

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/6.2.2

Revision 2

Deadline 1

June 2025

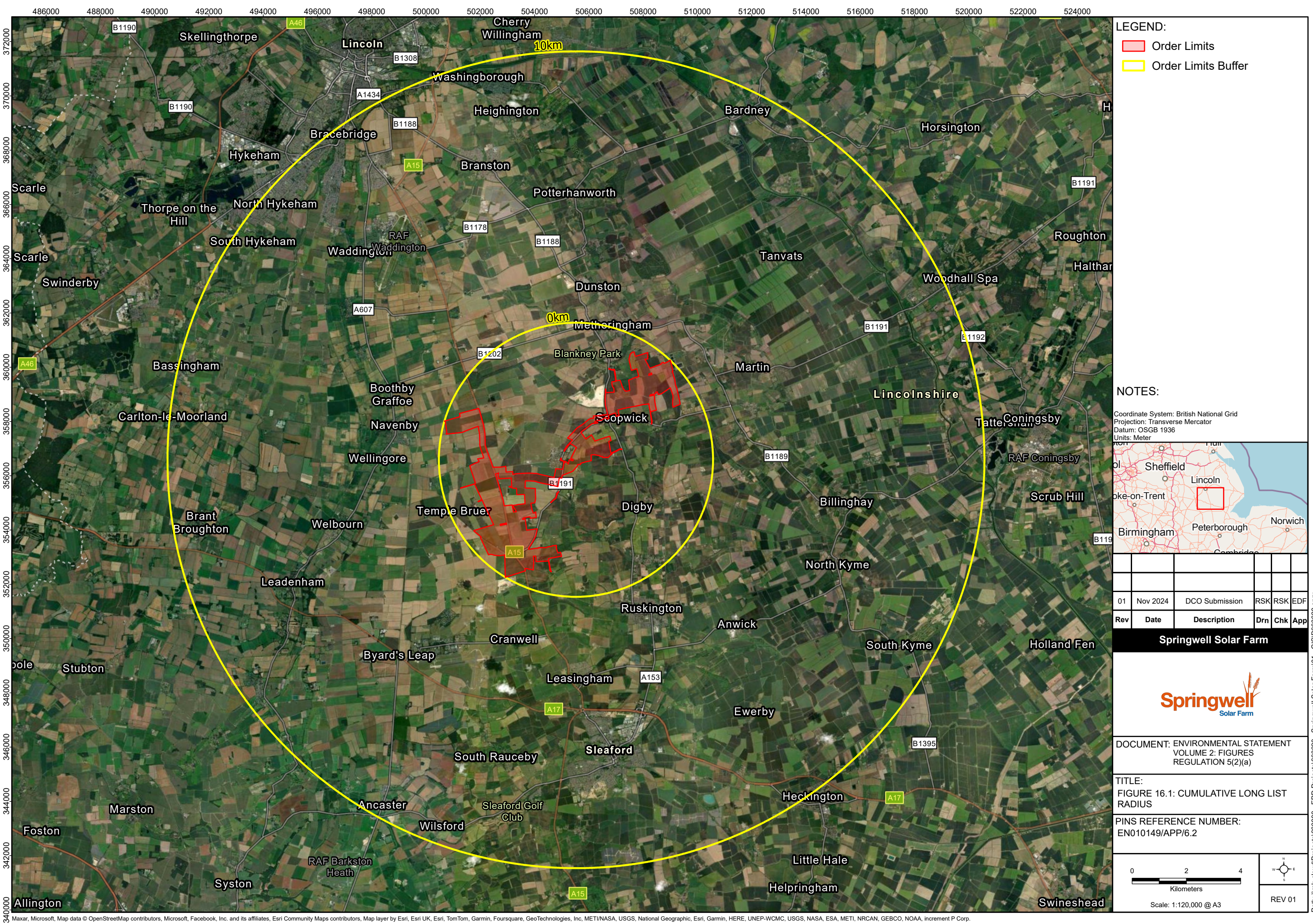
Springwell Energyfarm Ltd

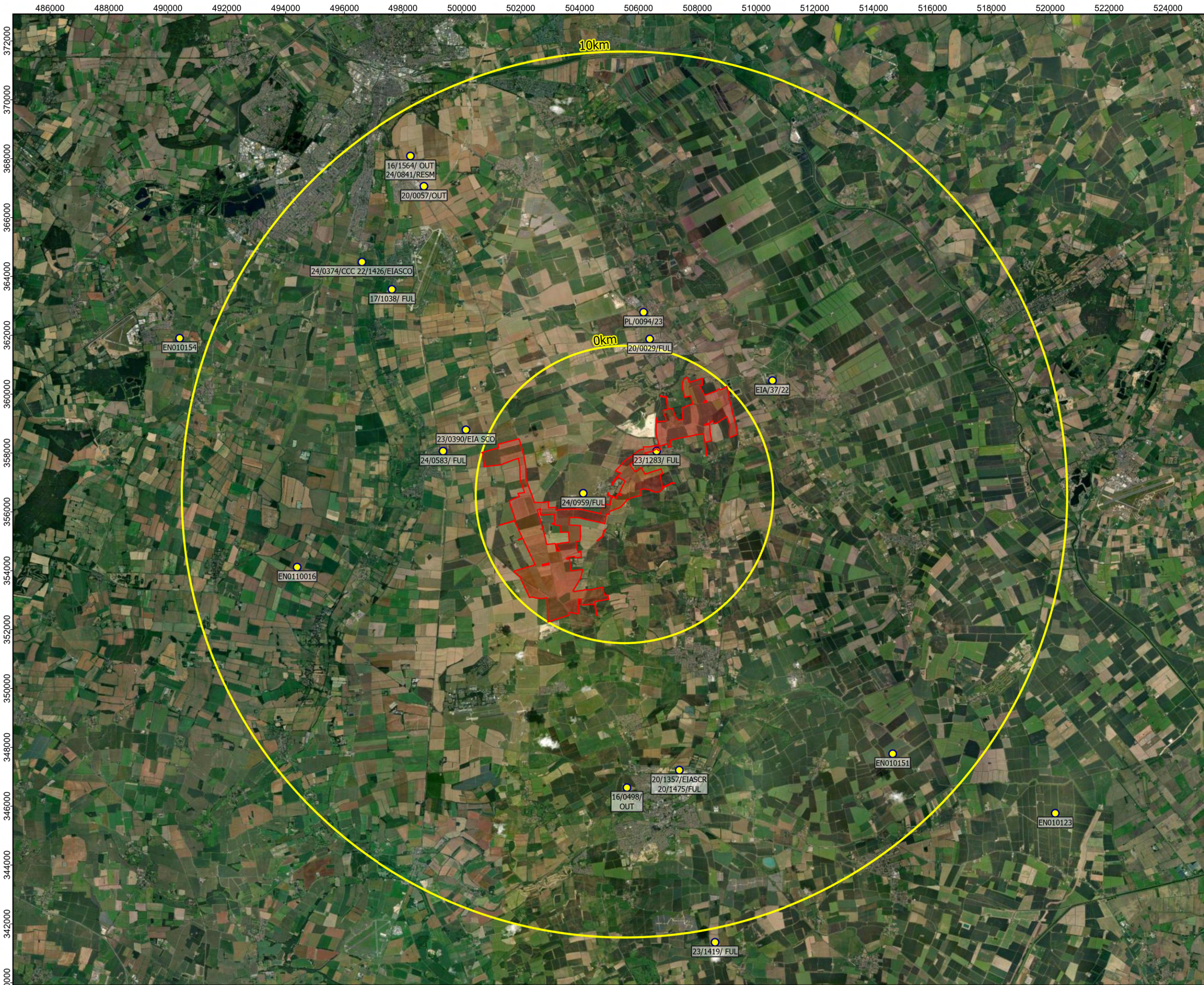


ES Volume 2: Figures

Chapter 16: Cumulative Effects

Drawing number	Revision number	Drawing title	Scale	Reason for revision
Figure 16.1	01	Cumulative Long List Radius	A3	No change made
Figure 16.2	02	Cumulative Short List Radius	A3	Updated to include EN0110016 Leoda Solar Farm
Figure 16.3	01	Cumulative ZTV – Springwell and National Grid Navenby Substation	A3	No change made
Figure 16.4	01	Cumulative ZTV – Springwell and Navenby Heath BESS	A3	No change made
Figure 16.5	01	Cumulative ZTV – Springwell and RAF Digby Development	A3	No change made
Figure 16.6	01	Cumulative ZTV – Springwell, National Grid Navenby Substation and Navenby Heath BESS	A3	No change made
Figure 16.7	01	Cumulative ZTV – Springwell, National Grid Navenby Substation and RAF Digby Development	A3	No change made
Figure 16.8	02	Best and Most Versatile (BMV) Agricultural Land and Cumulative Developments	A3	Updated to include EN0110016 Leoda Solar Farm





