



# BEACON FEN

## ENERGY PARK

Planning Inspectorate Reference: EN010151

Preliminary Environmental Information Report  
Contents, Glossary & Reference List  
[Document Reference: ST19595-REP-002]  
January 2024



### Revision History

Revision	Revision date	Details	Authorized	Name	Position

### List of Outstanding Issues and Information

Outstanding issue/info.	Section/Paragraph	Responsibility	Action

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# Glossary of Abbreviations

AADT	Annual Average Daily Traffic
AGL	Above Ground Level
AIL	Abnormal Indivisible Load
AOD	Above Ordnance Datum
ATC	Automatic Traffic Count
ATCT	Air Traffic Control Tower
BAP	Biodiversity Action Plan
BBC	Boston Borough Council
BESS	Battery Energy Storage System
BGS	British Geological Survey
BMV	Best and Most Versatile Agricultural Land
BNG	Biodiversity Net Gain
BS	British Standard
CCTV	Closed circuit television
CEMP	Construction Environmental Management Plan
CIEEM	Chartered Institute of Ecology and Environmental Management
CifA	Chartered Institute for Archaeologists
CTMP	Construction Traffic Management Plan
DCO	Development Consent Order
DEMP	Decommissioning Environmental Management Plan
DMRB	Design manual for Roads and Bridges
DTM	Digital Terrain Model
EcIA	Ecological Impact Assessment



EIA	Environmental Impact Assessment
EPS	European Protection Species
EPUK	Environmental Protection UK
ES	Environmental Statement
GCN	Great Crested Newt
GHG	Greenhouse Gas
GI	Green Infrastructure
GLVIA	Guidelines for Landscape and Visual Impact Assessment
GVA	Gross Value Added
HDD	Horizontal Directional Drilling
HER	Historic Environmental Record
HGV	Heavy Goods Vehicle
IAQM	Institute of Air Quality Management
IDB	Internal Drainage Board
IEMA	Institute of Environmental Management and Assessment
IPCC	Intergovernmental Panel on Climate Change
kWh	Kilowatt-hour
LAQM	Local Air Quality Management
LBAP	Local Biodiversity Action Plan
LCA	Landscape Character Area
LCC	Lincolnshire County Council
LCT	Landscape Character Type
LVIA	Landscape and Visual Impact Assessment
LWS	Local Wildlife Site
MW	Megawatt

MWh	Megawatt-hour
NATS	National Air Traffic Services
NCA	National Character Area
NGR	National Grid Reference
NHLE	National Heritage List for England
NKDC	North Kesteven District Council
NNR	National Nature Reserve
NPPF	National Planning Policy Framework
NPS	National Policy Statement
NSIP	Nationally Significant Infrastructure Projects
NVZ	Nitrate Vulnerable Zone
OLEMP	Outline Landscape and Ecology Management Plan
OP	Observational Point
PCU	Power Conversion Unit
PEIR	Preliminary Environmental Information Report
PIC	Personal Injury Collision
PINS	Planning Inspectorate
PM	Particulate Matter
PPV	Peak Particle Velocity
PV	Photovoltaic
RCP	Representative Concentration Pathway
Re	Relative Emissions
SAC	Special Areas of Conservation
SMP	Soil Management Plan
SoS	Secretary of State

SPA	Special Protection Areas
SPZ	Source Protection Zone
SSSI	Site of Special Scientific Interest
SuDS	Sustainable Drainage Systems
TPP	Tree Protection Plan
UKCP	United Kingdom Climate Projections
WFD	Water Framework Directive
ZOI	Zone of Influence
ZTV	Zone of Theoretical Visibility

# Glossary of Key Terminology

Abnormal Indivisible Load	An abnormal load that cannot be broken down into smaller loads for transport.
A <sup>1</sup> Weighting	An electronic filter in a sound level meter which mimics the human ear's response to sounds at different frequencies under defined conditions.
Abnormal Load	A vehicle that has a weight of more than 44,000kg, an axle load of more than 10,000kg for a single non-driving axle and 11,500kg for a single driving axle, a width of more than 2.9 metres or a rigid length of more than 18.65 metres.
Above Ordnance Datum	Ordnance Datum is the vertical datum used by ordnance survey as the basis for deriving altitudes on maps. Topography may be described using the level in comparison or 'above' ordnance datum.
Absolute Emissions (A <sub>b</sub> )	Greenhouse gas emissions associated with the Proposed Development
Access Tracks	The tracks within the Order limits constructed to provide access around the Proposed Development.
Aged or veteran tree	A tree which, because of its great age, size or condition is of exceptional value for wildlife, in the landscape, or culturally.
Agricultural Land Classification	Agricultural Land Classification is a standardised method for classifying the quality of agricultural land in England and Wales into one of five grades: Grade 1 (excellent), Grade 2 (very good), Grade 3 (good to moderate), divided into Subgrades 3a (good) and 3b (moderate), Grade 4 (poor), and Grade 5 (very poor).
Air Quality Management Areas	Areas designated by local authorities because they are not likely to achieve national air quality objectives by the relevant deadlines.
Air quality standard	The concentrations of pollutants in the atmosphere which can broadly be taken to achieve a certain level of environmental quality. The standards are based on the assessment of the effects of each pollutant on human health including the effects on sensitive sub groups (see also air quality objective).
Ambient noise	Total encompassing sound in a given situation at a given time usually composed of sound from many sources near and far. Includes both the residual noise and the specific noise from site operations when present.

