







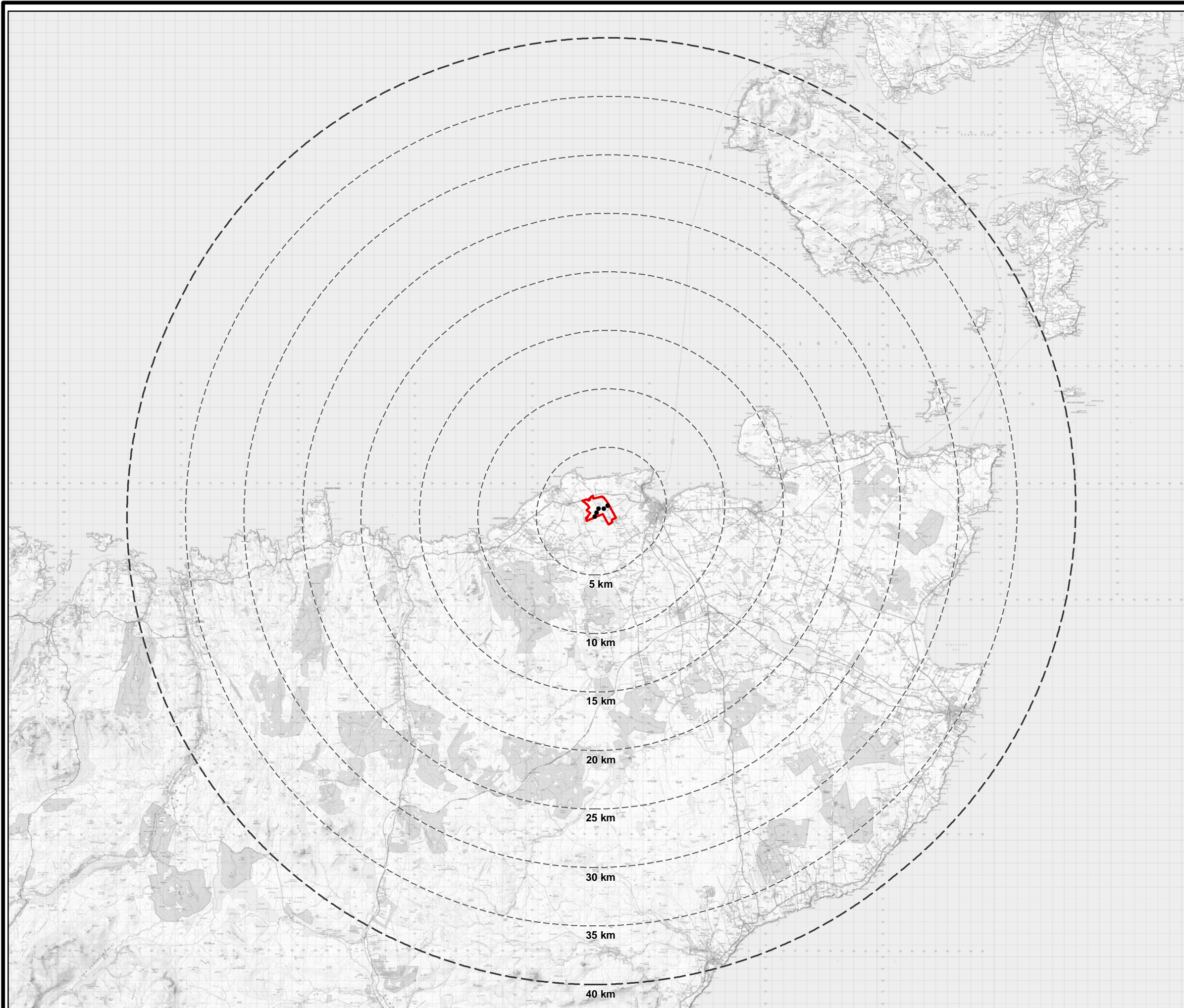
# CAIRNMORE HILL WIND FARM

## FIGURE 5.1.1

LANDSCAPE AND VISUAL IMPACT  
ASSESSMENT STUDY AREA

© CROWN COPYRIGHT AND DATABASE RIGHTS  
2022 ORDNANCE SURVEY 0100031673

-  Planning application boundary
-  Turbine layout (PSCOhof060)
-  5km intervals from outermost turbines
-  40km LVIA study area



Data source: RES, LUC

LAYOUT DWG

LAYOUT NO.  
PSCOhof060

DRAWING NUMBER

FIG5-1-1\_11524\_r0\_LVIAStudyArea\_A3L

SCALE - 1:320,000 @ A3

LANDSCAPE AND VISUAL IMPACT  
ASSESSMENT, 2022

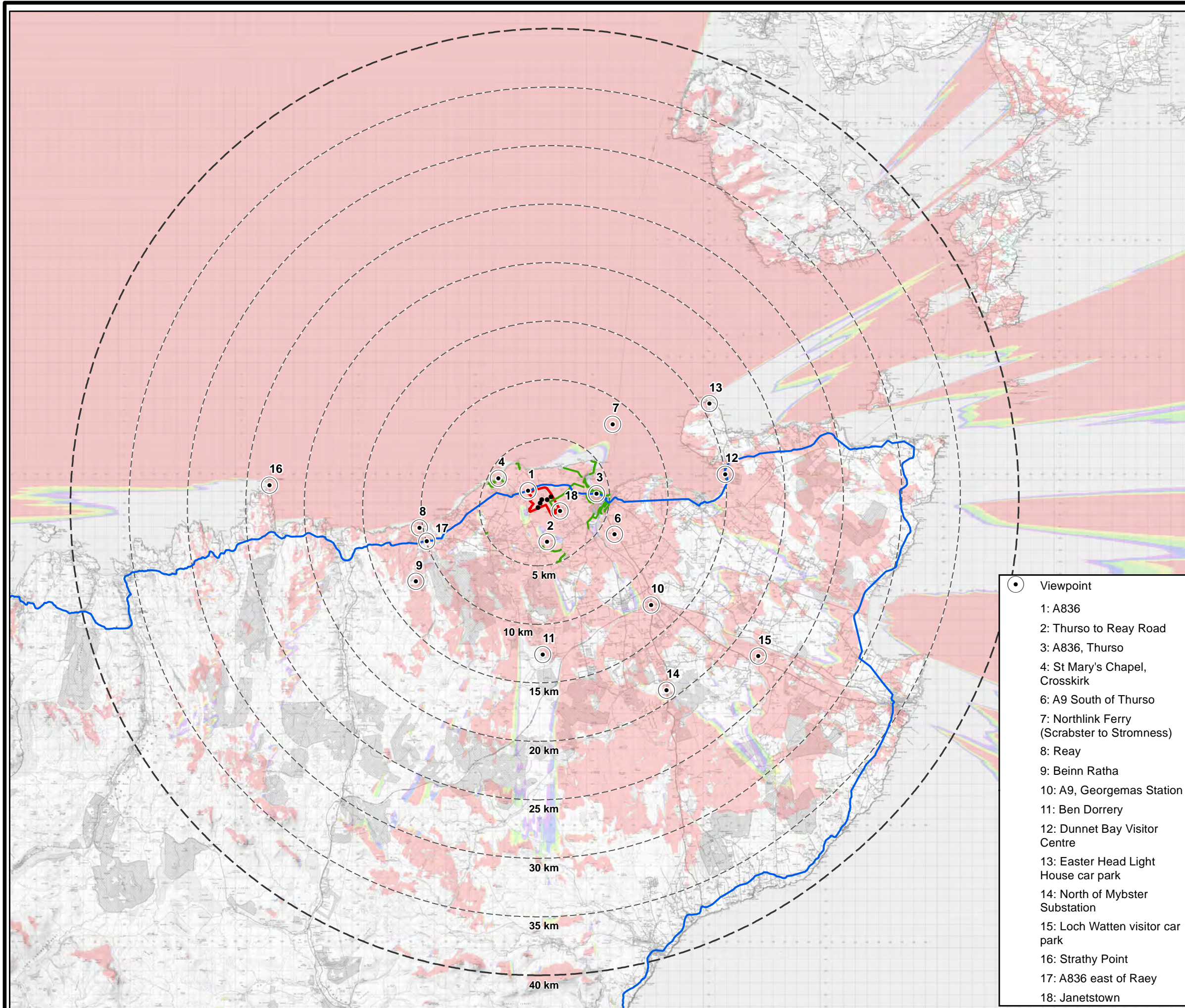
THIS DRAWING IS THE PROPERTY OF RENEWABLE ENERGY  
SYSTEMS LTD. AND NO REPRODUCTION MAY BE MADE IN  
WHOLE OR IN PART WITHOUT PERMISSION

# CAIRNMORE HILL WIND FARM

## FIGURE 5.1.2a

BLADE TIP HEIGHT (138.5M) ZONE  
OF THEORETICAL VISIBILITY AND  
VIEWPOINT LOCATIONS

© CROWN COPYRIGHT AND DATABASE RIGHTS  
2022 ORDNANCE SURVEY 0100031673



- Planning application boundary
- Turbine layout (PSCOhof060)
- 5km intervals from outer turbines
- 40km LVIA study area
- North Coast 500
- Core Path within 5km of turbines

### Theoretical blade tip visibility (138.5m)

- 1 turbine visible
- 2 turbines visible
- 3 turbines visible
- 4 turbines visible
- 5 turbines visible

### Notes:

The ZTV is calculated to turbine tip height (138.5m) from a viewing height of 2m above ground level. The terrain model assumes bare ground. The data for a 45km buffer around the turbines is derived from OS Terrain 5 height data (obtained from EMapSite in July 2022). The data for extents beyond 45km is derived from OS Terrain 50 height data (obtained from Ordnance Survey in July 2019). Earth curvature and atmospheric refraction have been taken into account. The ZTV was calculated using ArcMap 10.8.1 software.



Data source: RES, LUC, SNH, NC500

LAYOUT DWG: PSCOhof060

DRAWING NUMBER: FIG5-1-2a\_11524\_r0\_TipZTV\_A3L

SCALE - 1:320,000 @ A3

LANDSCAPE AND VISUAL IMPACT  
ASSESSMENT, 2022

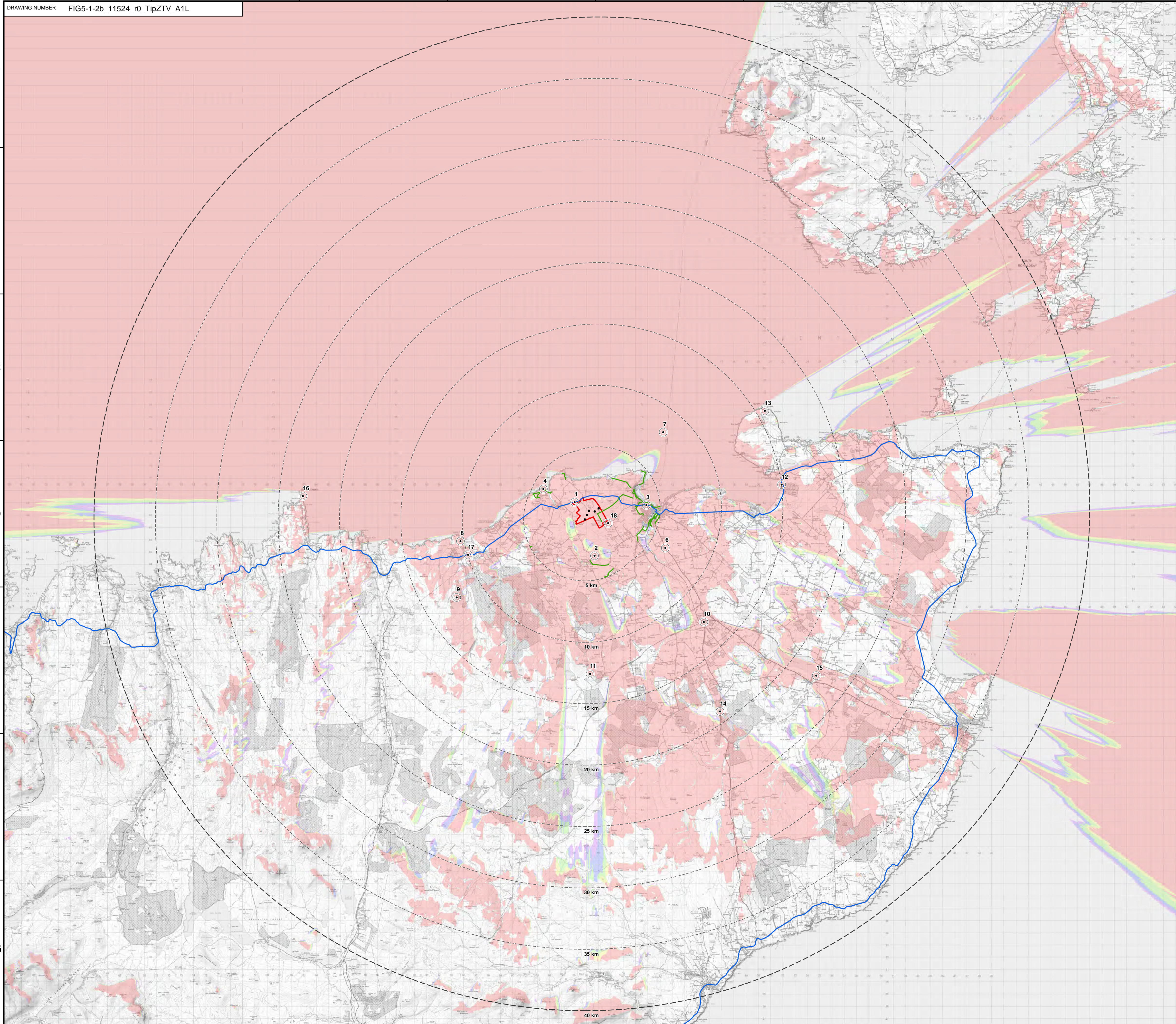
THIS DRAWING IS THE PROPERTY OF RENEWABLE ENERGY  
SYSTEMS LTD. AND NO REPRODUCTION MAY BE MADE IN  
WHOLE OR IN PART WITHOUT PERMISSION

