

BERDEN HALL FARM SOLAR FARM, ESSEX: SKYLARK MITIGATION STRATEGY

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Berden Hall Farm Solar Farm
Skylark Mitigation Strategy

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Quality Management

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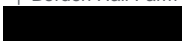
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1 INTRODUCTION

Purpose and scope of this report

- 1.1 RPS was commissioned by Berden Solar Limited to produce a Skylark Mitigation Strategy in support of an Environmental Statement (ES) assessing the impacts of a proposed solar farm at Berden Hall Farm, Pelham Stocking, Essex ('the site').
- 1.2 An Ecological Appraisal for the site was undertaken by Cherryfield Ecology (Cherryfield Ecology, 2022), based on surveys undertaken in 2019, 2020 and 2022. The initial survey reported that Skylarks were present on the site, although a full breeding bird survey was not undertaken and therefore an estimate of Skylark territories was not provided.
- 1.3 Although Skylarks may use solar farm sites for foraging, they are less likely to nest within the solar arrays given that they are a species which prefers to nest in open fields.
- 1.4 Therefore, an offsite mitigation strategy for Skylark has been developed.
- 1.5 This report provides:
- Estimate of breeding skylark territories potentially present on site;
 - Details of proposed offsite mitigation; and
 - Plans showing locations of proposed mitigation.

Site description

- 1.6 The proposed development site is located on approximately 65.84 hectares of arable land between the villages of Berden and Stocking Pelham, south of Ginns Road in the district of Uttlesford, Essex. The site is centred on national grid reference 100m square TL461291.

Proposed development

- 1.7 The proposed development is for the development of a ground mounted solar farm with a generation capacity of up to 49.99MW, together with associated infrastructure and landscaping. It would comprise the following elements:
- Approximately 91,056 photovoltaic solar panels
 - Nine inverter units
 - A small electrical substation
 - A reconfigured field access off Ginns Road to provide access to the site
 - Landscaping and deer fencing.

2 ESTIMATE OF SKYLARK TERRITORIES

- 2.1 As a full breeding bird survey of the site was not undertaken, an estimate of potential breeding territories has been made.
- 2.2 RPS undertook a breeding bird survey of a potential solar farm site in Walpole, Norfolk in 2021. This survey was for arable fields and therefore it is considered reasonable to use the recorded density of Skylarks from this survey to estimate density at Berden Hall Farm.
- 2.3 The survey site on which the RPS data was obtained is of comparable habitats (arable fields) in a predominantly arable landscape and therefore is considered to represent an acceptable measure of Skylark densities at Berden Hall Farm.
- 2.4 Estimated average Skylark density for arable fields surveyed in Norfolk was 0.22 territories / hectare.
- 2.5 Measurements of habitats at Berden Hall Farm (RPS, 2022) gives a total area of 63.96 ha of arable fields, arable field margins and temporary grass leys.
- 2.6 Applying 0.22 territories per ha, this results in an estimate of Skylark territory number of 14.07 territories, rounded down to 14 for the purposes of this assessment.

3 SKYLARK MITIGATION

- 3.1 Skylark mitigation will be provided in the form of Skylark plots to be created within arable fields owned by the landowner of Berden Hall Farm.
- 3.2 Skylark plots are created in accordance with Countryside Stewardship management practices as set out in AB4: Skylark Plots (<https://www.gov.uk/countryside-stewardship-grants/skylark-plots-ab4>).
- 3.3 The provision of Skylark plots at a ratio of two plots provided for each potential lost territory is an accepted and widely used mitigation strategy for developments that will result in the loss of Skylark territories. Skylark plots also benefit other farmland bird species.
- 3.4 A Skylark plot is a 4m x 4m area of arable field that is created by one of the following methods:
- Turning off the drill during sowing to leave an unsown plot
 - Sowing the crop as normal and spraying with herbicide to create the plot by 31 December
- 3.5 After drilling, the plots can be managed with the same treatments as the remainder of the field.
- 3.6 There is no need to keep the plots weed-free but spot-treating with herbicide in April will help skylarks to access their nesting sites.
- 3.7 Mechanical weeding of crops containing skylark plots will destroy any nests present and is not recommended.
- 3.8 The plots provide Skylarks with suitable access to nesting habitats in winter cereal crops throughout their breeding season.
- 3.9 Recommended plot density is two plots / ha. Larger fields are recommended as this reduces risk of predation by bird species that perch on boundary features such as trees. Fields of > 5 ha are therefore preferred.
- 3.10 Plots should also be located away from tramlines and no closer than 50 m to field margins.
- 3.11 Using the estimate of 14 Skylark territories derived in Section 2, 28 Skylark plots are required in offsite fields, which at 2 plots / ha equates to 14 ha of arable fields within which the plots will be cited.
- 3.12 Figures 1-3 below show locations of fields where plots will be created, and approximate plot locations within those fields. The plot locations in Figures 2 and 3 are not to scale – the size has been increased to make them more visible on the drawings as showing them to scale would make the plots harder to see.
- 3.13 On a precautionary basis, the two fields provide 36 plots in total. This is in excess of the 28 required to mitigate the estimate of 28 plots necessary to mitigate for the estimate of 14 affected territories.
- 3.14 It can therefore be confidently stated that the proposed skylark plots will be adequate to mitigate for estimated losses of Skylark territories on site.
- 3.15 The plots will be maintained on an annual basis for the duration of the operational life of the development.