Amenity	The ability of human receptors to achieve enjoyment and/or quality of life.
Analysis (Landscape)	The process of breaking the landscape down into its component parts to understand how it is made up.
Ancient woodland	An area that has been wooded continuously since at least 1600 AD.
Applicant	Beacon Fen Energy Park Ltd
Appropriate Assessment	The decision process carried out by a 'competent authority' where a project may have a 'likely significant effect' on a Natura 2000 site or a Ramsar site, in particular on the features for which the site was designated.
Aquifer	A body of permeable rock which can contain or transmit groundwater.
Assemblage (ecology)	A group of species found in the same location.
Assessment (Landscape)	An umbrella term for description, classification and analysis of landscape.
Automatic Traffic Count	A traffic count which is undertaken automatically such as through the installation of a temporary or permanent electronic traffic recording device.
Avoidance	Prevention of impacts occurring, having regard to predictions about potentially negative environmental effects (e.g. project decisions about site location or design).
Background noise level	The A-weighted sound pressure level of the residual noise at the assessment position that is exceeded for 90 per cent of a given time interval, T, i.e. LA <sub>90,T</sub> .
Baseline conditions	The conditions that would pertain in the absence of the proposed project at the time that the project would be constructed / operated / decommissioned. The definition of these baseline conditions should be informed by changes arising from other causes (e.g. other consented developments).
Baseline Emissions (B <sub>e</sub> )	Greenhouse gas emissions associated with an alternative development that delivers the same outputs as supplied by the proposed project
Battery Container	A container to house the battery energy storage cells and associated equipment within the BESS.

Battery Energy Storage System	Proposed development of a battery storage installation and associated development to allow for the storage, importation and exportation of energy to the National Grid.
Bedrock	Bedrock more than 2.6 million years old, and generally underlying superficial deposits.
Best and most versatile agricultural land	Land in grades 1, 2 and 3a of the Agricultural Land Classification; agricultural land that it is important to retain free from development.
Biodiversity	The biological diversity of the earth's living resources. The total variability among organisms and ecosystems. In common usage, and within these Guidelines, biodiversity is used to describe the conservation of the natural environment, rather than describing the variation within it.
Biodiversity Action Plan	UK strategy for the conservation of biological resources, now largely succeeded by The 'UK Post 2010 Biodiversity Framework' but lists of priority species and habitats and forms the basis of much biodiversity work.
Biodiversity Net Gain	A measurable improvement in biodiversity as determined by using a metric to quantify habitat values pre- and post-development.
Birds Directive	EU Council Directive 2009/147/EC on the conservation of wild birds.
Cable Circuit	An electrical conductor necessary to transmit electricity between two points within the Scheme and may include one or more auxiliary cables for the purpose of gathering monitoring data, earthing cables, cables for auxiliary supply, optical fibre, and other types of communication cables, cables connecting to direct current boxes.
Cable Route Corridor	Area within the Order limits that are proposed for the grid connection cable between the Onsite Substation and the National Grid Bicker Fen Substation.
Characterisation	The process of identifying areas of similar landscape character, classifying and mapping them and describing their character.
Chartered Institute for Archaeologists	Professional organization for archaeologists working in the U.K.
Chartered Institute of Ecology and Environmental Management	Professional body of which most professional consultant ecologists are members. Its aim is to raise the profile of professional ecological and environmental management and to promote the highest standards of practice for the benefit of nature and society.

Classification	A process of sorting the landscape into different types using selected criteria but without attaching relative values to different sorts of landscape.
CO <sub>2</sub>	Carbon Dioxide (greenhouse gas)
CO <sub>2</sub> e	Carbon Dioxide Equivalent. CO <sub>2</sub> e is a unit of measurement to compare emissions from various greenhouse gas sources based on their warming potential.
Compensation	The measures taken to offset or compensate for residual adverse effects which cannot be mitigated or for which mitigation cannot entirely eliminate adverse effects.
Confluence	The meeting of two or more waterbodies.
Connectivity (ecology)	A measure of the functional availability of the habitats needed for a particular species to move through a given area. Examples include the flight lines used by bats to travel between roosts and foraging areas or the corridors of appropriate habitat needed by some slow colonising species if they are to spread.
Conservation (for heritage policy)	The process of maintaining and managing change to a heritage asset in a way that sustains and, where appropriate, enhances its significance.
Conservation Area	An area of special environmental or historical importance that is protected from changes by law.
Conservation objective (ecology)	Objective for the conservation of biodiversity (e.g. specific objective within a management plan or broad objectives of policy).
Construction Environmental Management Plan	A site-specific plan developed to ensure that appropriate environmental management practices are followed during the construction phase of a project.
Construction Phase	The period within which the Project will be constructed, including the Project Substation and Grid Connection Route. Assumed to be a period of 12 months.
Construction Traffic Management Plan	Sets out how the construction phase (including deliveries to the Site) will be managed.
Countryside and Rights of Way (CROW) Act 2000	Primarily relates to public access to the countryside, but also amended existing law (the Wildlife and Countryside Act) relating to nature conservation and the protection of wildlife under Part III, which is concerned with the introduction of improved protection and management of Sites of Special Scientific Interest (SSSIs).

