

CRAIGINMODDIE WIND FARM

FIGURE 6.5

Zone of Theoretical Visibility - Including Screening from Woodland and Settlement



KEY

- Proposed Craiginmoddie Wind Turbines
- Distance Radii from Outermost Turbine (5, 10, 15, 20km)
- Viewpoints
- Woodland (modelled at 15m)

Zone of Theoretical Visibility

- Blade tips (200m) may be visible
- Blade tips and hubs (122.5m) may be visible

FIGURE DATA:
This figure has been based on the following data:

Layout file: obvs-BT-T5-20km.shp; obvs-BT-T50-45km.shp;
obvs-HH-T5-20km.shp; obvs-HH-T50-45km.shp
Terrain data: T5-DSM-screening.asc; T50-DSM.asc
Viewer's eye height: 2m above ground level
Calculation grid size: 5m to 20km from site; 50m beyond

NOTES:
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 OS Terrain 5/50 height data with the locations of woodland and buildings taken from the OS Open Map Local dataset. Buildings have been modelled with an assumed height of 7.5m and woodland an assumed height of 15m, representing a conservative estimate of average heights within the study area.

The model does not take into account some localised features such as small copses, hedgerows or individual trees and therefore still gives an exaggerated impression of the extent of visibility. 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 5m² (to 20km from site)/50m² (beyond) resolution.

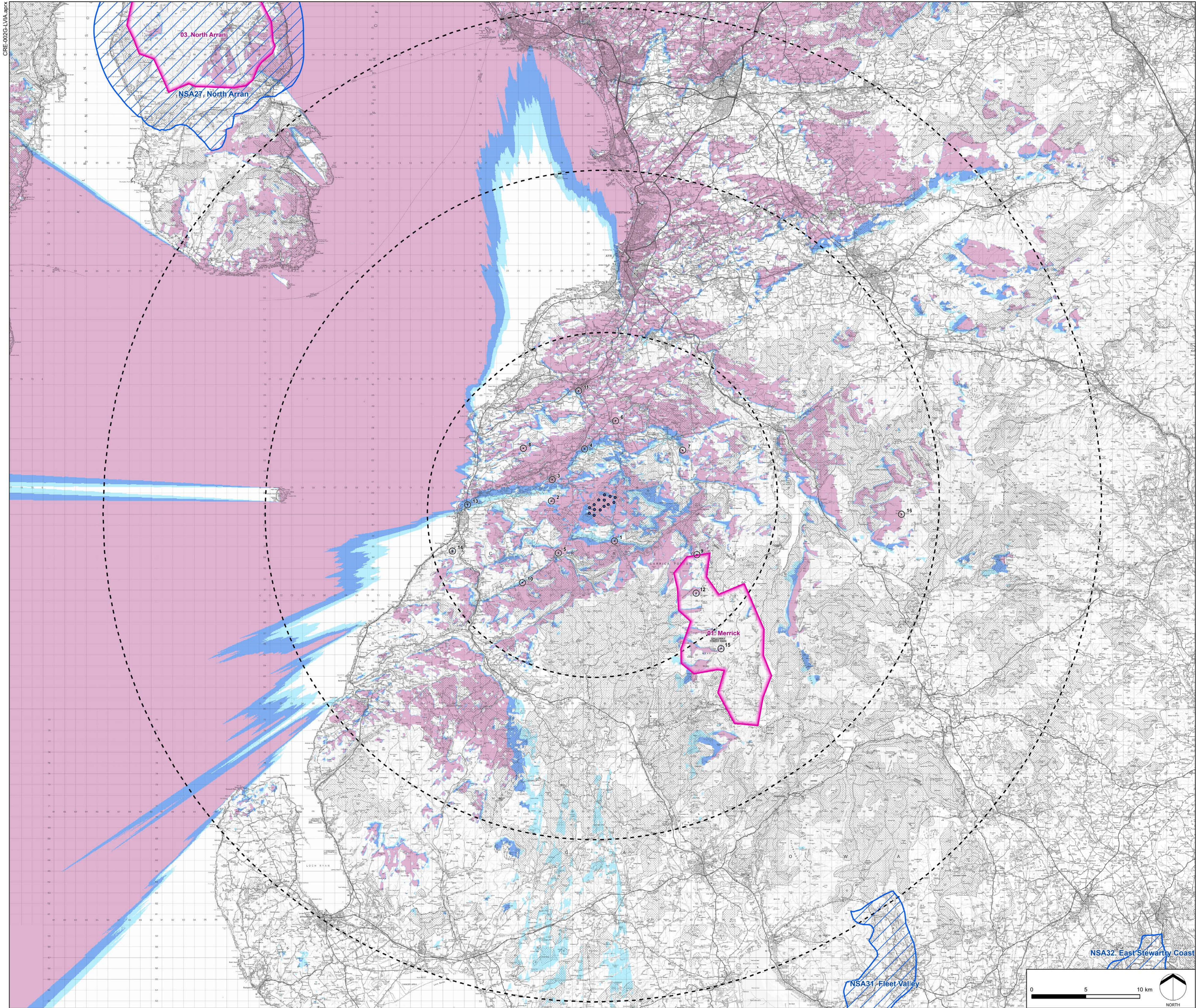
Projected Coordinate System: British National Grid