- Viewpoint
- 1: A836
- 2: Thurso to Reay Road
- 3: A836, Thurso
- 4: St Mary's Chapel, Crosskirk
- 6: A9 South of Thurso
- 7: Northlink Ferry (Scrabster to Stromness)
- 8: Reay
- 9: Beinn Ratha
- 10: A9, Georgemas Station
- 11: Ben Dorrery
- 12: Dunnet Bay Visitor Centre
- 13: Easter Head Light House car park
- 14: North of Mybster Substation
- 15: Loch Watten visitor car park
- 16: Strathy Point
- 17: A836 east of Raey
- 18: Janetstown

DRAWING NUMBER FIG5-1-2b\_11524\_r0\_TipZTV\_A1L

© CROWN COPYRIGHT, ALL RIGHTS RESERVED.  
2022 LICENCE NUMBER 0100031673

A  
B  
C  
D  
E  
F  
G



- Planning application boundary
- Turbine layout (PSCOhof060)
- 5km intervals from outer turbines
- 40km LVIA study area
- North Coast 500
- Core Path within 5km of turbines
- Viewpoint
- 1: A836
- 2: Thurso to Reay Road
- 3: A836, Thurso
- 4: St Mary's Chapel, Crosskirk
- 6: A9 South of Thurso
- 7: Northlink Ferry (Scrabster to Stromness)
- 8: Reay
- 9: Beinn Ratha
- 10: A9, Georgemas Station
- 11: Ben Dorrery
- 12: Dunnet Bay Visitor Centre
- 13: Easter Head Light House car park
- 14: North of Mybster Substation
- 15: Loch Watten visitor car park
- 16: Strathy Point
- 17: A836 east of Raey
- 18: Janetstown

- Theoretical blade tip visibility (138.5m)**
- 1 turbine visible
  - 2 turbines visible
  - 3 turbines visible
  - 4 turbines visible
  - 5 turbines visible

**Notes:**  
The ZTV is calculated to turbine tip height (138.5m) from a viewing height of 2m above ground level. The terrain model assumes bare ground. The data for a 45km buffer around the turbines is derived from OS Terrain 5 height data (obtained from EMapSite in July 2022). The data for extents beyond 45km is derived from OS Terrain 50 height data (obtained from Ordnance Survey in July 2019). Earth curvature and atmospheric refraction have been taken into account. The ZTV was calculated using ArcMap 10.8.1 software.



|            |       |            |            |      |                |
|------------|-------|------------|------------|------|----------------|
| 1          | RW    | 2022-02-18 | APPD       | DATE | FIRST ISSUE    |
| ISSUE      | DRAWN | DATE       | APPD       | DATE | REVISION NOTES |
| LAYOUT DWG |       |            | LAYOUT NO. |      |                |

DRAWING NUMBER  
**FIG5-1-2b\_11524\_r0\_TipZTV\_A1L**

COORDS British National Grid

PURPOSE EIA REPORT AND APPLICATION FOR CONSENT 2022

SCALE 1:150,000 ORIGINAL PLOT SIZE A1

PROJECT TITLE  
**LANDSCAPE AND VISUAL IMPACT ASSESSMENT, 2022**

DRAWING TITLE  
**FIGURE 5.1.2b - BLADE TIP HEIGHT (138.5m) ZONE OF THEORETICAL VISIBILITY AND VIEWPOINT LOCATIONS**

THIS DRAWING IS THE PROPERTY OF RENEWABLE ENERGY SYSTEMS LIMITED AND NO REPRODUCTION MAY BE MADE IN WHOLE OR IN PART WITHOUT PERMISSION



BEAUFORT COURT  
EGG FARM LANE  
KINGS LANGLEY  
HERTFORDSHIRE  
WD4 8LR  
TEL +44 (0) 1923 299200

# CAIRNMORE HILL WIND FARM

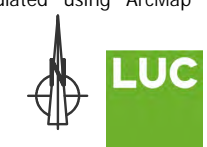
## FIGURE 5.1.3a

TURBINE HUB HEIGHT (80M)  
ZONE OF THEORETICAL  
VISIBILITY AND VIEWPOINT  
LOCATIONS

© CROWN COPYRIGHT AND DATABASE RIGHTS  
2022 ORDNANCE SURVEY 0100031673

- Planning application boundary
  - Turbine layout (PSCOhof060)
  - 5km intervals from outer turbines
  - 40km LVIA study area
  - North Coast 500
  - Core Path within 5km of turbines
- Theoretical wind farm visibility (hub=80m)**
- 1 turbine visible
  - 2 turbines visible
  - 3 turbines visible
  - 4 turbines visible
  - 5 turbines visible

Notes:  
The ZTV is calculated to turbine hub height (80m) from a viewing height of 2m above ground level. The terrain model assumes bare ground. The data for a 45km buffer around the turbines is derived from OS Terrain 5 height data (obtained from EMapSite in July 2022). The data for extents beyond 45km is derived from OS Terrain 50 height data (obtained from Ordnance Survey in July 2019). Earth curvature and atmospheric refraction have been taken into account. The ZTV was calculated using ArcMap 10.8.1 software.



Data source: RES, LUC, SNH, NC500

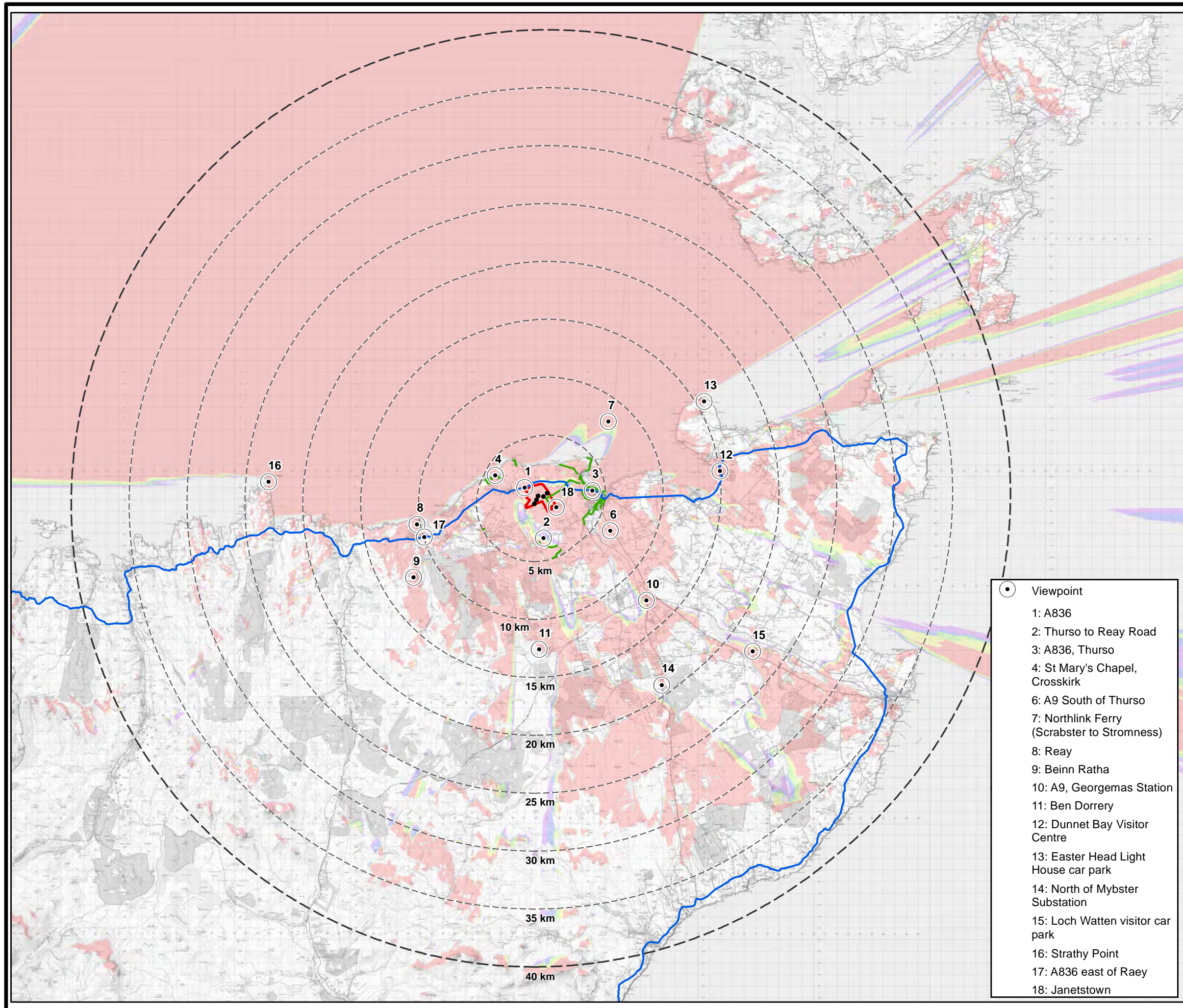
LAYOUT DWG: - T.LAYOUT NO: PSCOhof060

DRAWING NUMBER: FIG5-1-3a\_11524\_r0\_HubZTV\_A3L

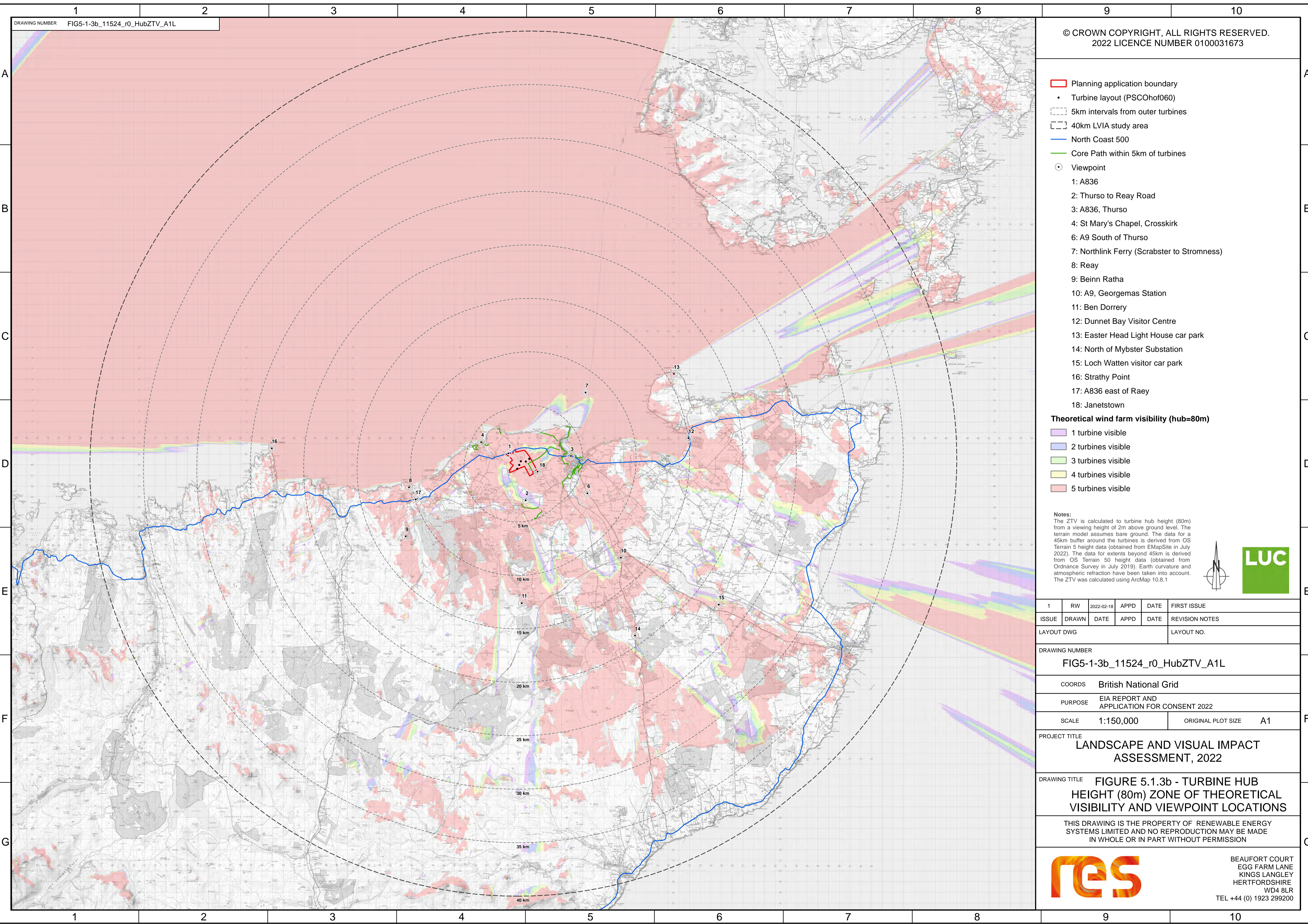
SCALE - 1:320,000 @ A3

LANDSCAPE AND VISUAL IMPACT  
ASSESSMENT, 2022

THIS DRAWING IS THE PROPERTY OF RENEWABLE ENERGY SYSTEMS LTD. AND NO REPRODUCTION MAY BE MADE IN WHOLE OR IN PART WITHOUT PERMISSION



- Viewpoint
- 1: A836
- 2: Thurso to Reay Road
- 3: A836, Thurso
- 4: St Mary's Chapel, Crosskirk
- 6: A9 South of Thurso
- 7: Northlink Ferry (Scrabster to Stromness)
- 8: Reay
- 9: Beinn Ratha
- 10: A9, Geogemas Station
- 11: Ben Dorrery
- 12: Dunnet Bay Visitor Centre
- 13: Easter Head Light House car park
- 14: North of Mybster Substation
- 15: Loch Watten visitor car park
- 16: Strathy Point
- 17: A836 east of Raey
- 18: Janetstown



- Planning application boundary
- Turbine layout (PSCOhof060)
- 5km intervals from outer turbines
- 40km LVIA study area
- North Coast 500
- Core Path within 5km of turbines
- Viewpoint
  - 1: A836
  - 2: Thurso to Reay Road
  - 3: A836, Thurso
  - 4: St Mary's Chapel, Crosskirk
  - 6: A9 South of Thurso
  - 7: Northlink Ferry (Scrabster to Stromness)
  - 8: Reay
  - 9: Beinn Ratha
  - 10: A9, Georgemas Station
  - 11: Ben Dorrery
  - 12: Dunnet Bay Visitor Centre
  - 13: Easter Head Light House car park
  - 14: North of Mybster Substation
  - 15: Loch Watten visitor car park
  - 16: Strathy Point
  - 17: A836 east of Raey
  - 18: Janetstown

