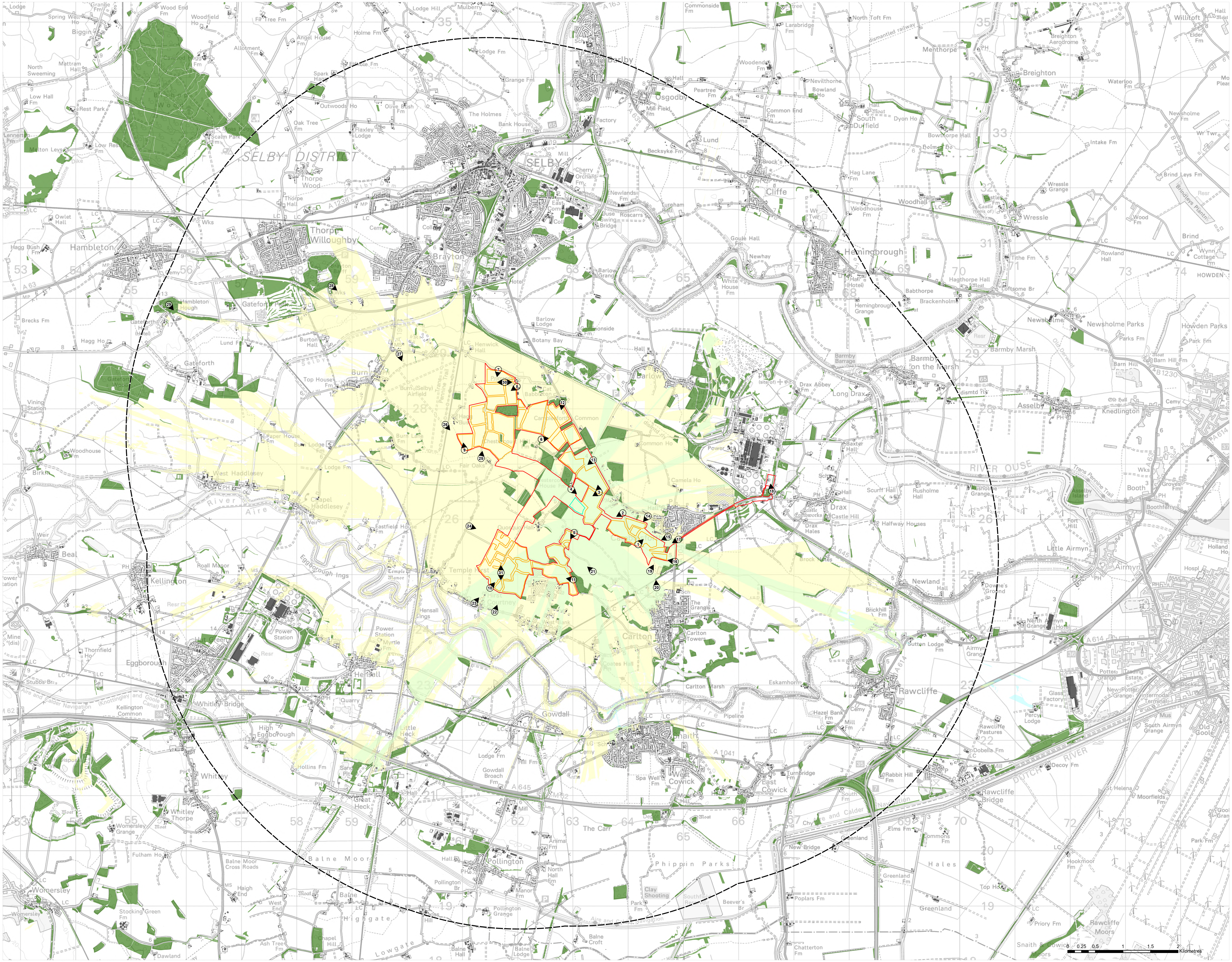
HELIOS RENEWABLE ENERGY PROJECT

**PINS Document Number:**
EN010140/APP/6.2.7.11

**Pursuant to:**
APFP Regulation 5(2)(a)

# Environmental Statement Figure 7.11: Landscape Strategy Schedules and Notes

June 2024



## Key

- 🟥 Site Boundary
- 🟦 Battery Energy Storage System (BESS) and Substation Area
- 🟧 Solar Panel Area
- ▭ Solar Panel Area 6 km Buffer
- ▲ Viewpoint Location

**Zones of Theoretical Visibility**

Battery Energy Storage System (BESS) and Substation

Solar Panel Area

**Note**

This Zone of Theoretical Visibility (ZTV) has been generated using ESRI ArcGIS Spatial Analyst extension. The digital terrain model (DTM) has been derived from OS Terrain 5 dataset with an accuracy of (+/- 1.5 - 2.5 m Root Mean Square Error [RMSE]). Earth curvature has been included in the ZTV calculation and refraction of light has been applied using ESRI default settings. The ZTV has been generated from a viewing height of 2 m above ground level which falls within recommendations by "Visual Representation of Windfarms" prepared for NatureScot February 2017 - Version 2.2.

The use of ZTV mapping at this stage is limited and the following assumptions should be noted:

- The ZTV has been generated using a 50 m grid of the maximum developable area of the proposed Helios Solar Farm BESS, substation and solar panel Area.
- A height of 6.48 m for BESS and substation and 3 m for the solar panel has been used for generating the ZTV.
- The ZTV accounts for the screening effects of settlements and woodland blocks using a height value of 8 m for buildings and 10 m for woodland. It does not indicate potential visual effects or show the likely significance of effects. It shows potential theoretical visibility only. The ZTV has been produced for the purpose of informing 'on the ground' visual assessment.
- The Helios ZTV has been run to an area extending just beyond the solar panel area 6 km Buffer.

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Project Title

Helios Renewable Energy Project

Drawing Title

Figure 7.11 - Solar Panels and Substation/BESS Combined ZTV – With Surface Features

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