

# Springwell Solar Farm

## ES Volume 2: Figures

### Chapter 16: Cumulative Effects

APFP Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning  
(Applications: Prescribed Forms  
and Procedure) Regulations 2009

EN010149/APP/6.2.3

Revision 3

Deadline 2

June 2025

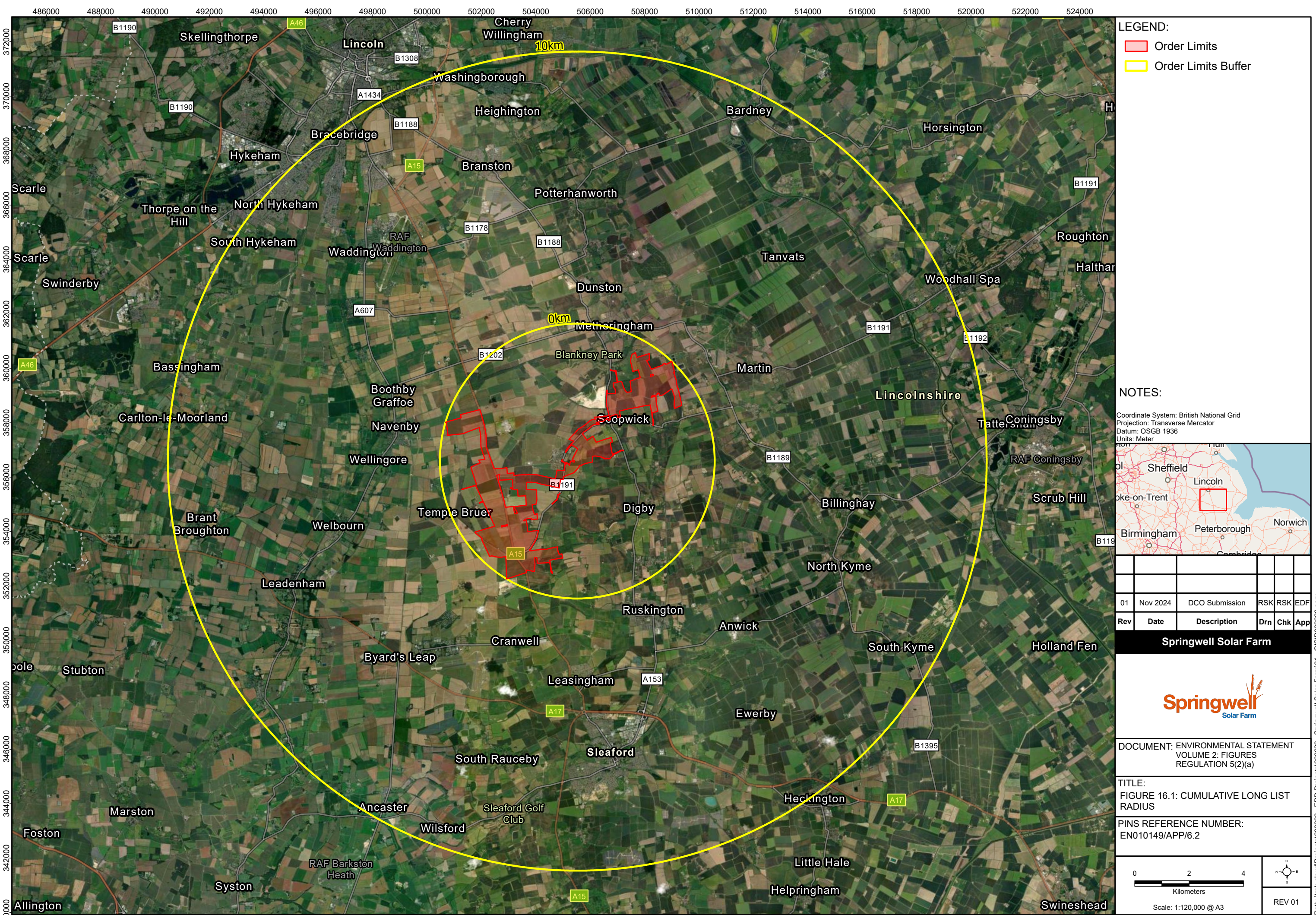
Springwell Energyfarm Ltd

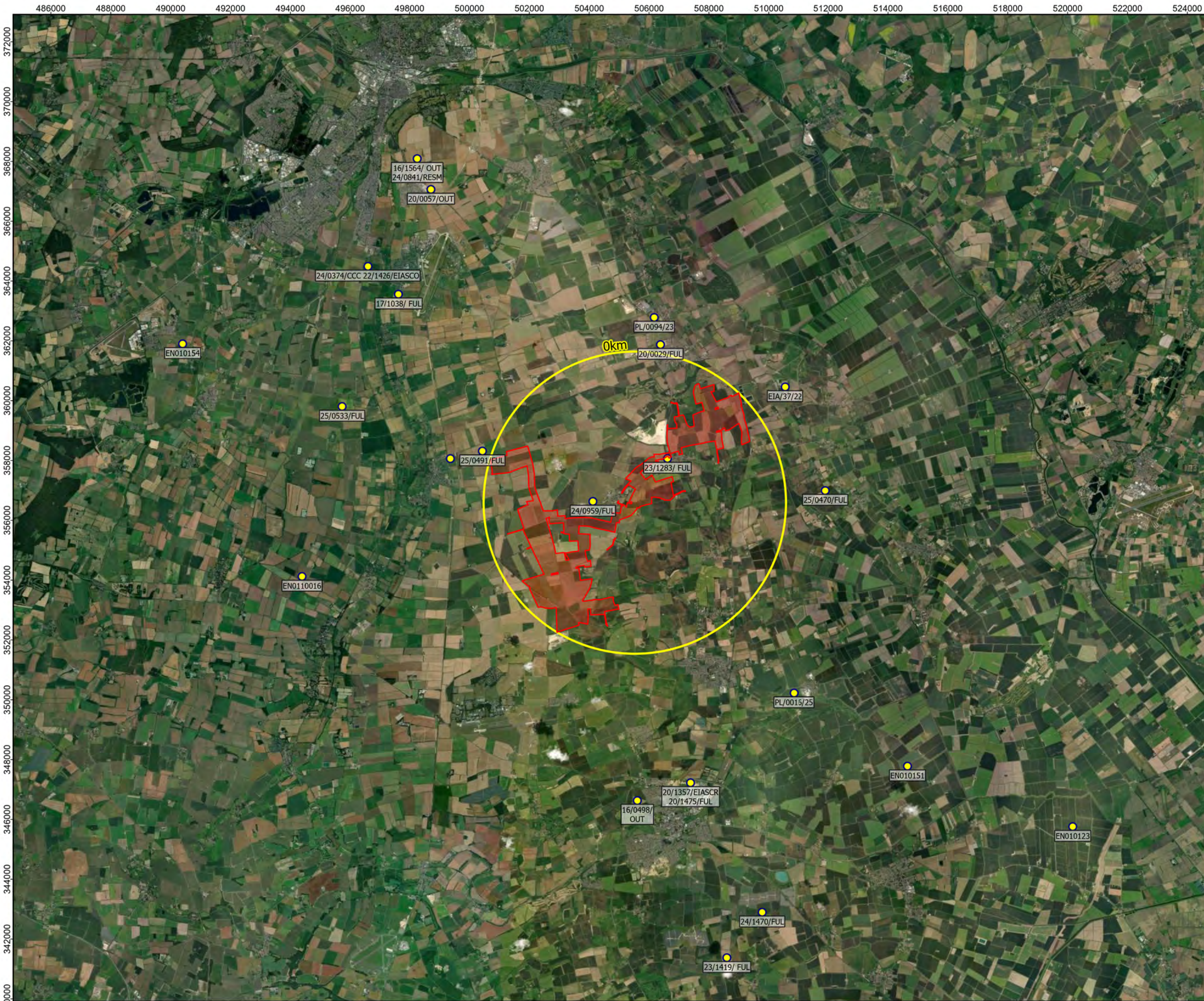


## ES Volume 2: Figures

### Chapter 16: Cumulative Effects

| Drawing number     | Revision number | Drawing title                                                                           | Scale | Reason for revision                                        |
|--------------------|-----------------|-----------------------------------------------------------------------------------------|-------|------------------------------------------------------------|
| <b>Figure 16.1</b> | 01              | Cumulative Long List Radius                                                             | A3    | No change made                                             |
| <b>Figure 16.2</b> | 03              | Cumulative Short List Radius                                                            | A3    | Updated to include short list refresh                      |
| <b>Figure 16.3</b> | 01              | Cumulative ZTV – Springwell and National Grid Navenby Substation                        | A3    | No change made                                             |
| <b>Figure 16.4</b> | 02              | Cumulative ZTV – Springwell and Navenby Heath BESS                                      | A3    | Updated to reflect revised boundary for Navenby Heath BESS |
