

# BEANE SOLAR FARM

EIA Screening Submission

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**REPORT**

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# 1 INTRODUCTION

This Environmental Impact Assessment (EIA) Screening Report is submitted for consideration to East Hertfordshire Council (the Council) on behalf of RES Ltd (the Applicant). The Screening Report is submitted in advance of a forthcoming planning application for the proposed Beane Solar Farm and associated infrastructure including battery energy storage (hereafter referred to as the proposed development).

The application site measures approximately 85ha and comprises a number of parcels of agricultural land which are primarily within East Hertfordshire off the A507. Please refer to the redline boundary illustrated on Figure 1 below. The centre-point grid coordinates of the site are 530685, 229583. Further details of the site location are provided within Section 2 of this Screening Report.

A small section of the southwestern extent of the site comprises further agricultural parcels of land off Cromer Heath, falling within North Hertfordshire (approx. 5% of the current RLB) –see Figure 1 below.

As acknowledged, whilst the application site falls within both East and North Hertfordshire Local Planning Authorities (LPA), owing to the vast majority of the site falling within East Hertfordshire, this request has been submitted solely to this authority, with a view to North Hertfordshire being consulted as part of this EIA Screening process.

This approach is one which has been informed through practice as well as preliminary engagement with the Council regarding established approaches upon receipt of similar applications.



**Figure 1:** Extract from Google Earth Showing the Application Site

RPS (“the Agent”) request a formal Screening Opinion from the Council as to whether Environmental Impact Assessment (EIA) applies to the project. This request is made in accordance with the requirements of Regulation 6 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) –as amended.

In accordance with Regulation 6 (2), this report includes:

- A plan sufficient to identify the land;
- A description of the Proposed Development, including in particular -

- i. a description of the physical characteristics of the Proposed Development and, where relevant, of demolition works;
  - ii. a description of the location of the Proposed Development, with particular regard to the environmental sensitivity of the geographical areas likely to be affected;
- A description of the aspects of the environment likely to be significantly affected by the Proposed Development;
- To the extent the information is available, a description of any likely significant effect of the Proposed Development on the environment resulting from -
  - iii. the expected residues and emissions and the production of waste, where relevant; and
  - iv. the use of natural resources, in particular soil, land, water and biodiversity; and
- Such other information or representations as the person making the request may wish to provide or make, including any features of the Proposed Development or any measures envisaged to avoid or prevent what might otherwise have been significant adverse effects on the environment.

In accordance with Regulation 6 of the EIA Regulations, it is requested that the Council adopt a Screening Opinion within three weeks beginning with the date of receipt of this request.

## 2 SITE LOCATION AND PROJECT DESCRIPTION

### 2.1 Site Location

As stated in Section 1 of this Screening Report, the application site measures approximately 85ha and comprises a number of parcels of agricultural land which are primarily within East Hertfordshire off the A507 - see Figure 1 above.

Two sets of overhead power lines supported on large electricity pylons run through the main aspect of the site in a west to east direction. The River Beane also cuts through the main aspect of the site –again from west to east. Information provided in response to consultation with the Hertfordshire Public Rights of Way mapping service, confirm that a public footpath also runs horizontally across the southern extent of the main site, from Cromer Heath to Lodge Farm immediately east of the site. In addition there is a further public footpath adjacent to the south western extent of the site to the east of Newell Lane/ Cromer Heath.

Cottered Airfield also falls within the site which remains active. The airfield is for exclusive private use and is in the control of the landowner. The landowner intends to cease the private airfield use or may relocate this elsewhere. To confirm, there is no commercial activity/ flights from this airfield. In the event of a proposed relocation of the facility this would be subject to a separate consenting process and does not form part of the proposed development.

The site is bound by planting separating parcels of agricultural land to the north, the A507 and Lodge Farm to the east, a section of mature planting and sporadic planting to the main part of the site’s southern boundary, with the B1037 and Cromer village bounding the southwestern extent of the site to the south, with sporadic planting and Cromer Heath to the west.

In respect of its wider context, the site is located northwest of the built-up extent of Cottered. Stevenage is sited approximately 6km to the southwest, with Stansted Airport approximately 23km to the southeast. The site is well connected within the wider context, owing to being sited off the A507, the A1 motorway being 7km to the west, with the A10 5km to the east and M11 motorway 20km to the east.

The wider context of the site is predominantly agricultural and rural in nature.



Figure 2: Extract from Google Earth illustrating the wider site context



## 2.2 Project Description / Proposed development

The Proposed Development comprises the construction and operation of an electricity generating station with a capacity of 49.9MW with associated ancillary development.

The proposal will have an operational lifespan of 40 years. Following this, the Proposed Development, including the proposed substation, would be fully decommissioned. Proposed planting which would be established within the landscape at that time will be left untouched.

The Proposed Development is located within a redline area approximately c. 85 ha (c. 210 acres) of land and comprise the construction and operation of the following key components:

- Photovoltaic (PV) Solar Panels erected on steel frames in south-facing arrays;
- Transformer/ inverter units; on concrete plinths
- Associated Battery Energy Storage provision;
- A primary substation and control building compound;
- A number of strategically located CCTV security cameras;
- Perimeter post and wire “deer” fencing;
- Site access
- Access tracks / Associated internal service tracks
- Onsite cabling
- Ancillary site works including temporary construction compound;
- Landscaping and biodiversity enhancement measures

Further information in respect of some of the key project components listed is provided below.

### 2.2.1 Design

It is envisaged that the Proposed Development would have a maximum generation capacity of 49.9MW.

The final design of the proposed development will consider the baseline environmental conditions onsite and the robust environmental assessments process to follow.

### 2.2.2 Solar Panels

Solar panels will be composed of bifacial photovoltaic cells designed to maximise the absorbency of the sun’s rays and to minimise the solar glare. Bifacial panels have two sides of solar cells, enabling additional energy generation from the reflected and diffused light on the rear-side of the panels. Solar panels do not require direct sunlight to produce energy –diffuse sunlight being sufficient. A grass surface reflects enough light to justify the use of bifacial modules. The solar panels will be arranged in south facing arrays, fixed within the site. There are no moving parts and they do not move to follow the sun.

Panels will be tilted between 10 to 30 degrees from the horizontal front. The bottom edge of the panels will be typically 0.6m above existing ground level, again depending on local topography and constraints.

Panels can be fixed in either portrait or landscape orientation. Overall panel heights from ground level will be up to 3.6m high regardless of their orientation. Example arrangements are illustrated in Plates 1 and 2 below.

### 2.2.3 Mounting System

Panel arrays will be fixed atop steel or aluminium frame tables which are driven or pushed into the ground. The exact depth will be determined in accordance with geotechnical site investigation findings. Panel arrays will be spaced by between 2m –10m to avoid inter-panel shading. Spacing distances will be dependent on topography.

Posts are pushed or driven into the ground via typical agricultural methods routinely used to erect fence posts on farms and rural areas. There is no concrete required to facilitate this process.

This construction method limits the footprint associated with the proposed development to approximately 5% of the land area and allows for the land beneath and between the arrays to remain accessible so it can continue to be utilised for livestock grazing purposes, such as sheep grazing.



**Plate 1:** Typical Solar Panel Arrangement –Landscape Formation



**Plate 2:** Typical Solar Panel Arrangement –Portrait Formation

## 2.2.4 Transformer / Inverter Substation Units

Transformer (or inverter) units are required to control the voltage of the electricity generated by the proposed development, prior to reaching the substation. The solar PV modules will be connected to inverter units which convert the direct current produced by the modules into alternating current, which is compatible with the local electricity distribution network.

A typical inverter station facility is shown in Plate 3 below.