Cumulative effects	The summation of effects that result from changes caused by a development in conjunction with other past, present or reasonably foreseeable actions.
dB(A)	Decibels measured on a sound level meter incorporating a frequency weighting (A weighting) which differentiates between sounds of different frequency (pitch) in a similar way to the human ear. Measurements in dB(A) broadly agree with people's assessment of loudness.
DCO Application	The application for a Development Consent Order (DCO) to be submitted by the Applicant for the Proposed Development of Beacon Fen Energy Park.
Decommissioning Environmental Management Plan	A working document that defines how a site will mitigate its potential impacts through decommissioning on the environment and local community.
Decommissioning Phase	The period within which the built components of the Project are decommissioned after the operational lifetime of 40 years of the Project. The process will include the removal of solar PV array infrastructure including modules, mounting structures, cabling, inverters and transformers, for recycling or disposal in accordance with good practice and market conditions at that time.
Design Manual for Roads and Bridges	A comprehensive series of documents, including standards, specifications and standard details, for the design of new road infrastructure.
Designated heritage asset	A World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield or Conservation Area designated under the relevant legislation.
Designated Landscape	Areas of landscape identified as being of importance at international, national or local levels, either defined by statute or identified in development plans or other documents.
Development Consent Order	An order made by the Secretary of State which grants development consent for Nationally Significant Infrastructure Projects pursuant to the Planning Act 2008.
Development plan	This includes adopted Local Plans, neighbourhood plans and the London Plan, as defined in section 38 of the Planning and Compulsory Purchase Act 2004 (regional strategies have all been abolished by Order using powers taken in the Localism Act 2011).
Direct employment	Employment generated by direct activity on site.
Displacement	The extent to which benefits of a development are offset by reductions in output or employment elsewhere.



Distribution (ecology)	The geographical presence of a feature. This can depend on factors such as climate and altitude.
Diversity	Where a variety of qualities or characteristics occurs.
Downgrading	The potential change in ALC grade to a lower (i.e. poorer) ALC quality grading.
Ecological feature	Habitats, species or ecosystems.
Ecological Impact Assessment	Assesses the potential effects of a development on habitats and species, particularly those protected by national and international legislation or considered to be of particular nature conservation importance.
Ecological networks	These link sites of biodiversity importance.
Economic development	Development, including those within the B Use Classes, public and community uses and main town centre uses (but excluding housing development).
Ecosystem	A community of interdependent plants and animals together with the environment which they inhabit and with which they interact.
Ecosystem services	The benefits people obtain from ecosystems such as, food, water, flood and disease control and recreation.
eDNA	Environmental DNA is DNA that is collected from a variety of environmental samples such as soil, seawater, or even air rather than directly sampled from an individual organism.
Effect	A physical or measurable change to the environment attributable to the project.
EIA Regulations	The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (as amended).
Element	A component part of the landscape (e.g. roads, hedges, woods).
Elements	Individual parts which make up the landscape, such as, for example, trees, hedges and buildings.
Embodied Carbon	The carbon dioxide (CO <sub>2</sub> ) emissions associated with materials and construction processes throughout the whole lifecycle of a building or infrastructure.
Enhancement	Landscape improvement through restoration, reconstruction or creation.
Enhancement (ecology)	Improved management of ecological features or provision of new ecological features, resulting in a net benefit to

	biodiversity, which is unrelated to a negative impact or is 'over and above' that required to mitigate/compensate for an impact.
Environment	Our physical surroundings including air, water and land.
Environment Agency	The EA is a non-departmental public body of the Department for Environment Food and Rural Affairs. Its purpose is, "to protect or enhance the environment, taken as a whole" (section 4, Environment Act 1995) to promote the objective of achieving sustainable development.
Environmental Assessment	A process by which information about the environmental effects of a project is collected, both by the developer and from other sources, and taken into account by the relevant decision making body before a decision is given and whether the development should go ahead.
Environmental Effects	The consequences for human being in terms of health and well-being, including the well-being of ecosystems and natural systems on which human survival depends, which stem from environmental impacts.
Environmental Impact	The process whereby a change, which may be adverse, beneficial, or both, is brought about in the existing environment as a result of development activities.
Environmental impact assessment	The evaluation of the effects of particular development proposals on the environment.
Environmental Statement	A document which sets out the developer's assessment of the likely effects of the project on the environment and which is submitted in conjunction with an application for planning permission.
Export Cables	The cables, which transmit electricity from the transformers to the project substation via Cable Circuits.
Fauna	All members of the animal kingdom: vertebrates (e.g. birds, mammals and fish) and invertebrates (e.g. insects).
Field Capacity Days	The number of days at which soil is saturated with water and any water from rainfall would infiltrate quickly under the force of gravity or create waterlogging.
Field pattern	The pattern of hedges and walls that define fields in farmed landscapes.
Flood Zone	Flood Zone definitions are set out in the National Planning Policy Guidance. There are three flood zones which refer to the probability of river and sea flooding, not taking into account the presence of flood defences.