- Theoretical wind farm visibility (hub=80m)**
- 1 turbine visible
  - 2 turbines visible
  - 3 turbines visible
  - 4 turbines visible
  - 5 turbines visible

**Notes:**  
The ZTV is calculated to turbine hub height (80m) from a viewing height of 2m above ground level. The terrain model assumes bare ground. The data for a 45km buffer around the turbines is derived from OS Terrain 5 height data (obtained from EMapSite in July 2022). The data for extents beyond 45km is derived from OS Terrain 50 height data (obtained from Ordnance Survey in July 2019). Earth curvature and atmospheric refraction have been taken into account. The ZTV was calculated using ArcMap 10.8.1



|            |       |            |      |            |                |
|------------|-------|------------|------|------------|----------------|
| 1          | RW    | 2022-02-18 | APPD | DATE       | FIRST ISSUE    |
| ISSUE      | DRAWN | DATE       | APPD | DATE       | REVISION NOTES |
| LAYOUT DWG |       |            |      | LAYOUT NO. |                |

DRAWING NUMBER  
**FIG5-1-3b\_11524\_r0\_HubZTV\_A1L**

COORDS **British National Grid**

PURPOSE **EIA REPORT AND APPLICATION FOR CONSENT 2022**

SCALE **1:150,000** ORIGINAL PLOT SIZE **A1**

PROJECT TITLE  
**LANDSCAPE AND VISUAL IMPACT ASSESSMENT, 2022**

DRAWING TITLE  
**FIGURE 5.1.3b - TURBINE HUB HEIGHT (80m) ZONE OF THEORETICAL VISIBILITY AND VIEWPOINT LOCATIONS**

THIS DRAWING IS THE PROPERTY OF RENEWABLE ENERGY SYSTEMS LIMITED AND NO REPRODUCTION MAY BE MADE IN WHOLE OR IN PART WITHOUT PERMISSION



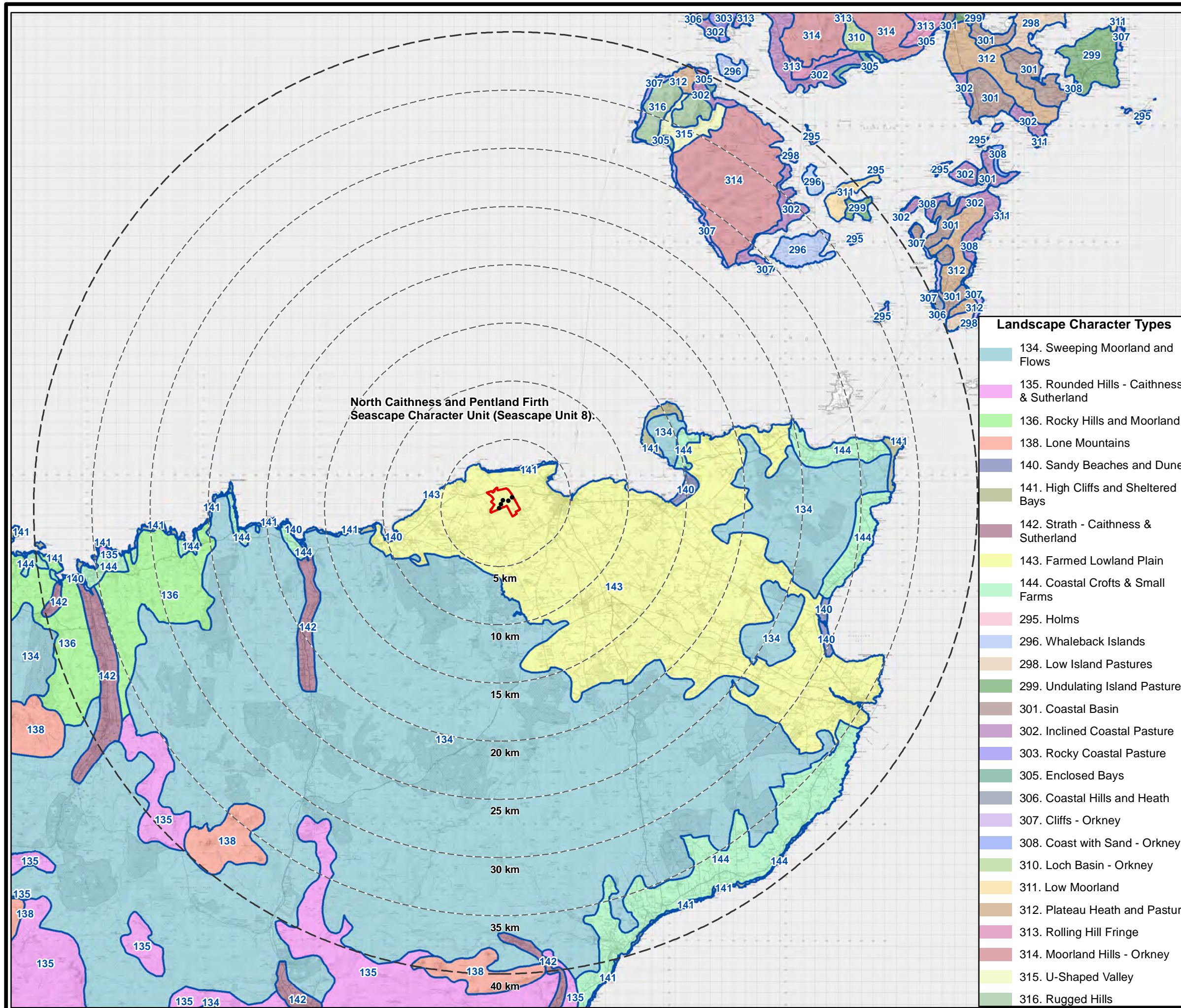
BEAUFORT COURT  
EGG FARM LANE  
KINGS LANGLEY  
HERTFORDSHIRE  
WD4 8LR  
TEL +44 (0) 1923 299200



# CAIRNMORE HILL WIND FARM

## FIGURE 5.1.4

LANDSCAPE CHARACTER TYPES



### Landscape Character Types

- 134. Sweeping Moorland and Flows
- 135. Rounded Hills - Caithness & Sutherland
- 136. Rocky Hills and Moorland
- 138. Lone Mountains
- 140. Sandy Beaches and Dunes
- 141. High Cliffs and Sheltered Bays
- 142. Strath - Caithness & Sutherland
- 143. Farmed Lowland Plain
- 144. Coastal Crofts & Small Farms
- 295. Holms
- 296. Whaleback Islands
- 298. Low Island Pastures
- 299. Undulating Island Pasture
- 301. Coastal Basin
- 302. Inclined Coastal Pasture
- 303. Rocky Coastal Pasture
- 305. Enclosed Bays
- 306. Coastal Hills and Heath
- 307. Cliffs - Orkney
- 308. Coast with Sand - Orkney
- 310. Loch Basin - Orkney
- 311. Low Moorland
- 312. Plateau Heath and Pasture
- 313. Rolling Hill Fringe
- 314. Moorland Hills - Orkney
- 315. U-Shaped Valley
- 316. Rugged Hills

© CROWN COPYRIGHT AND DATABASE RIGHTS  
2022 ORDNANCE SURVEY 0100031673

- Planning application boundary
- Turbine layout (PSCOhof060)
- 5km intervals from outermost turbines
- 40km LVIA study area
- Landscape Character Type



Data source: RES, LUC, SNH  
LAYOUT DWG: -  
LAYOUT NO: PSCOhof060

DRAWING NUMBER: FIG5-1-4\_11524\_r0\_LCTs\_A3L

SCALE - 1:320,000 @ A3

### LANDSCAPE AND VISUAL IMPACT ASSESSMENT, 2022

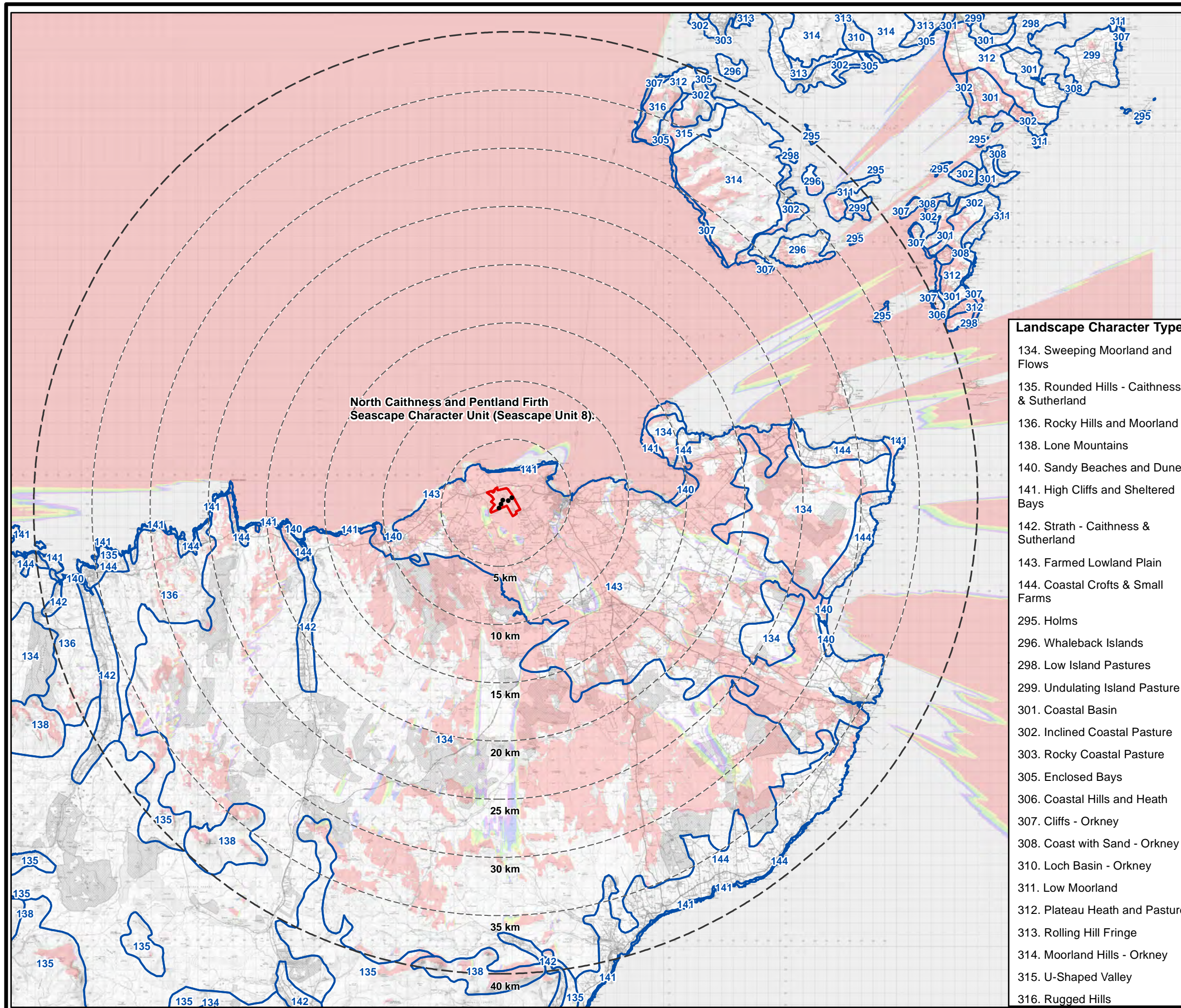
THIS DRAWING IS THE PROPERTY OF RENEWABLE ENERGY SYSTEMS LTD. AND NO REPRODUCTION MAY BE MADE IN WHOLE OR IN PART WITHOUT PERMISSION



# CAIRNMORE HILL WIND FARM

## FIGURE 5.1.5

LANDSCAPE CHARACTER TYPES WITH BLADE TIP HEIGHT (138.5M) ZONE OF THEORETICAL VISIBILITY



North Caithness and Pentland Firth Seascape Character Unit (Seascape Unit 8)

### Landscape Character Types

- 134. Sweeping Moorland and Flows
- 135. Rounded Hills - Caithness & Sutherland
- 136. Rocky Hills and Moorland
- 138. Lone Mountains
- 140. Sandy Beaches and Dunes
- 141. High Cliffs and Sheltered Bays
- 142. Strath - Caithness & Sutherland
- 143. Farmed Lowland Plain
- 144. Coastal Crofts & Small Farms
- 295. Holms
- 296. Whaleback Islands
- 298. Low Island Pastures
- 299. Undulating Island Pasture
- 301. Coastal Basin
- 302. Inclined Coastal Pasture
- 303. Rocky Coastal Pasture
- 305. Enclosed Bays
- 306. Coastal Hills and Heath
- 307. Cliffs - Orkney
- 308. Coast with Sand - Orkney
- 310. Loch Basin - Orkney
- 311. Low Moorland
- 312. Plateau Heath and Pasture
- 313. Rolling Hill Fringe
- 314. Moorland Hills - Orkney
- 315. U-Shaped Valley
- 316. Rugged Hills

© CROWN COPYRIGHT AND DATABASE RIGHTS 2022 ORDNANCE SURVEY 0100031673

- Planning application boundary
  - Turbine layout (PSCOhof060)
  - 5km intervals from outermost turbines
  - 40km LVIA study area
  - Landscape Character Type
- Theoretical blade tip visibility (138.5m)**
- 1 turbine visible
  - 2 turbines visible
  - 3 turbines visible
  - 4 turbines visible
  - 5 turbines visible

Notes:  
 The ZTV is calculated to turbine tip height (138.5m) from a viewing height of 2m above ground level. The terrain model assumes bare ground. The data for a 45km buffer around the turbines is derived from OS Terrain 5 height data (obtained from EMapSite in July 2022). The data for extents beyond 45km is derived from OS Terrain 50 height data (obtained from Ordnance Survey in July 2019). Earth curvature and atmospheric refraction have been taken into account. The ZTV was calculated using ArcMap 10.8.1 software.



