000 moated sites are known within England, and are predominantly located in the central and eastern parts of the country. The Scheduling Selection Guide

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ENVIRONMENTAL THEME	SCOPING IN / OUT	REASON FOR SCOPING OUT OR HOW/ WHE WILL THIS BE ADDRESSED.
		for Settlement Sites to 1500 (Historic Engla 2018) states that factors which may fave designation include good quality earthworks, presence of listed medieval buildings within moat, and the presence of associated features su as fishponds or ridge and furrow in a contempor landscape. A very large number of moats recorded within Essex, and a Scheduled example Battles Hall lies to the south of the site, which I extant remains of the northern and southern arr Within the site, where the remains are plough down and survive as extremely slight earthwo and below ground remains only, they are considered to be of a significance commensurate a Scheduled Monument, but rather are conside as a non-designated heritage asset. Solar pan are proposed in the area of the possible moated s and the anomalies in the western extent of the s The piles associated with the solar panels will can discrete impacts across the area, although relatively low disturbance overall.
		During the mid-19th century, the land within site was utilised as a mixture of arable, grass a woodland, and its arable use has continued into 21st century. Cropmarks of field boundaries visible within the site on modern aerial imag which are depicted on mapping from the 1 century. The geophysical survey identified th sides of a possible enclosure of poten postmedieval to modern state in the eastern ext of the western area of the site. Development in study area was focused at Berden to the north a Manuden to the south-east, as well as farmstea located in the wider landscape. On this basis, potential for significant archaeological remains post-medieval to modern date is considered to low.
		Having considered the potential impacts a historical data for the site, heritage and archelo can be scoped out of the Environmental Statem and can be adequately addressed as part of t planning application process through the submiss of the standalone technical report.
Ecology	Out	As part of UDC consideration of the original schere (Decision Notice UTT/21/1833/FUL), a consult response was submitted by Natural England we considered that the proposed development wo not have significant adverse impact statute protected nature conservation sites. The Counce in house ecologist also offered no objection, subj to the imposition of conditions to secure biodiverse

ENVIRONMENTAL THEME	SCOPING IN / OUT	REASON FOR SCOPING OUT OR HOW/ WHER WILL THIS BE ADDRESSED.
		mitigation and enhancement measures. The application submission is supported by a Ecological Impact Assessment by prepared by Clarkson and Woods Ecological Consultants. The assessme identifies how the majority of the site comprise large arable fields with little ecological importance. The installation of panels into these areas is unlike to result in any long-term adverse impacts uppoind biodiversity and, subject to the establishment grassland beneath and around the panels, the scheme is likely to result in a positive impact uppoind biodiversity within the local area. The site considered suitable for a number of protected notable species, particularly associated with the boundary features and the design of the scheme has been modified at an early stage to ensure that the most ecologically valuable habitats are retained within the development. All woodland, hedgerow and ditches are to be retained and protected through the construction phase through the establishment of appropriately fenced buffer zone which will remain free from development. Adversimpacts upon receptors associated with boundar features such as roosting and foraging/commutine bats, dormouse, otters, water voles and nesting birds are therefore likely to be avoide Recommendations have been provided to ensure that these habitats and the species, which may have been through the production of Biodiversity Protection Plan at the procommencement stage. Overall, as the majority of habitat on Site comprise
		agriculturally managed fields with relatively litt ecological importance, the installation of photovoltaic array into this area is unlikely to resu in significant adverse impacts upon loc biodiversity.
Hydrology, Ground Conditions and Contamination	Out	These topics are scoped out of the Environment Statement. The Flood Risk Assessment that supports the application submission confirms that the entire si is located within Flood Zone 1 (low probability flooding) as defined by the Environment Agent Flood Maps. Geological data held by the Britis Geological Survey (BGS) indicates that the bedroo geology underlying the site is "Lewes Nodular Cha Formation and Seaford Chalk Formatic (undifferentiated) - Chalk" The Soilscape soils da shows the site as both "Lime-rich loamy and clave soils with impeded drainage – slightly impeded drainage" Given the above, Fluvial Flood risk