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DEC 2020	MP	A1	1:75,000	ME	-

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FIGURE 6.6

Zone of Theoretical Visibility - Bare Ground



KEY

- Proposed Craiginmoddie Wind Turbines
- Distance Radii from Outermost Turbine (15, 30, 45km)
- Viewpoints
- /// National Scenic Areas
- █ Wild Land Areas

Zone of Theoretical Visibility to Blade Tip (200m)

- 1 - 4 turbines may be visible
- 5 - 10 turbines may be visible
- 11 - 14 turbines may be visible

FIGURE DATA:
This figure has been based on the following data:

Layout file: obvs-BT-T5-20km.shp; obvs-BT-T50-45km.shp
Terrain data: T5-DTM.asc; T50-DTM.asc
Viewer's eye height: 2m above ground level
Calculation grid size: 5m (to 20km from site)/50m (beyond 20km)

NOTES:
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 topography into account.

This visibility map is based on a 'bare earth' model of the landform and does not show any effects of screening from obstacles such as buildings and vegetation.

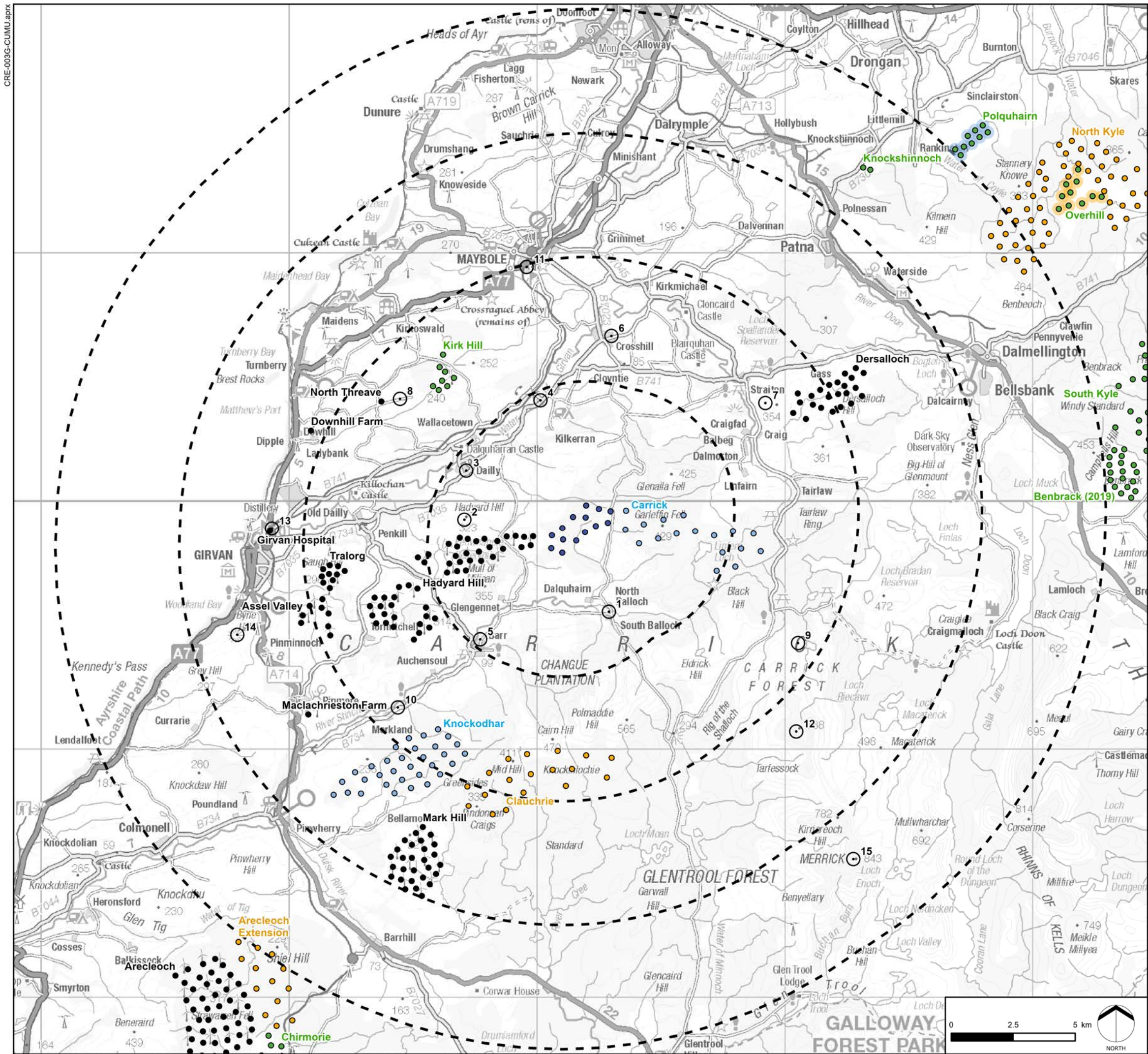
The ZTV includes an adjustment that allows for Earth's curvature and light refraction. It is based on a DTM and has a 5m² (to 20km from site)/50m² (beyond 20km) resolution.

Projected Coordinate System: British National Grid

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FIGURE 6.7
Cumulative Base Plan



KEY

- Proposed Craiginmoddie Wind Turbines
- Distance Radii from Outermost Turbine (5, 10, 15, 20km)
- Viewpoints

Cumulative Wind Farms within 20km

- Operational
- Consented
- In planning
- Scoping
- Consented, subject to a proposed variation
- Consented, subject to a scoping request for variation

