



ARCUS

LANDSCAPE AND VISUAL APPRAISAL ADDENDUM

SOAY SOLAR FARM AND GREENER GRID PARK

STATKRAFT UK LTD

JULY 2022



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1 INTRODUCTION

This Landscape and Visual Appraisal (LVA) Addendum provides updates to the LVA (November 2021) following a partial site re-design, in particular the removal of solar panels from field N2.

The 2021 LVA was undertaken to support the planning application by Statkraft UK LTD (the Applicant) for the installation of a solar photovoltaic (PV) array / solar farm with associated infrastructure and Greener Grid Park including battery storage and energy management buildings (the Development) on land south of Allerthorpe Woods, approximately centred on National Grid Reference SE 76204 46514, located within the East Riding of Yorkshire (the Site).

The LVA Addendum includes a detailed assessment of the visual effects arising from the slight re-design of the Development, including the removal of the proposed solar panels in land parcel N2.

The LVA Addendum is supported by an updated Photomontage Illustration from Viewpoint 4: Allerthorpe Footpath No.2, West of Warren Wood, and included within Appendix 1.

This LVA Addendum includes the following elements:

- Key conclusions of the 2021 LVA;
- Methodology review and update;
- Baseline review and update; and
- Review of LVA and update to the visual effects on views from Viewpoint 4: Allerthorpe Footpath No.2, West of Warren Wood.

2 KEY CONCLUSIONS OF THE 2021 LVA

The 2021 LVA evaluated the effects of the Development on the landscape and visual resource. The following summaries in Sections 2.1 and 2.2 below have been extracted from the 2021 LVA and presented here as context for the LVA Addendum.

2.1 Summary of Predicted Landscape Effects

- The main landscape effects would be primarily limited to the Site itself due to large amounts of tree cover within and adjacent to the Site including Allerthorpe Woods to the north, a series of woodland blocks scattered such as Warren Wood, Brickpit Plantation, Tank Plantation and Spruce Wood as well as a network of tree lined hedgerows;
- The extensive existing green network provides layers of existing screening and due to the flat topography and low-level nature of the Development, would limit overall landscape effects to the Site;
- The main landscape effects within the Site would be the change in land use and rural quality however, the Development would retain key landscape features such as existing woodland blocks and hedgerow field margins which contribute to landscape quality. The Development would also enhance the existing green network and any negative landscape effects resulting from the Development would be reversible;
- Given the contained nature of the Site and retention of existing screening vegetation within the Site, it is considered that the Development would not adversely affect key landscape features or aesthetic qualities within wider study area. Proposed landscape mitigation would reinforce existing positive landscape features and qualities identified within the Newton Upon Derwent, Wilberfoss, Allerthorpe and Hayton Farmland Landscape Character Area (LCA)

and River Derwent Corridor and Lower Derwent Valley Important Landscape Area;

- Embedded mitigation and landscape enhancements would be viewed from the wider study area in the form of additional vegetative layers in the landscape such as woodland band and trees hedgerows. Proposed planting would not only provide additional screening and build upon key landscape features and green network, but increase biodiversity and provide ecological enhancements;
- Other landscape designations within the Study Area are limited to the River Derwent Corridor and Lower Derwent Valley Important Landscape Area (ILA) which would not be affected as there is very little to no intervisibility between the Site and designation and changes created by the Development would not impact or remove landscape features or qualities which define the ILA. Therefore, the Development would not give rise to unacceptable effects on any landscape designations;
- The Development would not give rise to unacceptable cumulative effects on landscape character in conjunction with the neighbouring substation, due to existing vegetative screening surrounding the substation and proposed Greener Grid Park, however it would increase the amount of manmade infrastructure within the immediate landscape setting; and
- It is assessed that the Site does have the capacity to absorb the landscape effects resulting from the Development due to the primarily low-level nature of the development, existing screening and on-Site mitigation proposed.

2.2 Summary of Predicted Visual Effects

- Effects on views and visual amenity arising from the Development have been determined through analysis of a Bare Earth and 'Screened' ZTV and a number of viewpoints that represent visibility for a range of visual receptors (people). In this instance, the ZTV shows theoretical visibility of the Development is greatest to the west, with limited visibility to the north and east.
- The extent of theoretical visibility reflects the extent of Allerthorpe woods to north of the Site as well as Tank Plantation, Spruce Plantation and woodland surrounding Waplinton Hall and National Grid Substation to the east, which all limit views of the Wider Study Area. A network of hedgerows and hedgerow tree would also screen views of the solar array throughout the study area;
- Close-range views of the Development would be obtained from:
 - Allerthorpe Footpath No.2 and Warren Farm Cottages which are located centrally, within and in proximity to the site,
 - Thornton Footpath No.2 which adjoins the southern aspect of the site west of the proposed Greener Grid Park; and
 - Allerthorpe Footpath No.1 which is located directly north of the site at its closest point.
- With the exception of Warren Farm Cottages there are limited residential receptors within 1 km of the Site which are anticipated to see any discernible visual effects resulting from the development due to existing screening vegetation;
- It is anticipated the Development would give rise to limited cumulative effects on views/ visual amenity in conjunction with the substation due to existing vegetative screening surrounding the substation and proposed Greener Grid Park. A proposed woodland belt would build upon the existing woodland and screening to the east and south of the Greener Grid Park; and