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ENVIRONMENTAL THEME	SCOPING IN / OUT	REASON FOR SCOPING OUT OR HOW/ WHEI WILL THIS BE ADDRESSED.
		the site is considered to be very low. The Surfa Water (Pluvial) Flood Map indicates that t majority of the site is at a very low risk from surfa water flooding. There are some areas of high a medium risk indicated where the field drain ditch located through the southern part of the site a where various low spots have occurred within t fields. The maps show the flood depths to between $0 - 0.3m$ and $0.3 - 0.9m$. During t proposed surface water drainage design, the areas can be picked up and redesigned so as accommodate any existing overland flows a potential surface water flows using sustainal drainage techniques and positive drainage techniques where applicable.
		The surface water drainage design has consider the use of SuDS appropriate to the developme and suitable solutions discussed in the previo section. It is proposed to allow the site to drain close as naturally possible to the existing situati with run-off intercepted by a series of shall swales / filter trenches adjacent to the propos new internal access roads and swales located at t low parts of the site to collect and slow surfa water run-off prior to discharging to the existi watercourses previously named. The propos development site will not affect the existi permeable areas, apart from very small areas previously discussed, and run-off will be as existi added to slow flows and also improve water quality
		Overall, the developed land will be predominan used for solar panels with some associat infrastructure and access roads. The development considered to produce little to no pollution fro surface run off onto the ground. Over land flo through grass will then pass along SuDS featur such as swales which will provide additional wat quality improvements to already low polluted wate For the reasons set out above, the applicant do not consider that the proposal require an EIA
		terms of flood risk and the matter can be dealt w by way of normal planning practice. T application is duly supported by a Flood Ri Assessment.
Noise and Vibration	Out	Turning to noise, solar farms are not norma considered noisy. Nevertheless, various electric components, such as inverter, transformers a batteries, can emit low levels of noise.
		The application proposal is supported by a Noi Impact Assessment. The report details the existi background sound climate at the nearest nois

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ENVIRONMENTAL THEME	SCOPING IN / OUT	REASON FOR SCOPING OUT OR HOW/ WHE WILL THIS BE ADDRESSED.
		sensitive receptors, as well as the potential souremissions associated with the development. The assessment considers the potential noise generation from the plant associated with the proposal workspect to existing sound levels in the area. The assessment methodology contained in Brite Standard 4142:2014+A1:2019 Method for rationand assessing industrial and commercial sound have been used. The assessment identifies that the proposal will give rise to rating noise levels that a typically below the measured day and night the background sound levels in the area, at the close assessed residential receptors, thus giving rise to Low Impact. For this reason it is not expected the proposal would affect the noise environment the extent that a significant environmental effectively. Having considered the potential impacts, noise core be scoped out of the Environmental Statement a can be adequately addressed as part of the planning application process through the submission of the standalone technical report.
Traffic and Transport	Out	The application is supported by a Construction Traffic Management Plan prepared by Pegas Group. The plan provides an assessment of the likely number of deliveries associated with the construction of the development. It is anticipate that 922 deliveries will be required during the construction period, this equates to a average of deliveries per day. In addition to the He deliveries, there will also be a small number construction movements associated with small vehicles such as the collection of skips for was management (please refer to Chapter 8), the transport of construction workers and su contractors.
		out two rules which have been used as thresho impacts to define the scale and extent of the assessment as follows: Rule 1: Include highwore links where traffic flows will increase by more the 30% (or where the number of HGVs will increase more than 30%); and Rule 2: Include any othe specifically sensitive areas where traffic flows has increased by 10% or more. The anticipate additional HGV and LGV traffic movements to the local highways network during construction over daily period is not expected to exceed the threshold. Therefore, there will not be a significate environmental effect as a result of construction vehicle traffic. Similarly, the vehicle movement associated with the operational phase is negligible

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ENVIRONMENTAL THEME	SCOPING IN / OUT			
		Having considered the levels of traffic that coul occur as a result of the development, it is deeme appropriate to scope out this topic. The topic appropriately assessed through the standalor construction traffic management plan which ful assess the transport and highways impacts of the proposed development, specifically durin construction, and identify suitable mitigation measures.		