| <b>Figure 16.5</b> | 01              | Cumulative ZTV – Springwell and RAF Digby Development                                   | A3    | No change made                                             |
| <b>Figure 16.6</b> | 02              | Cumulative ZTV – Springwell, National Grid Navenby Substation and Navenby Heath BESS    | A3    | Updated to reflect revised boundary for Navenby Heath BESS |
| <b>Figure 16.7</b> | 01              | Cumulative ZTV – Springwell, National Grid Navenby Substation and RAF Digby Development | A3    | No change made                                             |
| <b>Figure 16.8</b> | 03              | Best and Most Versatile (BMV) Agricultural Land and Cumulative Developments             | A3    | Updated to include additional TCPA projects                |





LEGEND:

- Order Limits
- Cumulative Developments
- Buffer

NOTES:

Coordinate System: British National Grid  
Projection: Transverse Mercator  
Datum: OSGB 1936  
Units: Meter



|     |           |                              |     |     |     |
|-----|-----------|------------------------------|-----|-----|-----|
| 03  | June 2025 | Deadline 2                   | RSK | RSK | EDF |
| 02  | May 2025  | Leoda Solar Farm (EN0110016) | RSK | RSK | EDF |
| 01  | Nov 2024  | DCO Submission               | RSK | RSK | EDF |
| Rev | Date      | Description                  | Drn | Chk | App |

Springwell Solar Farm

DOCUMENT: ENVIRONMENTAL STATEMENT  
VOLUME 2: FIGURES  
REGULATION 5(2)(a)