**Plate 3:** Typical Inverter Station facility

## 2.2.5 Energy Storage

Energy storage will be a key part in managing the increasingly complex supply and demand needs of the 21st Century.

To optimise the solar generation on site, it is proposed that the solar farm would include energy storage to help increase the flexibility and generation opportunities. The inclusion of battery storage would allow for the stored electricity to be fed into the grid during times of peak demand. RES is currently considering 2 types of battery storage: Partial Hybrid storage (close to each inverter) and Full Hybrid battery storage (close to the substation). Both options are being considered and may both be part of the planning application, allowing one option to be installed. The final design and layout of the battery storage element of the proposed development will be finalised prior to the submission of the planning application, however it is anticipated that for the Full Hybrid battery storage, an area of approx. 80m x 80m will be required close to the substation and for the Partial Hybrid storage, each inverter location battery facility will include 2 x battery storage containers and associated power converters. In accordance with the sensitive design approach energy storage units will be located sensitively to ensure they are away from any areas of environmental constraint. Battery storage units typically resemble shipping containers in appearance.

## 2.2.6 Primary Substation

The substation will accommodate all necessary equipment to enable the solar farm electrical system to be controlled, monitored, metered and connected to the network. The substation arrangements are still in development and subject to requirements of the DNO. It is anticipated the substation will comprise a site (customer) control building, a DNO control building, and 33kV and 132kV compounds, as set out below.

The customer control building will take the form of a multi-compartment prefabricated structure atop a concrete foundation and accommodate metering equipment, switchgear, protection systems, control equipment and SCADA / telecommunications systems.

The DNO control building will similarly enclose DNO protection and control equipment, SCADA systems and any other equipment required by the DNO. The DNO control building may be prefabricated or traditionally constructed and may include welfare facilities, subject to DNO requirements.

The 33kV compound will enclose an auxiliary transformer and grid compliance equipment. The split of the 132kV compounds between the site and DNO is to be agreed but the general contents will comprise a 33kV/132kV grid transformer, disconnectors, circuit breakers, voltage transformers, current transformers and other equipment required to facilitate the grid connection. Substation compounds will be surrounded by secure fencing, typically 2.4m high palisade.

### 2.2.7 Connecting Cables

Connecting cables will run along the back of each panel to the end of every row where they connect to the main cables which in turn connect to inverter stations which in turn connect to the primary on-site substation. All main cables will be undergrounded across the site.

### 2.2.8 Grid Connection

The Proposed Development requires a connection to the National Grid ('the Grid Connection') to export electricity produced by the solar PV arrays. The Grid Connection would link the substation that forms part of the Proposed Development to the National Grid. It would be delivered independently by the DNO and will not therefore form part of the application for the Proposed Development.

If undertaken by a statutory undertaker, the connection would normally benefit from permitted development rights under the terms of Part 15 Class B of Schedule 2 to the Town and Country Planning (General Permitted Development) (England) Order 2015.

### 2.2.9 CCTV Cameras

For security purposes there will be CCTV cameras placed strategically throughout the development site. These will be pole mounted to heights of 3.5m, be directed along fence-lines and utilise infra-red technology. are designed to not move either intentionally or unintentionally due to adverse weather conditions or animal activity. Plate 4 below includes an indicative example of a typical form of CCTV cameras associated with proposals such as this.



**Plate 4:** Typical CCTV Camera

### 2.2.10 Perimeter Fencing

For health and safety as well as security purposes the area of development will be enclosed by post and wire style fencing no more than 2.5 m in height and typically referred to as deer fencing. .

The choice of materials is in keeping with the landscape. Where hedgerows exist or where planting is proposed the fencing will be located on the internal side of said planting to help negate visual impacts. Where it is proposed, fencing will be raised off the ground by 10-15 cm to ensure there is unimpeded access across the site for small mammals. An alternative approach is to provide mammal gates within the fencing at strategic points, the location of which will be informed through survey.

An image of typical fencing at the site is provided below in Plate 5.



**Plate 5:** Typical Post and Wire Security Fencing

### 2.2.11 Site Access

The application site abuts the local highway network comprising:

- A507 to the east;
- B1037 at the south; and
- Cromer Heath to the west.

Access arrangements will involve new road openings onto either one or a combination of the above options.

### 2.2.12 Internal Service Tracks

The development will utilise existing agricultural lanes for servicing purposes in so far as is reasonably possible and as such the extent of new tracks is minimised. Access will also be achievable during construction and operation via tractor or 4 x 4 vehicles around the periphery of existing fields or through the significant spacing between panel arrays and within buffers around field boundaries. Where new tracks are required, these will be constructed in stone and accordingly will have a permeable finish.

### 2.2.13 Construction Phase

It is anticipated that the site will be constructed across a 12 to 18month period, subject to sequencing of works. This document assumes a shorter 12-month period, representing the higher intensity of construction activity. A more detailed review of construction sequencing and programme will be performed prior to the planning submission.

The type of construction activities required include:

- Site preparation;
- Construction of the solar PV arrays and associated infrastructure;
- Commissioning; and
- Landscape planting and habitat enhancement measures.

A temporary storage compound will facilitate the construction process to be located near to the main site access point.

The compound will be surrounded by a temporary fence to secure the contents and will enclose:

- a. A site office;
- b. Containers to facilitate storage of panels and tools;
- c. Areas of parking;
- d. Kitchen;
- e. Chemical toilets; and
- f. An area of storage for construction materials and project components.
- g. Segregated waste skips.

Foul waste and waste from skips will be disposed of off-site, by appropriate contractors and to appropriate licenced facilities.

Any onsite fuel storage will be containerised and located within a bunded area wall to protect against spillages and contamination. Ground level will be finished in a proposed 300mm Type 3 stone or equivalent. The compound area will measure approximately 50m x 60m maximum. Upon completion of construction works compound areas will be reinstated and all hardcore will be removed off site and disposed of appropriately.

### 2.2.14 Traffic Generation

Deliveries will be via standard HGV and there will be no oversized loads associated with the proposal.

Traffic generation at the site is anticipated to peak at around week 10 (stone delivery) and week 20 (PV panels and battery storage components) of the c. 52-week programme (Construction peak and delivery peak) when there is anticipated to be c. 15 HGV deliveries per day to the site.

During operation traffic generation will be negligible and limited to routine maintenance and cleaning only - anticipated as no more than one vehicle (standard van or 4 x 4) per week.

### 2.2.15 Lighting

No permanent lighting is proposed. Manually operated lights may be attached to the substation and/or inverter cabinets in the event of an emergency maintenance visit being required in the hours of darkness.

### 2.2.16 Operation Phase

It is anticipated that the proposal will have an operating life of 40 years after which all panels and associated infrastructure will be removed and the site reinstated in accordance with a scheme to be agreed in writing with the Planning Authority at that time. As per Section 2.2.14, activity onsite during operation will be limited to routine maintenance, servicing of components and any emergency servicing. There will also be some vegetation and habitat management,

### 2.2.17 Decommissioning Phase

At the end of the project's operational life the solar farm will be fully decommissioned. This will include the substation which will then be obsolete.

All project elements will be removed from site and where possible will be recycled. Any waste generated during the decommissioning process will be removed and transported by a certified and licensed contractor. The site will be restored leaving no permanent visible trace. The solar panels will be removed from the site in the same way they were transported to the site originally. The cables interconnecting the panels to the electricity grid system will be de-energised and removed from the site, with any cable marker signs removed.

Over this time any landscaping associated with proposals and over this period will establish and grow to form mature hedgerows and shrubbery. All landscaping will be retained in situ.