LEGEND:

- Order Limits
- Cumulative Developments
- Buffer

NOTES:

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



Rev	Date	Description	Drn	Chk	App
02	May 2025	Leoda Solar Farm (EN0110016)	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 16.2: CUMULATIVE SHORT
LIST RADIUS

PINS REFERENCE NUMBER:
EN010149/APP/6.2 Rev 2 - APP/6.2.2 -
June 25

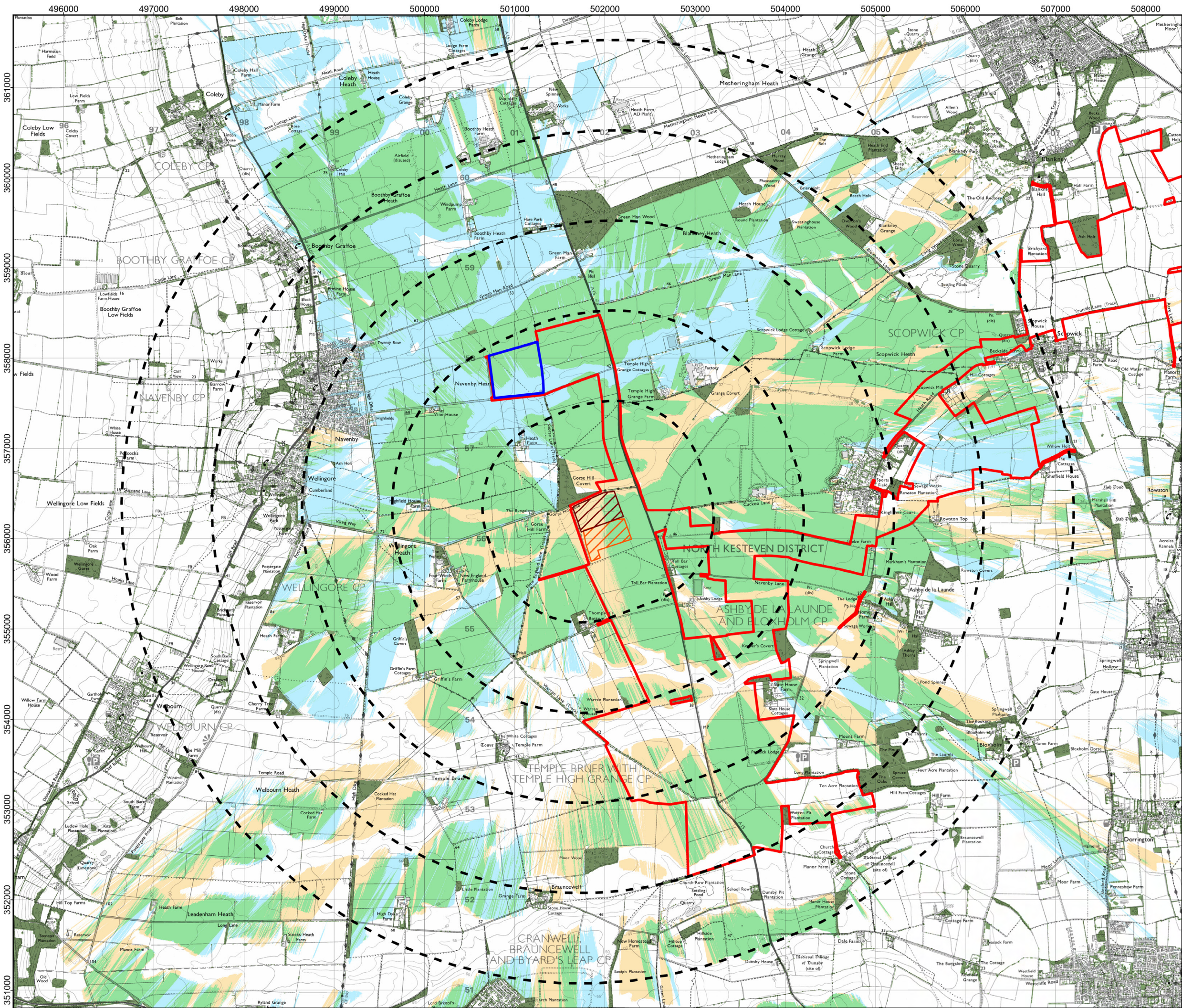
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Kilometers