TITLE:  
FIGURE 16.2: CUMULATIVE SHORT  
LIST RADIUS

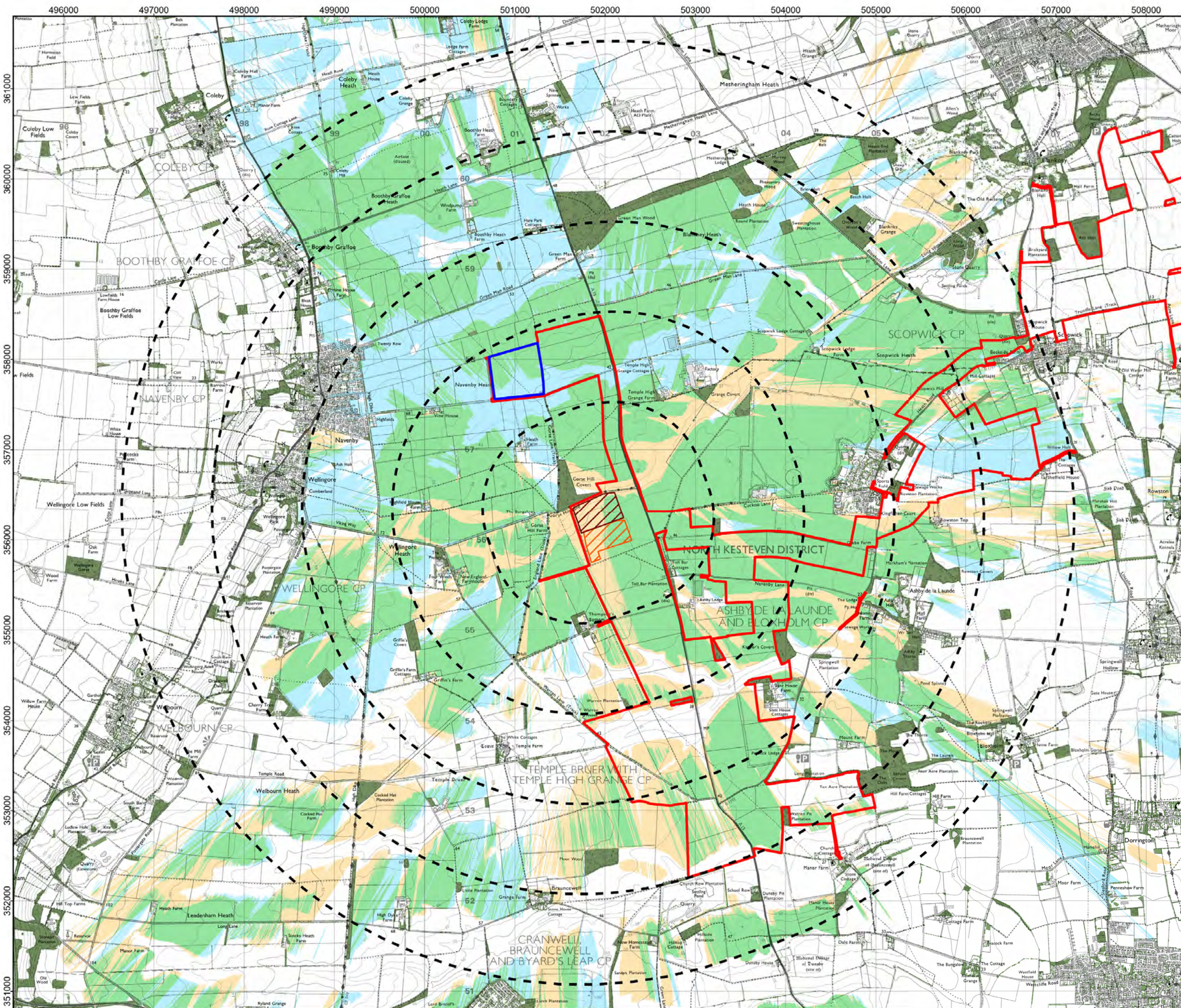
PINS REFERENCE NUMBER:  
EN010149/APP/6.2.3

024

Kilometers

Scale: 1:120,000 @ A3

REV 03

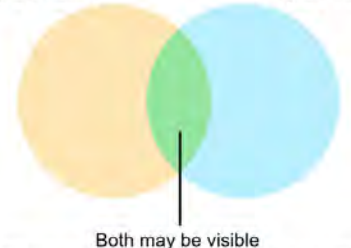


- Legend:**
- Order Limits
  - Springwell Substation Siting Area
  - Springwell BESS Siting Area
  - Distance Radii from Siting Area (1, 2, 3, 4, 5km)
  - NG Navenby Substation
  - Woodland and vegetation higher than 2.5m

**Zone of Theoretical Visibility**

Springwell Substation/BESS may be visible

NG Navenby Substation may be visible



**NOTES:**  
Layout file: D012-obvs-substation-BESS-LIDAR5m-3km.shp; D012-obvs-cumulative-screening-VOM-3km.shp  
Terrain data: DEFRA-LIDAR-2022-derived-DEM-5m.shp  
Viewer's eye height: 2m above ground level  
Calculation grid size: 2m  
This drawing is based upon computer generated Zone of Theoretical Visibility (ZTV) studies produced using the Viewshed routine in the Visibility Analysis plugin for QGIS.  
The areas shown are the maximum theoretical visibility, taking into account topography, principal woodlands and buildings.  
A digital surface model (DSM) has been derived from DEFRA 2022 2m DTM height data. Locations of buildings are taken from the OS Open Map Local dataset and woodland from the EA's Vegetation Object Model Dataset. Heights of buildings and woodland are taken from DEFRA 2022 2m DSM height data. The actual extent of visibility on the ground will be less than that suggested by this plan.  
The ZTV includes an adjustment that allows for Earth's curvature and light refraction. It is based on a derived DSM and has a 2m resolution.  
The ZTV does not show cable route corridors, boundary fencing and CCTV, inverter and transformers and switchgear compounds, National Grid Sealing End Compound and additional 400kV towers.  
Coordinate System: British National Grid  
Projection: Transverse Mercator  
Datum: OSGB 1936  
Units: Meter



| Rev | Date     | Description    | Drm | Chk | App |
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| 01  | Nov 2024 | DCO Submission | RSK | RSK | EDF |

