



Clachaig Glen Wind Farm

Environmental Impact Assessment Report

Volume 2c

Landscape and Visual Figures

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RWE

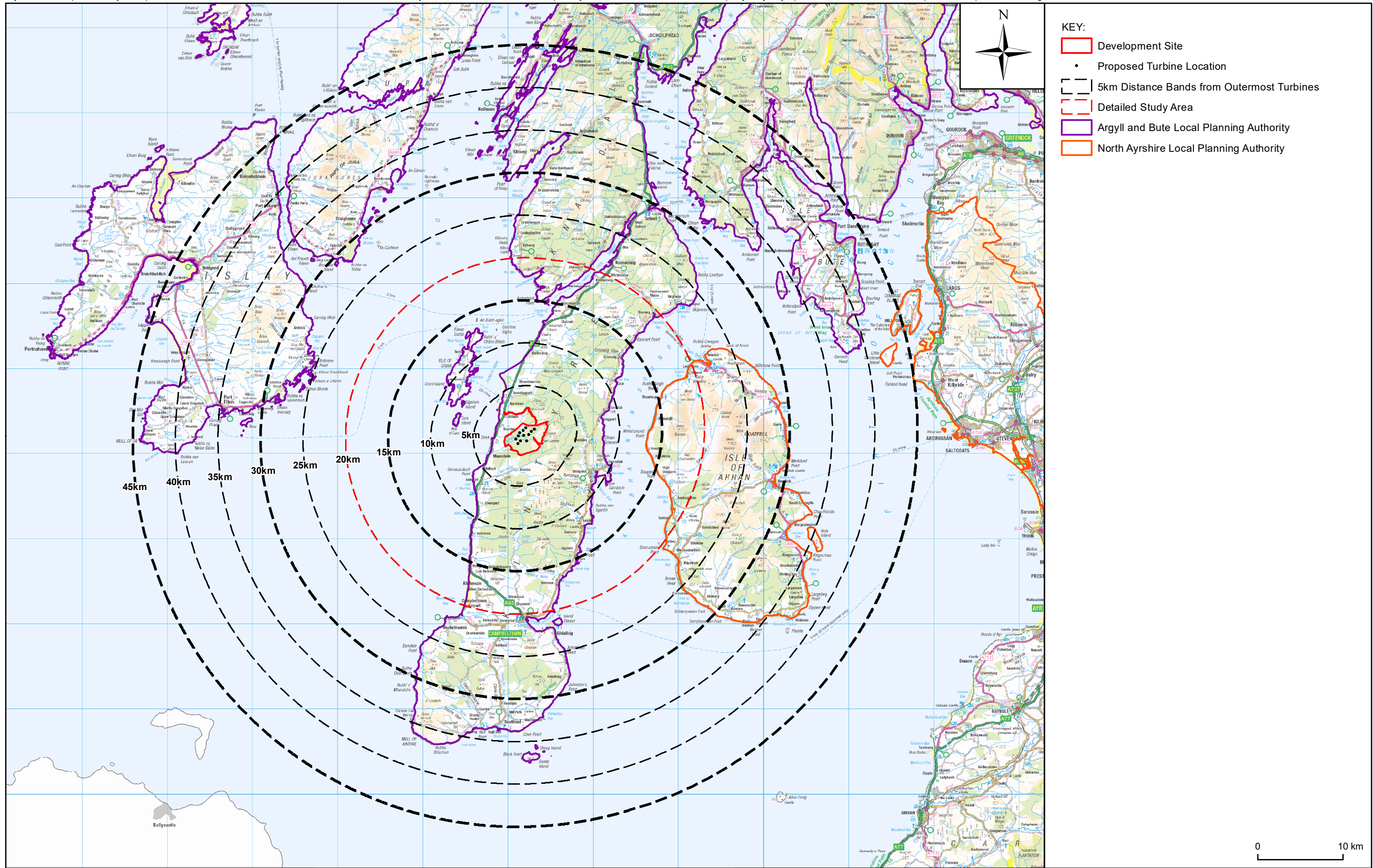
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Environmental Impact Assessment Report