## 2.3 Design Principles

A series of design principles have informed the evolution of the project layout including:

Undertaking development proposals cognisant of onsite physical constraints to ensure features including landscaping is retained in-situ;

Working with the existing site topography to avoid cut and fill or regarding of land;

Where environmental constraints are identified, retaining these in-situ;

Integration of a comprehensive package of landscape and ecological enhancement measures as an integral project component

Where there is potential for minor deviations in respect of project components, for example heights of panels off the ground, in all instances the maximum/most onerous design parameter has been applied to ensure a robust "worst case scenario" assessment.



## 3 LEGISLATION & SCREENING CRITERIA

Whether or not the Proposed Development constitutes ‘EIA development’ requires an assessment by East Herts Council, as the Local Planning Authority (LPA) against the requirements and relevant criteria of the EIA Regulations 2017, as amended.

### 3.1 EIA Schedules

Within the Regulations “EIA development” is described as:

- Schedule 1 development –meaning EIA is mandatory for any projects listed therein; or
- Schedule 2 development likely to have significant effects on the environment by virtue of factors such as its nature, size or location.

The Proposed Development does not fall under any of the descriptions of development set out in Schedule 1 of the Regulations. Rather it falls under *Schedule 2, Class 3 -Energy Industry–(a) Industrial installations for the production of electricity, steam and hot water where the area of development exceeds 0.5 hectares.*

As stated, a determination as to whether EIA applies must therefore be made by the Council.

### 3.2 Screening of Schedule 2 Development

A Schedule 2 development does not require EIA to be undertaken in all cases but must be considered against the selection criteria detailed within Schedule 3 of the EIA Regulations namely the characteristics of the development; the environmental sensitivity of the location; and the characteristics of the potential impacts (e.g. its magnitude and duration).

#### 1. Characteristics of the Development

The characteristics of development shall be considered having regard, in particular, to:

- (a) the size and design of the whole development;
- (b) cumulation with other existing and/or approved development;
- (c) the use of natural resources, in particular land, soil, water and biodiversity;
- (d) the production of waste;
- (e) pollution and nuisances;
- (f) the risk of major accidents and/or disasters which are relevant to the development concerned, including those caused by climate change, in accordance with scientific knowledge;
- (g) the risks to human health (for example due to water contamination or air pollution).

#### 2. Location of the Development

The environmental sensitivity of geographical areas likely to be affected by development shall be considered, with particular regard to:

- (a) the existing and approved land use;
- (b) the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground;
- (c) the absorption capacity of the natural environment, paying particular attention to the following areas—
  - (i) wetlands, riparian areas, river mouths;
  - (ii) coastal zones and the marine environment;
  - (iii) mountain and forest areas;
  - (iv) nature reserves and parks;
  - (v) European sites and other areas classified or protected under national legislation;
  - (vi) areas in which there has already been a failure to meet the environmental quality standards laid down in Union legislation and relevant to the development, or in which it is considered that there is such a failure;
  - (vii) densely populated areas;
  - (viii) landscapes and sites of historical, cultural or archaeological significance.

#### 3. Characteristics of the Potential Impacts

The likely significant effects of development on the environment shall be considered in relation to criteria set out under paragraphs 1 (Characteristics of the development) and 2 (Location of the development), taking into account:

- (a) the magnitude and spatial extent of the impact (for example geographical area and size of the population likely to be affected);
- (b) the nature of the impact;
- (c) the transboundary nature of the impact
- (d) the intensity and complexity of the impact;
- (e) the probability of the impact;
- (f) the expected onset, duration, frequency and reversibility of the impact;
- (g) the cumulation of the impact with the impact of other existing and/or approved development;
- (h) the possibility of effectively reducing the impact.

This EIA Screening Report draws on similar project experience as well as baseline assessment to facilitate consideration of potential significant effects of the Proposed Development. In the context of the Schedule 3 requirements set out above, this Screening considers the Proposed Development alongside other existing and/or approved developments that could give rise to cumulative impacts.

A review of the East Hertfordshire and North Hertfordshire online planning databases confirms the Council position in respect of a number of previous solar farm proposals all of which have received “nil” EIA Determinations including those projects listed within Table 1 below.

**Table 1:** Sample Solar EIA Screening Determinations

Council Area	Planning Reference	Address	Project Description	Planning Status
East Herts	3/21/2601/FUL	Land At Wickham Hall	49.9MW Solar Farm with associated infrastructure including Battery Storage	Under Consideration
North Herts	22/00741/FP	Land West Of Ashwell Road Bygrave	40MW Solar Farm with associated infrastructure including Battery Storage	Under Consideration
North Herts	22/03231/FP	Land North East Of Wandon End Hertfordshire	Proposed solar farm within 106 hectares with associated access, landscaping, battery storage and ancillary infrastructure	Under Consideration
North Herts	22/00709/FP	Land to the South Of Wymondley Substation And South Of Sperberry Hill St Ippolyts Hertfordshire	Proposed solar farm measuring 35.5 hectares with associated battery storage and ancillary infrastructure (as amended by revised and additional information November 2022).	Refused November 2023.
North Herts	21/03380/FP	Land To The North And East Of Great Wymondley Hertfordshire	Proposed solar farm measuring 88 hectares with associated battery storage containers,	Under consideration

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Council Area	Planning Reference	Address	Project Description	Planning Status
			transformers stations, storage buildings, fencing etc including means of access (amended plans received 30.05.2022)	

The position of the local planning authorities in both East and North Herts in respect of the above listed developments, reflects the collective experience of RPS and RES in that EIA is not normally applied to solar farm developments.

Instead, the recommended approach is usually that applications for consent are accompanied by a suite of environmental assessments which address those matters relevant to the specific characteristics of the site which may include:

- Landscape and Visual Impact;
- Ecology and Biodiversity;
- Archaeology / Cultural Heritage;
- Glint and Glare;
- Flood Risk and Drainage;
- Traffic and Transport;
- Noise Impact; or
- Agricultural land classification.

## 4 SCREENING INFORMATION

### 4.1 Characteristics of the Development

#### 4.1.1 Size and Design of the Project

A detailed project description is set out in Section **Error! Reference source not found.** of this Report, providing details of project size and applied design principles.

#### 4.1.2 Cumulative Impact with Other Existing or Approved Developments

To identify the potential cumulative effects between the Proposed Development and other energy infrastructure facilities or significant development proposals, a review has been undertaken using available online databases including the North and East Herts Council websites.

As per Table 1 above, there are a number of other solar development proposals within the North and East Herts Council areas. The nearest proposed solar farm to the site is located c.8km northwest (22/00741/FP) on lands west Of Ashwell Road Bygrave. The proposed solar farm on lands to the north and east of Great Wymondley (21/03380/FP) is located c.10km west of the site.

The potential for cumulative impacts arising from solar farms and other developments between are possible mainly due to:

1. Impacts during construction in the event that the construction timelines overlap for the proposed development and one or more other nearby development, mainly in terms of traffic and transport or noise effects; and
2. Cumulative landscape and visual impacts on receptors of acknowledged importance.

The significant separation distance between the site of the Proposed Development and those other solar farm proposals listed, together with intervening landscape features mean there is no potential for cumulative landscape and visual impacts or noise impacts. The solar farm developments listed are all at different stages within the planning process. Delivery of same requires planning consent and a grid connection offer. Processes dictate that it is extremely unlikely that the timelines for construction of the Proposed Development and others listed would overlap. Additionally, the significant separation distances between the sites dictates the potential for cumulative traffic and transport issues is negligible.

Accordingly, no further assessment of potential cumulative impacts is provided within this Screening Report.

#### 4.1.3 Use of Natural Resources

It is proposed to place a renewable energy facility on a portion of existing agricultural land. The facility does not utilise fuel to operate and harvests sunlight to create energy which is clean and renewable.