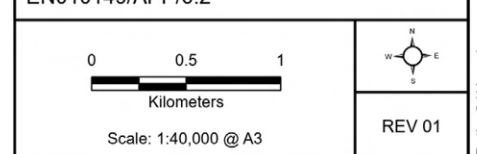
**Springwell Solar Farm**

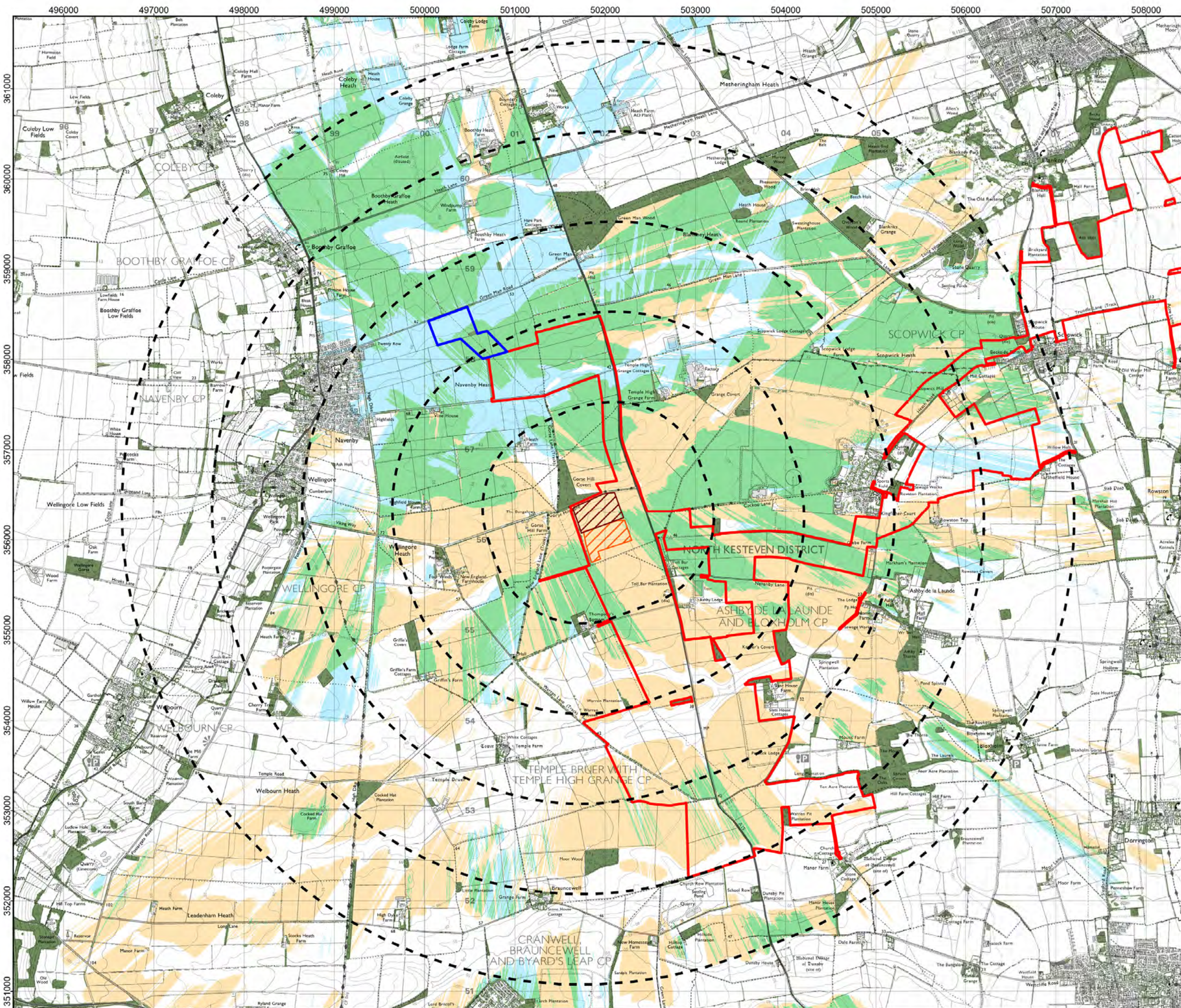


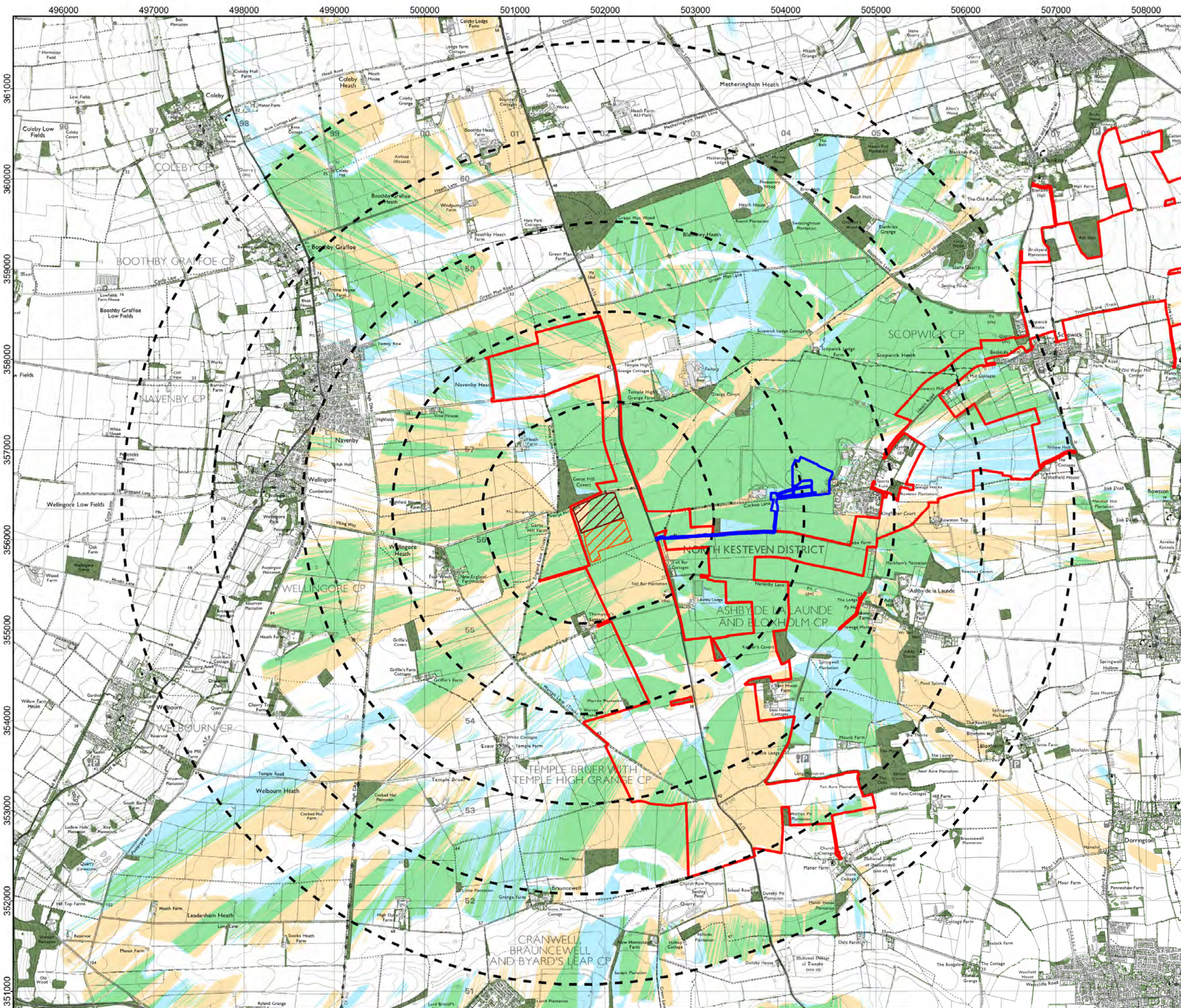
**DOCUMENT:**  
ENVIRONMENTAL STATEMENT  
VOLUME 2: FIGURES  
REGULATION 5(2)(a)