Volume 2c

EIAR LVIA Figures

Figures: 7.1; 7.2; 7.3; 7.4a



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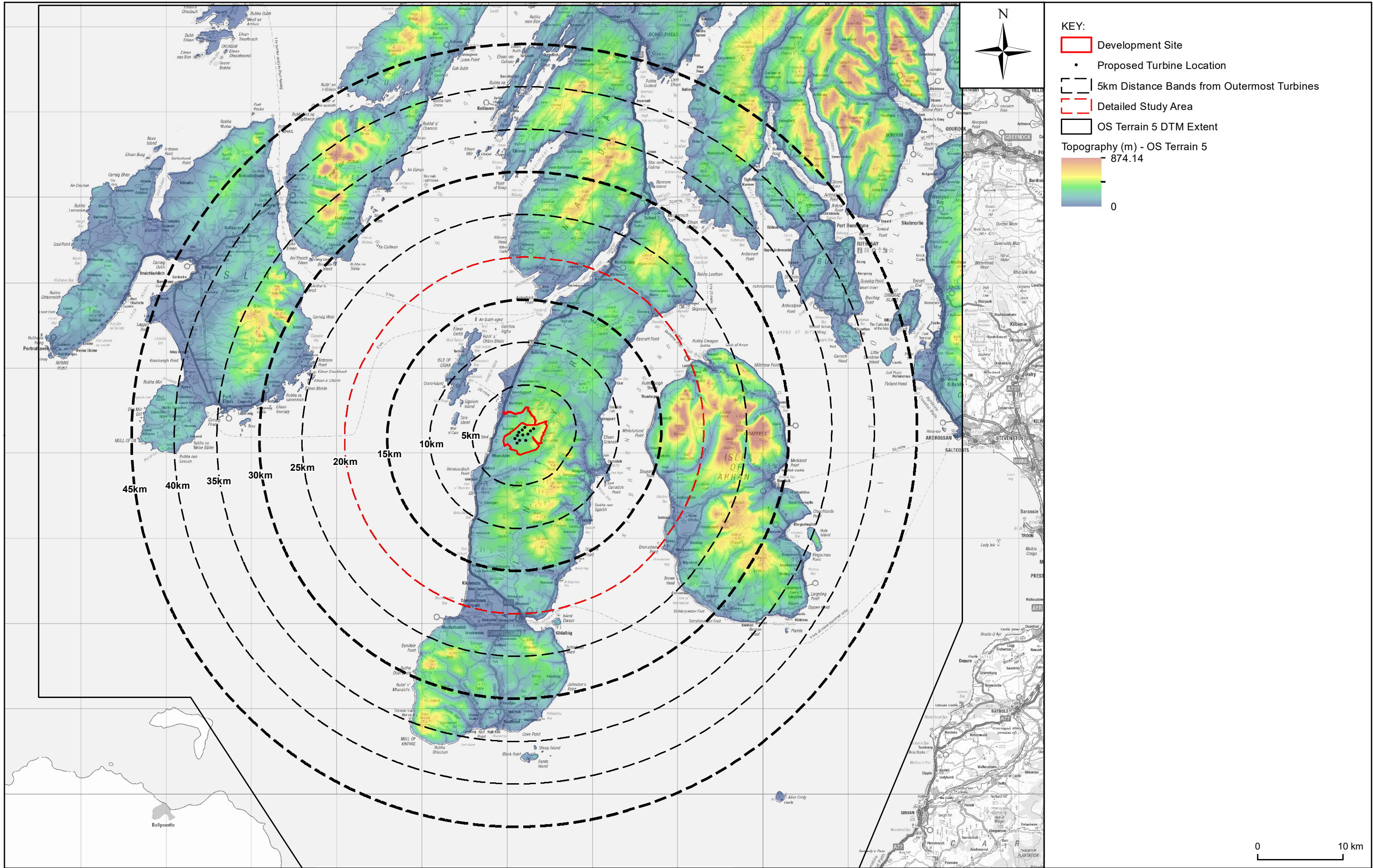
- Development Site
- Proposed Turbine Location
- 5km Distance Bands from Outermost Turbines
- Detailed Study Area
- Argyll and Bute Local Planning Authority
- North Ayrshire Local Planning Authority

Client:	RWE
Project:	CLACHAIG GLEN WIND FARM ENVIRONMENTAL IMPACT ASSESSMENT

Title:	FIGURE 7.1 SITE LOCATION AND LVIA STUDY AREA
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Client: **RWE**

Project: **CLACHAIG GLEN WIND FARM ENVIRONMENTAL IMPACT ASSESSMENT**

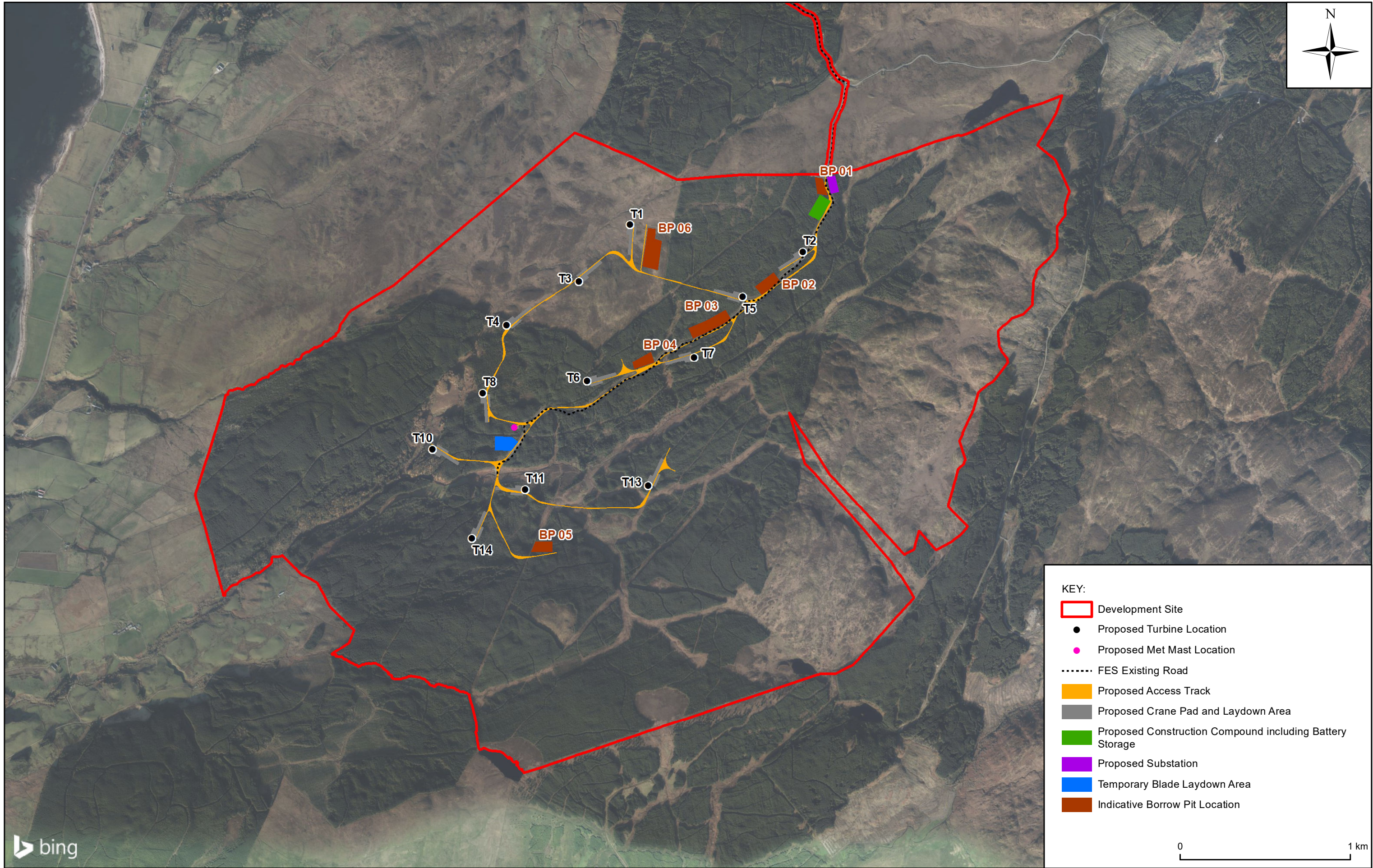
Title: **FIGURE 7.2 TOPOGRAPHY WITHIN STUDY AREA**