As per the project description set out in Section 2 of this Report, the design of the facility is informed by ingrained design principles including the retention of vegetation across the site, integration of separation distances to field boundaries (5m) and significant separation distances between panel arrays (at least 2m and often significantly more) meaning the overwhelming majority of the site will remain undisturbed. Furthermore, the Proposed Development will include embedded proposals for additional hedgerow planting as well as mitigation planting –comprising hedgerows and trees - that will enhance biodiversity.

The result of this approach is a dual use on site of renewable clean and green energy creation and retained agricultural use through sheep grazing during the entire operational period.

No further consideration in respect of use of natural resources is included within this Screening Report.

#### 4.1.4 Production of Waste

There will be no waste generated by the operation of the Proposed Development.

Construction of the Proposed Development would require minor excavation works to facilitate cable laying and foundation preparation for the battery storage units, inverter stations and substation. Excavated materials

generated during cable trenching will be temporarily stored in accordance with best environmental practices and all trenches will be backfilled as work progresses across the site.

Foundations for inverter and energy storage units will be insignificant and will be reused across the site. In the unlikely event this cannot be facilitated, residual materials will be transported off-site to be disposed of by suitably accredited waste contractors.

At the end of its lifecycle all project components will be decommissioned in accordance with binding regulations and recycled where possible.

It is considered that waste generated during construction of the Proposed Development is unlikely to result in significant effects.

No further consideration of potential waste impact is provided within this Screening Report.

### 4.1.5 Pollution and Nuisances

There are no negative air quality impacts associated with the proposal other than those associated with vehicle movements during construction. These will not be significant or lead to any damaging air quality effects within the area. The project will however create enough clean renewable electricity to power 13,500 homes<sup>1</sup>, contributing to Net Zero 2050 targets and leading to an annual carbon abatement of 30,500 tonnes<sup>2</sup>.

Solar farms are not inherently noisy. During operation there are no moving parts associated with the facility, whilst maintenance traffic is occasional. There is potential for emissions from Transformer/inverter units during peak hours of sunshine as well as from the BESS facility when operational. As part of the design process these project components will be sensitively placed to ensure maximum separation distances to surrounding sensitive receptors. Whilst experience shows that associated impacts are typically considered not significant, as part of a robust and worst case scenario approach a Noise Impact Assessment will be provided as part of the planning submission. This assessment will include a survey and results of the pre-existing background and ambient sound levels and make a comparison with the expected levels of sound generated by the Proposed Development.

The potential for noise emissions during construction is from construction traffic. Construction processes will be facilitated by standard agricultural machinery.

Panels utilised on site will be manufactured by a registered supplier and in accordance with applicable EU Directives regarding the Restriction on the Use of Certain Hazardous Substances in Electrical and Electronic Equipment meaning any potential risk of contamination from broken panels is negated.

Section 4.3.8 and 4.3.2 of this Report considers further, potential Noise and Traffic Impacts.

No further consideration of Air Quality is provided within this Screening Report.

### 4.1.6 Accident Risk

Given the nature and location of the Proposed Development, it is considered that the risk of major accidents and/or disasters primarily relates to flooding events, fire and traffic accidents during construction.

Given the proposed in-built best practice approach to health and safety during construction and operation there are no predicted significant effects in relation to accident risk.

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<sup>1</sup> This figure has been calculated by taking the predicted annual electricity generation of the site (RES predict a capacity factor of 11.2%) and dividing this by the annual average household electricity consumption figures (3509 kWh) from the Department for Business, Energy and Industrial Strategy (BEIS) -

<sup>2</sup> RES uses DESNZ's "all non-renewable fuels" emissions statistic of 424 tonnes of carbon dioxide per GWh of electricity supplied in the Digest of UK Energy Statistics (July 2023) Table 5.14 ("Estimated carbon dioxide emissions from electricity supplied"). Carbon reduction is calculated by multiplying the total amount of electricity generated by the solar farm per year by the number of tonnes of carbon which fossil fuels would have produced to generate the same amount of electricity.

## Flooding

The majority of the site is located within Flood Zone 1 although a small linear section along the River Beane through the centre of the site is located within Flood Zone 3. A further narrow section of the site to the south is defined as Flood Zone 3 adjacent to the path of an unnamed watercourse.

Proposals are evolving to consider the baseline environment at the site including those flood risk considerations and to mitigate through avoidance in so far as is reasonably possible.

Please refer to Section 4.3.7 below which considers the proposed development approach in consideration of flood risk and hydrology.

## Fire

Considerations in respect of fire relate mainly to the battery storage facilities on site. The Proposed Development will be equipped with a number of active fire protection measures and suitable alarm systems that will be managed and monitored remotely by the site manager. As such, it is not likely that the project would generate a significant risk of fire.

Please refer to Section 4.3.11 below which further considers potential fire risk.

## Traffic Accidents

As stated previously in Section 2.2.9, access arrangements will involve new road openings onto either one or a combination of the surrounding highway network comprising:

- A507 to the east;
- B1037 at the south; and
- Cromer Heath to the west.

Peak traffic volumes associated with construction are set out in Section 2.2.14 - anticipated to be c. 15 HGV deliveries per day to the site.

During operation, access will be occasional and by standard 4 x 4 to facilitate routine maintenance. Vehicle levels will arguably therefore constitute a reduction from those presently associated with more active farming activities at the site.

Accordingly, the main potential for accident risk is associated with traffic during construction. The likelihood of this occurrence will be mitigated by a Construction Traffic Management Plan (CTMP) which is anticipated to be conditioned as part of any planning approval for the site. Alternatively, the CTMP can be provided in Outline form as part of the planning pack, should the Council prefer this approach. The CTMP will include measures to control the routing and timing of vehicles entering/egressing the Proposed Development site as to avoid adverse impacts on the local road network and mitigating the potential for accidents.

Potential for traffic impacts is considered further in Section 4.3.2 below.

It is not predicted that the proposal will result in any significant effects in relation to accident risk.

### 4.1.7 Risks to Human Health

The Proposed Development is benign in terms of risk to human health. Any potential human health risks are limited to those associated with traffic movements during construction, noise during construction or operation, or in the event of fire. It is predicted that no significant effects will arise in respect of those traffic or noise considerations and in any event should any impacts exist, these are short term and temporary.

Further consideration is provided in Section 4.3.2 (traffic) and Section 4.3.8 (noise).

Fire risk is considered in Section 4.3.11 below.

### 4.1.8 Glint and Glare

As per Section 2.2.2 of this Screening Report, solar panels are composed of bifacial photovoltaic cells, opaque in design to maximise the absorbency of the sun's rays and to minimise the potential for reflection or glare.

Notwithstanding this, a Glint and Glare Assessment will be completed in support of the Proposed Development, which considers the impact of the proposal upon road safety and residential amenity. Where necessary, consideration of aviation activity will also be included.

Glint and Glare is considered in Section 4.3.10 below.

## 4.2 Location of the Project

The location of the project is set out in Section 2.1 of this Report.

The baseline environmental conditions at the site are confirmed below.

The site is not subject to any environmental designations and is not considered to be one that is sensitive in environmental terms as per the descriptions set out in Schedule 3 of the EIA Regulations.

### 4.2.1 Ecological Context

The site of the Proposed Development is not located within or in proximity to any internationally designated sites.

In terms of national designations, the nearest SSSI the subject site is Moor Hall Meadows, which is located approximately 3.2km to the southeast. Blagrove Common SSSI is sited over 4km to the northeast.

There are no locally designated sites overlapping the site. The closest Local Nature Reserve is Weston Hill LNR sited approximately 6km to the northwest.

At its nearest point the south-western extent of the site is also approximately 80m north of Cromer Hall Meadows Wildlife site. Cottered Road Verge Wildlife Site is located adjacent to the A507 approximately 90m east of the site's south-eastern boundary.