2.6 ITERATIVE DESIGN & THE EIA

2.6.1 Whilst a contributing value of EIA is its iterative design process that allows for refinement to the scheme, it is accepted that for this application submission, the key design iterations incorporated into the scheme were implemented prior to the preparation of the EIA. The EIA has not introduced any additional layout changes to the submitted scheme.

2.7 ENVIRONMENTAL IMPACT ASSESSMENT METHODOLOGY

2.7.1 The content of the Environmental Statement is based on the following:

- Review of the baseline situation through existing information, including data, reports, site surveys and desktop studies;
- Consideration of the relevant National Planning Policy Framework (NPPF) and accompanying Planning Practice Guidance (PPG), national Policy Statement and emerging Draft national Policy Statements and the statutory Development Plan;
- Consideration of potential sensitive receptors;
- Identification of likely significant environmental effects and an evaluation of their duration and magnitude;
- Expert opinion;
- Modelling;
- Use of relevant technical and good practice guidance; and
- Specific consultations with appropriate bodies, including the preapplication advice pursuant to the previous refused renewable energy scheme at this location.
- 2.7.2 Environmental effects have been evaluated with reference to definitive standards and legislation where available. Where it has not been possible to quantify effects, assessments have been based on available knowledge and professional judgment.

2.8 DETERMINING SIGNIFICANCE

2.8.1 The purpose of the Environmental Impact Assessment is to identify the likely 'significance' of environmental effects (beneficial or adverse) arising from a development. In broad terms, environmental effects are described as:

 Adverse – detrimental or negative effects to an environmental resource or receptor;

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- Beneficial advantageous or positive effect to an environmental resource or receptor; or
- Negligible a neutral effect to an environmental resource or receptor.

2.8.2 It is proposed that the significance of environmental effects (adverse, negligible/neutral or beneficial) would be described in accordance with the following 7-point scale:-

major	moderate	minor	neutral/not	minor	moderate	major
beneficial	beneficial	beneficial	significant	adverse	adverse	adverse

2.8.3 Significance reflects the relationship between two factors:

- The magnitude or severity of an effect (i.e. the actual change taking place to the environment); and
- The sensitivity, importance or value of the resource or receptor.
- 2.8.4 The broad criteria for determining magnitude are set out in **Table 2.2**.

Table 2.2:	Degrees of	Magnitude and	their Criteria
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Magnitude of Effect	Criteria
High	Total loss or major/substantial alteration to elements/features of the baseline (pre-development) conditions such that the post development character/composition/attributes will be fundamentally changed.
Medium	Loss or alteration to one or more elements/features of the baseline conditions such that post development character/composition/attributes of the baseline will be materially changed.
Low	A minor shift away from baseline conditions. Change arising from the loss/alteration will be discernible/detectable but the underlying character/composition/attributes of the baseline condition will be similar to the pre-development.
Negligible	Very little change from baseline conditions. Change not material, barely distinguishable or indistinguishable, approximating to a `no change' situation.

2.8.5 The sensitivity of a receptor is based on the relative importance of the receptor using the scale in **Table 2.3**.

Sensitivity	Criteria		
High	The receptor/resource has little ability to absorb change without fundamentally altering its present character, or is of international or national importance.		
Medium	The receptor/resource has moderate capacity to absorb change without significantly altering its present character, or is of high and more than local (but not national or international) importance.		
Low	The receptor/resource is tolerant of change without detrimental effect, is of low or local importance.		

ASSESSMENT SCOPE AND METHODOLOGY

Negligible	The receptor/resource can accommodate change without material effect,	
	is of limited importance.	

2.8.6 Placement within the 7-point significance scale would be derived from the interaction of the receptor's sensitivity and the magnitude of change likely to be experienced (as above), assigned in accordance with **Table 2.4** below, whereby effects assigned a rating of Major or Moderate would be considered as `significant'.