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KEY:

- Development Site
- Proposed Turbine Location
- Proposed Met Mast Location
- FES Existing Road
- Proposed Access Track
- Proposed Crane Pad and Laydown Area
- Proposed Construction Compound including Battery Storage
- Proposed Substation
- Temporary Blade Laydown Area
- Indicative Borrow Pit Location

0 1 km

Client: **RWE**

Project: CLACHAIG GLEN WIND FARM ENVIRONMENTAL IMPACT ASSESSMENT

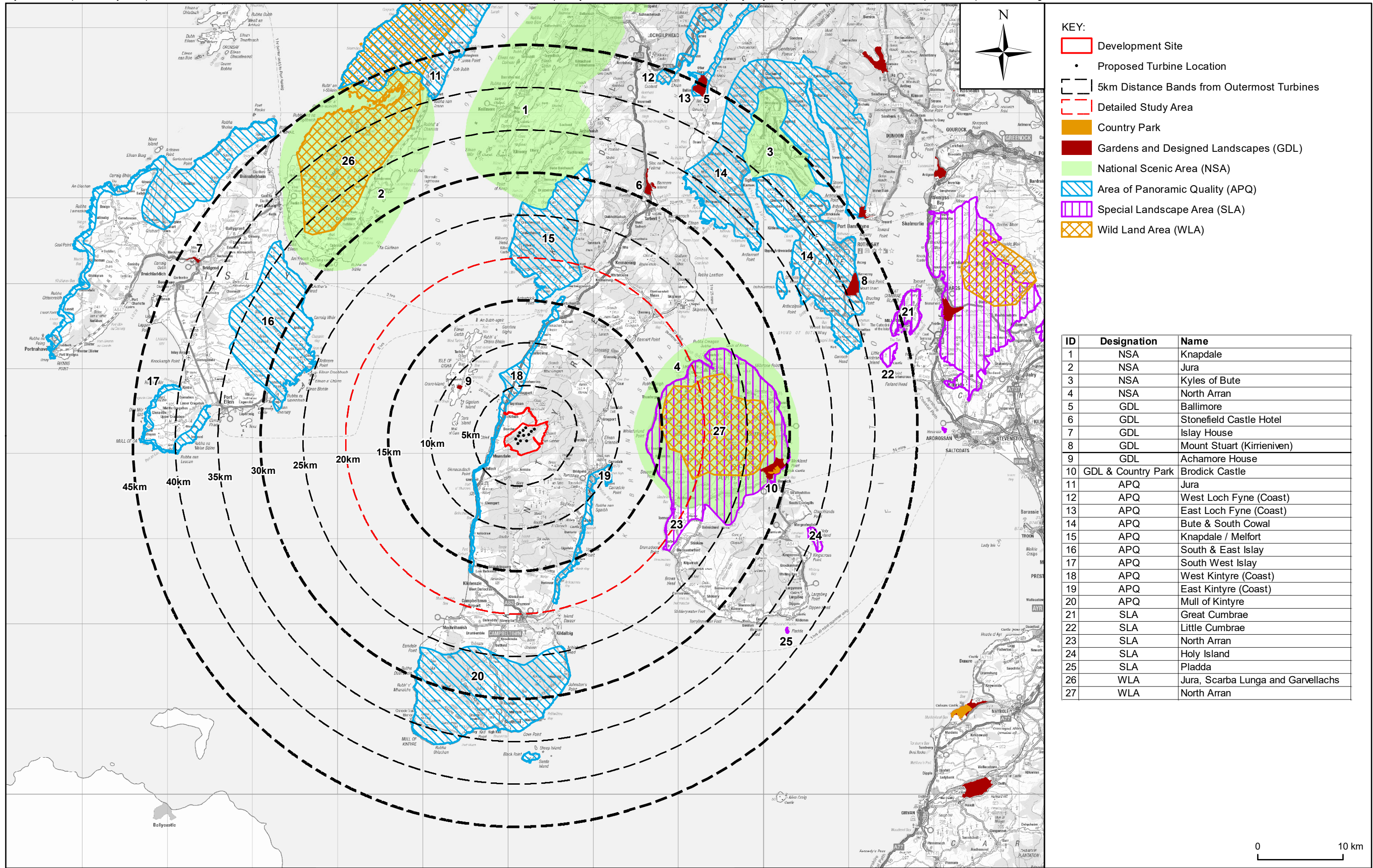
Title: **FIGURE 7.3 PROPOSED DEVELOPMENT SITE: AERIAL PHOTOGRAPHY**