Scale: 1:120,000 @ A3

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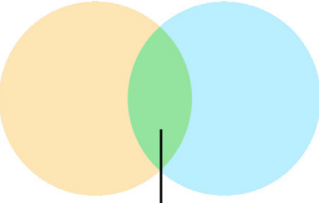


- Legend:**
- Order Limits
 - Springwell Substation Siting Area
 - Springwell BESS Siting Area
 - Distance Radii from Siting Area (1, 2, 3, 4, 5km)
 - NG Navenby Substation
 - Woodland and vegetation higher than 2.5m

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-Cumu-Screening-VOM-3km.shp
Terrain data: DEFRA-LIDAR-2022-derived DSM-VOM-2m.asc
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 routines 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	Drn	Chk	App
01	Nov 2024	DCO Submission	RSK	RSK	EDF

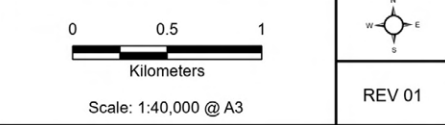
Springwell Solar Farm

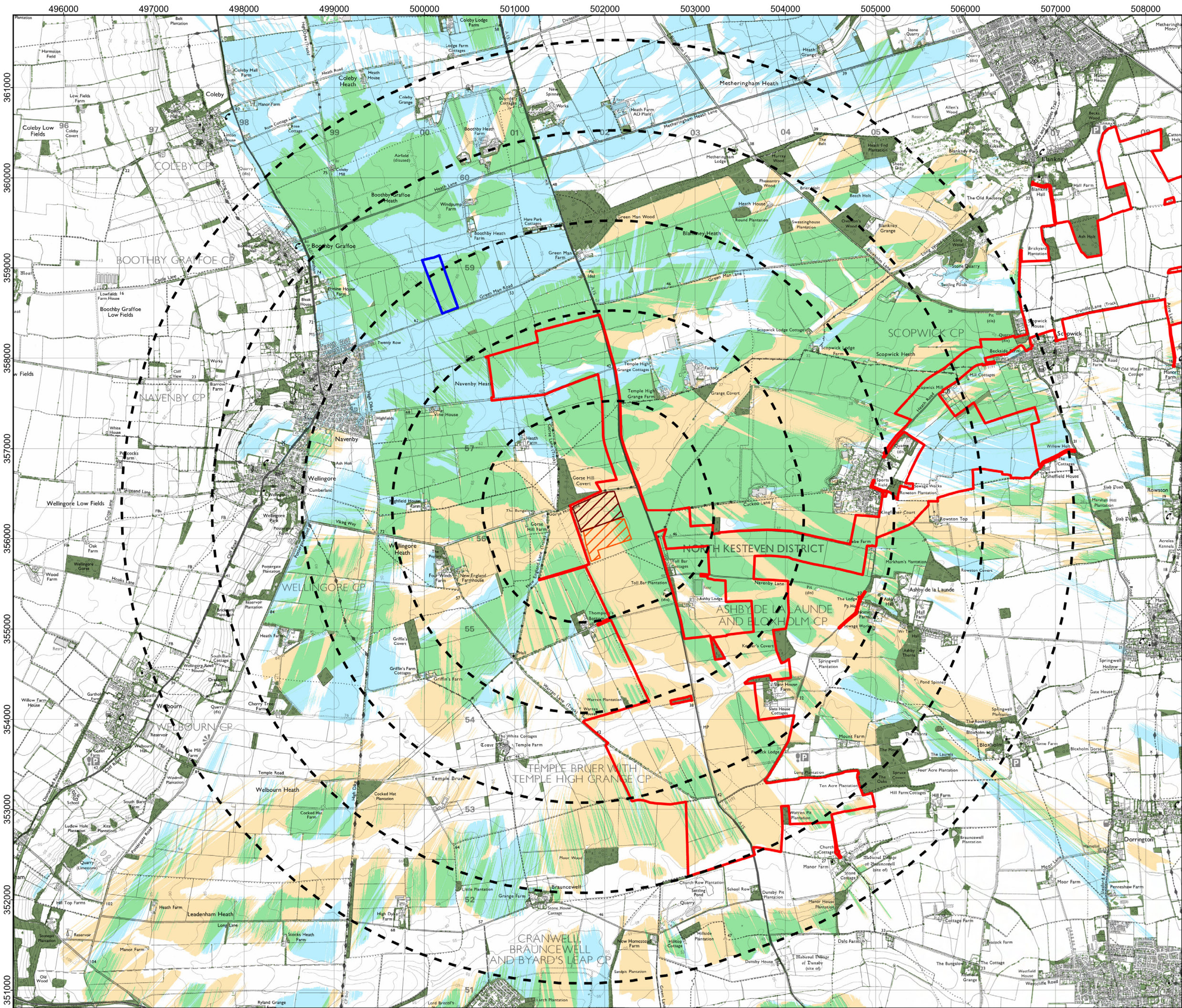


DOCUMENT:
ENVIRONMENTAL STATEMENT
VOLUME 2: FIGURES
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TITLE:
Figure 16.3: Cumulative ZTV – Springwell and National Grid Navenby Substation

PINS REFERENCE NUMBER:
EN010149/APP/6.2





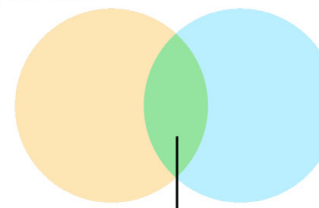
Legend:

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

Zone of Theoretical Visibility

Springwell Substation/BESS may be visible

Navenby Heath BESS may be visible



NOTES:
Layout file: D012-obvs-substation-BESS-LIDAR5m-3km.shp; D012-Obvs-Cumu-Screening-VOM-3km.shp
Terrain data: DEFRA-LIDAR-2022-derived DSM-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 routines 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	Drn	Chk	App
01	Nov 2024	DCO Submission	RSK	RSK	EDF