- It is assessed that the Site does have the capacity to absorb the visual effects resulting from the Development due to the primarily low-level nature of the proposed infrastructure, existing screening and on-site mitigation proposed.

3 CHANGES TO LEGISLATION, POLICY & GUIDANCE

There have been no changes to legislation, policy or guidance since the 2021 LVA was issued. Therefore, Section 3 Legislation, Policy and Guidance of the 2021 LVA remains valid.

4 METHODOLOGY & SCOPE OF ASSESSMENT

The methodology for assessing visual effects within this LVA Addendum follows the methodology set out within Section 2.2 of the 2021 LVA. Please refer to the 2021 LVA for the LVA Methodology.

5 BASELINE REVIEW & UPDATE

There is no change to the baseline condition as presented in Section 4 of the 2021 LVA.

6 EMBEDDED MITIGATION

The landscape and visual objectives of the embedded mitigation were:

- To screen elements of the Development from key receptor locations (e.g., nearby residential properties);
- To soften 'hard edges' of the Development from the Public Rights of Way (PRoW); and
- To reflect existing landscape elements and character in areas of the wider landscape setting.

The embedded mitigation includes the following biodiversity objectives:

- To minimise impacts on existing habitats and species during construction;
- To extend and enhance the most valuable existing habitats on-site;
- To create new habitats on-site that reflect the natural flora and fauna of the area; and
- To make the most of opportunities to improve biodiversity within the Site and surrounding area.

The Development provides an opportunity to both screen the proposed infrastructure from sensitive receptors, such as the PRoW within the Site and improve the existing baseline landscape features/green infrastructure of the immediate landscape setting. The Development includes a significant amount of new planting and biodiversity enhancements in the form of native species hedgerow, woodland, scrub planting and tussock grassland.

Landscape and ecology mitigation is shown on the Updated Landscape and Ecology Mitigation and enhancement Plan drawing 5052_DR_LAN_101 (Appendix 1). This includes all proposed planting and specification and illustrates how planting connects to the existing green network, specifically the reinforcement of existing hedgerows and introduction of additional woodland which responds to opportunities outlined within guidelines of the Newton Upon Derwent, Wilberfoss, Allerthorpe and Hayton Farmland LCA as well as Policies ENV2, ENV4 and ENV5.

Details of proposed species specification as well as an implementation and management prescriptions are outlined within the Biodiversity Enhancement Management Plan (BEMP) submitted as part of this Application.

A review of the proposed mitigation has been undertaken, and the mitigation measures proposed have contributed to a biodiversity net gain of +132.46% in Biodiversity Habitat Units and +22.3% Hedgerow Units as reported in the Biodiversity Metric Assessment (BMA) Report. This represents an increase in the overall biodiversity net gain in Biodiversity Habitat Units, and a reduction in Hedgerow Units as reported in the 2021 LVA. Further detail is provided in the Biodiversity Enhancement Management Plan (BEMP) (July 2022) submitted as part of this Application.

7 ASSESSMENT OF POTENTIAL LANDSCAPE EFFECTS

There is no change to the predicted landscape effects as presented in Section 7 within the 2021 LVA.

8 ASSESSMENT OF POTENTIAL VISUAL EFFECTS

This LVA Addendum addresses the change in the predicted visual effects arising from the amendments to the Development, including removal of the solar panels within land parcel N2. Views of the Development within and around land parcel N2 would be experienced from Allerthorpe Footpath No.2 and from the rear of properties at Warren Farm Cottages.

8.1 Visual Effects

Visual effects are concerned wholly with the effect of the Development on views, and the general visual amenity as experienced by people.

Visual effects are assessed by considering the sensitivity of the receptor (people) against the proposed magnitude of change to determine a level of visual effect. The acceptability of this effect largely relates to the activity and the experience of the viewer and the visual composition, character, context, and the overall ability of the landscape in that view to accommodate the Development in design terms. Visual effects are assessed in relation to the agreed viewpoints, properties and settlements, tourist and recreational destinations including tourist routes as well as main transport routes.