Data source: RES, LUC, SNH

LAYOUT DWG: PSCOhof060

DRAWING NUMBER: FIG5-1-5\_11524\_r0\_ZTV\_LCTs\_A3L

SCALE - 1:320,000 @ A3

LANDSCAPE AND VISUAL IMPACT ASSESSMENT, 2022

THIS DRAWING IS THE PROPERTY OF RENEWABLE ENERGY SYSTEMS LTD. AND NO REPRODUCTION MAY BE MADE IN WHOLE OR IN PART WITHOUT PERMISSION



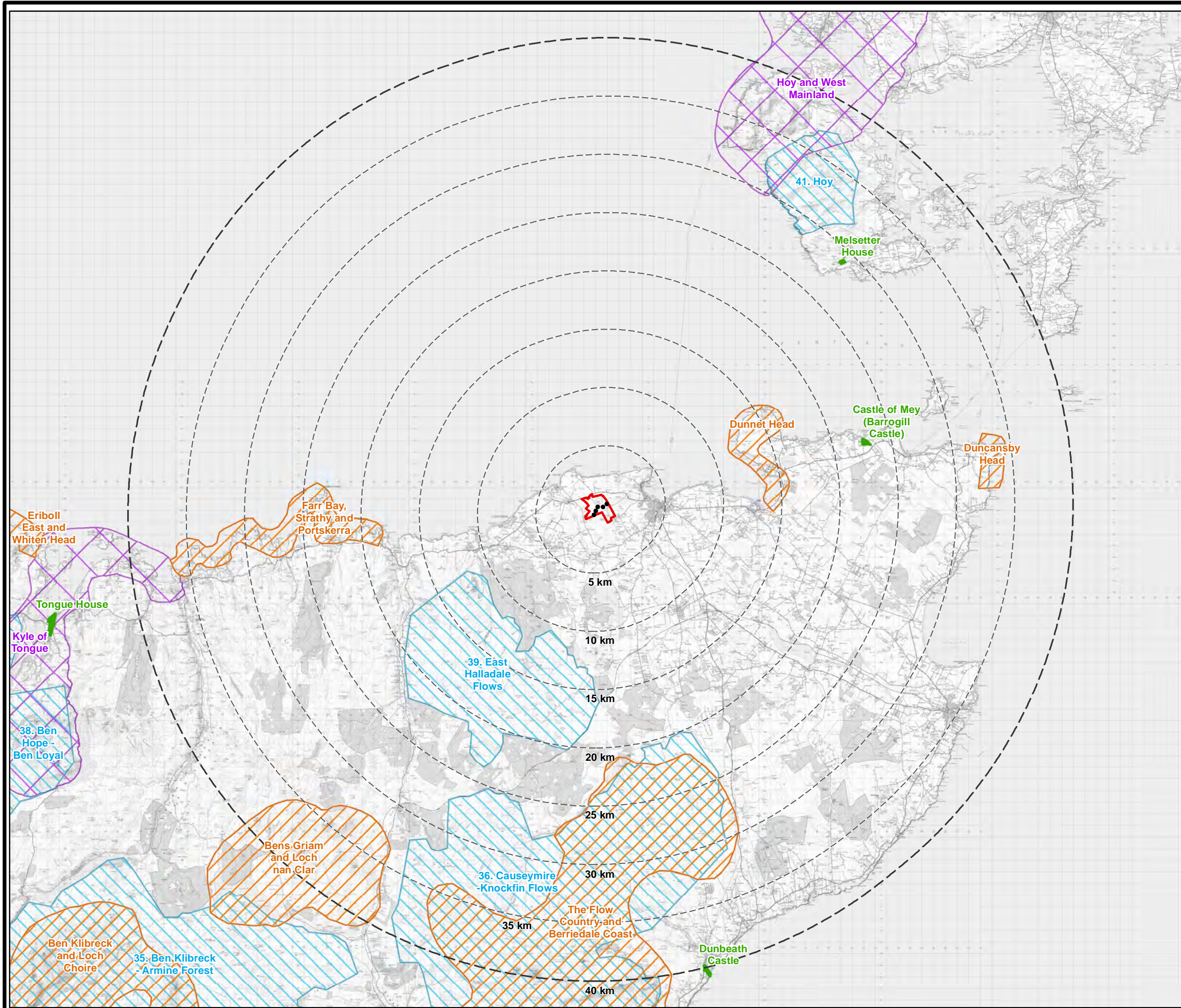
# CAIRNMORE HILL WIND FARM

## FIGURE 5.1.6

### DESIGNATED LANDSCAPES AND WILD LAND AREAS

© CROWN COPYRIGHT AND DATABASE RIGHTS  
2022 ORDNANCE SURVEY 0100031673

- Planning application boundary
- Turbine layout (PSCOhof060)
- 5km intervals from outermost turbines
- 40km LVIA study area
- Special Landscape Area (THC)
- Garden and Designed Landscape
- Wild Land Area
- National Scenic Area



Data source: RES, LUC, THC, SNH, HES, SG

LAYOUT DWG: PSCOhof060

DRAWING NUMBER: FIG5-1-6\_11524\_r0\_DesignatedLandscapes\_A3L

SCALE - 1:320,000 @ A3

LANDSCAPE AND VISUAL IMPACT  
ASSESSMENT, 2022

THIS DRAWING IS THE PROPERTY OF RENEWABLE ENERGY  
SYSTEMS LTD. AND NO REPRODUCTION MAY BE MADE IN  
WHOLE OR IN PART WITHOUT PERMISSION



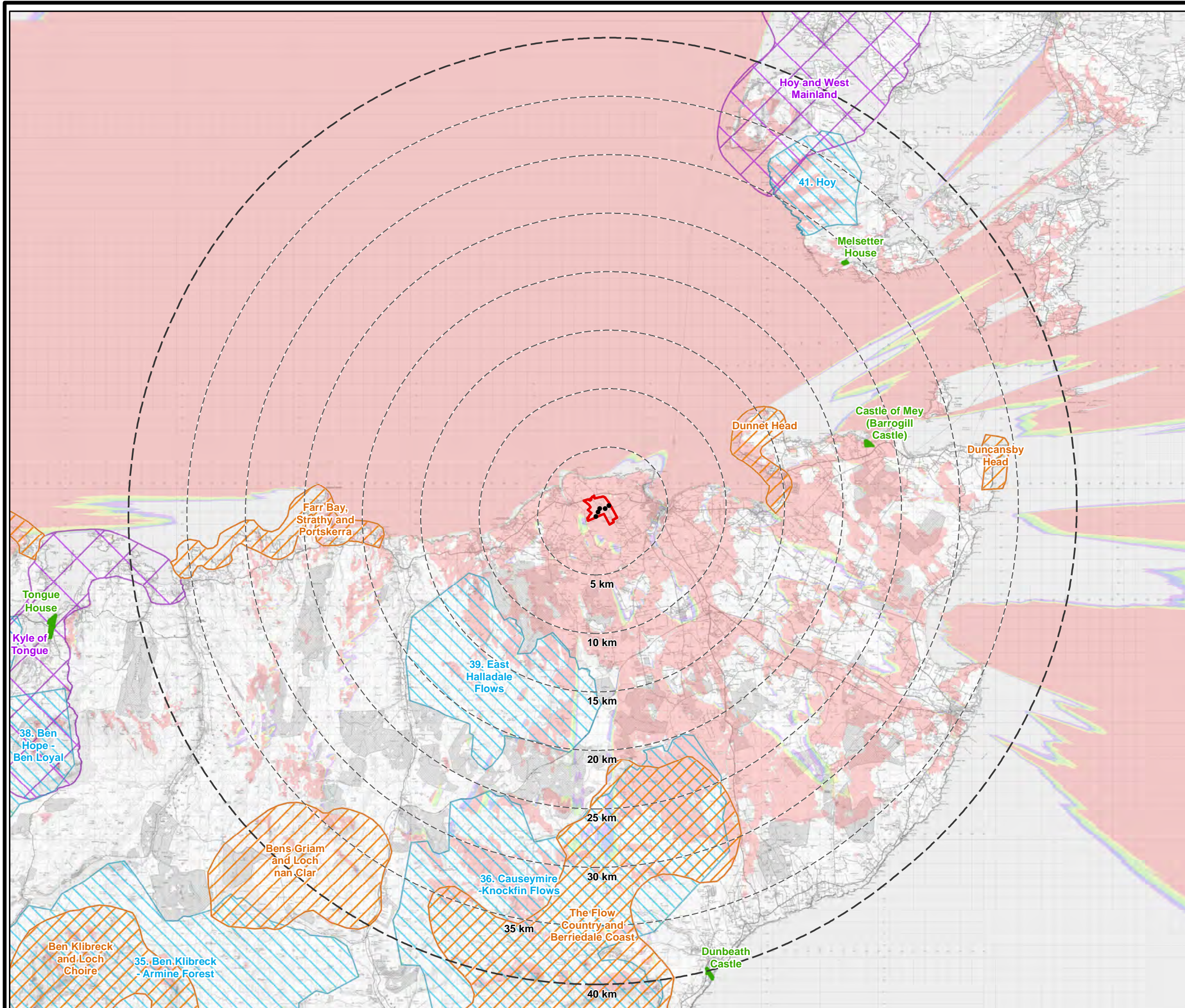


# CAIRNMORE HILL WIND FARM

## FIGURE 5.1.7

DESIGNATED LANDSCAPES AND WILD LAND AREAS WITH BLADE TIP HEIGHT (138.5M) ZONE OF THEORETICAL VISIBILITY

© CROWN COPYRIGHT AND DATABASE RIGHTS 2022 ORDNANCE SURVEY 0100031673



- Planning application boundary
- Turbine layout (PSCOhof060)
- 5km intervals from outermost turbines
- 40km LVIA study area
- Special Landscape Area (THC)
- Garden and Designed Landscape
- Wild Land Area
- National Scenic Area

- Theoretical blade tip visibility (138.5m)**
- 1 turbine visible
  - 2 turbines visible
  - 3 turbines visible
  - 4 turbines visible
  - 5 turbines visible

Notes:  
 The ZTV is calculated to turbine tip height (138.5m) from a viewing height of 2m above ground level. The terrain model assumes bare ground. The data for a 45km buffer around the turbines is derived from OS Terrain 5 height data (obtained from EMapSite in July 2022). The data for extents beyond 45km is derived from OS Terrain 50 height data (obtained from Ordnance Survey in July 2019). Earth curvature and atmospheric refraction have been taken into account. The ZTV was calculated using ArcMap 10.8.1 software.  
 Data source: RES, LUC, THC, SNH, HES, SG



LAYOUT DWG: - LAYOUT NO: PSCOhof060

DRAWING NUMBER: FIG5-1-7\_11524\_r0\_DesignatedLandscapesZTV\_A3L

SCALE - 1:320,000 @ A3

LANDSCAPE AND VISUAL IMPACT ASSESSMENT, 2022

THIS DRAWING IS THE PROPERTY OF RENEWABLE ENERGY SYSTEMS LTD. AND NO REPRODUCTION MAY BE MADE IN WHOLE OR IN PART WITHOUT PERMISSION

# CAIRNMORE HILL WIND FARM

## FIGURE 5.1.8

OPERATIONAL, CONSENTED, PROPOSED AND SCOPING WIND FARMS WITHIN 40KM AND INCLUDED IN THE CUMULATIVE ASSESSMENT

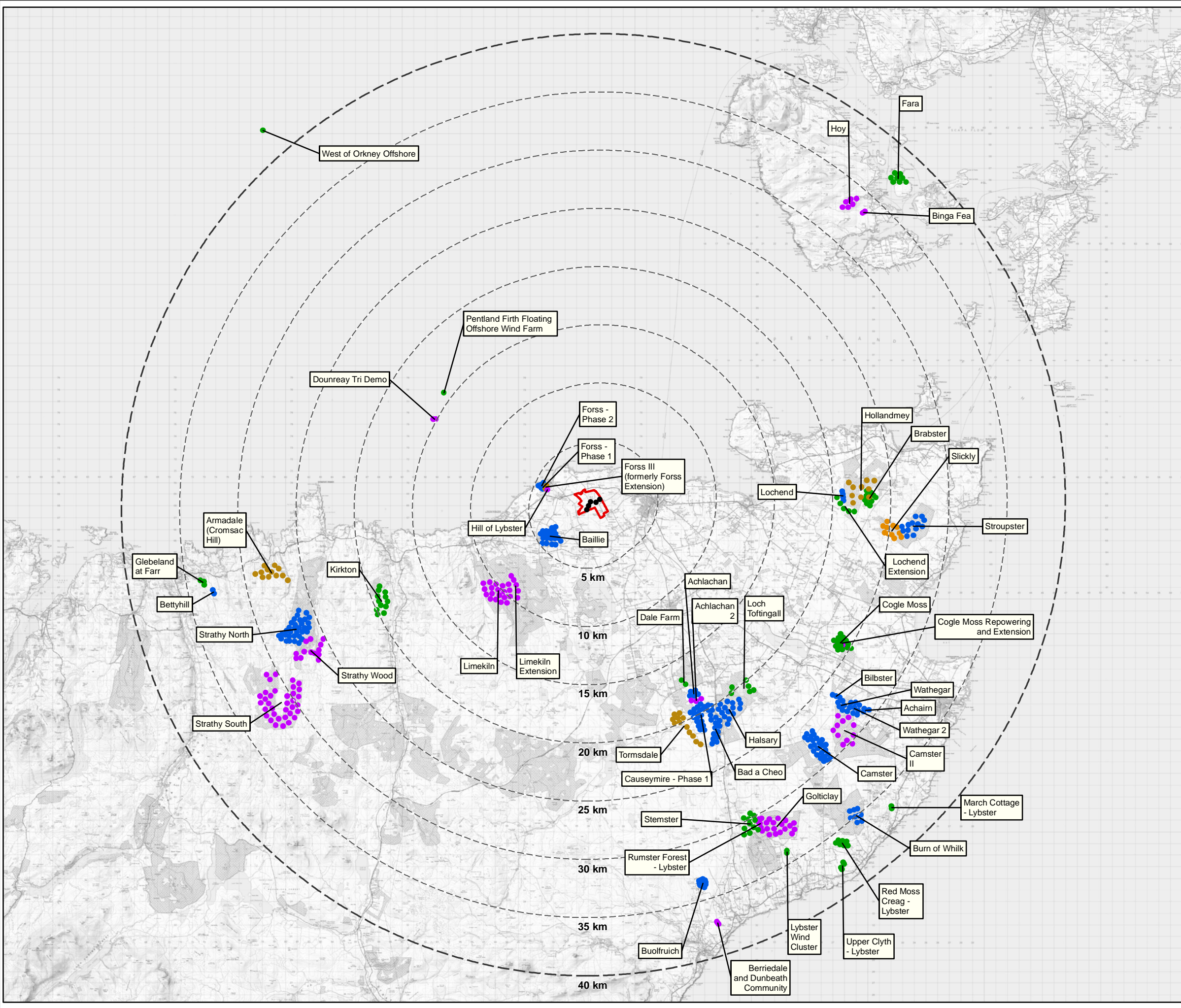
© CROWN COPYRIGHT AND DATABASE RIGHTS 2022 ORDNANCE SURVEY 0100031673

- Planning application boundary
- Turbine layout (PSCOhof060)
- 5km intervals from outermost turbines
- 40km LVIA study area

**Wind farm (by status)**

- Operational
- Under Construction
- Consented
- Appeal/Public Inquiry
- Application Submitted
- Design/Scoping

The cumulative plan considers the status of schemes as of the 09/05/2022. Turbines under 50m and single turbines have been scoped out beyond 5km.