### 4.2.2 Archaeological and Cultural Heritage Context

Data regarding known heritage assets (designated and undesignated) has been sought from a number of sources, including the Hertfordshire Historic Environment Record (HER), and the National Heritage List for England (maintained by Historic England). The Environment Agency LiDAR dataset (1 m DTM) was also consulted.

The proposal site does not sit within a conservation area, nor does it contain any designated heritage assets. There are a number of heritage assets within the applied 1km study site area including:

- The Brick Barn at Lodge Farm –Grade II –Reference 1101291 –adjacent to the site to the east; and
- Cromer Windmill –Grade II –Reference 1101453 –located c.180m from the nearest portion of the site to the west;
- Cumberlow Manor House Scheduled Monument –Reference 1003551 –located c.620m north of the site at its nearest point.

Cottered Conservation Area is situated c.350m southeast of the site at its nearest point. Within the conservation area are a number of listed buildings including those associated with The Garden House Registered Park and Garden which is c.420m southeast of the site at its nearest.

In terms of non-designated heritage assets, the Historic Environment Record records the course of the northwest/southeast-aligned Roman road between Braughing and Baldock within the main body of the proposal site.

Please refer to Figure 1 below.

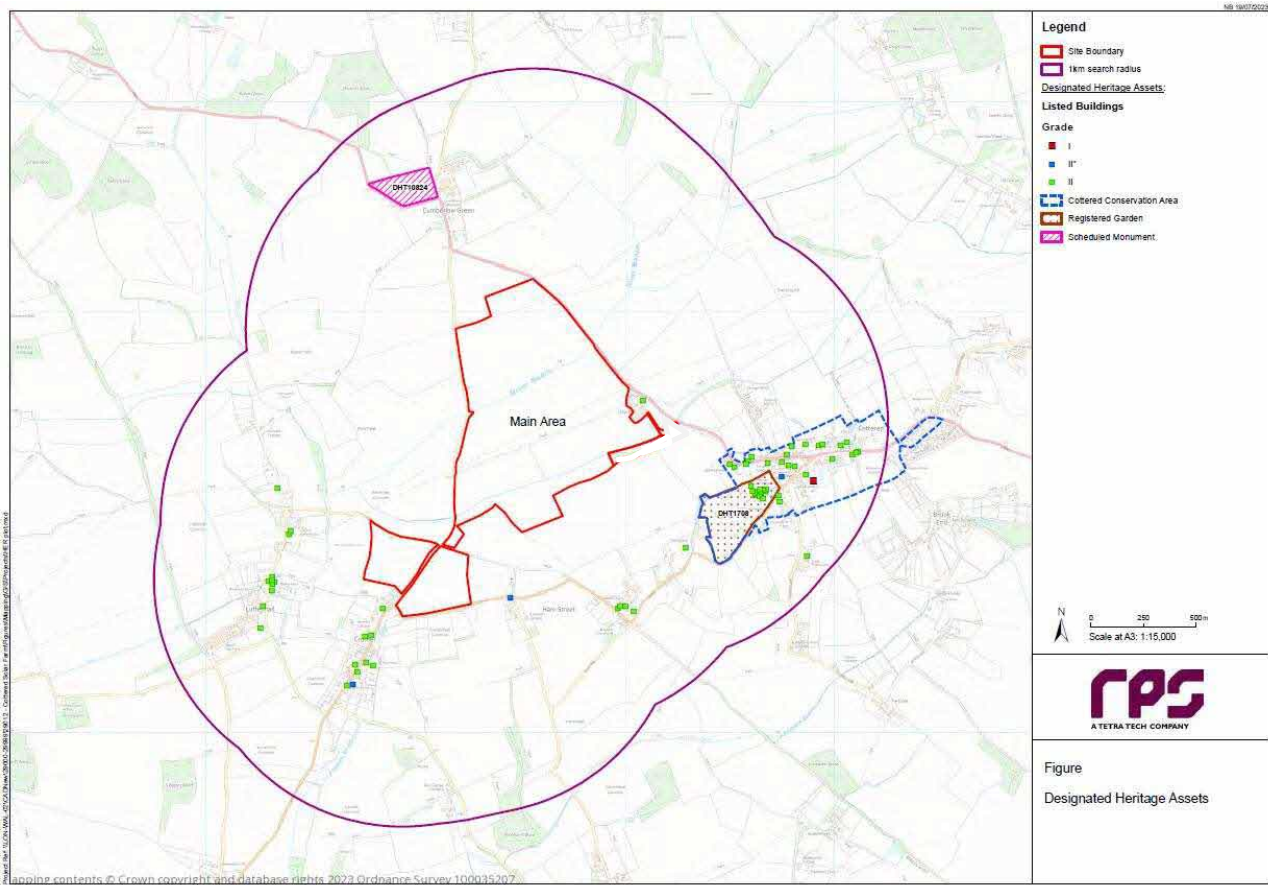


Figure 1: Designated Heritage Assets

### 4.2.3 Landscape and Visual

The Proposed Development site is located on arable land in an agricultural area to the west of Cottered Village. The site is comprised of two main sections, the largest of which is located further north abutting the A507 along its eastern boundary. The southern site portion is comprised of 2 large agricultural fields divided by and east and west of Cromer Heath which also extends north along the western site boundary. The site is undulating. Beane River and another unnamed watercourse at the south of the site represent low points of elevation from which the rest of the site rises gently to high points at the extreme north and also along the horizontal alignment of Lodge Hill Farm, which is located immediately west of the site.

Surrounding development is dominated by clusters of residential development notably at Cottered Village approximately 0.5km southeast of the site at its nearest point, but also at Cromer and Hare Street to the south. Views of the main part of the site are available to traffic along the adjoining A507 in both directions. From here the southern site portion will not be visible. The southern site portion, notably the field to the east of Cromer Heath will be easily visible from residential properties at Cromer. Existing vegetation along an existing PROW which crosses the site just north of the two southernmost fields will however mostly obscure views towards the main body of the site from this location. Wider intermediate and long-distance views will be sporadic and fleeting depending on location, with the main potential towards the west and east, from which parts of the wider site may be visible. Towards the north and south views are largely obscured by topography and intervening vegetation. Huge electricity pylons dissect the site and are notable landmarks in the area.

The site is not subject to any statutory landscape designation. Chiltern Hills Area of Outstanding Natural Beauty is located approximately 20 km west of the site. There are no National Parks within 50km of the Proposed Development site.

The Proposed Development is entirely located within the National Character Area (NCA) Profile: 86 South Suffolk and North Essex Clayland (NE515). The NCA Profile: 40 (Natural England, 2015) states that ‘It is an ancient landscape of wooded arable countryside with a distinct sense of enclosure. The overall character is of a gently undulating, chalky boulder clay plateau, the undulations being caused by the numerous small-scale river valleys that dissect the plateau.’



The East Hertfordshire District Plan Landscape Character Supplementary Planning Document (September 2007) indicates that the Proposed Development sits within the Upper Beane Valley Tributes Landscape Character Area (LCA). Among the key characteristics listed are narrow winding lanes, arable land and small blocks of ancient woodland. Distinctive features include “pylons cut across the valley.” Cromer windmill is listed as a prominent landmark.

Strategy and guidelines for managing change within the area include:

- Encouraging species rich grassland;
- Promotion of hedgerow restoration along the lines of ancient field boundaries and for the creation of visual links between woodlands;
- Promoting diversity of hedgerow species; and
- Extending rights of way.

Two Public Right of Way (PRoW) intersect the site of the Proposed Development - one (Cottered 028) within the larger northern site portion, and the second (Cottered 029) between the northern site portion and the two fields adjacent to Cromer Heath at the southwest.