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KEY:

- Development Site
- Proposed Turbine Location
- 5km Distance Bands from Outermost Turbines
- Detailed Study Area
- Country Park
- Gardens and Designed Landscapes (GDL)
- National Scenic Area (NSA)
- Area of Panoramic Quality (APQ)
- Special Landscape Area (SLA)
- Wild Land Area (WLA)

ID	Designation	Name
1	NSA	Knapdale
2	NSA	Jura
3	NSA	Kyles of Bute
4	NSA	North Arran
5	GDL	Ballimore
6	GDL	Stonefield Castle Hotel
7	GDL	Islay House
8	GDL	Mount Stuart (Kirriemuir)
9	GDL	Achamore House
10	GDL & Country Park	Brodick Castle
11	APQ	Jura
12	APQ	West Loch Fyne (Coast)
13	APQ	East Loch Fyne (Coast)
14	APQ	Bute & South Cowal
15	APQ	Knapdale / Melfort
16	APQ	South & East Islay
17	APQ	South West Islay
18	APQ	West Kintyre (Coast)
19	APQ	East Kintyre (Coast)
20	APQ	Mull of Kintyre
21	SLA	Great Cumbrae
22	SLA	Little Cumbrae
23	SLA	North Arran
24	SLA	Holy Island
25	SLA	Pladda
26	WLA	Jura, Scarba Lunga and Garvellachs
27	WLA	North Arran

Client: **RWE**

Project: **CLACHAIG GLEN WIND FARM ENVIRONMENTAL IMPACT ASSESSMENT**

Title: **FIGURE 7.4a LANDSCAPE DESIGNATIONS**

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RWE

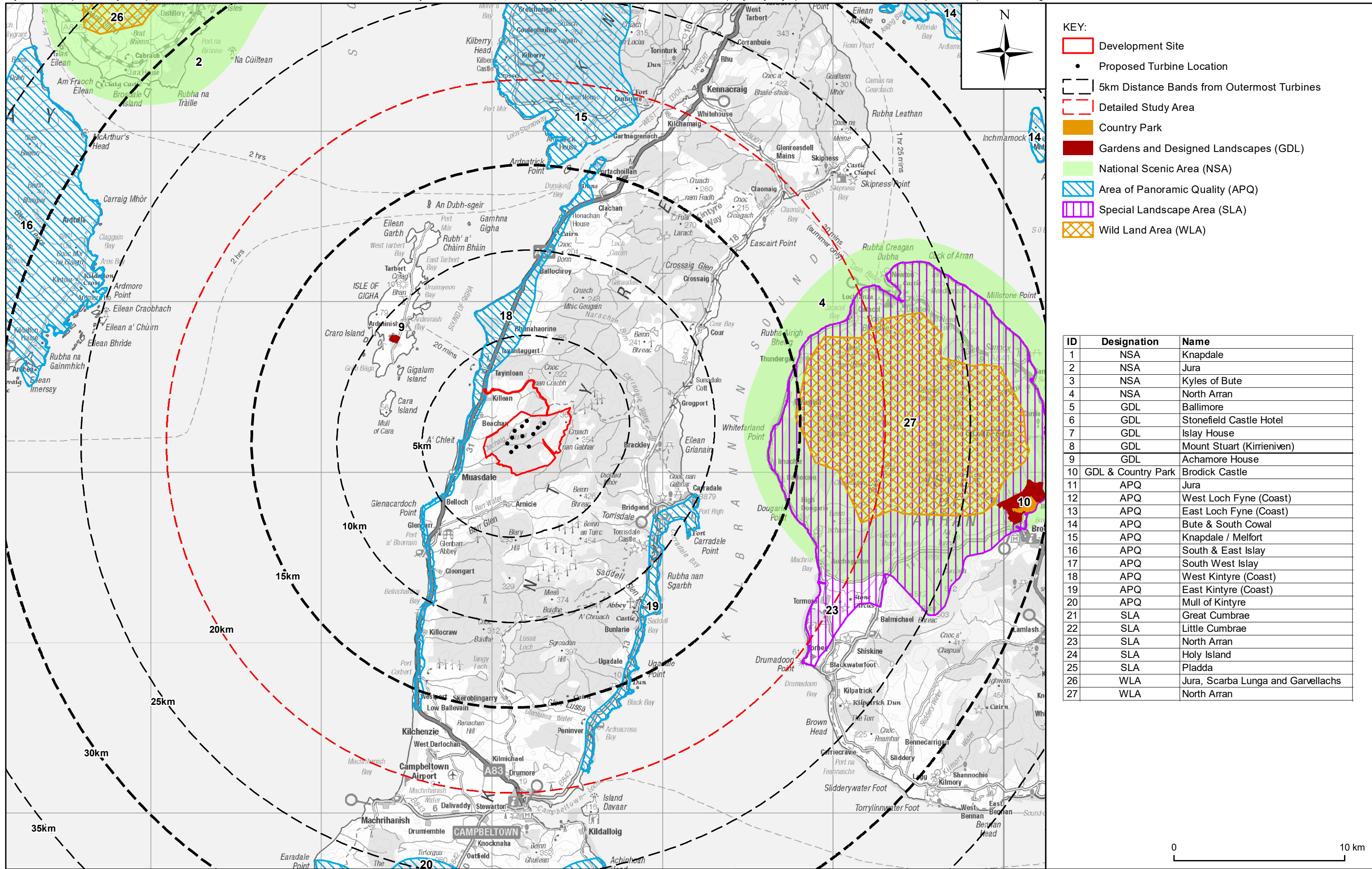
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Environmental Impact Assessment Report