Data source: RES, LUC

LAYOUT DWG: PSCOhof060

DRAWING NUMBER: FIG5-1-8\_11524\_r0\_CumulativeWfs\_A3L

SCALE - 1:320,000 @ A3

**LANDSCAPE AND VISUAL IMPACT ASSESSMENT, 2022**

THIS DRAWING IS THE PROPERTY OF RENEWABLE ENERGY SYSTEMS LTD. AND NO REPRODUCTION MAY BE MADE IN WHOLE OR IN PART WITHOUT PERMISSION



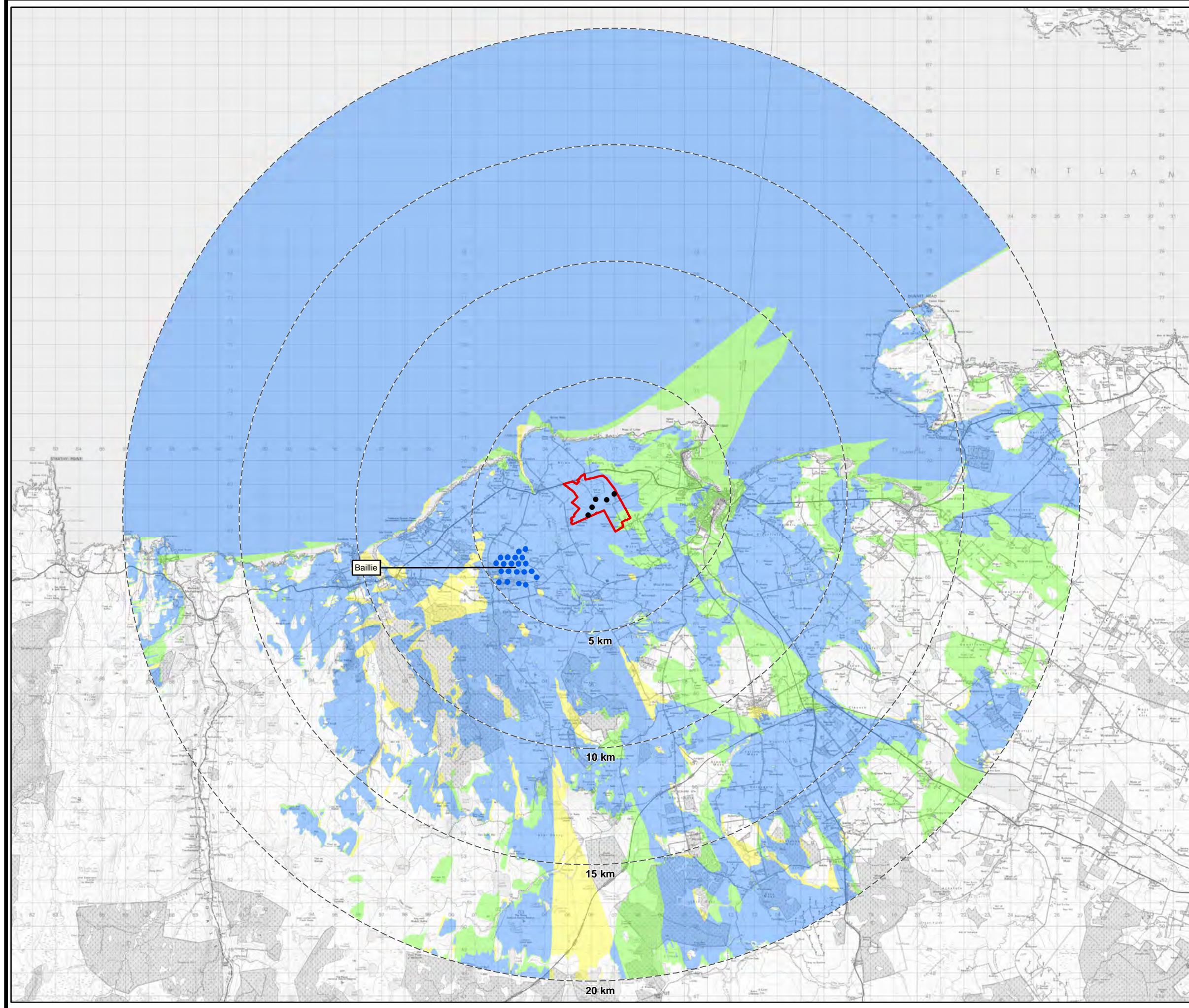
# CAIRNMORE HILL WIND FARM

## FIGURE 5.1.9

CUMULATIVE ZONE OF THEORETICAL VISIBILITY - BAILLIE VS PROPOSED DEVELOPMENT

© CROWN COPYRIGHT AND DATABASE RIGHTS 2022 ORDNANCE SURVEY 0100031673

- Planning application boundary
- Turbine layout (PSCOhof060)
- 5km intervals from outermost turbines
- Wind farm (by status)**
  - Operational
  - Only Baillie visible
  - Only Cairnmore Hill visible
  - Both Cairnmore Hill and Baillie visible



The ZTV is calculated to turbine tip height from a viewing height of 2m above ground level. The terrain model assumes bare ground and is derived from OS Terrain 5 height data (obtained from EMapSite in July 2022). Earth curvature and atmospheric refraction have been taken into account. The ZTV was calculated using ArcMap 10.8.1 software.



Data source: RES, LUC

LAYOUT DWG: PSCOhof060

DRAWING NUMBER: FIG5-1-9\_11524\_r0\_CZTV\_Baillie\_A3L

SCALE - 1:160,000 @ A3

LANDSCAPE AND VISUAL IMPACT ASSESSMENT, 2022

THIS DRAWING IS THE PROPERTY OF RENEWABLE ENERGY SYSTEMS LTD. AND NO REPRODUCTION MAY BE MADE IN WHOLE OR IN PART WITHOUT PERMISSION



# CAIRNMORE HILL WIND FARM

## FIGURE 5.1.10a

CUMULATIVE ZONE OF THEORETICAL VISIBILITY - FORSS AND HILL OF LYBSTER OPERATIONAL AND CONSENTED VS PROPOSED DEVELOPMENT

© CROWN COPYRIGHT AND DATABASE RIGHTS 2022 ORDNANCE SURVEY 0100031673

- Planning application boundary
- Turbine layout (PSCOhof060)
- 5km intervals from outermost turbines
- Wind farm (by status)**
  - Operational
  - Consented
- Only Forss + Hill of Lybster visible
- Only Cairnmore Hill visible
- Cairnmore Hill, Forss, and Hill of Lybster visible

The ZTV is calculated to turbine tip height from a viewing height of 2m above ground level. The terrain model assumes bare ground and is derived from OS Terrain 5 height data (obtained from EMapSite in July 2022). Earth curvature and atmospheric refraction have been taken into account. The ZTV was calculated using ArcMap 10.8.1 software.



Data source: RES, LUC

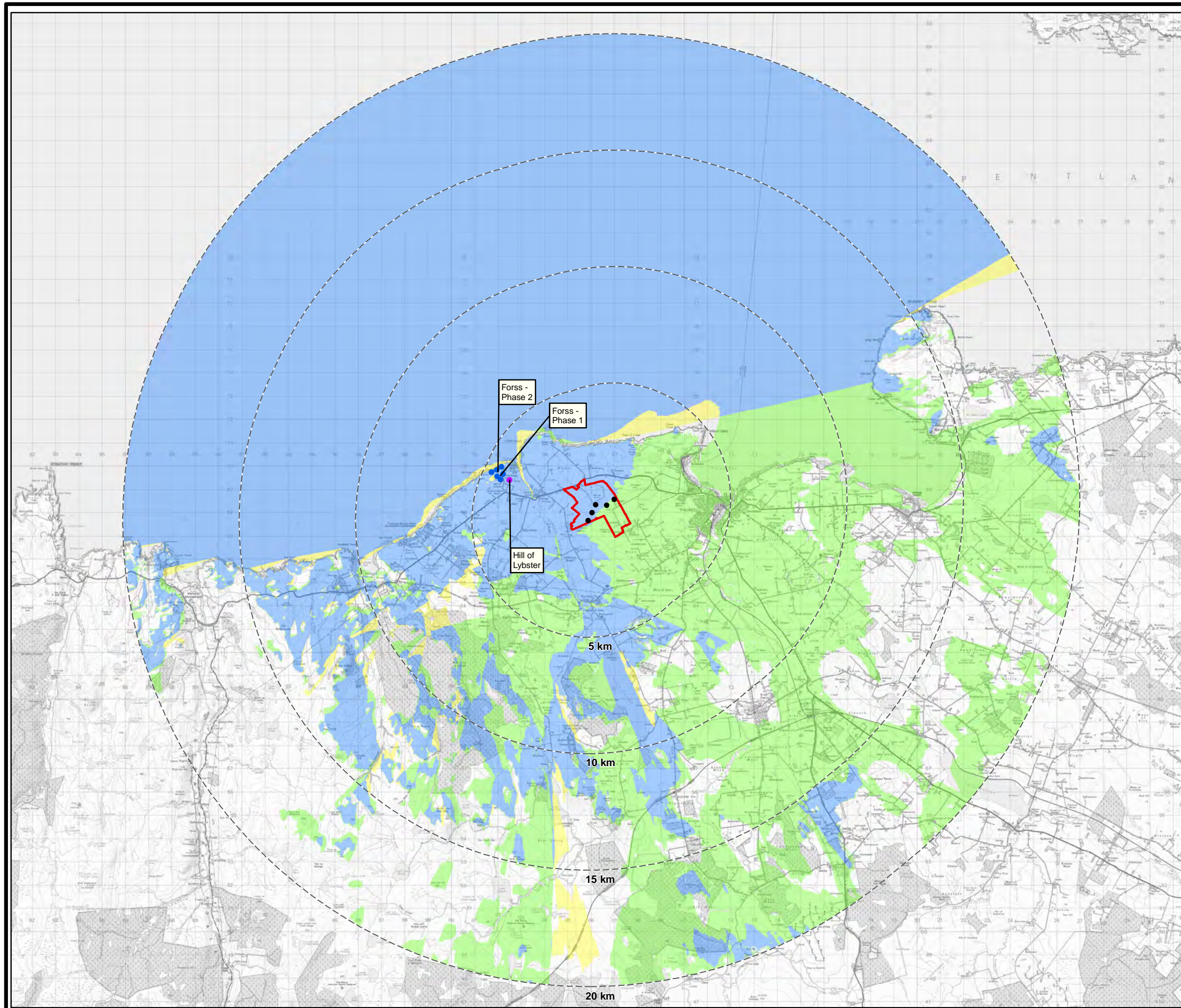
LAYOUT DWG: PSCOhof060

DRAWING NUMBER: FIG5-1-10a\_11524\_r0\_CZTV\_ForssHoLOpCons\_A3L

SCALE - 1:160,000 @ A3

LANDSCAPE AND VISUAL IMPACT ASSESSMENT, 2022

THIS DRAWING IS THE PROPERTY OF RENEWABLE ENERGY SYSTEMS LTD. AND NO REPRODUCTION MAY BE MADE IN WHOLE OR IN PART WITHOUT PERMISSION



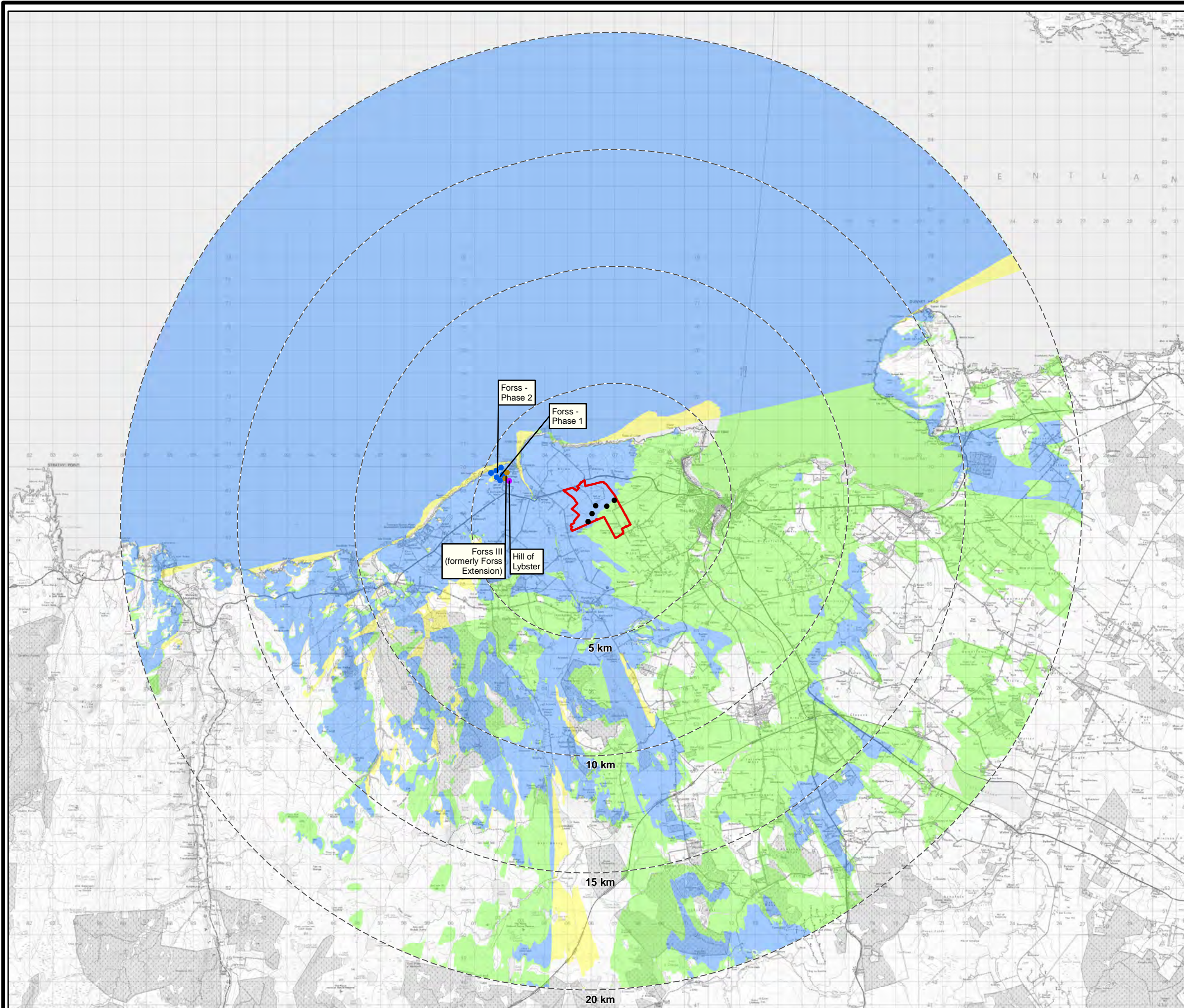


# CAIRNMORE HILL WIND FARM

## FIGURE 5.1.10b

CUMULATIVE ZONE OF THEORETICAL VISIBILITY - FORSS AND HILL OF LYBSTER OPERATIONAL, CONSENTED, AND PROPOSED VS PROPOSED DEVELOPMENT