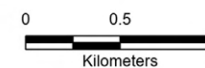
Springwell Solar Farm



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

TITLE:
Figure 16.4: Cumulative ZTV – Springwell and Navenby Heath BESS

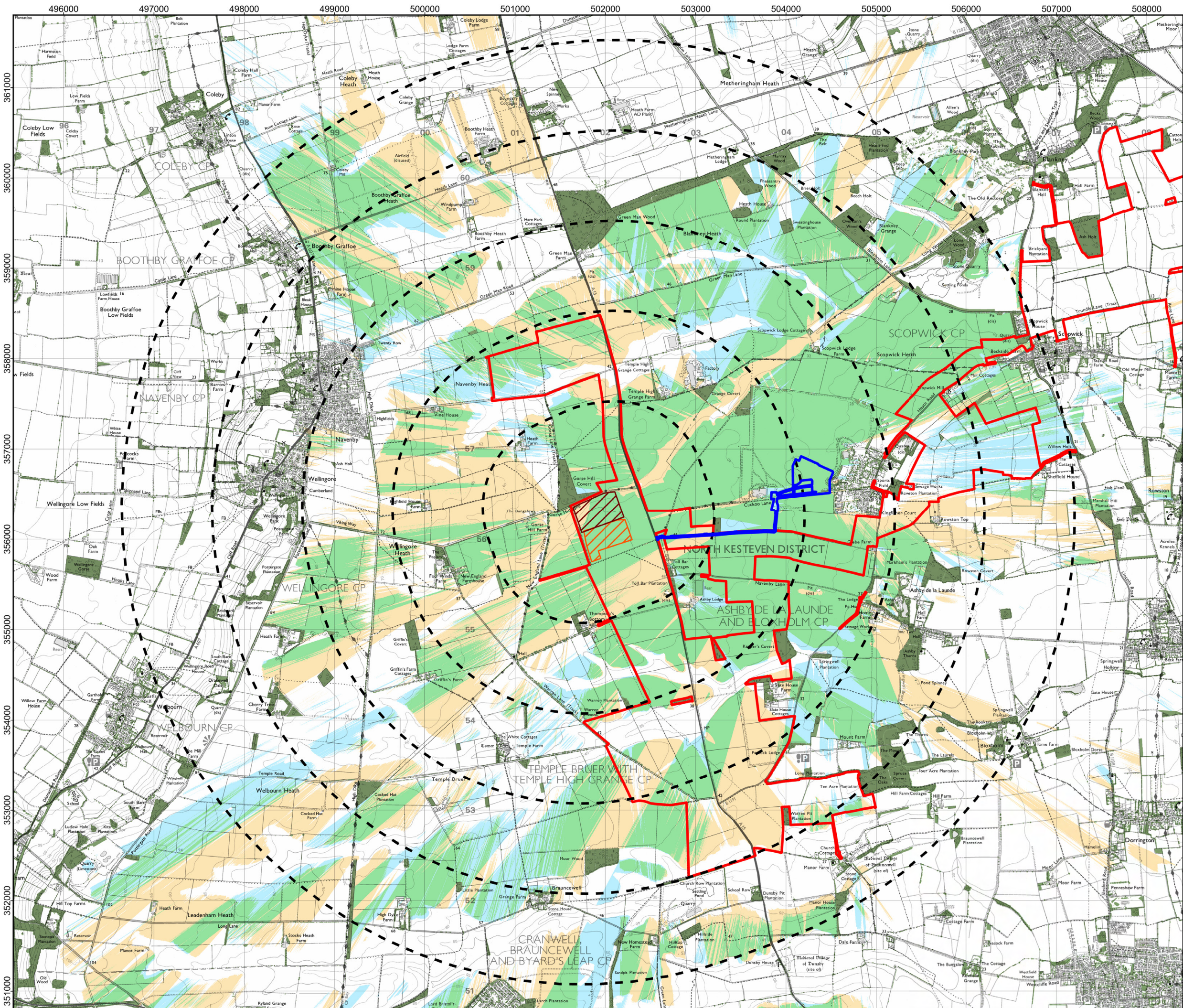
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EN010149/APP/6.2



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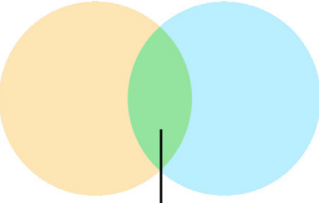


- Legend:**
- Order Limits
 - Springwell Substation Siting Area
 - Springwell BESS Siting Area
 - Distance Radii from Siting Area (1, 2, 3, 4, 5km)
 - RAF Digby Development
 - Woodland and vegetation higher than 2.5m

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-Cumu-Screening-VOM-3km.shp
Terrain data: DEFRA-LIDAR-2022-derived-DSM-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 routines 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



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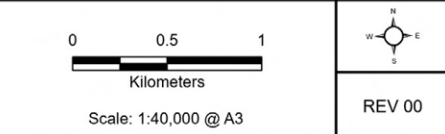
Springwell Solar Farm