Volume 2c

EIAR Figure

Figures: 7.4b; 7.5a; 7.5b



KEY:

- Development Site
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- 5km Distance Bands from Outermost Turbines
- Detailed Study Area
- Country Park
- Gardens and Designed Landscapes (GDL)
- National Scenic Area (NSA)
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- Special Landscape Area (SLA)
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ID	Designation	Name
1	NSA	Knapdale
2	NSA	Jura
3	NSA	Kyles of Bute
4	NSA	North Arran
5	GDL	Ballimore
6	GDL	Stonefield Castle Hotel
7	GDL	Islay House
8	GDL	Mount Stuart (Kirriemuir)
9	GDL	Achamore House
10	GDL & Country Park	Brodick Castle
11	APQ	Jura
12	APQ	West Loch Fyne (Coast)
13	APQ	East Loch Fyne (Coast)
14	APQ	Bute & South Cowal
15	APQ	Knapdale / Melfort
16	APQ	South & East Islay
17	APQ	South West Islay
18	APQ	West Kintyre (Coast)
19	APQ	East Kintyre (Coast)
20	APQ	Mull of Kintyre
21	SLA	Great Cumbrae
22	SLA	Little Cumbrae
23	SLA	North Arran
24	SLA	Holy Island
25	SLA	Pladda
26	WLA	Jura, Scarba Lunga and Garvellachs
27	WLA	North Arran