© CROWN COPYRIGHT AND DATABASE RIGHTS 2022 ORDNANCE SURVEY 0100031673



- Planning application boundary
  - Turbine layout (PSCOhof060)
  - 5km intervals from outermost turbines
- Wind farm (by status)**
- Operational
  - Consented
  - Application Submitted
- Only Forss and Hill of Lybster visible
  - Only Cairnmore Hill visible
  - Cairnmore Hill, Forss, and Hill of Lybster visible

The ZTV is calculated to turbine tip height from a viewing height of 2m above ground level. The terrain model assumes bare ground and is derived from OS Terrain 5 height data (obtained from EMapSite in July 2022). Earth curvature and atmospheric refraction have been taken into account. The ZTV was calculated using ArcMap 10.8.1 software.



Data source: RES, LUC

LAYOUT DWG

T.LAYOUT NO.

PSCOhof060

DRAWING NUMBER

FIG5-1-10b\_11524\_r0\_CZTV\_ForssHoLOpConsProp\_A3L

SCALE - 1:160,000 @ A3

LANDSCAPE AND VISUAL IMPACT ASSESSMENT, 2022

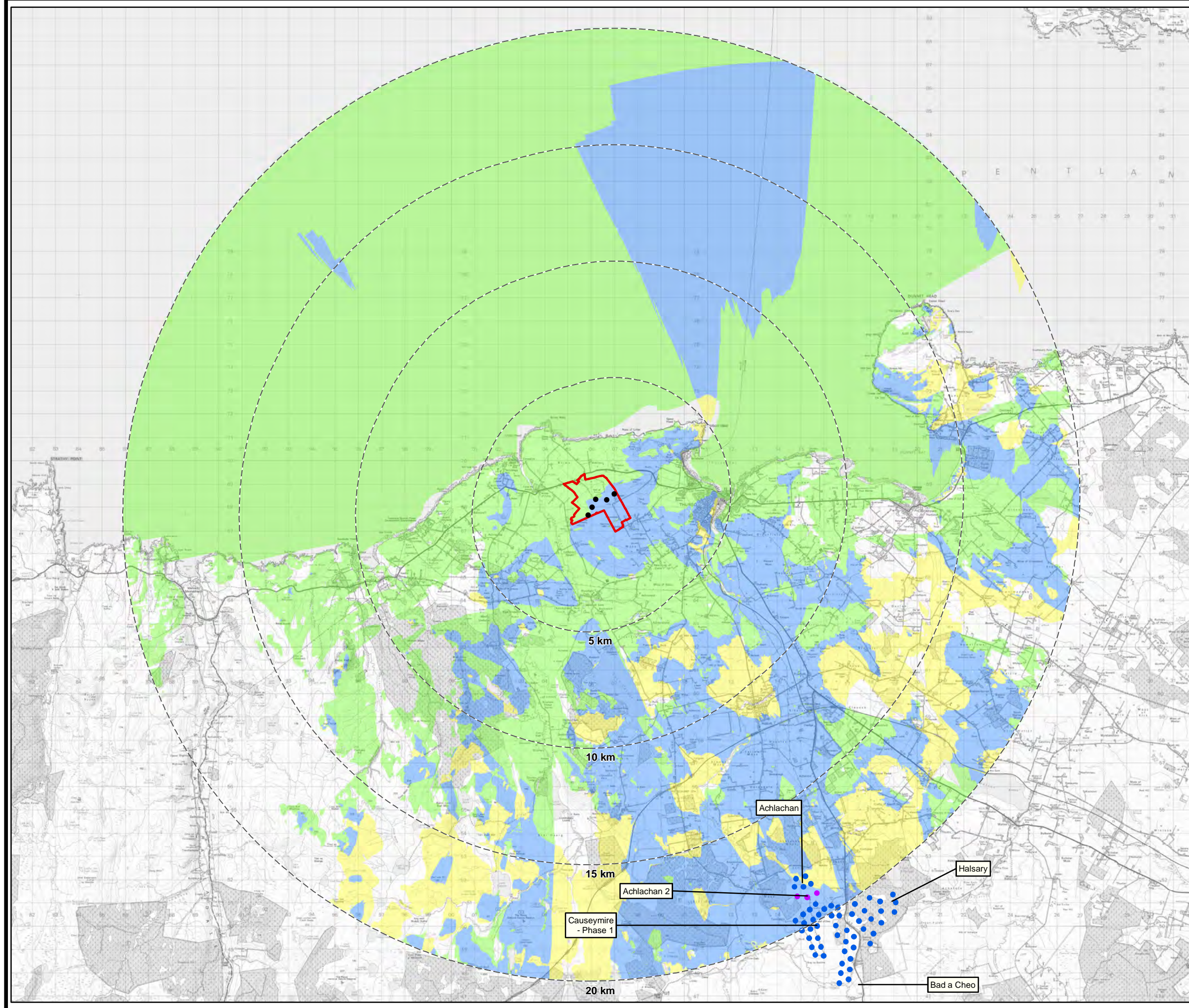
THIS DRAWING IS THE PROPERTY OF RENEWABLE ENERGY SYSTEMS LTD. AND NO REPRODUCTION MAY BE MADE IN WHOLE OR IN PART WITHOUT PERMISSION

CAIRNMORE HILL  
WIND FARM

FIGURE 5.1.11a

CUMULATIVE ZONE OF  
THEORETICAL VISIBILITY -  
SOUTH-EAST GROUP  
OPERATIONAL AND CONSENTED  
VS PROPOSED DEVELOPMENT

© CROWN COPYRIGHT AND DATABASE RIGHTS  
2022 ORDNANCE SURVEY 0100031673



- Planning application boundary
  - Turbine layout (PSCOhof060)
  - 5km intervals from outermost turbines
- Wind farm (by status)**
- Operational
  - Consented
- Only SE group schemes visible
  - Only Cairnmore Hill visible
  - Both Cairnmore Hill and SE group schemes visible

The ZTV is calculated to turbine tip height from a viewing height of 2m above ground level. The terrain model assumes bare ground and is derived from OS Terrain 5 height data (obtained from EMapSite in July 2022). Earth curvature and atmospheric refraction have been taken into account. The ZTV was calculated using ArcMap 10.8.1 software.



Data source: RES, LUC

LAYOUT DWG

LAYOUT NO.

PSCOhof060

DRAWING NUMBER

FIG5-1-11a\_11524\_r0\_CZTV\_SEOpCons\_A3L

SCALE - 1:160,000 @ A3

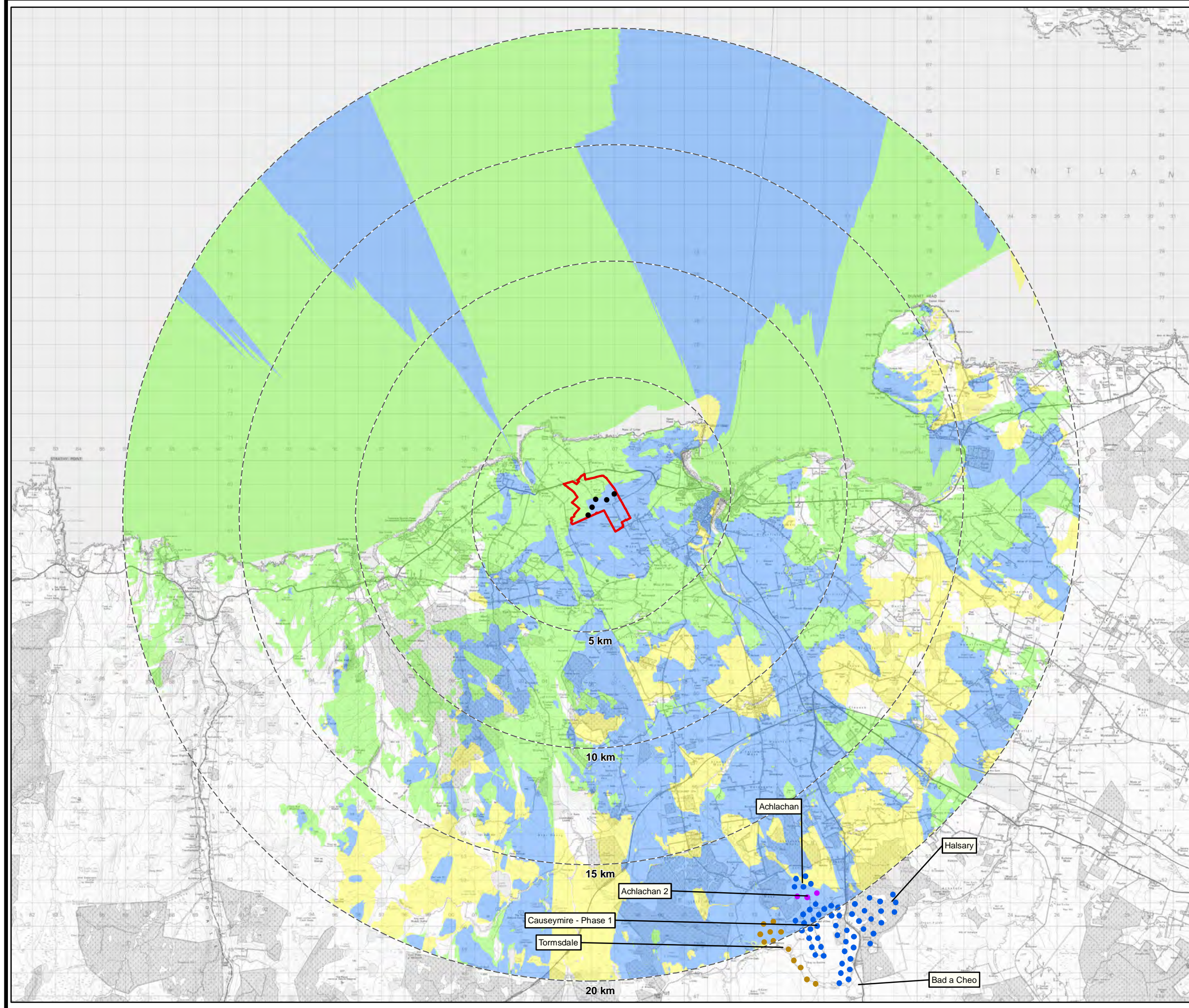
LANDSCAPE AND VISUAL IMPACT  
ASSESSMENT, 2022

THIS DRAWING IS THE PROPERTY OF RENEWABLE ENERGY  
SYSTEMS LTD. AND NO REPRODUCTION MAY BE MADE IN  
WHOLE OR IN PART WITHOUT PERMISSION

# CAIRNMORE HILL WIND FARM

**FIGURE 5.1.11b**  
**CUMULATIVE ZONE OF THEORETICAL VISIBILITY - SOUTH-EAST GROUP OPERATIONAL, CONSENTED, AND PROPOSED VS PROPOSED DEVELOPMENT**

© CROWN COPYRIGHT AND DATABASE RIGHTS 2022 ORDNANCE SURVEY 0100031673



- Planning application boundary
  - Turbine layout (PSCOhof060)
  - 5km intervals from outermost turbines
- Wind farm (by status)**
- Operational
  - Consented
  - Application Submitted
- Only SE group schemes visible
  - Only Cairnmore Hill visible
  - Both Cairnmore Hill and SE group schemes visible

The ZTV is calculated to turbine tip height from a viewing height of 2m above ground level. The terrain model assumes bare ground and is derived from OS Terrain 5 height data (obtained from EMapSite in July 2022). Earth curvature and atmospheric refraction have been taken into account. The ZTV was calculated using ArcMap 10.8.1 software.



Data source: RES, LUC

LAYOUT DWG: - LAYOUT NO: PSCOhof060

DRAWING NUMBER: FIG5-1-11b\_11524\_r0\_CZTV\_SEOpConsProp\_A3L

SCALE - 1:160,000 @ A3

## LANDSCAPE AND VISUAL IMPACT ASSESSMENT, 2022

THIS DRAWING IS THE PROPERTY OF RENEWABLE ENERGY SYSTEMS LTD. AND NO REPRODUCTION MAY BE MADE IN WHOLE OR IN PART WITHOUT PERMISSION



# CAIRNMORE HILL WIND FARM

## FIGURE 5.1.12a

CUMULATIVE ZONE OF THEORETICAL VISIBILITY - SOUTH-WEST GROUP CONSENTED VS PROPOSED DEVELOPMENT

© CROWN COPYRIGHT AND DATABASE RIGHTS 2022 ORDNANCE SURVEY 0100031673

- Planning application boundary
  - Turbine layout (PSCOhof060)
  - 5km intervals from outermost turbines
- Wind farm (by status)**
- Consented
  - Only SW group schemes visible
  - Only Cairnmore Hill visible
  - Both Cairnmore Hill and SW group schemes visible

The ZTV is calculated to turbine tip height from a viewing height of 2m above ground level. The terrain model assumes bare ground and is derived from OS Terrain 5 height data (obtained from EMapSite in July 2022). Earth curvature and atmospheric refraction have been taken into account. The ZTV was calculated using ArcMap 10.8.1 software.