**TITLE:**  
Figure 16.3: Cumulative ZTV – Springwell and National Grid Navenby Substation

**PINS REFERENCE NUMBER:**  
EN010149/APP/6.2





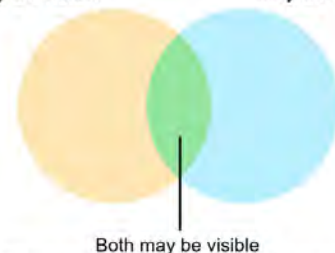


- Legend:**
- Order Limits
  - Springwell Substation Siting Area
  - Springwell BESS Siting Area
  - Distance Radii from Siting Area (1, 2, 3, 4, 5km)
  - RAF Digby Development
  - Woodland and vegetation higher than 2.5m

**Zone of Theoretical Visibility**

Springwell Substation/BESS may be visible

RAF Digby Development may be visible



**NOTES:**  
Layout file: D012-obvs-substation-BESS-LIDAR5m-3km.shp; D012-obvs-cumulative-screening-VOM-3km.shp  
Terrain data: DEFRA-LIDAR-2022-derived-DEM-VOM-2m.shp  
Viewer's eye height: 2m above ground level  
Calculation grid size: 2m  
This drawing is based upon computer generated Zone of Theoretical Visibility (ZTV) studies produced using the Viewshed routine in the Visibility Analysis plugin for QGIS.  
The areas shown are the maximum theoretical visibility, taking into account topography, principal woodlands and buildings.  
A digital surface model (DSM) has been derived from DEFRA 2022 2m DTM height data. Locations of buildings are taken from the OS Open Map Local dataset and woodland from the EA's Vegetation Object Model Dataset. Heights of buildings and woodland are taken from DEFRA 2022 2m DSM height data. The actual extent of visibility on the ground will be less than that suggested by this plan.  
The ZTV includes an adjustment that allows for Earth's curvature and light refraction. It is based on a derived DSM and has a 2m resolution.  
The ZTV does not show cable route corridors, boundary fencing and CCTV, inverter and transformers and switchgear compounds, National Grid Sealing Find Compound and additional 400kV towers.  
Coordinate System: British National Grid  
Projection: Transverse Mercator  
Datum: OSGB 1936  
Units: Meter



| Rev | Date     | Description    | Drm | Chk | App |
|-----|----------|----------------|-----|-----|-----|
| 01  | Nov 2024 | DCO Submission | RSK | RSK | EDF |

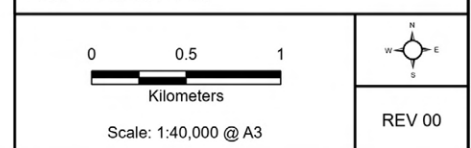
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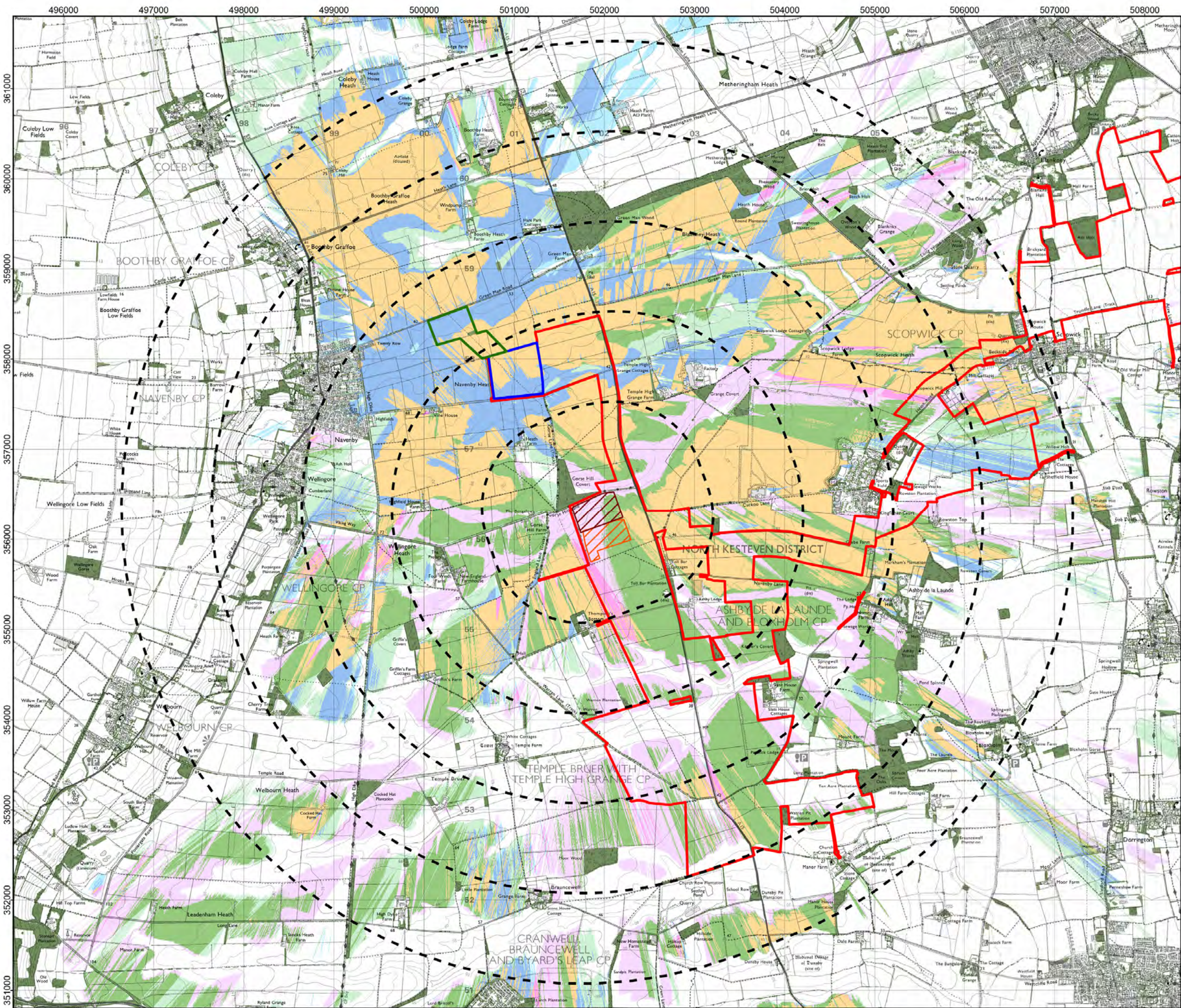