Flood Zone 1	This zone comprises land assessed as having a less than 1 in 1,000 annual probability of river or sea flooding.
Flood Zone 2	This zone comprises land assessed as having between a 1 in 100 and 1 in 1,000 annual probability of river, or between a 1 in 200 and 1 in 1,000 annual probability of sea flooding in any year.
Flood Zone 3	This zone comprises land assessed as having between a 1 in 100 or greater annual probability of river (>>11%%), or a 1 in 200 or greater annual probability of sea flooding (>>00.5%%).
Flora	All members of the plant kingdom: higher ferns, ferns and fern allies, mosses and liverworts, algae and phytoplankton, fungi and lichens.
Fragmentation (ecology)	The breaking up of a habitat, ecosystem or land-use type into smaller parcels with a consequent impairment of ecological function.
Frequency (Hz)	The number of cycles per second (i.e. the number of vibrations that occur in one second); subjectively this is perceived as pitch.
Geology	The scientific study of the origin, history and structure of the earth.
GHG Emissions	Greenhouse gases are gases that trap heat in the atmosphere. The main greenhouse gases are carbon dioxide, methane, nitrous oxide, and the fluorinated gases.
Glare	A scattered reflection of light. Glare is significantly less intense than glint and is produced from rougher surfaces such as concrete, tarmac, and vegetation.
Glint	Also known as a specular reflection is produced as a direct reflection of the sun on the surface of the solar panel. It occurs with the reflection of light from smooth surfaces such as glass, steel, and calm water.
GLVIA3	‘Guidelines for Landscape and Visual Impact Assessment - Third Edition’. Published in April 2013 by the Landscape Institute and the Institute of Environmental Management and Assessment. Guidance providing advice on the process of assessing the landscape and visual effects of developments.
Green Glint	Low intensity glint with no potential for temporary after image.
Green infrastructure	A network of multi-functional green space, urban and rural, which is capable of delivering a wide range of environmental and quality of life benefits for local communities.

Greenhouse Gas	Gases such as carbon dioxide, methane and nitrous oxide, that trap heat in the atmosphere.
Gross Value Added	The measure of the value of goods and services produced in an area, industry or sector of an economy.
Ground conditions	An assessment of the history and chemical and physical characteristics of the soil conditions at a site.
Groundwater	All water which is below the surface of the ground in the saturated zone and in direct contact with the ground or subsoil.
Groundwater Daughter Directive	Clarifies certain objectives of the Water Framework Directive relating to prevention and control of groundwater pollution and establishes groundwater quality standards.
Habitat	The place or type of site where an organism or population naturally occurs. Often used in the wider sense referring to major assemblages of plants and animals found together.
Habitat connectivity	Linkage between areas of habitats, such as corridors to allow dispersal of wildlife.
Habitat of Principal Importance	Identified as being the most threatened and requiring conservation action under the UK Biodiversity Action Plan (UK BAP). Statutory lists of priority habitats in England, are provided under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (England).
Habitats Directive	EU Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora.
Habitats Regulations	The Conservation of Habitats and Species Regulations 2017.
Hard Standing	Ground surfaced with a hard material suitable for supporting vehicular movement (e.g. tarmac, compacted gravel, concrete).
Heritage	Historic or cultural associations.
Heritage asset	A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage asset includes designated heritage assets and assets identified by the local planning authority (including local listing).
Historic environment	All aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora.

Historic environment record	Information services that seek to provide access to comprehensive and dynamic resources relating to the historic environment of a defined geographic area for public benefit and use.
Horizontal Directional Drilling	A construction technique whereby a tunnel is drilled under a waterway or other designated area, and a pipeline or other utility is pulled through the drilled underground tunnel.
Hydrology	The study of the movement, distribution, and quality of water.
Important ecological features	Ecological features requiring specific assessment within EclA. Ecological features can be important for a variety of reasons (e.g. quality and extent of designated sites or habitats, habitat / species rarity).
Indirect Effects	Effects that result indirectly from the proposed project as a consequence of the direct effects, often occurring away from the site, or as a result of a sequence of interrelationships or a complex pathway. They may be separated by distance or in time from the source of the effects.
Indirect employment	Employment growth arising through spending in the supply chain by activity on site (i.e. contracted out manufacturing and services).
Indirect Impacts	Impacts on the environment, which are not a direct result of the development but are often produced away from it or as a result of a complex pathway. Sometimes referred to as secondary impacts.
Infiltration	The passage of water into soil.
Interception	The process by rainfall is prevented from falling directly onto the ground surface by the presence of vegetation.
Inverter	Inverters convert the direct current (DC) electricity collected by the PV modules into alternating current (AC), which allows the electricity generated to be exported to the National Grid. BESS also use inverters to convert between DC and AC. The batteries function in DC and electricity must be converted to AC to pass into or from the grid.
Iterative Design Process	The process by which project design is amended and improved by successive stages of refinement which respond to growing understanding of environmental issues.
Jointing pit	Underground structures constructed at regular intervals along the cable route to join sections of cable and facilitate installation of the cables into the buried ducts.
L <sub>90</sub>	The noise level which is exceeded for 90% of the measurement period.