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Figure 1. Location of Skylark mitigation sites

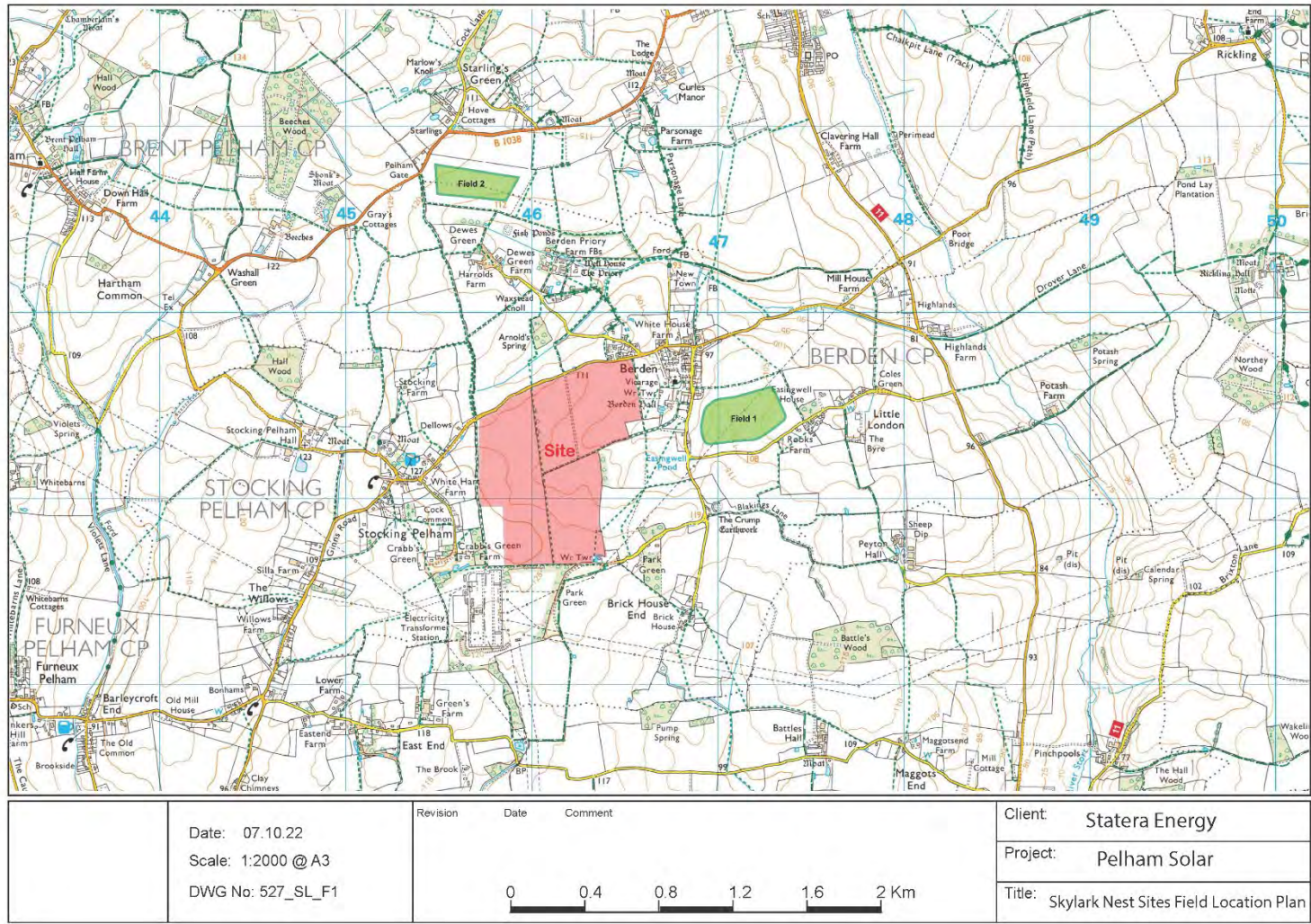


Figure 2. Plot locations in Field 1