**DOCUMENT:**  
ENVIRONMENTAL STATEMENT  
VOLUME 2: FIGURES  
REGULATION 5(2)(a)

**TITLE:**  
Figure 16.5: Cumulative ZTV – Springwell and  
RAF Digby Development

**PINS REFERENCE NUMBER:**  
EN010149/APP/6.2

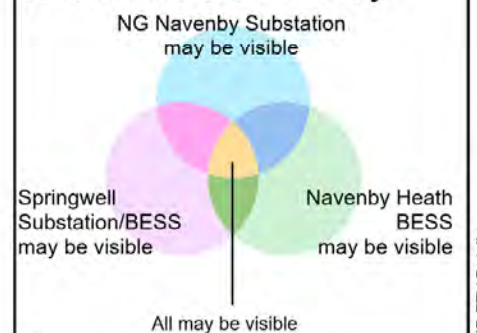




#### Legend:

- Order Limits
- Springwell Substation Siting Area
- Springwell BESS Siting Area
- Distance Radii from Siting Area (1, 2, 3, 4, 5km)
- Navenby Heath BESS
- NG Navenby Substation
- Woodland and vegetation higher than 2.5m

#### Zone of Theoretical Visibility



NOTES:  
Layout file: D012-obs-substation-BESS-LOA-5m-3km.shp; D012-obs-Cumulative-Screening-VOM-3km.shp  
Terrain data: DEFRA-LOA-2022-derived-DEM-VOM-2m.shp  
Viewer's eye height: 2m above ground level  
Calculation grid size: 2m  
The drawing is based upon computer generated Zone of Theoretical Visibility (ZTV) studies produced using the Viewshut routine in the Visibility Analysis plugin for QGIS.  
The areas shown are the maximum theoretical visibility, taking into account topography, principal woodlands and buildings. A digital surface model (DSM) has been derived from DEFRA 2022 2m DTM height data. Locations of buildings are taken from the OS Open Map Local dataset and overlaid from the EIA's Vegetation Class Model dataset. Heights of buildings and woodland are taken from DEFRA 2022 2m DSM height data.  
The actual extent of visibility on the ground will be less than that suggested by this plan.  
The ZTV includes an adjustment that allows for Earth's curvature and light refraction. It is based on a derived DSM and has a 2m resolution.  
The ZTV does not show cable route corridors, boundary fencing and CCTV, inverter and transformers and associated compounds, National Grid Siting First Compound and additional 400kV towers.

Coordinate System: British National Grid  
Projection: Transverse Mercator  
Datum: OSGB 1936  
Units: Meter



| Rev | Date      | Description    | Drm | Chk | App |
|-----|-----------|----------------|-----|-----|-----|
| 02  | June 2025 | Deadline 2     | RSK | RSK | EDF |
| 01  | Nov 2024  | DCO Submission | RSK | RSK | EDF |