LA <sub>90,T</sub>	The “A weighted” noise level exceeded for 90 per cent of the specified measurement period (T).
LA <sub>eq,T</sub>	The “A weighted” equivalent continuous sound level – the sound level of a notionally steady sound having the same energy as the actual fluctuating sound over the same time period (T).
Land Cover	The surface and cover of the land, usually expressed in terms of vegetation cover or lack of it. Related to but not the same as land use.
Land Use	What land is used for, based on broad categories of functional land cover, such as urban and industrial use and the different types of agriculture and forestry.
Landform	The shape and form of the land surface which has resulted from combinations of geology, geomorphology, slope, elevation and physical process.
Landscape	An area, as perceived by people, the character of which is the result of the action and interaction of natural and/or human factors.
Landscape and Visual Impact Assessment	A tool used to identify and assess the likely significance of the effects of change resulting from development both on the landscape as an environmental resource in its own right and on people’s views and visual amenity.
Landscape Character	A distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse.
Landscape Character Area	These are single unique areas which are the discrete geographical areas of a particular landscape type.
Landscape Character Assessment	The process of identifying and describing variation in the character of the landscape, and using this information to assist in managing change in the landscape. It seeks to identify and explain the unique combination of elements and features that make landscape distinctive. The process results in the production of a Landscape Character Assessment.
Landscape Character Type	These are distinct types of landscape that are relatively homogeneous in character. They are generic in nature in that they may occur indifferent areas in different parts of the country, but wherever they occur they share broadly similar combinations of geology, topography, drainage patterns, vegetation and historical land use and settlement pattern, and perceptual and aesthetic attributes.

Landscape Effects	Change in the elements, characteristics, character and qualities of the landscape as a result of development. These effects can be positive or negative.
Landscape Feature	Particularly prominent or eye-catching elements in the landscape, such as tree clumps, church towers or wooded skylines OR a particular aspect of the project proposal.
Landscape Receptors	Defined aspects of the landscape resource that have the potential to be affected by a proposal.
Landscape Resource	The combination of elements that contribute to landscape context, character and value.
Landscape Sensitivity	The extent to which a landscape can accept change of a particular type and scale, without unacceptable adverse effects.
Landscape Value	The relative value that is attached to different landscapes by society. A landscape may be valued by different stakeholders for a whole variety of reasons.
Lead Local Flood Authority	Lead Local Flood Authorities have responsibility for developing a Local Flood Risk Management Strategy for their area covering local sources of flooding. The local strategy produced must be consistent with the national strategy. It will set out the local organisations with responsibility for flood risk in the area, partnership arrangements to ensure co - ordination between these, an assessment of the flood risk and plans and actions for managing the risk.
Leq <sub>s</sub>	Equivalent continuous noise level; the steady sound pressure which contains an equivalent quantity of sound energy as the time-varying sound pressure levels.
Light Goods Vehicle	A commercial motor vehicle with a total gross weight of 3,500kg or less.
Listed Building	A building, object or structure that has been judged to be of national importance in terms of architectural or historic interest and included on a special register.
Local Biodiversity Action Plan	Local strategy for the conservation of biological resources, now largely succeeded by The 'UK Post-2010 Biodiversity Framework' but lists of priority species and habitats and forms the basis of much biodiversity work.
Local Plan	The plan for the future development of the local area, drawn up by the local planning authority in consultation with the community. In law this is described as the development plan documents adopted under the Planning and Compulsory Purchase Act 2004. Current core strategies or other planning policies, which under the regulations would be considered to

	be development plan documents, form part of the Local Plan. The term includes old policies which have been saved under the 2004 Act.
Local planning authority	The public authority whose duty it is to carry out specific planning functions for a particular area.
Local Transport Plan	A document that sets out the long-term strategy for travel and transport within an area for a defined plan period.
Local Wildlife Site	Non statutory designated site identified and selected for their local nature conservation value and protected through planning policy.
Lower Plastic Limit	The lower plastic limit also referred to as plastic limit, is the water content at which a soil changes from the plastic state to a semisolid state.
Magnitude	A combination of the scale, extent and duration of an effect.
Main River	Main rivers are usually larger rivers and streams. The Environment Agency carries out maintenance, improvement or construction work on main rivers to manage flood risk.
Megawatt (MW)	A unit of power equal to one million watts, especially as a measure of the output of a power station.
Methodology	The specific approach and techniques used for a given study.
Mitigation	Any process, activity or thing designed to avoid, reduce or remedy adverse environmental impacts likely to be caused by a development project.
Module Mounting Structure	The structure that is fixed to the ground and onto which the PV Modules are attached.
National Character Area	Previously known as Joint Character Areas developed by the then Countryside Agency. These are areas that share similar landscape characteristics.
National Heritage List for England	Historic England's National Heritage List England. Register of all nationally protected historic buildings and sites in England, including Listed Buildings, Scheduled Monuments, protected wrecks, registered parks and gardens and battlefields.
National Nature Reserve	Established to protect the most significant areas of habitat and of geological formations.
National Planning Policy Framework	Document setting out the Government's planning policies for England and instruction on how they are expected to be applied. Latest version published in July 2021.