Change	Sensitivity of Receptor				
		High	Medium	Low	Negligible
_	High	Major	Major	Moderate	Negligible
Magnitude of	Medium	Major	Moderate	Minor to Moderate	Negligible
	Low	Moderate	Minor to Moderate	Minor	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

Table 2.4: Degrees of Significance

- 2.8.7 The above magnitude and significance criteria are provided as a guide for specialists to categorise the significance of effects within the ES. Where discipline-specific methodology has been applied that differs from the generic criteria above, this is clearly explained within the given chapter under the heading of Assessment Approach.
- 2.8.8 A significance of effects would be assigned both before and after mitigation.

2.9 MITIGATION

- 2.9.1 Standard measures and the adoption of construction best practice methods to avoid, minimise or manage adverse environmental effects, or to ensure realisation of beneficial effects, are assumed to have been incorporated into the design of the development and the methods of its construction from the outset. Further information on the standard measures and construction best practice is detailed in **Chapter 4**. Where outlined, the assessment incorporates these measures. Where mitigation measures are proposed that are specific to an environmental theme or wider development proposal and incorporated into the design these are also outlined within **Chapter 4**, and if relevant are highlighted within the technical chapter.
- 2.9.2 Where the assessment of the development has identified potential for adverse environmental effects, the scope for mitigation of those effects, for example by way of compensatory measures, has been considered and is outlined in the appropriate technical chapter. It is assumed that such measures would be subject to appropriate planning conditions. Where the effectiveness of the mitigation proposed has been considered uncertain, or where it depends upon assumptions of operating procedures, then data and/or professional judgment has been introduced to support these assumptions.

2.10 CUMULATIVE AND IN-COMBINATION EFFECTS

2.10.1 Cumulative and combined effects are defined as follows:

- Cumulative impacts are those effects of development that may interact or overlap in an additive or subtractive manner with the impacts of other developments that are not currently in existence but may be by the time the development is implemented.
- Combined effects arise where effects from one environmental element bring about changes in another environmental element.
- 2.10.2 The identification of sites draws upon the information provided by the statutory consultees as part of the consultation process and information in the public domain relating to other known major developments that are proposed in the locality. This includes a review of the electronic planning registers at Uttlesford district council and East Herts Council.
- 2.10.3 For the purpose of this Environmental Statement, the following energy development are included within the cumulative assessments. The cumulative schemes are illustrated on Figure 6.1.
- 2.10.4 **Planning Application Ref S62A/22/0006**, land at Berden Hall Farm. Application by Berden Solar Limited for the development of a ground mounted solar farm with a generation capacity of up to 49.99MW and an operational life of 40 years, together with associated infrastructure and landscaping. The Section 62A planning application was submitted to and made valid by the Planning Inspectorate, on behalf of the secretary of state, on 29 July 2022. On 19 August 2022, the Planning inspectorate advised that an EIA was required to support the planning application. It is understood that the applicant is now preparing the required Environmental Statement. The site location plan and layout plans are provided at Appendix 2.3
- 2.10.5 **Planning Application UTT/21/0688/FUL**, land at Cole End Farm Lane, Wimbish. Application relates to the construction and operation of a 30MW ground mounted solar farm with an operational lifespan of 40 years together with associated infrastructure, including inverters, customer switchgear, DNO substation, medium voltage power station, security cameras, perimeter fence, access tracks and landscaping. Planning application was submitted to Uttlesford District Council on 2 March 2021. The application was presented to Planning committee on 6 July 2022 and resolution was reached to grant planning permission subject to completion of S106 Agreement. At the item of writing this chapter, the S106 negotiations are ongoing between the applicant and the District Council. The site location plan and layout plans are provided at Appendix 2.4
- 2.10.6 **Planning Application UTT/21/2846/FUL**, land at Chesterford Park, Little Chesterford, Essex. Planning application relates to the construction of a Green Energy Hub for the Chesterford Research Park comprising solar array development, a battery energy storage system, associated transformers, underground cabling and other electrical equipment, related landscaping scheme, fencing and CCTV. Application was made valid by the council on 13 September 2021. The application was presented to the Planning Committee on 16 March 2022 and resolution was reached to grant planning permission subject to completion of S106 Agreement. At the time of writing this chapter, the decision notice has yet been released by the Local Planning Authority. The site location plan and layout plans are provided at Appendix 2.5
- 2.10.7 Cross Boundary Application East Herts Planning Application 3/22/0806/FUL / Uttlesford District Council Planning Application UTT/22/1203/FUL, land off Crabbs Lane and Pelham Substation. Planning application by Renewable Connections for the construction and operation of a Battery Energy Storage System and associated