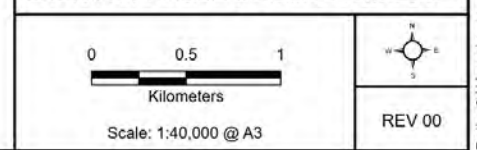
#### Springwell Solar Farm

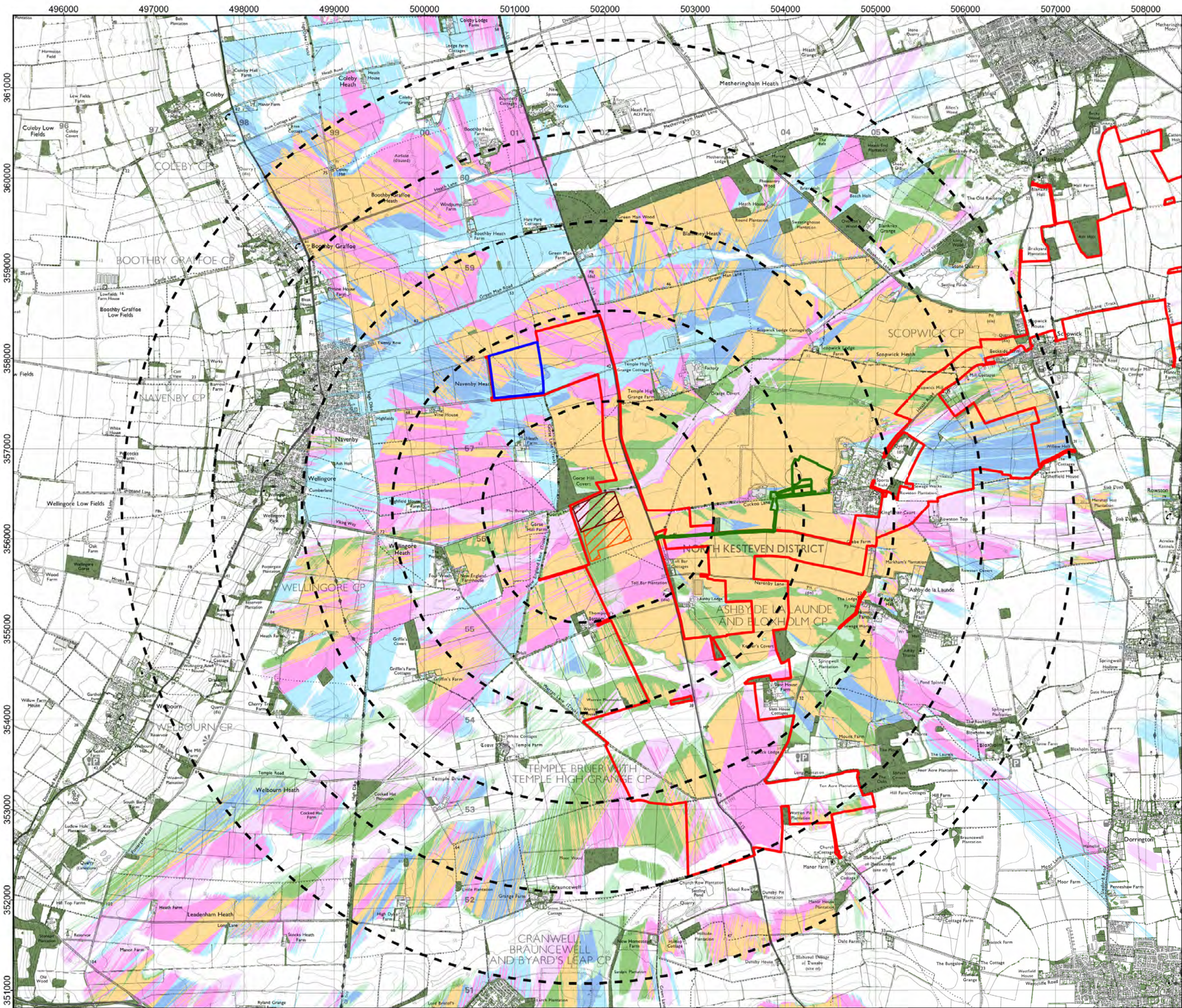


DOCUMENT:  
ENVIRONMENTAL STATEMENT  
VOLUME 2: FIGURES  
REGULATION 5(2)(a)

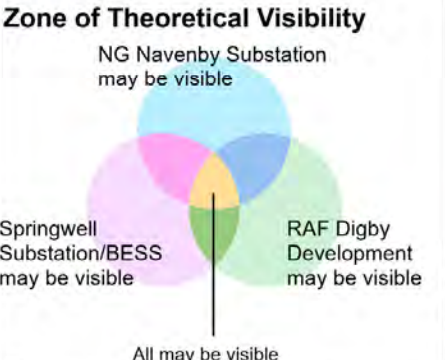
TITLE:  
Figure 16.6: Cumulative ZTV – Springwell,  
National Grid Navenby Substation and  
Navenby Heath BESS

PINS REFERENCE NUMBER:  
EN010149/APP/6.2.2 Deadline 2 June 2025





- Legend:**
- Order Limits
  - Springwell Substation Siting Area
  - Springwell BESS Siting Area
  - Distance Radii from Siting Area (1, 2, 3, 4, 5km)
  - NG Navenby Substation
  - RAF Digby Development
  - Woodland and vegetation higher than 2.5m



NOTES:  
Layout file: D012-dvrs-substation-BESS-LOA05m-3km.shp; D012-dvrs-Cumulative-Screening-VOM-3km.shp  
Terrain data: DEFRA-LOA05m-2022-derived-DEM-VOM-2m.shp  
Viewer's eye height: 2m above ground level  
Calculation grid size: 2m  
The screening is based upon computer generated Zone of Theoretical Visibility (ZTV) studies produced using the Viewshut routine in the Visibility Analysis plugin for QGIS.  
The areas shown are the maximum theoretical visibility, taking into account topography, principal woodlands and buildings. A digital surface model (DSM) has been derived from DEFRA 2022 2m DTM height data. Locations of buildings are taken from the OS Open Map Local dataset and overlaid from the EIA's Vegetation Object Model dataset. Heights of buildings and woodland are taken from DEFRA 2022 2m DSM height data.  
The actual extent of visibility on the ground will be less than that suggested by this plan.  
The ZTV includes an adjustment that allows for Earth's curvature and light reduction. It is based on a derived DSM and two m resolution.  
The ZTV does not show cable route corridors, boundary fencing and CCTV, inverter and transformers and associated compounds, National Grid Siting First Compound and additional 400kV towers.