National Policy Statement	National Policy Statements are produced by government. They comprise the government's central policy documents for the development of nationally significant infrastructure.
Nationally Significant Infrastructure Project	Nationally Significant Infrastructure Projects (NSIPs) are large scale developments such as power generating stations (including wind farms) and electricity transmission lines which require development consent pursuant to the PA 2008.
Natural Environment and Rural Communities (NERC) Act 2006	It requires local authorities and government departments to have regard to the purposes of conserving biodiversity in a manner that is consistent with the exercise of their normal functions such as policy and decision-making.
Nitrate Vulnerable Zone	An area designated as being at risk from agricultural nitrate pollution.
Noise	Unwanted or unexpected sound.
Non Technical Summary	A report which briefly describes the main points discussed in the Environmental Statement in a clear manner, without the use of technical jargon and phraseology.
Non-statutory Designated Site	A site identified and selected via planning policy for its nature conservation value based on important, distinctive and threatened habitats and species.
Notable species	Those species listed under Section 41 of the Natural Environment and Rural Communities Act (2006), British Red List, IUCN Red List or assessed as Nationally Scarce/Rare.
NOx	Nitrogen Oxides (greenhouse gas). The collective term used to describe various oxides of Nitrogen.
Onsite Cabling	Low voltage electrical cabling required to connect PV modules and BESS to inverters and inverters to the onsite transformers. Higher voltage cables (typically 33kV) required between transformers and switchgear and from switchgear to the substations.
Onsite Substation	Comprising electrical infrastructure such as the transformers, switchgear and metering equipment required to facilitate the export of electricity from the Proposed Development to the National Grid.
Open space	All open space of public value, including not just land, but also areas of water (such as rivers, canals, lakes and reservoirs) which offer important opportunities for sport and recreation and can act as a visual amenity.

Operational Phase	The period within which the Project is operational, following the Construction Phase and following connection and first export to the National Grid, no earlier than October 2025.
Order limits	The land shown on the Works Plans within which the Scheme can be carried out.
Ordinary watercourse	A watercourse that is not part of a Main River. All rivers and streams, ditches, drains, cuts, culverts, dikes, sluices, sewers (other than public sewers within the meaning of the Water Industry Act 1991) and passages, through which water flows.
Outline Landscape and Ecology Management Plan	The OLEMP sets out the landscape and ecological management actions for the Scheme, outlining how mitigation measures, identified within the Environmental Statement, will be delivered through future landscape works and management.
PA 2008	Planning Act 2008
Pathways	The routes by which impacts are transmitted through air, water, soils or plants and organisms to their receptors.
Peak Particle Velocity	Measurement of the environmental impact of ground vibration from blasting operations is based almost exclusively on the peak vibration level generated.
Perception (of landscape)	The psychology of seeing and possibly attaching value and/or meaning (to landscape).
Percolation	The downwards vertical movement of water within soil.
Personal Injury Collision	A collision involving a mechanically-propelled vehicle on a road or other public area which causes injury or damage to a person.
Photomontage	A visualisation which superimposes an image of a proposed development upon a photograph or series of photographs.
Photovoltaic	The process of converting sunlight to electrical energy.
Pollution	Anything that affects the quality of land, air, water or soils, which might lead to an adverse impact on human health, the natural environment or general amenity. Pollution can arise from a range of emissions, including smoke, fumes, gases, dust, steam, odour, noise and light.
Population (ecology)	A collection of individuals (plants or animals), all of the same species and in a defined geographical area.
Potential impacts	Impacts, which could occur in the absence of appropriate design modifications or preventative measures.

Power Conversion Unit	A Power Conversion Unit will comprise an inverter, a transformer, and switchgear, which can be grouped together or distributed throughout the Site. The Power Conversion Unit can sometimes be enclosed in a single container.
Predicted impacts	Those impacts which are predicted as a consequence of the development although the nature and severity of their effect will be conditioned by the scope for mitigation.
Preference	The liking by people for one particular landscape element, characteristic or feature over another.
Preliminary Environmental Information	Preliminary Environmental Information is defined in the EIA Regulations as: 'information referred to in regulation 14(2) which – (a) has been compiled by the applicant; and (b) is reasonably required for the consultation bodies to develop and informed view of the likely significant environmental effects of the development (and of any associated development.
Principal Aquifer	These are layers of rock or drift deposits that have high intergranular and/or fracture permeability - meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale. In most cases, principal aquifers are aquifers previously designated as major aquifer.
Proposed Development	The Proposed Development consists of a ground-mounted solar photovoltaic (PV) electricity generation and battery energy storage system (BESS), together with associated grid connection infrastructure, at land north and east of the village of Heckington, near Sleaford, Lincolnshire. The Proposed Development would have a generation capacity of approximately 400 megawatts (MW) of electricity per year, incorporating up to 600MW BESS.
Protected species	Those species protected by legislation.
Public Right(s) of Way	Footpaths (for walking, running, mobility scooters or powered wheelchairs); Bridleways (for walking, horse riding, bicycles, mobility scooters or powered wheelchairs); Restricted byways (for any transport without a motor and mobility scooters or powered wheelchairs); Byways open to all traffic (for any kind of transport, including cars, but mainly used by walkers, cyclists and horse riders).
PV Panel	A panel comprising a grouping of photovoltaic cells connected to each other and set within a single physical frame. Each PV Panel is attached to a Mounting Structure.
Quality	A measure of the physical state of the landscape. It may include the extent to which typical character is represented in