No National Cycle Network (NCN) routes coincide with the Proposed Development site, with the closest being NCN Route 12, which is located approximately 7.4 km west of the Proposed Development site.

### 4.2.4 Hydrological Setting

The River Beane –an Environment Agency (EA) Designated Main River –flows through the site.

Weston Tributary is located approximately 800m to the west of the site. It too is a designated EA River and flows in a southerly direction adjoining the River Beane to the south-west of the site. Ardeley Brook is located approximately 1.4km to the south-east of the site and is also a designated EA Main River and flows in a westerly then northern direction to join the River Beane.

An unnamed ordinary water course is located in the south of the site which flows in a south-eastern direction and joins with the River Beane also.

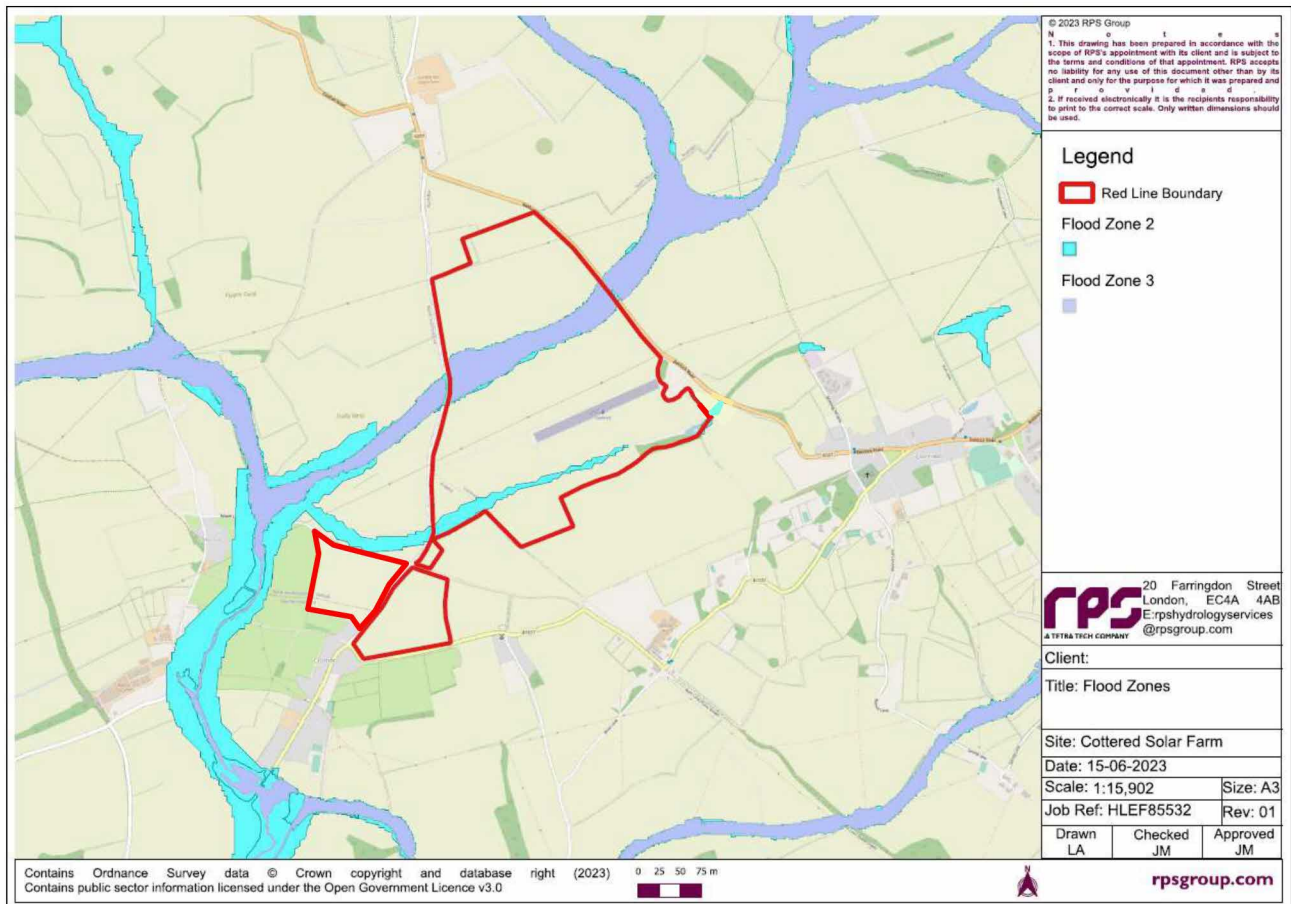
Please refer to Figure 2 below.



**Figure 2:** Hydrological Watercourses

The EA Flood Map for Planning (available online) indicates that the majority of the site (80%) is located within Flood Zone 1. However, in the central area of the site is a section located in Flood Zone 3 which is associated with the River Beane. There is also an area in the southern section of the site located in Flood Zone 2a along the path of the unnamed watercourse.

Please refer to Figure 3 below.



**Figure 3: EA Flood Map for Planning**

The majority of the site is at a very low risk of surface water flooding however there are two horizontal bands across the site, at 'high risk'. The northern band is associated with the River Beane and has an overland flow route feeding into the river located towards the western boundary of the site. The southern band is associated with the unnamed ordinary watercourse.

EA mapping confirms the site is not located within an area potentially at risk from reservoir flooding.

### 4.3 Characteristics of the Potential Impacts

#### 4.3.1 Ecology and Biodiversity

As set out previously, there are no ecological designations overlapping with the site.

A Preliminary Ecological Assessment has been undertaken and in terms of habitat has confirmed the area of development as being of low conservation value with the potential to support limited numbers of protected species. It provides suitable nesting sites for breeding birds [REDACTED] and reptiles with scattered trees having bat roost potential.

Subsequent targeted species surveys reveal that where trees exist or where species are present these can be mitigated through avoidance by applying development set back distances to evolving development proposals.

An existing pond was identified with the potential to support Great Crested Newts. Subsequent eDNA has ruled out any presence however. Ornithology surveys remain ongoing at the site. Should the need for mitigation be identified then this will be applied through avoidance or application of compensatory measures.

The planning application will be supported by an Ecological Impact Assessment which will include the results of all ecological surveys as well as any mitigation and/or compensatory measures should they be required.

In accordance with the requirements of the National Planning Policy Framework and the Environment Act 2021, the application will be supported by a Biodiversity Net Gain Assessment clearly setting out how the Proposed Development will exceed pre-development biodiversity levels by at least 10%.

Subject to mitigation through avoidance and application of adequate set back buffers, as well as the application of compensatory measures if required, it is not anticipated that the Proposed Development will result in any unacceptable or significant negative effects on ecology or biodiversity. Rather, the incorporation or planting and other biodiversity measures –bug hotels, bat boxes etc –will result in biodiversity net gain well above the mandatory minimum requirements.

### 4.3.2 Traffic and Transport

A Transport Statement (TS) assessing the impacts of the Proposed Development will be provided in support of this Application. Access to the site for both construction and operation will be via new road openings onto either one or a combination of the following options:

- A507 to the east;
- B1037 at the south; and
- Cromer Heath to the west.

The purpose of the TS is to quantify the volumes of trips and establish how the local road network can accommodate this increased demand. Measures to minimise or mitigate the impact of these movements will be included where required.

The TS will be prepared in accordance with the Ministry of Housing, Communities and Local Government publication ‘National Planning Policy Framework’ (NPPF) 2021, and guidance document ‘Planning Practice Guidance: Travel Plans, Transport Assessments and Statements’ (PPG), 2014, from the Department for Levelling Up, Housing and Communities and Ministry of Housing, Communities & Local Government.