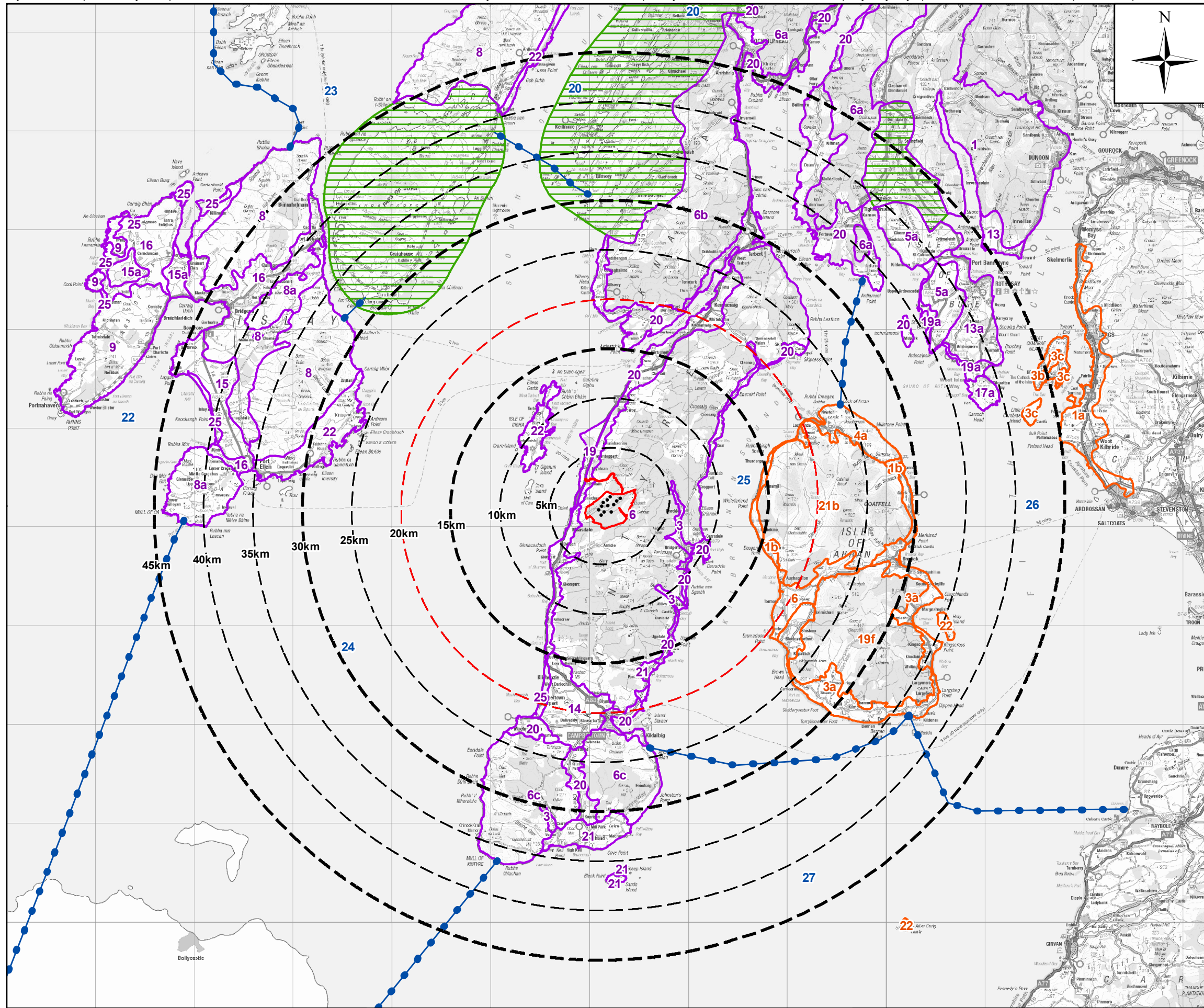
Client: **RWE**

Project: **CLACHAIG GLEN WIND FARM ENVIRONMENTAL IMPACT ASSESSMENT**

Title: **FIGURE 7.4b DETAILED STUDY AREA LANDSCAPE DESIGNATIONS**

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KEY:

- Development Site
- Proposed Turbine Location
- 5km Distance Bands from Outermost Turbines
- Detailed Study Area

Landscape Character Type

- Argyll and Bute Landscape Wind Energy Capacity Study (2017)
- Area Not Considered in the Capacity Study for Turbines Over 50m in Height
- North Ayrshire Landscape Wind Capacity Study (2018)
- Seascape Unit Boundary - SNH (2005)

Argyll and Bute Landscape Wind Energy Capacity Study (2017)	
ID	Landscape Character Type
1	Steep Ridgeland and Mountains
3	Hidden Glens
5a	Bute Open Ridgeland
6	Upland Forest Moor Mosaic
6a	Loch Fyne Upland Forest Moor Mosaic
6b	Knapdale Upland Forest Moor Mosaic
6c	Mull of Kintyre Upland Forest Moor Mosaic
8	Moorland Plateau
8a	Moorland Plateau with Farmland
9	Rocky Moorland
10	Upland Parallel Ridges
13	Rolling Farmland with Estates
13a	Bute Rolling Farmland with Estates
14	Bay Farmland
15	Lowland Bog and Moor
15a	Less Extensive Lowland Bog and Moor
16	Marginal Farmland Mosaic
17a	Bute Basalt Lowlands
19	Coastal Plain
19a	Bute Coastal Plain
20	Rocky Mosaic
21	Low Coastal Hills
22	Coastal Parallel Ridges
23	Flat Moss and Mudflats
25	Sand Dunes and Machair

North Ayrshire Landscape Wind Capacity Study (2018)	
ID	Landscape Character Type
1a	North Ayrshire Raised Beach Coast
1b	Arran Raised Beach Coast
3a	Arran Coastal Fringe with Agriculture
3b	Cumbraes Coastal Fringe with Agriculture
3c	Rugged Island Core
4a	Arran Coastal Headland
6	Coastal Lowland Moor
19f	Arran Rugged Moorland Hills & Valleys
21b	Arran Rugged Granite Uplands
22	Rocky Volcanic Island

Seascape Unit - SNH (2005)	
Unit ID	Seascape Character Unit
20	Sound of Mull / Firth of Lorn / Sound of Jura
22	West Islay
23	South Mull / Colonsay / West Jura / Sound of Islay
24	West Kintyre / South East Jura and South East Islay
25	Loch Fyne / Kilbrannan Sound
26	Firth of Clyde
27	South Arran / South Ayrshire / South East Kintyre