	individual areas, the interactions of the landscape and the condition of individual elements.
Ramsar sites	Wetlands of international importance, designated under the 1971 Ramsar Convention.
Rarity	A measure of relative abundance.
Receptor	Physical landscape resource, special interest or viewer group that will experience an effect.
Receptors	A component of the natural or man-made environment such as water, air, a building, or a plant that is affected by an impact.
Relative Emissions ( $R_e$ )	Difference between absolute emissions generated by the proposed project and the baseline emissions.
Residual Effects	Those effects of a development that cannot be mitigated following implementation of mitigation proposals.
Scenario	A picture of a possible future.
Scheduled Monument	A nationally important archaeological site or historic building, given protection against unauthorised change.
Scope (Climate Change)	In the context of greenhouse gas emissions reporting, the term 'Scope' refers to a defined category for reporting purposes. There are 3 emissions scopes; Scope 1, Scope 2 and Scope 3 emissions.
Scoping	An initial stage in determining the nature and potential scale of the environmental impacts arising from the proposed development, and assessing what further studies are required to establish their significance.
Scoping Consultation	The consultation carried out by PINS with the consultation bodies pursuant to Regulation 10(6) of the EIA Regulations before the Scoping Opinion was adopted.
Scoping Opinion	The Scoping Opinion adopted by PINS (on behalf of the Secretary of State) pursuant to Regulation 10 of the EIA Regulations and dated 30 May 2022.
Sealing	Terminology is taken from the Institute of Environmental Management and Assessment guide "A New Perspective on Land and Soil in Environmental Impact Assessment", and is a description of physical changes that in effect lose future agricultural potential use, i.e. it is irreversible development.
Secondary B Aquifer	Predominantly lower permeability layers which may store and yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering.

	These are generally the water bearing parts of the former non-aquifers
Secondary/Tertiary River	Smaller rivers or streams alternatively known as 'ordinary watercourses'.
Sense of Place (Genius Loci)	The essential character and spirit of an area: Genius Loci literally 'spirit of the place'.
Sensitivity	(See landscape sensitivity)
Sequential Test	A Sequential Test aims to steer new development to areas with the lowest probability of flooding by recommending that development is not allocated if there are reasonably available sites appropriate to the proposed development in areas with a lower probability of flooding.
Setting	The surroundings within which a heritage asset is experienced and any element, which contributes to the understanding of its significance.
Setting of a heritage asset	The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.
Significance (for heritage policy)	The value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting.
Site	The land north and east of the village of Heckington, near Sleaford, Lincolnshire.
Site Boundary	The maximum extent of land potentially required temporarily and/or permanently for the construction, operation and maintenance of the Proposed Development.
Site of Special Scientific Interest	Sites designated by Natural England under the Wildlife and Countryside Act 1981.
Soil Association	Soil association is a geographic grouping of soils identified by the name of the most frequently occurring soil series and by the combination of ancillary soil series. Soil associations are mapped as map units on the Soil Survey of England and Wales soil maps, each unit has got a number code indicating predominant major soil group, group and subgroup. For example, association 821b (Blackwood) is dominated by soil of the Blackwood series belonging to subgroup 8.21, the typical

	subdivision of soil group 8.2, Sandy gley soils, which are part of major group 8, Ground-water gley soils.
Soil series	Soil series is the lower categorical level of the soil classification used in England and Wales. Soils series are defined using a combination of three main properties, the broad type of parent material present (substrate type), the texture of the soil material (textural grouping) and the presence or absence of material with a distinctive mineralogy.
Solar Array Area	Area within the Order limits that is proposed primarily for the ground mounted solar photovoltaic (PV) electricity generation and energy storage facility inclusive of the Onsite Substation and Battery Energy Storage System (BESS).
Solar Farm	Electricity generating station comprising of solar PV modules connected to the National Grid via a substation.
Solar PV Modules	A panel comprising a grouping of photovoltaic cells connected to each other and set within a single physical frame. The PV Panel is attached to a Mounting Structure. Also referred to as a PV Module.
Source Protection Zone	Zones which show the level of risk to a groundwater source from contamination. This could be from any activity that might cause pollution in the area. For example, storing pollutants like petrol underground, soakaways from septic tanks to the ground. The closer the activity, the greater the risk.
Special Areas of Conservation	Areas given special protection under the European Union's Habitats Directive, which is transposed into UK law by the Habitats and Conservation of Species Regulations 2010.
Special Protection Areas	Areas which have been identified as being of international importance for the breeding, feeding, wintering or the migration of rare and vulnerable species of birds found within European Union countries. They are European designated sites, classified under the Birds Directive.
Specific noise	The noise source under investigation.
Statutory Designated Site	A site receiving protection by means of certain legislation in recognition of its biodiversity value.
String Inverters	String Inverters are mounted on the Mounting Structures underneath the PV Modules. Inverters convert the direct current (DC) electricity into alternating current (AC), which allows the electricity generated to be exported to the national grid.
Study Area	The area in which a particular assessment or survey targets. The study area will vary depending on the nature of the