The main traffic volumes that will occur as a result of the proposed development are during the construction phase, albeit these will be a temporary increase. It is anticipated that traffic during the operational phase will be minimal, with 1 vehicle trip per day to the site for monitoring and maintenance.

As set out, it is envisaged that the construction period will last c. 12 months. During this period HGV traffic is estimated to peak at 15 deliveries per day to the site during weeks 10 and 20. It is anticipated there will be 45 construction staff on-site during peak development phases. Construction staff will typically arrive in teams of 4-5 persons in working vans, as per most construction sites. Allowing for 35 staff arriving in teams of 5 and the remainder arriving in single vehicles, this equates to 17 staff vehicles arriving at the site during peak construction periods.

It is expected that a CTMP will be conditioned as part of any planning consent for the Proposed Development. This document will include measures to inter-alia, manage the timing of HGV deliveries to the site to ensure no conflicts with periods of high traffic generation in the local area, and ensure that staff arrive and depart the site outside of main commuting periods. The TS will reference this document and set out measures that will be typically provided for within it.

As part of the TS overall traffic volumes will be profiled for the proposed development throughout the anticipated construction period. In order to quantify the significance of any changes in traffic flows existing data will be gathered on the surrounding traffic routes to advise in respect of existing vehicle uses. The percentage change associated with the Proposed Development will be quantified in terms of overall traffic volume and HGV volume. Institute of Environmental Management and Assessment (IEMA) Guidelines will be used as a reference point to identify:

- Where traffic flows will increase by more than 30% (or the number of heavy goods vehicles will increase by more than 30%)’ on highways; and
- In other specifically sensitive areas, where traffic flows will increase by 10% or more.

Given the limited traffic associated with the Proposed Development, it is extremely unlikely that the Proposed Development will increase either traffic or HGV volumes on the local highway network significantly. In the event that the potential for significant effects is identified along the B1037 or Cromer Heath, the TS will set out measures to mitigate any impacts ensuring no significant effects in terms of traffic and transport.

Mitigation measures referred to will be reinforced through the CTMP

### 4.3.3 Landscape and Visual Impacts

The Application will be supported by a Landscape & Visual Impact Assessment (LVIA) which identifies and determines the effects on landscape character, landscape features, visual receptors, and visual amenity due to the Proposed Development. This will include a series of photomontages which will demonstrate the impact of the Proposed Development within the wider area from a series of viewpoints to be agreed with the Council. This will include from points of public access and general assembly including Cottered Conservation Area, Cromer Windmill and the existing PROW.

The design principles applied to development of the design concept involve retention of all trees and hedgerows as far as possible and an in-built commitment to augment the existing vegetation with sympathetic landscape planting along boundaries and within the site where circumstances allow. The proposed planting forms an inherent part of the development proposals and aligns with the aspirations of the Landscape Character Assessment Supplementary Planning Document for managing change within this LCA.

It is considered that landscape changes within the Proposed Development site would not alter the character of the landscape within the extended hinterland. Rather, landscape changes are likely to be relatively contained localised where partial localised visibility of the site will be available notably along a section of the A507 adjacent to and east of the site, and from the south at Cromer.

Panels will be no more than 3.6m high and from Cromer and elsewhere visibility will be largely shielded by proposed landscaping to augment that already present around the site. Landscaping will be proposed along the A507 - which is the main immediate view of the site. It must be noted that views along this busy road are to traffic and as such are transient and relatively short in duration.

PROW which cross the site with remain untouched and the Proposed Development will incorporate adequate set-back distances and screen planting to ensure that there is no impact on these amenities. Whilst users of these footpaths may encounter some visual nuisance during construction this will be limited and temporary.

Given the existing landscape baseline, which is free of any landscaping designations, and the adoption of a landscape led approach, it is considered that construction and operation of the Proposed Development is unlikely to result in significant effects on landscape character.

### 4.3.4 Natural Resources

An Agricultural Land Classification (ALC) Assessment (including site survey and auger borings) was undertaken which confirms that the main agricultural land classes identified within the site are Class 2, 3a and 3b –please refer to Table 2 below.

It is worth noting that the land will continue to fulfil an agricultural purpose during the operation of the facility and further that there will be no permanent loss of the soil resource as a result of the development or total loss of agricultural productivity.

Further, the use of this portion of land will not significantly affect the area’s supply of land classified as prime given the context of the surrounding hinterland. The development is in accordance with National and Local Policy in this respect.

**Table 2: ALC Gradings and Limitations**

Grade	ha	% of Site	Limitation
1			
2	16	18.18	Doughtiness
3a	55	62.5	Doughtiness, wetness and pattern effect
3b	17	19.32	Doughtiness and flooding
4			
5			
Non -Agricultural Land			
Total	88	100	

There is no water requirement on site nor does the Proposed Development negatively impact on the water environment, important mineral deposits, peat and other carbon rich soils, open space, or important trees and

woodland. Indeed, the Proposed Development will include embedded proposals for additional woodland and hedgerow planting that will enhance biodiversity and increase trees and woodland in the locality.

### 4.3.5 Arboricultural Considerations

The “best in class” sensitive design approach employed during the design process is referred to previously in Section 2.1 of this Report. This confirms that inter-alia:

Proposals are suitably located to take account of existing constraints within the Proposed Development site, such as field boundaries and vegetation;

Existing trees within the Proposed Development site will be avoided and retained;

Existing agricultural tracks and gateways for internal access during construction and operation of the Proposed Development, in so far as is reasonably possible; and

There would be no re-grading of land or cut and fill to facilitate panel placement.

Proposed infrastructure will be appropriately separated from existing trees and vegetation by at least 5 metres or to take account of the crown spread. Where crowns are larger so too will be the separation distance to take account of the associated shading effect on the panels.

Inherent landscaping proposals will be developed as part of the Proposed Development to appropriately supplement existing vegetation around the site boundaries.

At the time of decommissioning all landscape proposals which will by then be established, will be left untouched.

Accordingly, it is proposed that the arboricultural impact of the Proposed Development will be positive across its lifespan.

### 4.3.6 Cultural Heritage

A Heritage Statement will be prepared to accompany the planning application, assessing whether the Proposed Development would affect the significance of any heritage assets.

The proposal site is not located within a conservation area, nor does it contain any designated or non-designated built heritage assets. There are a large number of built heritage assets located within a 1 kilometre search study radius of the proposal site, and accordingly the assessment will comply with Section 66(1) of the *Planning (Listed Buildings and Conservation Areas) Act (1990)* and paragraph 194 of the NPPF to ascertain if the settings, or significance, of these buildings would be affected by the proposals.

Initial reviews of the proposal site and local area suggest that the majority of designated heritage assets within the search area not be affected due to the fact that their historical associations, settings, and thus significance are not reliant upon the proposal site and further, that they remain well removed and/or screened from it due to extant development and/or intervening vegetation.

The Heritage Statement will include detailed assessment across a limited number of designated heritage assets including the *Grade II\* Cromer Windmill*, and the *Grade II The Brick Barn at Lodge*, to identify and set out whether they will be directly (materially) harmed or whether their setting will be affected.

There is also the possibility of impacts on buried archaeological remains, although any such impacts would be limited due to the nature of the scheme including the limited intrusiveness, design approach and temporary nature.

It is not predicted that the development will result in significant effects on the existing cultural heritage resource around the site. Where impacts are thought to exist, these will be less than substantial and reversible.

### 4.3.7 Flood Risk and Hydrology

A Flood Risk and Sustainable Drainage Strategy will form part of the proposed planning submission to Council.

EA mapping shows that the majority of the site is located within Flood Zone 1 and accordingly is at low risk of fluvial and tidal flooding. There is a section of the site along the River Beane in Flood Zone 3 and a further section to the south along an unnamed watercourse within Flood Zone 2a.