Data source: RES, LUC

LAYOUT DWG

LAYOUT NO.

PSCOhof060

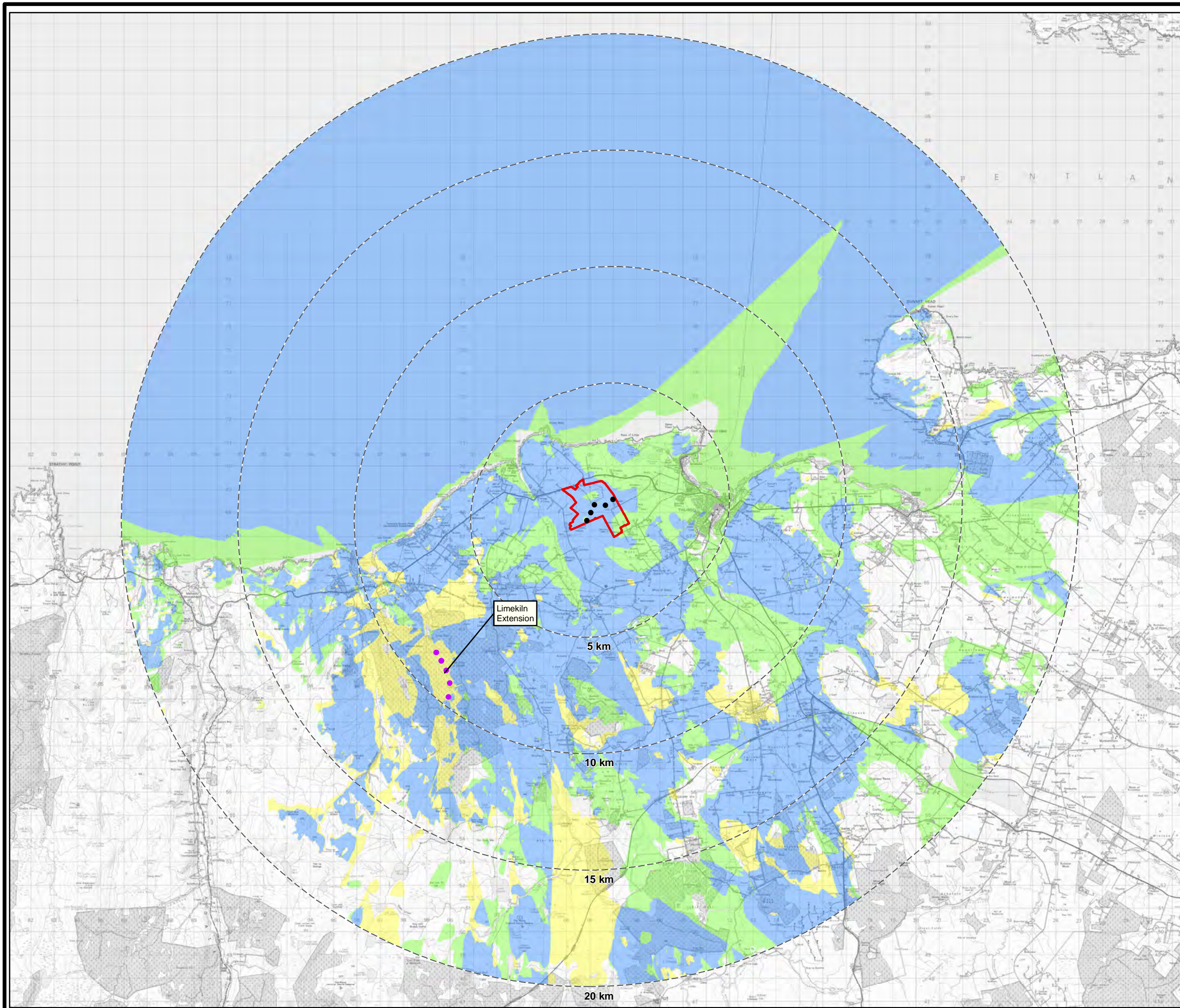
DRAWING NUMBER

FIG5-1-12a\_11524\_r0\_CZTV\_SWCons\_A3L

SCALE - 1:160,000 @ A3

LANDSCAPE AND VISUAL IMPACT ASSESSMENT, 2022

THIS DRAWING IS THE PROPERTY OF RENEWABLE ENERGY SYSTEMS LTD. AND NO REPRODUCTION MAY BE MADE IN WHOLE OR IN PART WITHOUT PERMISSION







# CAIRNMORE HILL WIND FARM

## FIGURE 5.1.12b

CUMULATIVE ZONE OF THEORETICAL VISIBILITY - SOUTH-WEST GROUP CONSENTED AND PROPOSED VS PROPOSED DEVELOPMENT

© CROWN COPYRIGHT AND DATABASE RIGHTS 2022 ORDNANCE SURVEY 0100031673

- Planning application boundary
- Turbine layout (PSCOhof060)
- 5km intervals from outermost turbines
- Wind farm (by status)**
  - Consented
  - Only SW group schemes visible
  - Only Cairnmore Hill visible
  - Both Cairnmore Hill and SW group schemes visible

The ZTV is calculated to turbine tip height from a viewing height of 2m above ground level. The terrain model assumes bare ground and is derived from OS Terrain 5 height data (obtained from EMapSite in July 2022). Earth curvature and atmospheric refraction have been taken into account. The ZTV was calculated using ArcMap 10.8.1 software.



Data source: RES, LUC

LAYOUT DWG

T.LAYOUT NO.

PSCOhof060

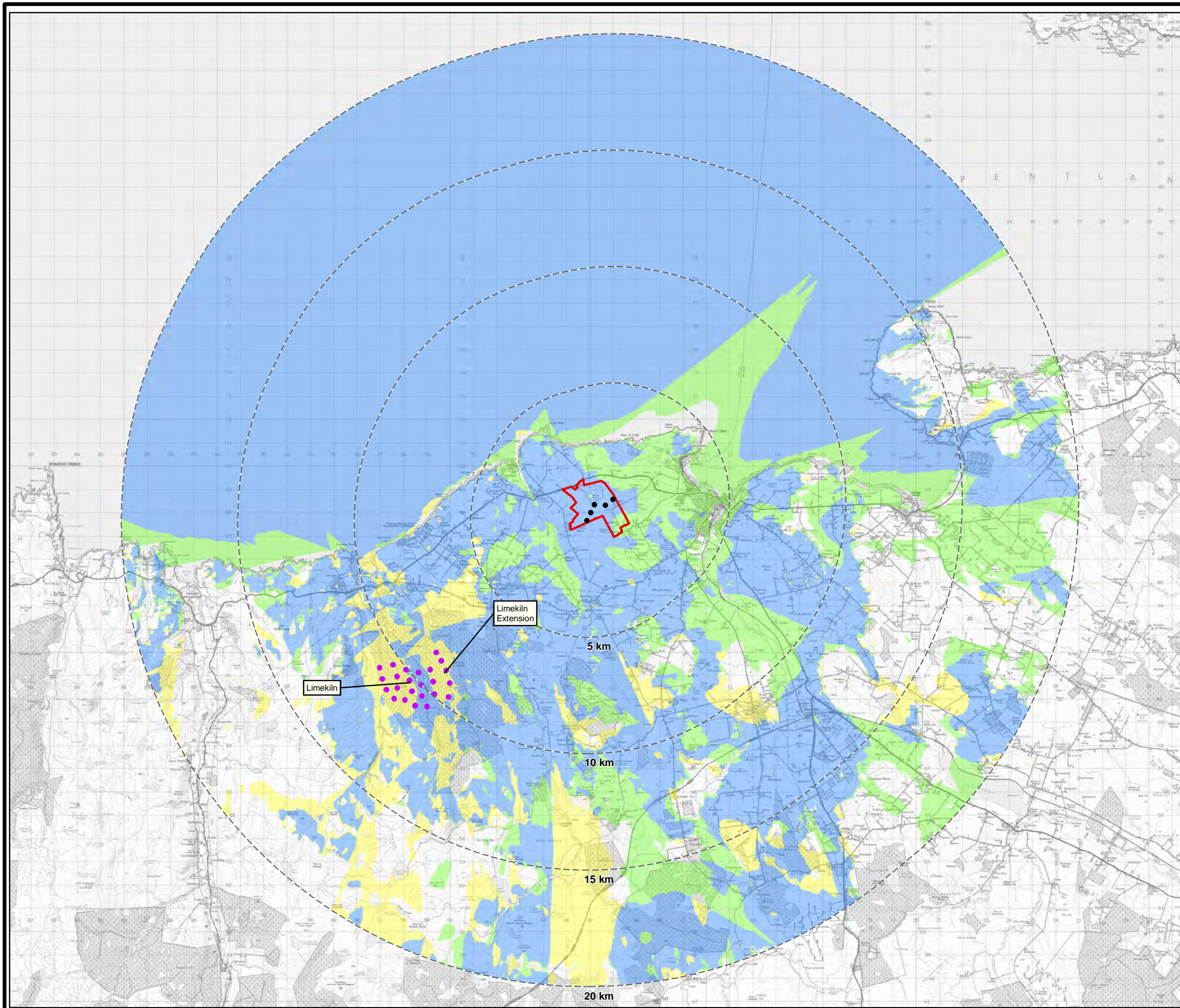
DRAWING NUMBER

FIG5-1-12b\_11524\_r0\_CZTV\_SWConsProp\_A3L

SCALE - 1:160,000 @ A3

LANDSCAPE AND VISUAL IMPACT ASSESSMENT, 2022

THIS DRAWING IS THE PROPERTY OF RENEWABLE ENERGY SYSTEMS LTD. AND NO REPRODUCTION MAY BE MADE IN WHOLE OR IN PART WITHOUT PERMISSION





# CAIRNMORE HILL WIND FARM

## FIGURE 5.1.13

CUMULATIVE ZONE OF THEORETICAL VISIBILITY - OFFSHORE CONSENTED VS PROPOSED DEVELOPMENT

© CROWN COPYRIGHT AND DATABASE RIGHTS  
2022 ORDNANCE SURVEY 0100031673

- Planning application boundary
  - Turbine layout (PSCOhof060)
  - 5km intervals from outermost turbines
- Wind farm (by status)**
- Consented
  - Only Dounreay Tri scheme visible
  - Only Cairnmore Hill visible
  - Both Cairnmore Hill and Dounreay Tri visible

The ZTV is calculated to turbine tip height from a viewing height of 2m above ground level. The terrain model assumes bare ground and is derived from OS Terrain 5 height data (obtained from EMapSite in July 2022). Earth curvature and atmospheric refraction have been taken into account. The ZTV was calculated using ArcMap 10.8.1 software.



Data source: RES, LUC

LAYOUT DWG

LAYOUT NO.