Client: **RWE**

Project: **CLACHAIG GLEN WIND FARM ENVIRONMENTAL IMPACT ASSESSMENT**

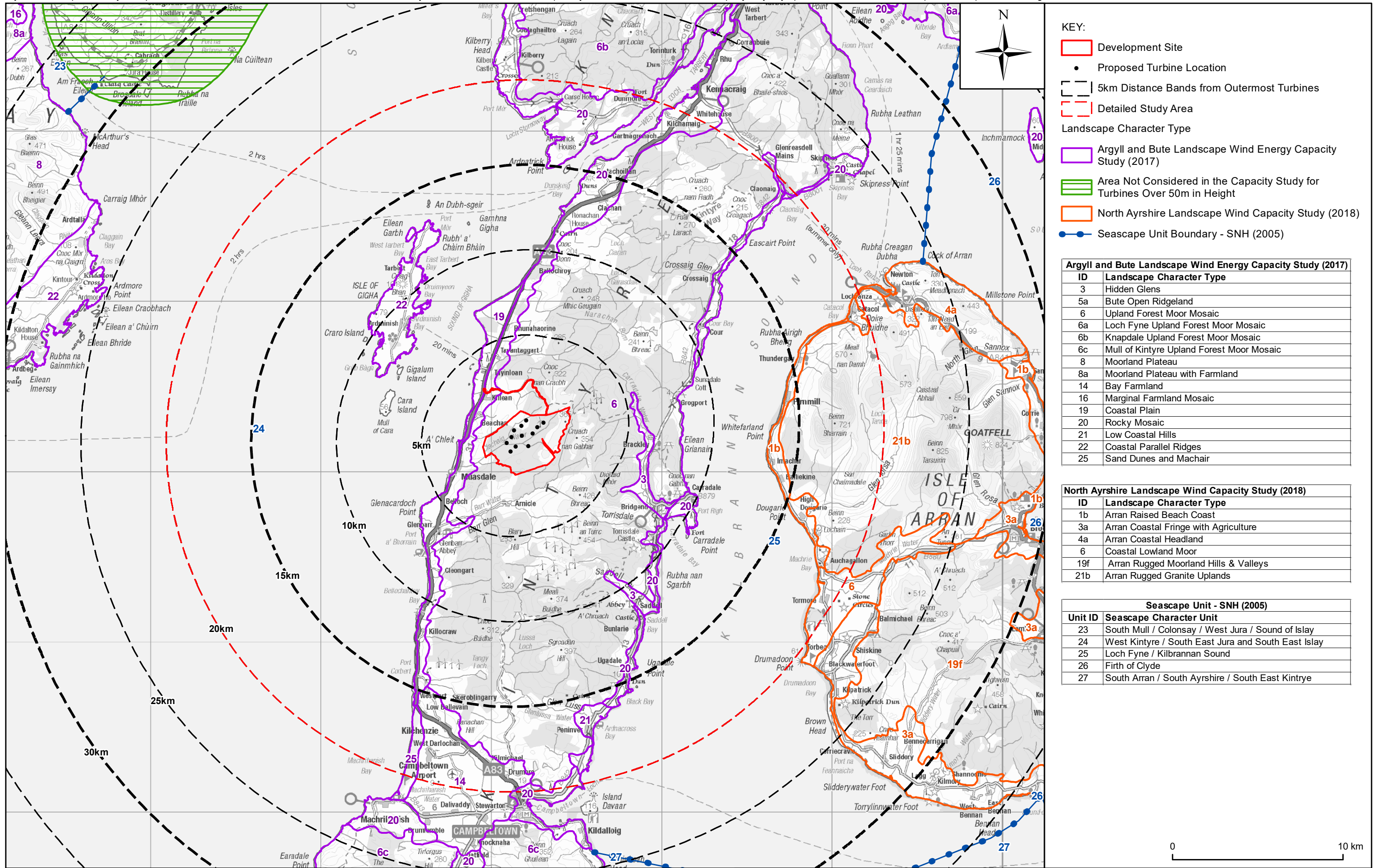
Title: **FIGURE 7.5a LANDSCAPE CHARACTER**

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KEY:

- Development Site
- Proposed Turbine Location
- 5km Distance Bands from Outermost Turbines
- Detailed Study Area
- Landscape Character Type**
- Argyll and Bute Landscape Wind Energy Capacity Study (2017)
- Area Not Considered in the Capacity Study for Turbines Over 50m in Height
- North Ayrshire Landscape Wind Capacity Study (2018)
- Seascape Unit Boundary - SNH (2005)

Argyll and Bute Landscape Wind Energy Capacity Study (2017)	
ID	Landscape Character Type
3	Hidden Glens
5a	Bute Open Ridgeland
6	Upland Forest Moor Mosaic
6a	Loch Fyne Upland Forest Moor Mosaic
6b	Knapdale Upland Forest Moor Mosaic
6c	Mull of Kintyre Upland Forest Moor Mosaic
8	Moorland Plateau
8a	Moorland Plateau with Farmland
14	Bay Farmland
16	Marginal Farmland Mosaic
19	Coastal Plain
20	Rocky Mosaic
21	Low Coastal Hills
22	Coastal Parallel Ridges
25	Sand Dunes and Machair

North Ayrshire Landscape Wind Capacity Study (2018)	
ID	Landscape Character Type
1b	Arran Raised Beach Coast
3a	Arran Coastal Fringe with Agriculture
4a	Arran Coastal Headland
6	Coastal Lowland Moor
19f	Arran Rugged Moorland Hills & Valleys
21b	Arran Rugged Granite Uplands

Seascape Unit - SNH (2005)	
Unit ID	Seascape Character Unit
23	South Mull / Colonsay / West Jura / Sound of Islay
24	West Kintyre / South East Jura and South East Islay
25	Loch Fyne / Kilbrannan Sound
26	Firth of Clyde
27	South Arran / South Ayrshire / South East Kintyre