8.1.1 Assessment of Visual Effects on Views from Allerthorpe Footpath No.2, West of Warren Wood (Viewpoint 4)

Viewpoint 4 was selected to illustrate the landscape context and views from the Allerthorpe Footpath No.2.

There is no change to the predicted visual effects on views from Viewpoint 4 as presented in Section 7 within the 2021 LVA. The assessment text from the 2021 LVA has been included below to accompany the updated photomontage illustrations in Figure 22a - c, Appendix 1.

Proposed embedded mitigation would limit views of the Development to the south and the magnitude of change would remain medium and a discernible change would still be visible. Level of effect is therefore considered to remain *moderate* adverse, but reversible.

8.1.2 Visual Effect on Views from Residential Properties

The effect of the Development on local residents requires particular attention because they would experience the Development from different locations, at different times of the day, usually for longer periods of time, and in different seasons.

Whilst individual or specific observations are made concerning views or potential views in the direction of the Development in respect of the relevant properties, a 'summation' is offered based on an opinion 'in the round' (i.e., taking all relevant factors into account which could include the various potential views from the house, the surrounding amenity ground, the access / egress points and the immediately adjacent highway taking the views in the direction of the Development into account along with alternative views which may be available).

There would be no change to the visual effects arising from views from Warren Farm Cottages as presented in Section 7 within the 2021 LVA.

Views from ground and first floors of the eastern façade of Warren Farm Cottages, towards the Development to the east, would as a worst case, be of the sides of panels within field parcels N3 (approximately 374 m distance to the east), and field parcel O (approximately 356 m distance to the south-east) (refer to drawing Updated Landscape and Ecology Mitigation and Enhancement Plan). Garden vegetation and fencing may screen / filter views for the single storey properties at Warren Farm Cottages.

8.1.3 Visual Effect on Views from Public Rights of Way Allerthorpe Footpath No.2

The viewpoint assessment in Section 8.1.1 above details the visual effect on views from Allerthorpe Footpath No.2.

The assessment text from the 2021 LVA has been included below for visual effects on views from Allerthorpe Footpath No.2.

A revised photomontage from Viewpoint 4 Allerthorpe Footpath No.2, West of Warren Wood (refer to Figure 22 a – c, Appendix 1) illustrates the revised layout of the Development, including solar panels removed from land parcel N2.

There would be no change to the visual effects arising from the PRoW network, specifically Allerthorpe Footpath No.2.

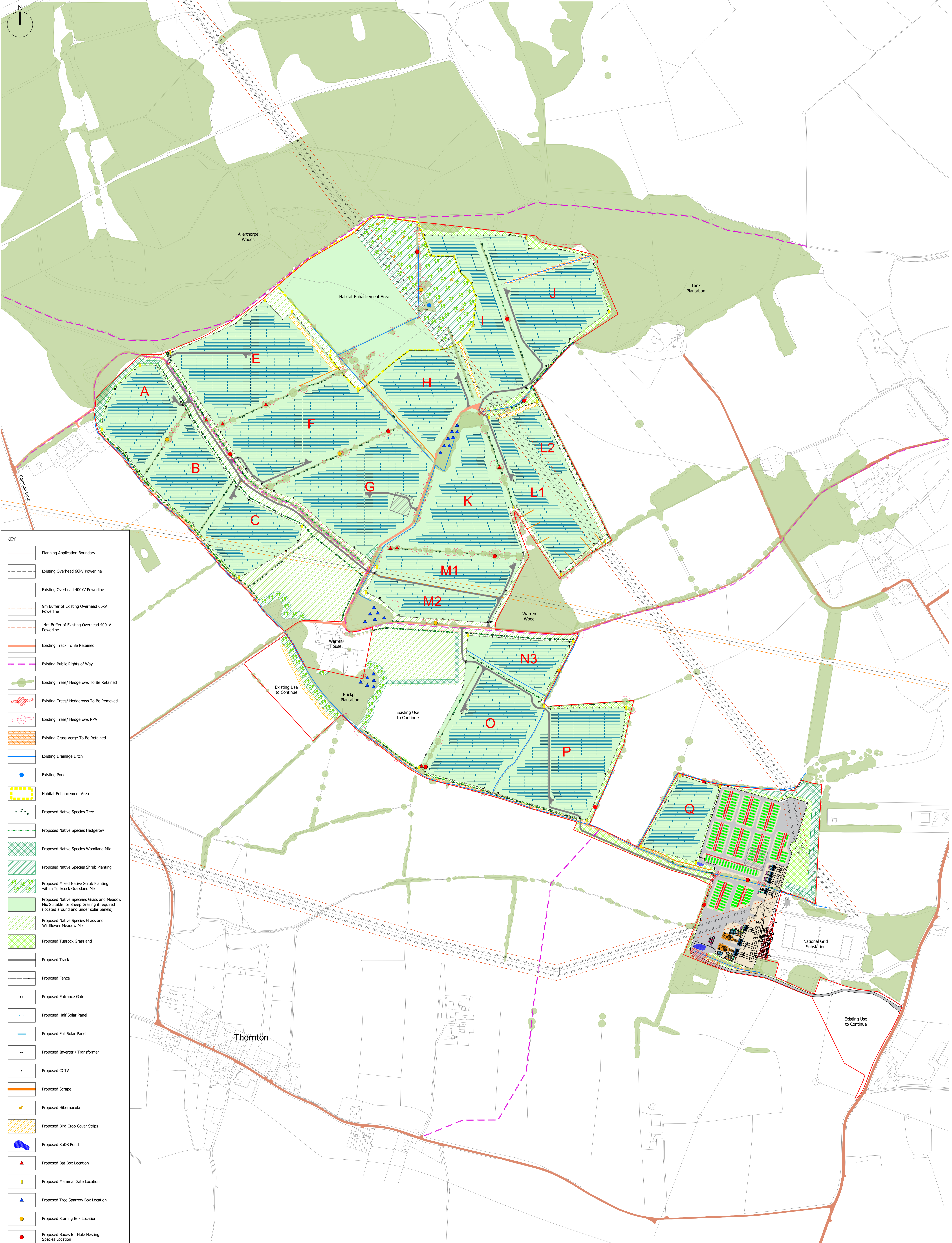
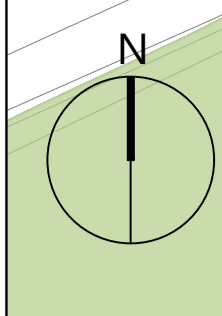
9 CONCLUSION