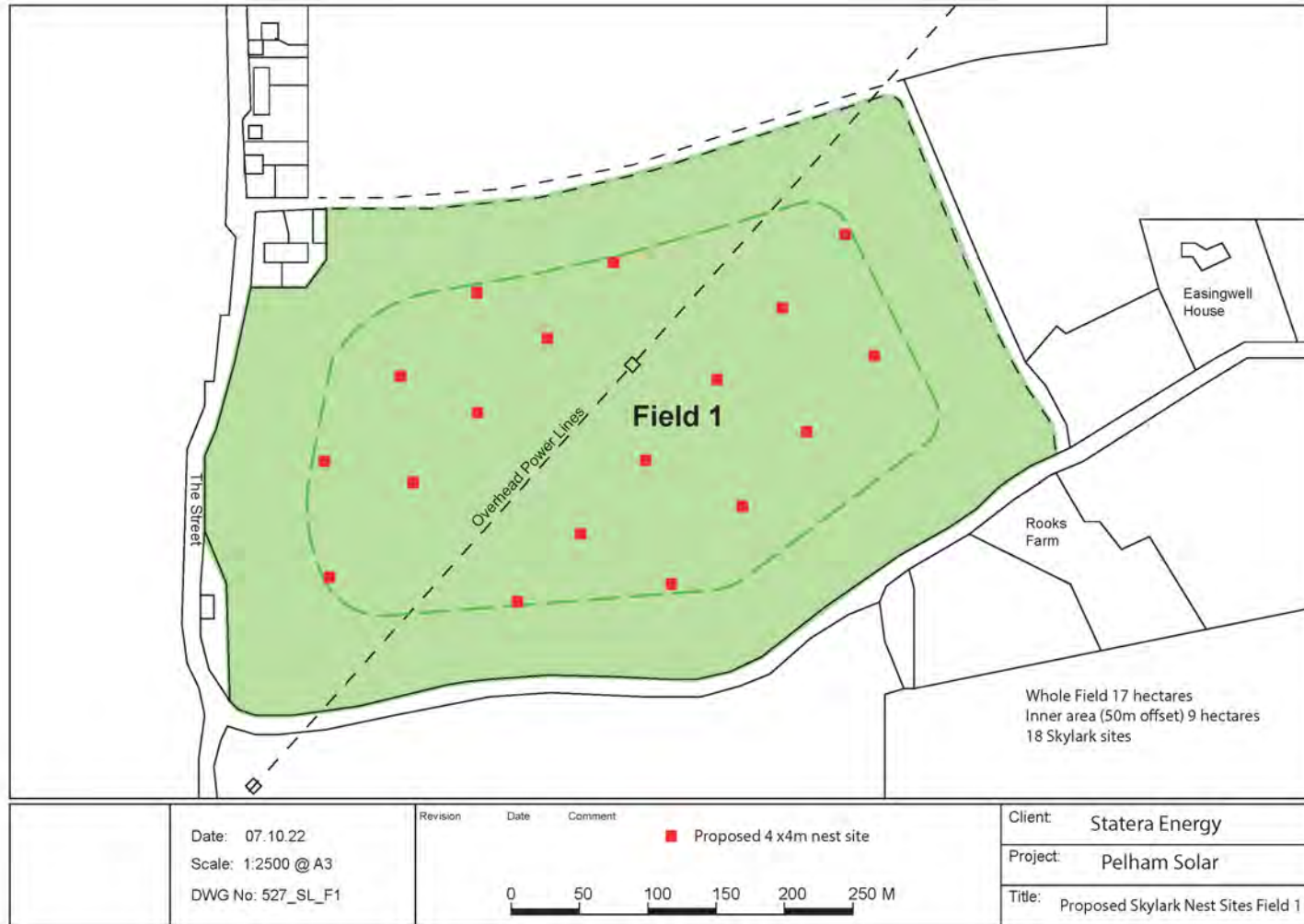


Figure 3. Plot locations in Field 2



REFERENCES

RPS (2022). *Berden Hall Farm Solar Farm: Desk study and habitat survey*. RPS, St Ives, Cambridgeshire.