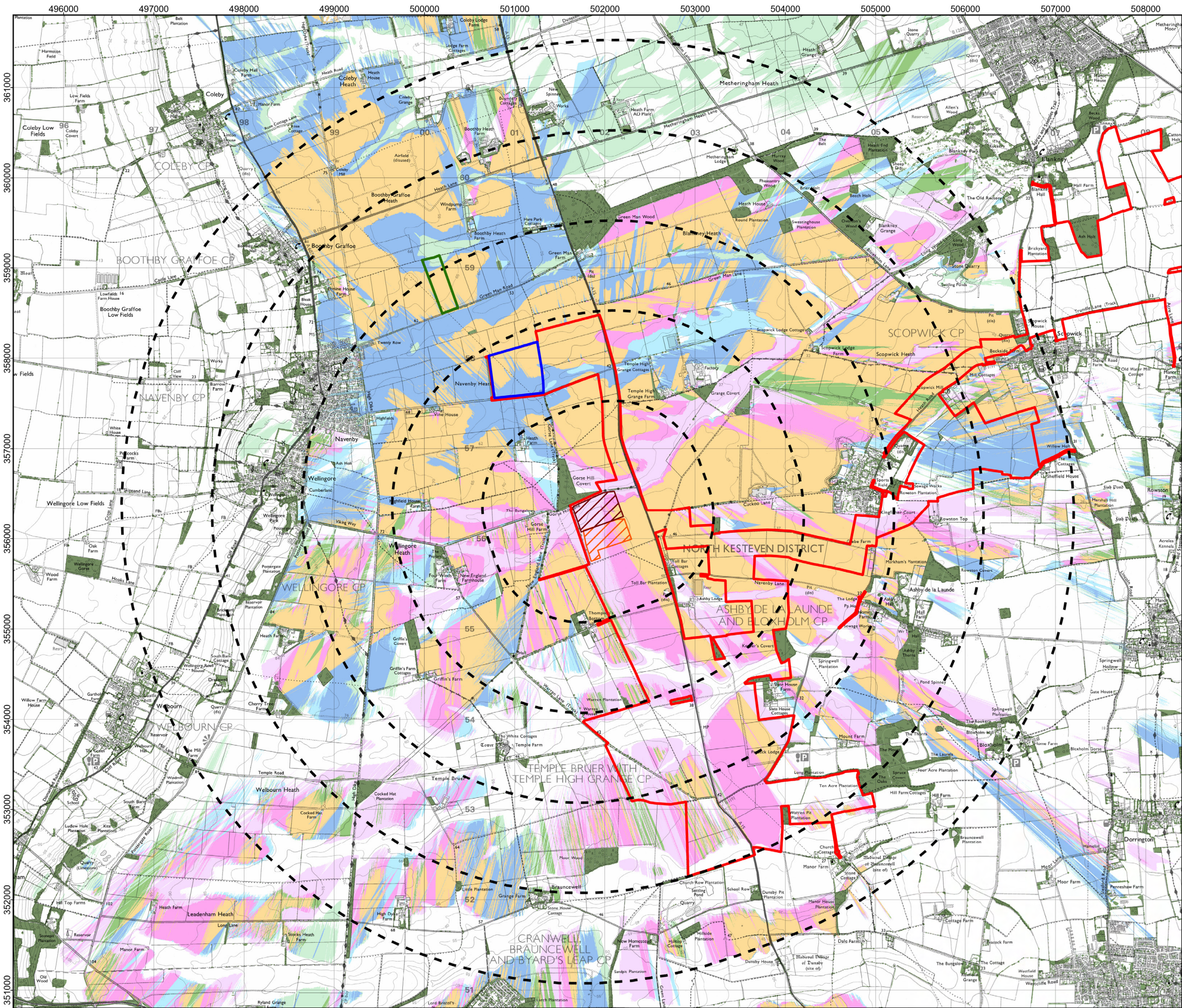


DOCUMENT:
ENVIRONMENTAL STATEMENT
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TITLE:
Figure 16.5: Cumulative ZTV – Springwell and RAF Digby Development

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

NG Navenby Substation may be visible

Springwell Substation/BESS may be visible

Navenby Heath BESS may be visible

All may be visible

NOTES:
Layout file: D012-obvs-substation-BESS-LDAR5m-3km.shp; D012-Obvs-Cumu-Screening VOM 3km.shp
Input data: DEFRA-LEADS 2022-derived DSM VOM-2m asc
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 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 overlaid from the EA's Vegetation Object Model dataset. Heights of buildings and woodlands 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



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Rev	Date	Description	Drn	Chk	App