	technical assessment. Where relevant, these are defined within the relevant technical chapter of the PEIR.
Substation	Substations contain the specialist equipment that allows the voltage of electricity to be transformed (or 'switched'). The voltage is stepped up or down through pieces of equipment called transformers, which sit within a substation's site.
Superficial geology	Typically refers to geological deposits that are less than 2.6 million years old. These recent unconsolidated sediments may include stream channel and floodplain deposits, beach sands, talus gravels and glacial drift and moraine. All pre-Quaternary deposits are referred to as bedrock.
Surface water runoff	Rainwater (including snow and other precipitation) which is on the surface of the ground and has not entered a watercourse, drainage system or public sewer.
Susceptibility	The ability of a defined landscape or visual receptor to accommodate the specific proposed development without undue negative consequences.
Sustainability	The principle that the environment should be protected in such a condition and to such a degree that ensures new development meets the needs of the present without compromising the ability of future generations to meet their own needs.
Sustainable Drainage System	Sustainable Drainage Systems are drainage solutions that provide an alternative to the direct channelling of surface water through networks of pipes and sewers to nearby watercourses.
Switchgear	A combination of electrical disconnect switches, fuses, or circuit breakers used to control, protect and isolate electrical equipment.
t	Tonne
Technique	Specific working process.
TEMPro	The Trip End Model Presentation Program (TEMPro) software allows users to view travel forecasts for an area.
Threshold	A specified level in grading effects e.g. of magnitude, sensitivity or significance.
Time depth	Historical layering – the idea of a landscape as a 'palimpsest, a much written –over manuscript.
Tonnes of carbon dioxide (tCO <sub>2</sub> )	Unit for reporting the GHG emissions.

Topography	The natural or artificial features, level and surface form of the ground surface.
Tranquillity	A state of calm and quietude associated with peace, considered to be a significant asset of landscape.
Transformers	Transformers control the voltage of the electricity generated across the site before it reaches the electrical infrastructure.
Transport Assessment	A comprehensive and systematic process that sets out transport issues relating to a proposed development. It identifies what measures will be required to improve accessibility and safety for all modes of travel, particularly for alternatives to the car such as walking, cycling and public transport and what measures will need to be taken to deal with the anticipated transport impacts of the development.
Travel plan	A long-term management strategy for an organisation or site that seeks to deliver sustainable transport objectives through action and is articulated in a document that is regularly reviewed.
Underdrainage	Sometimes called field drainage, it is a system of pipes made of plastic or clay that are laid under agricultural land at a depth of 0.75 to 1.5m. Underdrainage rapidly removes excess soil water to reduce or eliminate waterlogging (a condition when all empty spaces in the soil are filled with water) and return the soils to their natural field capacity (when the water drained away from large soil pores under the force of gravity and some air is present). Underdrainage is connected to open drainage ditches at field boundaries which collect the water and transport it away from the field.
Visual Amenity	The overall pleasantness of the views people enjoy of their surroundings, which provides an attractive visual setting or backdrop for the enjoyment of activities of the people living, working, recreating, visiting or travelling through an area.
Visual Effect	Effects on specific views and on the general visual amenity experienced by people.
Visual Receptors	Individuals and/or defined groups of people who have the potential to be affected by a proposal.
Visualisation	Computer simulation, photomontage or other technique to illustrate the predicted appearance of a development.
Water Framework Directive	The WFD (more formally Directive 2000/60/EC) is designed to improve and integrate the way water bodies are managed throughout Europe. In the UK, it came into force on 22 December 2000, and was transposed into UK law (transposed) in 2003. Member States must aim to reach good chemical and ecological status in inland and coastal waters by 2015 subject



to certain limited exceptions. The WFD is designed to enhance the status and prevent further deterioration of aquatic ecosystems and associated wetlands; promote the sustainable use of water; reduce pollution of water especially by 'priority' and 'priority hazardous' substances; and ensure progressive reduction of groundwater pollution. The WFD establishes a strategic framework for managing the water environment. It requires a management plan for each river basin to be developed every 6 years. The plans are based on a detailed analysis of the impacts of human activity on the water environment and incorporate a programme of measures to improve water bodies where required.

Water Resources Act 1991	An Act of the Parliament of the United Kingdom that regulates water resources, water quality and pollution, and flood defences.
Wildlife corridor	Areas of habitat connecting wildlife populations.
World Heritage Site	A site inscribed by United Nations Educational, Scientific, and Cultural Organisation (UNESCO) because of its Outstanding Universal Value under the terms of the UNESCO World Heritage Convention.
Yellow Glint	Higher intensity glint that does have some potential for temporary after image.
Zone of Influence	The area for the assessment of combined effects. Zones of Influence (Zols) are variable depending on the environmental factor being discussed.
Zone of Theoretical Visibility	Area within which a proposed development may have an influence or effect on visual amenity. Usually based on a bare ground model with no buildings or tree screening included.

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