CRAIGINMODDIE WIND FARM

FIGURE 6.8

Cumulative ZTV: Operational and Consented Sites

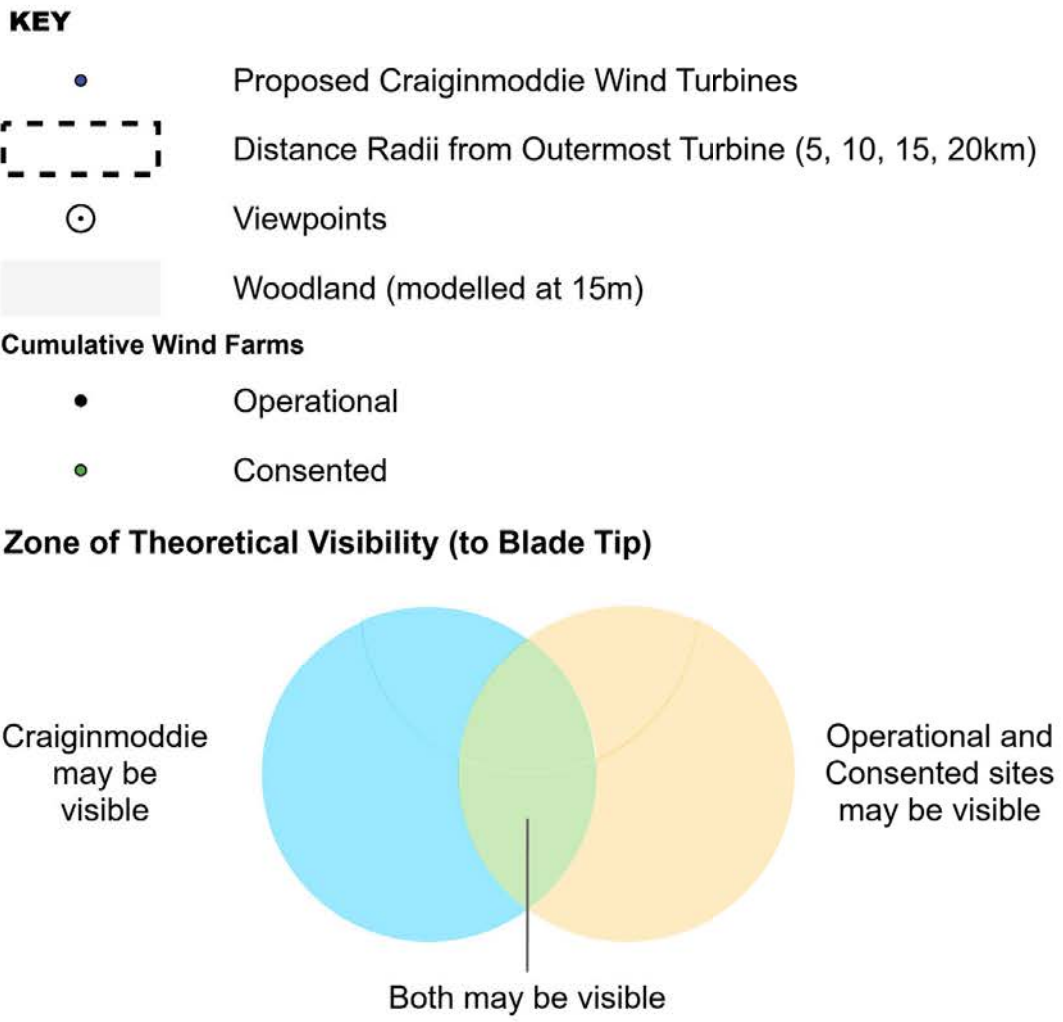
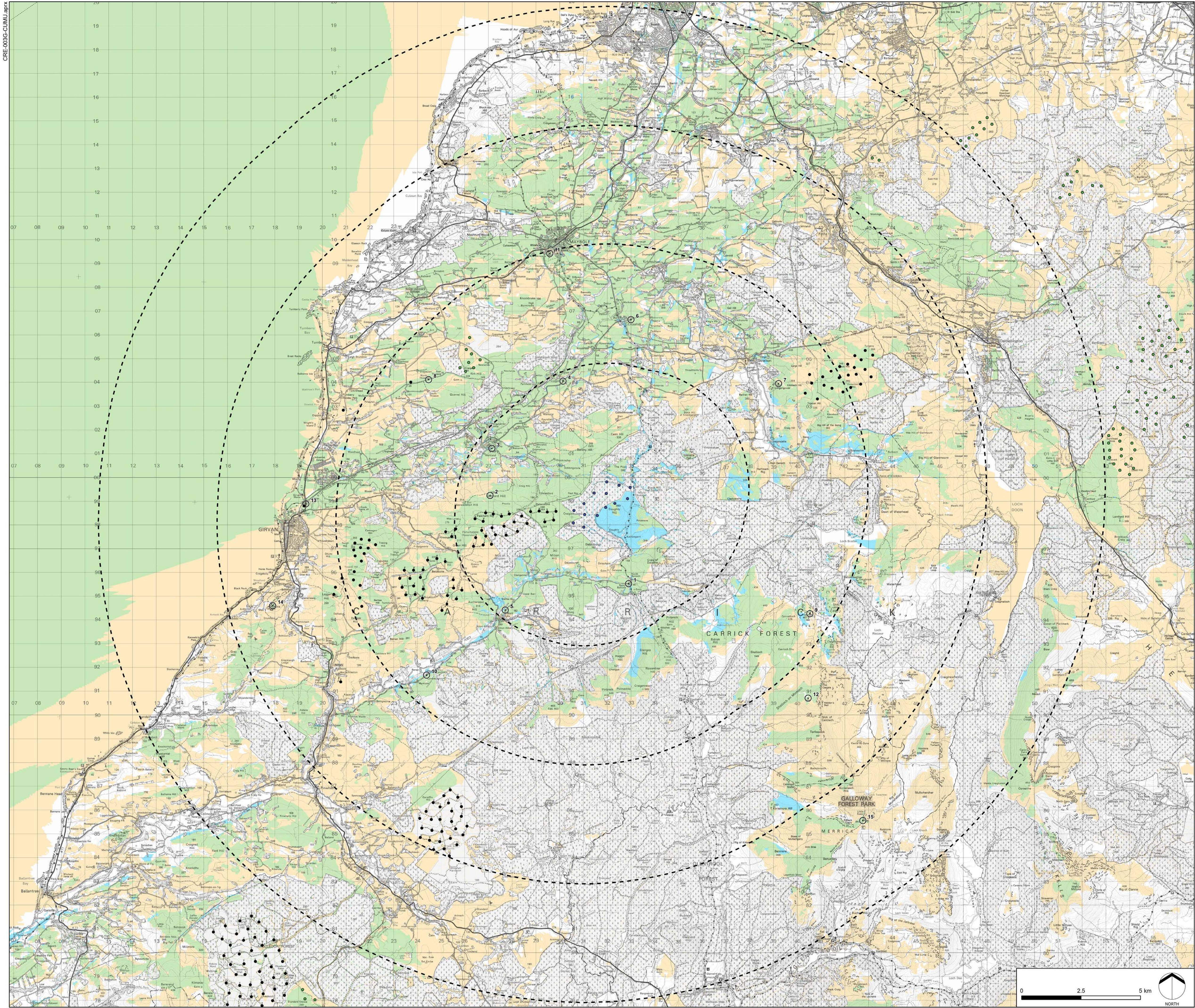


FIGURE DATA:
This figure has been based on the following data:

Layout file: obvs-BT-T5-20km.shp; obvs-BT-T50-45km.shp; obvs-cumu-op+cons-BT-T5-20km.shp; obvs-cumu-op+cons-BT-T50-45km.shp
Terrain data: T5-DSM-cumu-screening-10m.asc;
T50-DSM-cumu-screening.asc
Viewer's eye height: 2m above ground level
Calculation grid size: 10m to 20km from site; 50m beyond

NOTES:
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 OS Terrain 5/50 height data with the locations of woodland and buildings taken from the OS Open Map Local dataset. Buildings have been modelled with an assumed height of 7.5m and woodland an assumed height of 15m, representing a conservative estimate of average heights within the study area.

The model does not take into account some localised features such as small copses, hedgerows or individual trees and therefore still gives an exaggerated impression of the extent of visibility. 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 10m² (to 20km from site)/50m² (beyond) resolution.

Projected Coordinate System: British National Grid					
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