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

PINS REFERENCE NUMBER:
EN010149/APP/6.2

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Kilometers

Scale: 1:40,000 @ A3

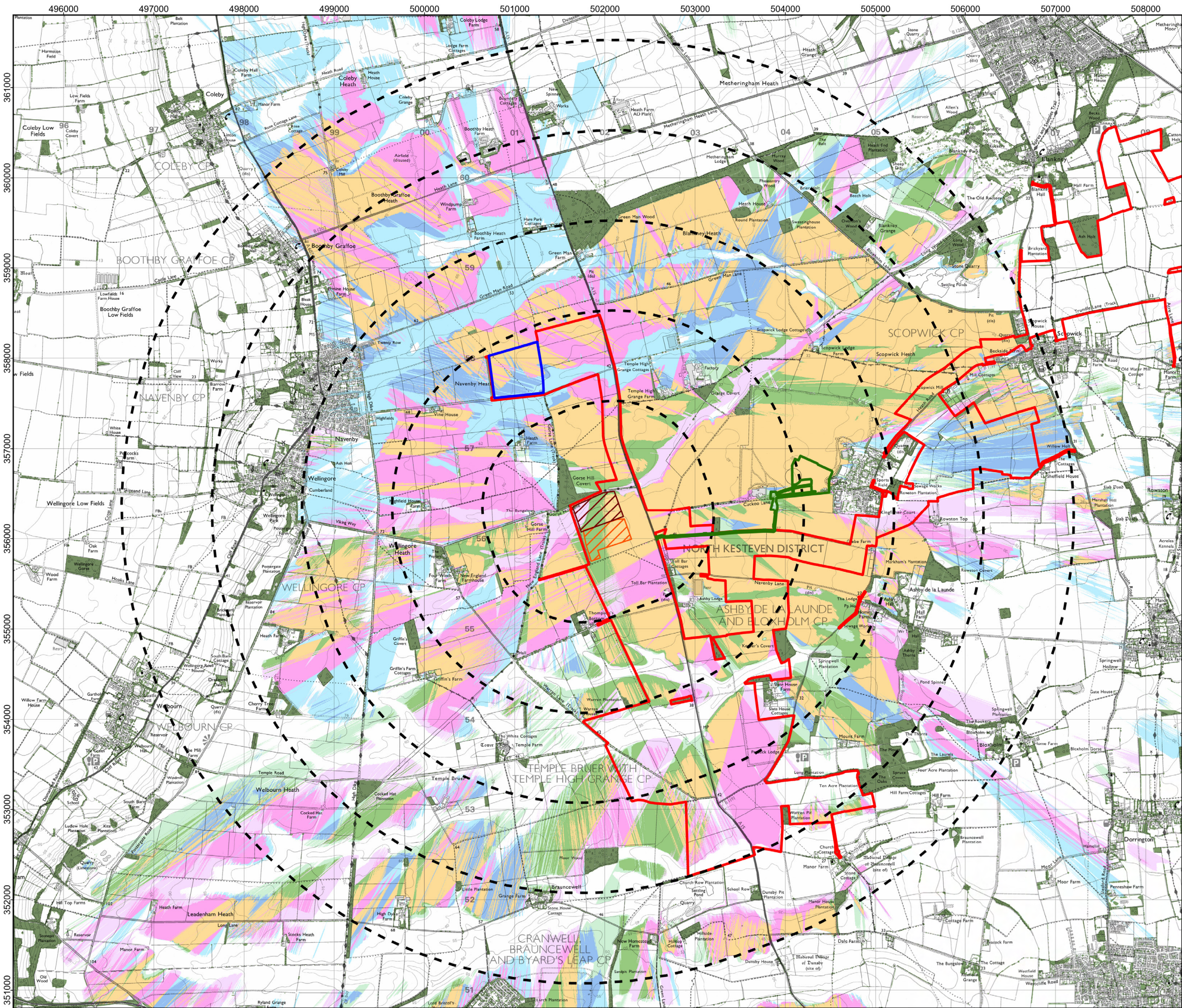
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Legend:

- 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

Zone of Theoretical Visibility

NG Navenby Substation may be visible

Springwell Substation/BESS may be visible

RAF Digby Development may be visible

All may be visible

NOTES:
Layout file: D012-obvs-substation-BESS-LDAR5m-3km.shp; D012-Obvs-Cumu-Screening VOM 3km.shp
Terrain data: DEFRA-LEADS 2022-derived DSM 2m asc
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 Viewshed routine in the Visibility Analysis plugin for QGIS.
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Projection: Transverse Mercator
Datum: OSGB 1936
Units: Meter



01	Nov 2024	DCO Submission	RSK	RSK	EDF
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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

00.51

Kilometers

Scale: 1:40,000 @ A3

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