infrastructure. The application was made valid by East Herts Council on 27 April 2022. The application was made valid by Uttlesford District Council on 28 April 2022. At the time of writing this Chapter, the application was still under the Local Planning Authorities determination. The site location plan and layout plans are provided at Appendix 2.6

- 2.10.8 **Planning Application East Herts Ref 3/21/2601/FUL**, Land at Wickham Hall Estate. Application relates to the temporary construction of a solar photovoltaic farm with an output capacity not to exceed 49.9MW of energy, with supporting infrastructure and battery storage, inverters and transformers, fencing and landscaping works. The application was made valid by Est Herts Council on 30 November 2021. At the time of writing this Chapter, the application was still under the Local Planning Authority's determination. The site location plan and layout plans are provided at Appendix 2.7
- 2.10.9 **Planning Application East Herts Ref 3/21/0969/FUL**. Planning Application by Pelham Power Ltd for the construction of a 50MW battery energy storage system facility and associated access, landscaping and other infrastructure works. Application was made valid by East Herts Council on 5 May 2021. At the time of writing this Chapter, the application was still under the Local Planning Authority's determination. The site location plan and layout plans are provided at Appendix 2.8.
- 2.10.10 It is noted that **Decision Notice UTT/17/2075/FUL**, land north of Pelham Substation for a the 49.99MW Battery Storage Facility approved under Decision Notice UTT/17/2075/FUL is operational and therefore forms part of the baseline assessment.

2.11 GENERAL ASSUMPTIONS AND LIMITATIONS

- 2.11.1 The principal assumptions that have been made and any limitations that have been identified in preparing this Environmental Statement are set out below:
 - All of the principal land uses adjoining the application site remain as present day, except where development is known to come forward, these include the renewable energy developments illustrated on Figure 6.1.
 - Information received from third parties is complete and up to date during the consultation leading to the submission of the planning application.
 - In EIA technical assessment a degree of professional judgement is always required, however this is substantiated wherever possible through evidence.
 - The design, construction and completed stages of the development will satisfy legislative requirements; and
 - Conditions will be attached to the planning permission with regards "mitigation", where considered necessary to make the development acceptable.
- 2.11.2 Notwithstanding some of the limitations described above, this Environmental Statement is considered robust and fit for purpose. The Environmental Statement has been produced in accordance with relevant legislation, policy, guidance and consultation with the Local Planning Authorities and statutory consultees.

2.12 STRUCTURE OF TECHNICAL CHAPTER

2.12.1 Throughout the EIA process, the likely significant environmental effects of the development will be assessed. Within each of the technical chapters the

information which will inform the EIA process has generally been set out in the following way:

- **Introduction** to introduce the topic under consideration, state the purpose of undertaking the assessment and set out those aspects of the development material to the topic assessment;
- Assessment Approach to describe the method and scope of the assessment undertaken and responses to consultation in relation to method and scope in each case pertinent to the topic under consideration;
- **Baseline Conditions** a description of the baseline conditions pertinent to the topic under consideration including baseline survey information.
- Assessment of Likely Significant Effects identifying the likely effects, evaluation of those effects and assessment of their significance, considering both construction and operational and direct and indirect effects;
- Mitigation and Enhancement describing the mitigation strategies for the significant effects identified and noting any residual effects of the proposals;
- Cumulative and In-combination Effects consideration of potential cumulative and in-combination effects with those of other developments; and
- **Summary** a non-technical summary of the chapter, including baseline conditions, likely significant effects, mitigation and conclusion.



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