Electrical components including inverter stations, on-site substation and battery storage units will be located within lands identified as Flood Zone 1. Likewise too will the vast majority of solar panels.

There is a potential requirement however, depending upon the results of ongoing environmental surveys, to overlap limited numbers of panels with some linear areas along the existing watercourses identified as Flood Zone 2a and 3. In the event that this approach is taken, existing flood levels will be established, and panels will be raised appropriately to ensure the bottom edge is above the flood level plus a 300mm freeboard to protect against damage. The placing of solar panel stanchions within floodplain areas is an established practice. Where the panels are located within the river floodplain, the impact on flood risk elsewhere is considered negligible since the footprint of the stanchions on the ground is insignificant in relation to the floodplain area. The proposed development will therefore not increase the risk of river flooding elsewhere and there is no impact on the floodplain. In any event the development will still include a minimum separation distance to all watercourses and drains of at least 5m.

In terms of runoff, a solar farm is likely to be inherently better for surface water drainage than a continuation of agricultural practice. The design approach employed means that the requirement for hardstanding is minimised and that the placement of panels works with the existing landform, thus minimising the requirement for cut and fill or levelling. A solar farm will not change existing characteristics and should be a positive improvement even with no additional SuDS measures. The primary reason for this is the significant advantage from full year-round organically managed vegetated ground cover on a solar farm compared with intensive arable or livestock grazing uses. Research undertaken by Cook and McCuen (2013) found that provided full vegetation cover beneath the solar panels is maintained, the change in runoff characteristics from solar farm sites is likely to be insignificant and that ground cover has a much more important control over runoff.

Solar panels will not form large impermeable surfaces. The arrays are arranged in well-spaced rows with open avenues in between. In addition, there are spaces between each of the panels as they are affixed to the supporting structure, allowing rainwater to pass through the arrays and disperse evenly. These design features combine to ensure permeability within the solar panels. Rainfall will fall onto open ground as usual or run-off the panels through the gaps into the ground to be dispersed by the same routes that are currently in place. Owing to the retention of vegetation which will be managed organically through light grazing, there will not be a measurably increased runoff as a result of installation of the panels. Any flows that do not infiltrate the ground will drain to the existing ditches within the site. The overall drainage regime for the site will not therefore be significantly altered as a result of the proposed development.

Flooding from groundwater, reservoir and sewer sources is also considered to be low.

The Proposed Development is at 'low' risk of flooding from all sources assessed. In the event that panels are placed along identified flood zones associated with the existing watercourses, these will be raised appropriately to allow for a freeboard and will not increase the risk of flooding elsewhere. With appropriate surface water and soil management measures, the development would cause negligible effects on the existing hydrological regimes.

## Noise

The Application will be supported by a Noise Impact Assessment, which discusses the potential noise levels during construction and assesses the potential operational impacts of the Proposed Development, all in line with current government guidance.

The sound generated during the operation of the Proposed Development will be assessed in accordance with BS4142:2014 which requires that a survey of the existing sound levels is undertaken and the results compared with the expected noise levels resulting from the introduction of the Proposed Development. The assessment will further consider the absolute operational noise levels in terms of guidance provided in BS8233:2014, WHO documentation and any specific guidance provided by representatives of the local council. The operational noise from the proposed development will be predicted using the methodology specified in ISO9613-2:1996.

The sound generated by the construction of the proposed development will be discussed with reference to the requirements of BS 5228-1:2009. If any particular areas of concern are identified, this will be addressed by the specification of potential mitigation measures with due regard to the use of 'best practicable means' to reduce potential impacts where appropriate and proportionate, including reference to any necessary consultation with the local community.

In respect of potential cumulative impacts, it is not anticipated that the Proposed Development would combine with other identified developments in the locality to result in significant cumulative negative effects with regard to noise. However, this aspect will be kept under review during the development process.

### 4.3.8 Human Health

It is proposed that human health impacts associated with the proposal are limited to those associated with traffic movements during construction and noise impacts during construction and operation. As per Sections **Error! Reference source not found.** and **Error! Reference source not found.** of this Report, it is not anticipated that impacts in terms of traffic and/or noise will be significant.

Fire risk is considered below in Section **Error! Reference source not found.**

### 4.3.9 Glint and Glare

A Glint & Glare Assessment will be undertaken by Pager Power who are specialists in this field. The detailed report will be provided as supporting environmental information with the application.

Pager Power has reviewed existing guidelines and the available studies in the process of defining its own glint and glare assessment guidance and methodology. This methodology defines the process for determining the impact on road safety and residential amenity.

Pager Power's approach is to undertake geometric reflection calculations and, where a solar reflection is predicted, consider the screening (existing and/or proposed) between the receptor and the reflecting solar panels. The scenario in which a solar reflection can occur for all receptors is then identified and discussed, and a comparison is made against the available solar panel reflection studies to determine the overall impact.

The assessment will set out where there may be potential for significant effects on road safety or residential amenity. Where mitigation is recommended, this will be provided within the Landscape and Environmental Mitigation Plan which forms part of the planning pack accompanying the application.

### 4.3.10 Fire Risk

Fire risk considerations focus mainly on the Battery Storage element of the project. It is proposed that fire risk will be minimised by:

Procuring components and using construction techniques which comply with all relevant legislation;

Including automatic fire detection systems in the development design;

Including automatic fire suppression systems in the development design;

Including redundancy in the design to provide multiple layers of protection;

Designing the Development to contain and restrict the spread of fire through the use of fire-resistant materials, and adequate separation between elements of the battery facility;

Undertaking consultation with the local fire service to ensure that recommendations and requirements are addressed to enable an adequate emergency response to a fire; and

Working with the local fire service to develop their Tactical Response Plan in case of an incident.

Further to the built-in design safety measures, the risk of fire at the Proposed Development is not thought to be significant.



## 5 CONCLUSIONS

This Report identifies suitable and relevant information regarding the likely impacts associated with construction and operation of the Proposed Development.

A review of EIA Regulations confirms that this is not Schedule 1 development. Rather the Project constitutes Schedule 2 development requiring a determination as to whether EIA applies.

When making a Determination as to whether EIA applies under the Regulations, the Authority must have regard to the relevant selection criteria set out in Schedule 3 under the broad headings of, Characteristics of Development, Location of Development and Characteristics of the Potential Impact.

This Report has been informed by baseline environmental review, the results of ongoing environmental surveys and previous project experience. It summarises the conclusions of the ongoing suite of environmental assessments confirming that:

- The site is not located in an environmentally sensitive area;
- The sensitive design approach will appropriately mitigate the potential for impacts on any identified environmental constraints; and
- That the Proposed Development will not result in significant environmental effects.

It is proposed that the emerging planning application will be supported by a suite of targeted environmental reports comprising;

- Ecological Impact Assessment;
- Landscape and Environmental Management Plan;
- Arboricultural Survey;
- Transport Statement;
- Landscape and Visual Impact Assessment;
- Glint and Glare Assessment;
- Heritage Statement;
- Flood Risk Assessment and Sustainable Drainage Strategy;
- Agricultural Land Classification Assessment;
- Noise Impact Assessment.

The application is also accompanied by a:

- Statement of Community Involvement; and
- Planning / Design and Access Statement.

The individual assessments undertaken to date, previous experience, and analysis of other similar projects, demonstrate that the proposed development will not give rise to unusually complex or potentially hazardous environmental effects where expert and detailed analysis of such effects would be desirable over and above the assessment and analysis suggested through the individual assessment approach.

It is our considered view that the assessments proposed to be provided in support of this application will provide sufficient environmental information to allow a full and proper assessment of the environmental effects of the proposal without the need for an Environmental Impact Assessment.