Coordinate System: British National Grid  
Projection: Transverse Mercator  
Datum: OSGB 1936  
Units: Meter



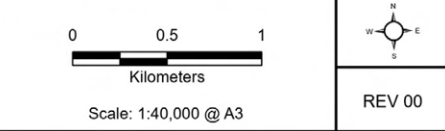
| Rev | Date     | Description    | Drn | Chk | App |
|-----|----------|----------------|-----|-----|-----|
| 01  | Nov 2024 | DCO Submission | RSK | RSK | EDF |

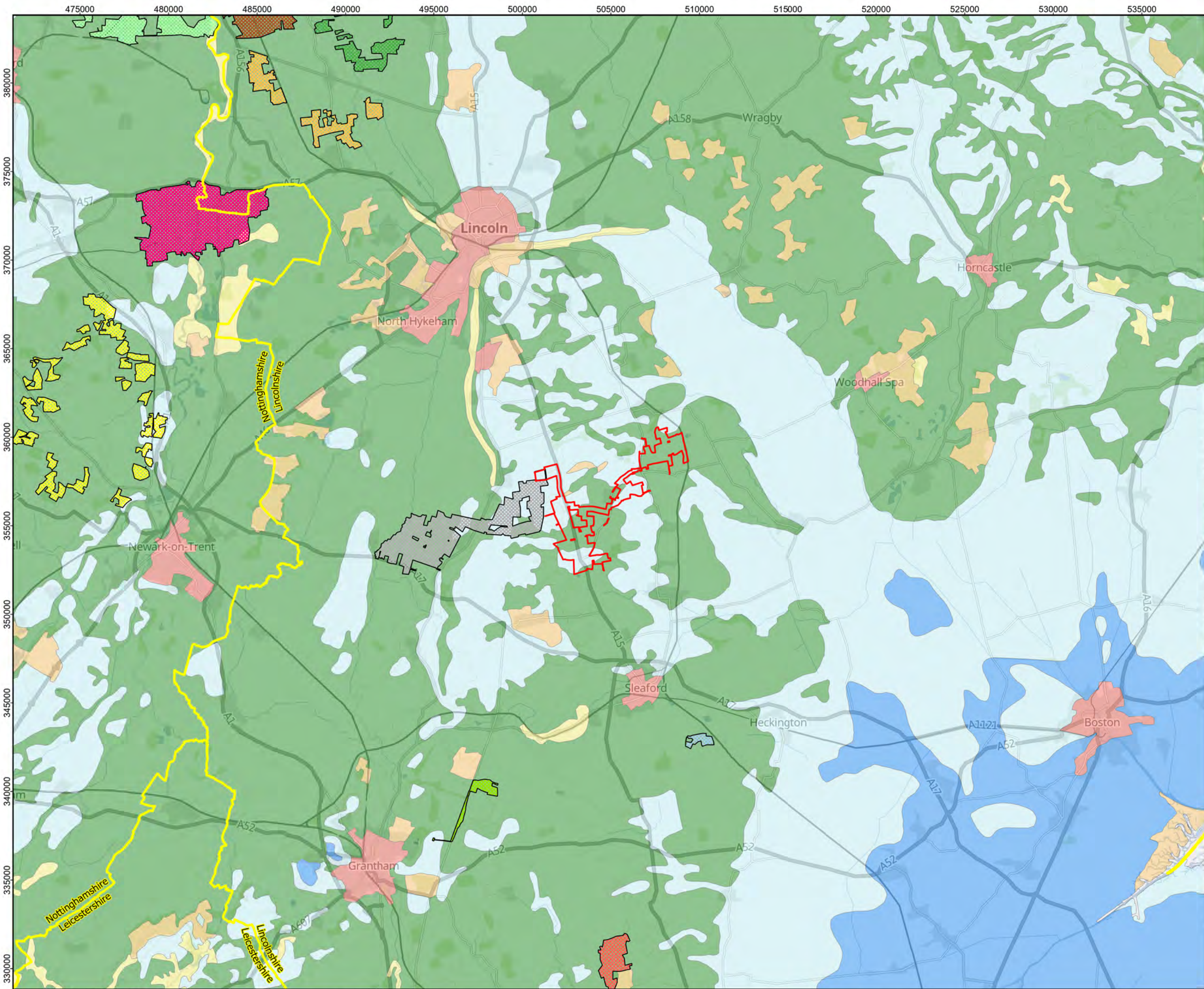
**Springwell Solar Farm**

**DOCUMENT:**  
ENVIRONMENTAL STATEMENT  
VOLUME 2: FIGURES  
REGULATION 5(2)(a)

**TITLE:**  
Figure 16.7: Cumulative ZTV – Springwell,  
National Grid Navenby Substation and RAF  
Digby Development

**PINS REFERENCE NUMBER:**  
EN010149/APP/6.2





**LEGEND:**

- Order Limits
- County Boundary
- Cottam Solar Project
- GNR Solar Park
- Gate Burton Solar Farm
- One Earth Solar Farm
- Steeple's Renewable Project
- Temple Oaks Renewable Energy Park
- West Burton Solar Project
- Burton Gorse Solar
- Welby Solar Farm
- Leoda Solar Farm
- Provisional Agricultural Land Classification
- Grade 1
- Grade 2
- Grade 3
- Grade 4
- Non Agricultural
- Urban

**NOTES:**  
Missing Fiskerton West Solar, Mareham Lane Solar, & Immingham Solar Farm  
Coordinate System: British National Grid  
Projection: Transverse Mercator  
Datum: OSGB 1936  
Units: Meter



|     |           |                              |     |     |     |
|-----|-----------|------------------------------|-----|-----|-----|
| 03  | June 2025 | Deadline 2                   | RSK | RSK | EDF |
| 02  | May 2025  | Leoda Solar Farm (EN0110016) | RSK | RSK | EDF |
| 01  | Nov 2024  | DCO Submission               | RSK | RSK | EDF |
| Rev | Date      | Description                  | Drm | Chk | App |

**Springwell Solar Farm**

**DOCUMENT: ENVIRONMENTAL STATEMENT  
VOLUME 2: FIGURES  
REGULATION 5(2)(a)**

**TITLE:  
FIGURE 16.8: BEST AND MOST VERSATILE  
(BMV) AGRICULTURAL LAND AND CUMULATIVE  
DEVELOPMENTS**

**PINS REFERENCE NUMBER:  
EN010149/APP/6.2.3**

0 2 4  
Kilometers  
Scale: 1:200,000 @ A3

REV 03