A review of the 2021 LVA, and the amendments to the Development (including removal of land parcel N2), concludes:

- There would be no change to the predicted visual effects on views of the Development from the eastern façade of Warren Farm Cottages; and
- There would be no change to the predicted visual effects of the Development on views from Allerthorpe Footpath No.2, north of land parcel N2.

APPENDIX 1 – FIGURES

- Figure 13 – Viewpoint 4: Allerthorpe Footpath No.2, West of Warren Wood
- 5052_DR_LAN_101 – Updated Landscape and Ecology Mitigation and Enhancement Plan



KEY

	Planning Application Boundary
	Existing Overhead 66kV Powerline
	Existing Overhead 400kV Powerline
	9m Buffer of Existing Overhead 66kV Powerline
	14m Buffer of Existing Overhead 400kV Powerline
	Existing Track To Be Retained
	Existing Public Rights of Way
	Existing Trees/ Hedgerows To Be Retained
	Existing Trees/ Hedgerows To Be Removed
	Existing Trees/ Hedgerows RPA
	Existing Grass Verges To Be Retained
	Existing Drainage Ditch
	Existing Pond
	Habitat Enhancement Area
	Proposed Native Species Tree
	Proposed Native Species Hedgerow
	Proposed Native Species Woodland Mix
	Proposed Native Species Shrub Planting
	Proposed Mixed Native Scrub Planting within Tucksock Grassland Mix
	Proposed Native Species Grass and Meadow Mix Suitable for Sheep Grazing if required (located around and under solar panels)
	Proposed Native Species Grass and Wildflower Meadow Mix
	Proposed Tussock Grassland
	Proposed Track
	Proposed Fence
	Proposed Entrance Gate
	Proposed Half Solar Panel
	Proposed Full Solar Panel
	Proposed Inverter / Transformer
	Proposed CCTV
	Proposed Scrape
	Proposed Hibernacula
	Proposed Bird Crop Cover Strips
	Proposed SuDS Pond
	Proposed Bat Box Location
	Proposed Mammal Gate Location
	Proposed Tree Sparrow Box Location
	Proposed Starling Box Location
	Proposed Boxes for Hole Nesting Species Location

NOTES:
 1. All locations of proposed bird / bat boxes and mammal gates to be micro sited on site by a qualified ecologist.
 2. For detail of BESS refer to drawing 4259-DR-P-0001.

REVISION SCHEDULE

Rev	Date	Description
A	05.07.22	Revised HEA boundary (WM)

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 GRID REFERENCE: SE 764464

PROJECT: Soay Solar Farm and Greener Grid Park
TITLE: Landscape and Ecology Mitigation and Enhancement Plan
CLIENT: Statkraft UK
DATE: 24.06.22 **SCALE:** 1:3000@A0
DRAWN: WM **DRAWING NO.:** 5052-DR-LAN-101
CHECKED: CH **REVISION:** A