PSCOhof060

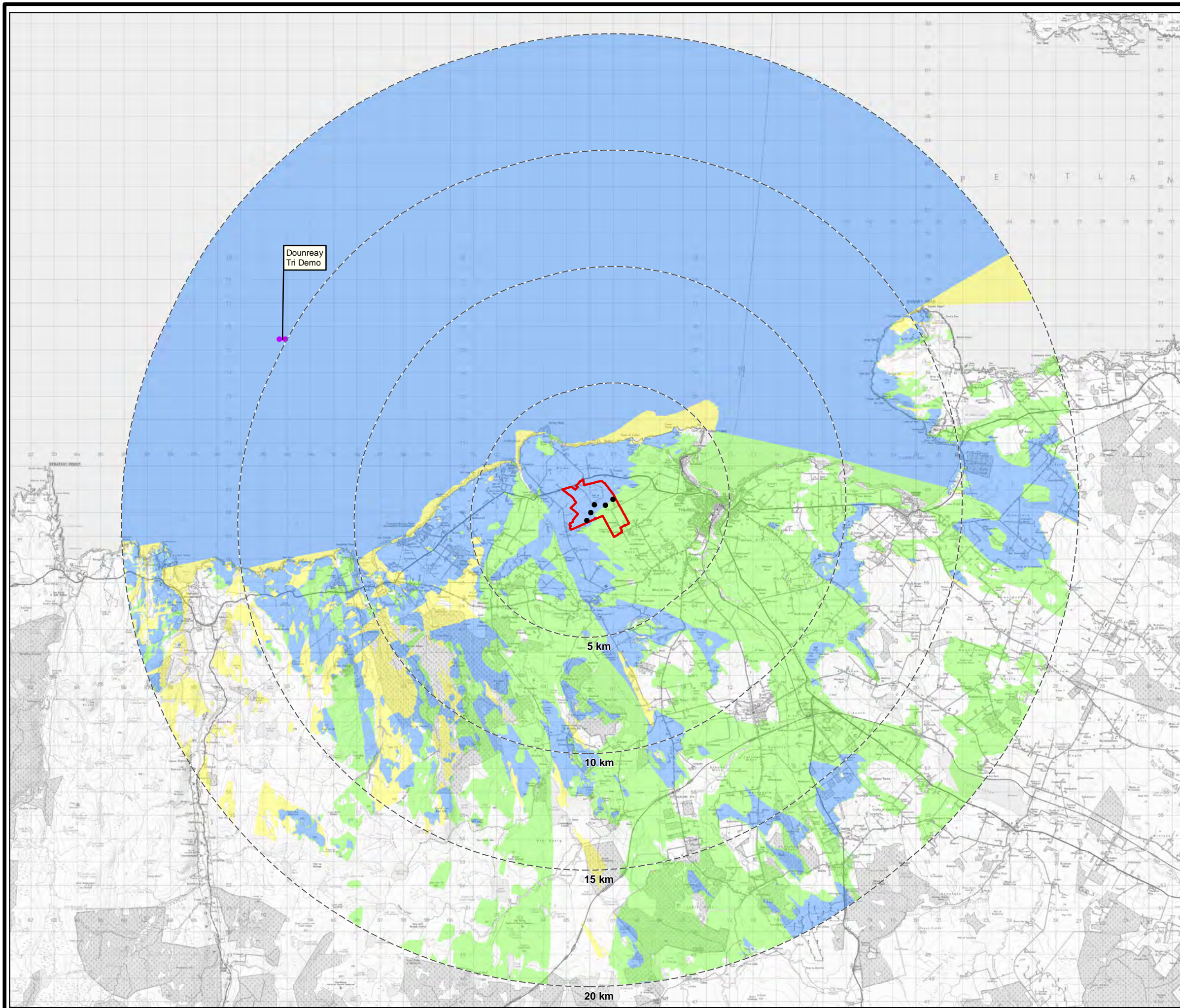
DRAWING NUMBER

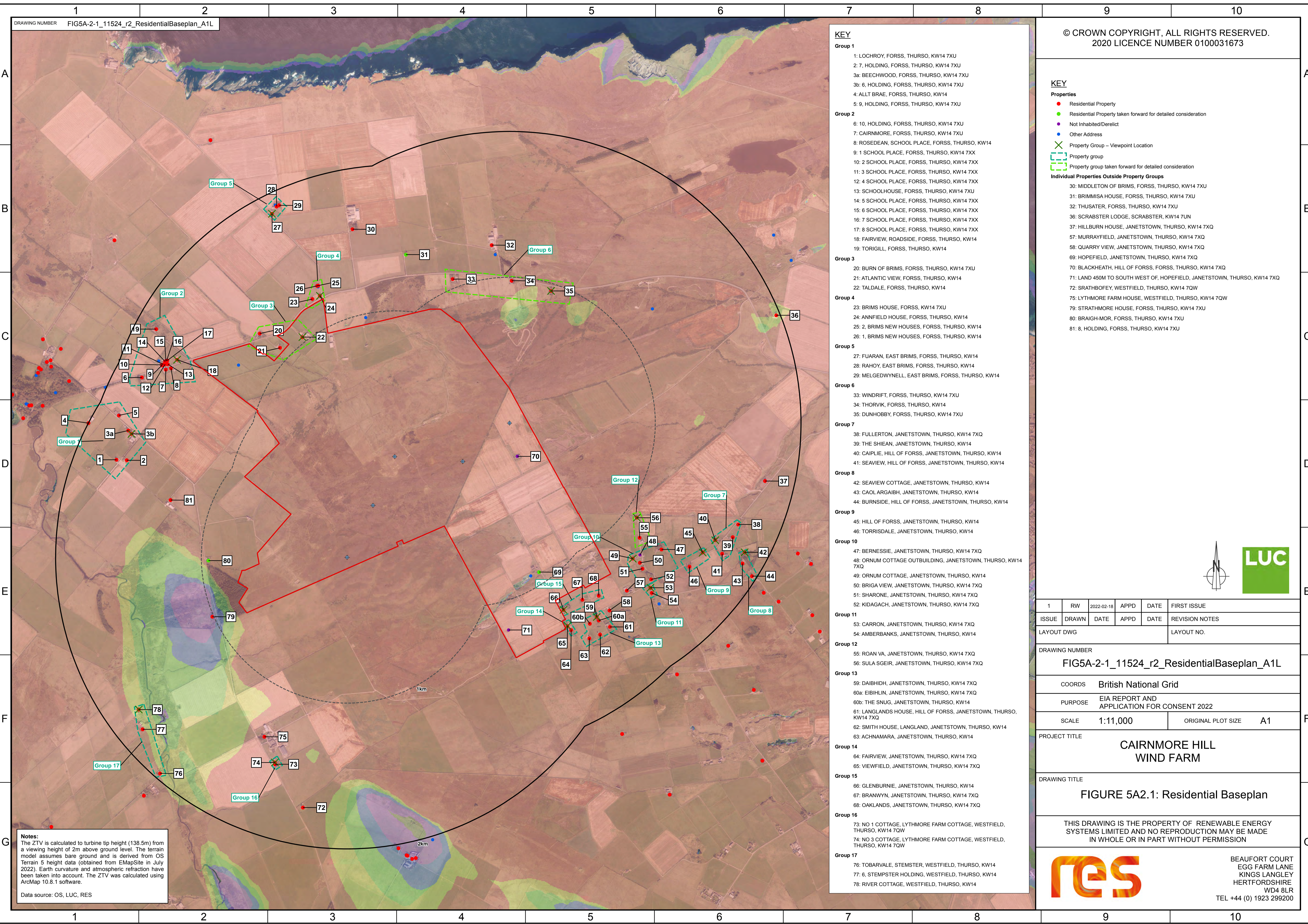
FIG5-1-13\_11524\_r0\_CZTV\_DounreayTri\_A3L

SCALE - 1:160,000 @ A3

LANDSCAPE AND VISUAL IMPACT ASSESSMENT, 2022

THIS DRAWING IS THE PROPERTY OF RENEWABLE ENERGY SYSTEMS LTD. AND NO REPRODUCTION MAY BE MADE IN WHOLE OR IN PART WITHOUT PERMISSION





- KEY**
- Group 1**
    - 1: LOCHROY, FORSS, THURSO, KW14 7XU
    - 2: 7, HOLDING, FORSS, THURSO, KW14 7XU
    - 3a: BEECHWOOD, FORSS, THURSO, KW14 7XU
    - 3b: 6, HOLDING, FORSS, THURSO, KW14 7XU
    - 4: ALLT BRAE, FORSS, THURSO, KW14
    - 5: 9, HOLDING, FORSS, THURSO, KW14 7XU
  - Group 2**
    - 6: 10, HOLDING, FORSS, THURSO, KW14 7XU
    - 7: CAIRNMORE, FORSS, THURSO, KW14 7XU
    - 8: ROSEDEAN, SCHOOL PLACE, FORSS, THURSO, KW14
    - 9: 1 SCHOOL PLACE, FORSS, THURSO, KW14 7XX
    - 10: 2 SCHOOL PLACE, FORSS, THURSO, KW14 7XX
    - 11: 3 SCHOOL PLACE, FORSS, THURSO, KW14 7XX
    - 12: 4 SCHOOL PLACE, FORSS, THURSO, KW14 7XX
    - 13: SCHOOLHOUSE, FORSS, THURSO, KW14 7XU
    - 14: 5 SCHOOL PLACE, FORSS, THURSO, KW14 7XX
    - 15: 6 SCHOOL PLACE, FORSS, THURSO, KW14 7XX
    - 16: 7 SCHOOL PLACE, FORSS, THURSO, KW14 7XX
    - 17: 8 SCHOOL PLACE, FORSS, THURSO, KW14 7XX
    - 18: FAIRVIEW, ROADSIDE, FORSS, THURSO, KW14
    - 19: TORIGILL, FORSS, THURSO, KW14
  - Group 3**
    - 20: BURN OF BRIMS, FORSS, THURSO, KW14 7XU
    - 21: ATLANTIC VIEW, FORSS, THURSO, KW14
    - 22: TALDALE, FORSS, THURSO, KW14
  - Group 4**
    - 23: BRIMS HOUSE, FORSS, KW14 7XU
    - 24: ANNFIELD HOUSE, FORSS, THURSO, KW14
    - 25: 2, BRIMS NEW HOUSES, FORSS, THURSO, KW14
    - 26: 1, BRIMS NEW HOUSES, FORSS, THURSO, KW14
  - Group 5**
    - 27: FUARAN, EAST BRIMS, FORSS, THURSO, KW14
    - 28: RAHOY, EAST BRIMS, FORSS, THURSO, KW14
    - 29: MELGEDWYNELL, EAST BRIMS, FORSS, THURSO, KW14
  - Group 6**
    - 33: WINDRIFT, FORSS, THURSO, KW14 7XU
    - 34: THORVIK, FORSS, THURSO, KW14
    - 35: DUNHOBBY, FORSS, THURSO, KW14 7XU
  - Group 7**
    - 38: FULLERTON, JANETSTOWN, THURSO, KW14 7XQ
    - 39: THE SHIEAN, JANETSTOWN, THURSO, KW14
    - 40: CAIPLIE, HILL OF FORSS, JANETSTOWN, THURSO, KW14
    - 41: SEAVIEW, HILL OF FORSS, JANETSTOWN, THURSO, KW14
  - Group 8**
    - 42: SEAVIEW COTTAGE, JANETSTOWN, THURSO, KW14
    - 43: CAOL ARGAIBH, JANETSTOWN, THURSO, KW14
    - 44: BURNSIDE, HILL OF FORSS, JANETSTOWN, THURSO, KW14
  - Group 9**
    - 45: HILL OF FORSS, JANETSTOWN, THURSO, KW14
    - 46: TORRISDALE, JANETSTOWN, THURSO, KW14
  - Group 10**
    - 47: BERNESSIE, JANETSTOWN, THURSO, KW14 7XQ
    - 48: ORNUM COTTAGE OUTBUILDING, JANETSTOWN, THURSO, KW14 7XQ
    - 49: ORNUM COTTAGE, JANETSTOWN, THURSO, KW14
    - 50: BRIGA VIEW, JANETSTOWN, THURSO, KW14 7XQ
    - 51: SHARONE, JANETSTOWN, THURSO, KW14 7XQ
    - 52: KIDAGACH, JANETSTOWN, THURSO, KW14 7XQ
  - Group 11**
    - 53: CARRON, JANETSTOWN, THURSO, KW14 7XQ
    - 54: AMBERBANKS, JANETSTOWN, THURSO, KW14
  - Group 12**
    - 55: ROAN VA, JANETSTOWN, THURSO, KW14 7XQ
    - 56: SULA SGEIR, JANETSTOWN, THURSO, KW14 7XQ
  - Group 13**
    - 59: DAIBHIDH, JANETSTOWN, THURSO, KW14 7XQ
    - 60a: EIBIHLIN, JANETSTOWN, THURSO, KW14 7XQ
    - 60b: THE SNUG, JANETSTOWN, THURSO, KW14
    - 61: LANGLANDS HOUSE, HILL OF FORSS, JANETSTOWN, THURSO, KW14 7XQ
    - 62: SMITH HOUSE, LANGLAND, JANETSTOWN, THURSO, KW14
    - 63: ACHNAMARA, JANETSTOWN, THURSO, KW14
  - Group 14**
    - 64: FAIRVIEW, JANETSTOWN, THURSO, KW14 7XQ
    - 65: VIEWFIELD, JANETSTOWN, THURSO, KW14 7XQ
  - Group 15**
    - 66: GLENBURNIE, JANETSTOWN, THURSO, KW14
    - 67: BRANWYN, JANETSTOWN, THURSO, KW14 7XQ
    - 68: OAKLANDS, JANETSTOWN, THURSO, KW14 7XQ
  - Group 16**
    - 73: NO 1 COTTAGE, LYTHMORE FARM COTTAGE, WESTFIELD, THURSO, KW14 7QW
    - 74: NO 3 COTTAGE, LYTHMORE FARM COTTAGE, WESTFIELD, THURSO, KW14 7QW
  - Group 17**
    - 76: TOBARVALE, STEMSTER, WESTFIELD, THURSO, KW14
    - 77: 6, STEMSTER HOLDING, WESTFIELD, THURSO, KW14
    - 78: RIVER COTTAGE, WESTFIELD, THURSO, KW14

- KEY**
- Properties**
- Residential Property
  - Residential Property taken forward for detailed consideration
  - Not Inhabited/Derelict
  - Other Address
  - ✕ Property Group – Viewpoint Location
  - Property group
  - Property group taken forward for detailed consideration
- Individual Properties Outside Property Groups**
- 30: MIDDLETON OF BRIMS, FORSS, THURSO, KW14 7XU
  - 31: BRIMMISA HOUSE, FORSS, THURSO, KW14 7XU
  - 32: THUSATER, FORSS, THURSO, KW14 7XU
  - 36: SCRABSTER LODGE, SCRABSTER, KW14 7UN
  - 37: HILLBURN HOUSE, JANETSTOWN, THURSO, KW14 7XQ
  - 57: MURRAYFIELD, JANETSTOWN, THURSO, KW14 7XQ
  - 58: QUARRY VIEW, JANETSTOWN, THURSO, KW14 7XQ
  - 69: HOPEFIELD, JANETSTOWN, THURSO, KW14 7XQ
  - 70: BLACKHEATH, HILL OF FORSS, FORSS, THURSO, KW14 7XQ
  - 71: LAND 450M TO SOUTH WEST OF, HOPEFIELD, JANETSTOWN, THURSO, KW14 7XQ
  - 72: SRATHBOFEY, WESTFIELD, THURSO, KW14 7QW
  - 75: LYTHMORE FARM HOUSE, WESTFIELD, THURSO, KW14 7QW
  - 79: STRATHMORE HOUSE, FORSS, THURSO, KW14 7XU
  - 80: BRAIGH-MOR, FORSS, THURSO, KW14 7XU
  - 81: 8, HOLDING, FORSS, THURSO, KW14 7XU



**Notes:**  
The ZTV is calculated to turbine tip height (138.5m) from a viewing height of 2m above ground level. The terrain model assumes bare ground and is derived from OS Terrain 5 height data (obtained from EMapSite in July 2022). Earth curvature and atmospheric refraction have been taken into account. The ZTV was calculated using ArcMap 10.8.1 software.  
Data source: OS, LUC, RES

|   |       |                       |                    |   |                |
|---|-------|-----------------------|--------------------|---|----------------|
| 1   | RW    | 2022-02-18            | APPD               | DATE  | FIRST ISSUE    |
| ISSUE   | DRAWN | DATE                  | APPD               | DATE  | REVISION NOTES |
| LAYOUT DWG  |       |                       | LAYOUT NO.         |   |                |
| DRAWING NUMBER  |       |                       |                    |   |                |
| FIG5A-2-1_11524_r2_ResidentialBaseplan_A1L  |       |                       |                    |   |                |
| COORDS  |       | British National Grid |                    |   |                |
| PURPOSE   |       |                       |                    |   |                |
| EIA REPORT AND APPLICATION FOR CONSENT 2022   |       |                       |                    |   |                |
| SCALE   |       |                       | ORIGINAL PLOT SIZE |   |                |
| 1:11,000  |       |                       | A1                 |   |                |
| PROJECT TITLE   |       |                       |                    |   |                |
| CAIRNMORE HILL WIND FARM  |       |                       |                    |   |                |
| DRAWING TITLE   |       |                       |                    |   |                |
| FIGURE 5A2.1: Residential Baseplan  |       |                       |                    |   |                |
| THIS DRAWING IS THE PROPERTY OF RENEWABLE ENERGY SYSTEMS LIMITED AND NO REPRODUCTION MAY BE MADE IN WHOLE OR IN PART WITHOUT PERMISSION |       |                       |                    |   |                |
|   |       |                       |                    | BEAUFORT COURT<br>EGG FARM LANE<br>KINGS LANGLEY<br>HERTFORDSHIRE<br>WD4 8LR<br>TEL +44 (0) 1923 299200 |                |