Client: **RWE**

Project: **CLACHAIG GLEN WIND FARM ENVIRONMENTAL IMPACT ASSESSMENT**

Title: **FIGURE 7.5b DETAILED STUDY AREA LANDSCAPE CHARACTER**

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RWE

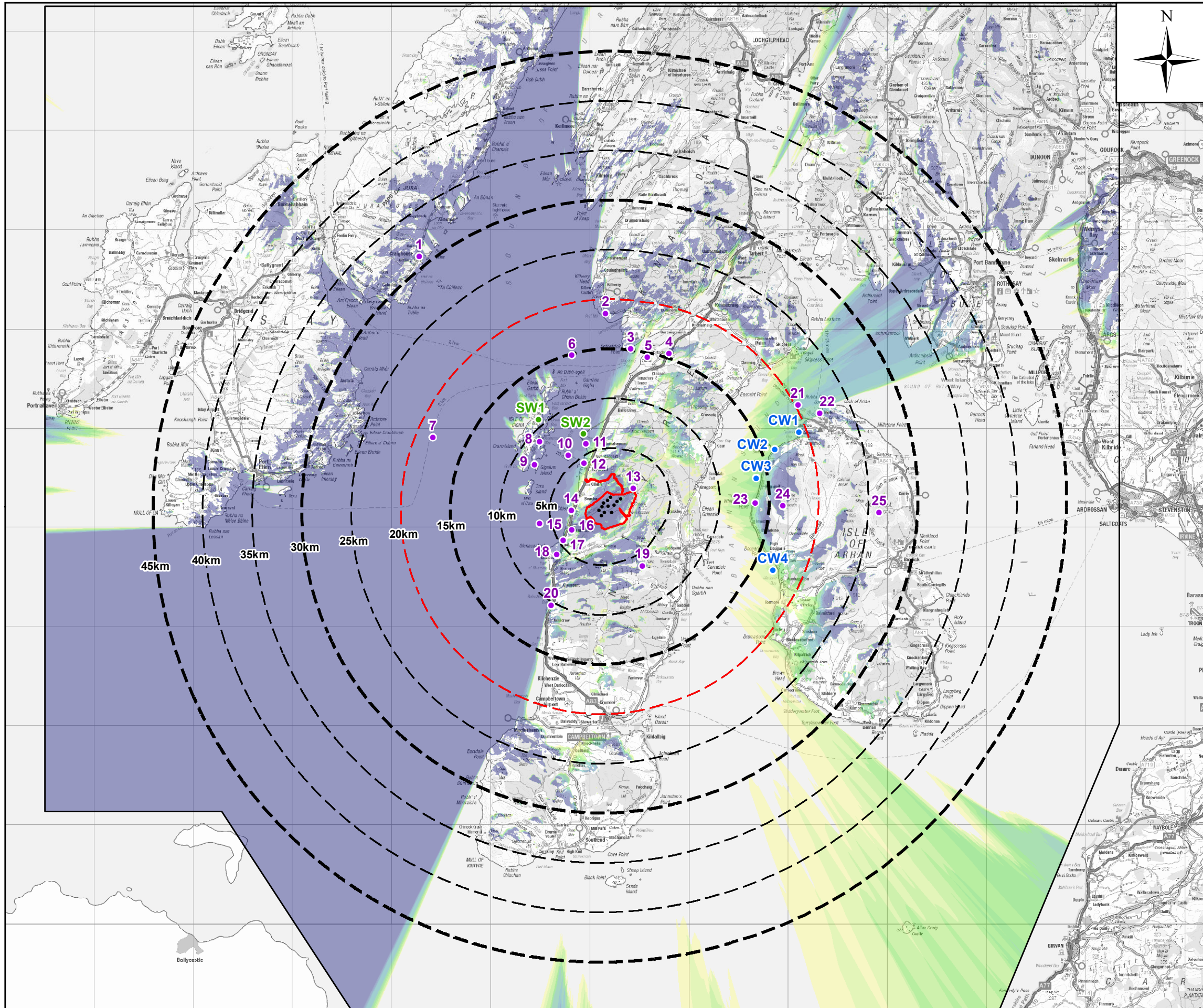
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Environmental Impact Assessment Report

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EIAR LVIA Figures

Figure: 7.6a



- KEY:**
- Development Site
 - Proposed Turbine Location
 - 5km Distance Bands from Outermost Turbines
 - Detailed Study Area
 - OS Terrain 5 DTM Extent
 - LVIA Viewpoint Location
 - Supplementary Wireline Viewpoint Location
 - Supplementary Cumulative Wireline Viewpoint Location

Number of Turbines Visible:

1	4	7	10
2	5	8	11
3	6	9	12

Viewpoint Location			
ID	Name	X	Y
1	Craighouse, Jura	152740	667370
2	B8024 south of Kilberry	171541	661638
3	Ardpatrick	174063	658086
4	A83 north of Clachan	177920	657558
5	Dun Skeig	175775	657185
6	Kennacraig - Port Askaig Ferry	168126	657382
7	Kennacraig - Port Ellen Ferry	154091	649118
8	Ardminish, Gigha	164896	648662
9	South Pier, Gigha	164371	646362
10	Sound of Gigha from Gigha Ferry	167781	647310
11	Rhunahaorine/ Point Sands near the caravan park	169539	648433
12	Tayinloan Ferry Terminal	169336	646531
13	Kintyre Way north of site	174336	643968
14	A'Chleit	168106	641746
15	Sound of Gigha from recreational watercraft	164905	640419
16	North Muasdale	168136	639771
17	A83 south of Muasdale	167248	638737
18	Glenacardoch	166619	637287
19	Beinn an Tuirc	175223	636169
20	A83 near Bellochantuy	166040	632191
21	Lochranza - Claonaig Ferry	190950	652364
22	Newton Point, Arran	193137	651538
23	A841 Whitefarland, Arran	186613	642531
24	Beinn Bharrain, Arran	189439	642218
25	Goatfell, Arran	199135	641538
SW1	Creag Bhan, Gigha	164780	650900
SW2	Kintyre Way, Rhunahaorine north	169315	649455
CW1	Catcol, Arran	191040	649630
CW2	Rubha Airigh Beirg, Arran	188595	647875
CW3	Kilbrannan Sound, northwest of Pirmill	186715	645010
CW4	Kilbrannan Sound, Machrie Bay	188410	635690

NOTE:
Zone of Theoretical Visibility (ZTV) has been generated using Ordnance Survey Terrain 5 digital terrain model, which does not take account of the screening effects of vegetation, buildings or other structures.

ZTV is based upon a maximum layout of 12 turbines using an observer eye height of 2m above ground level.
Tip Height: T1-T6 & T8 - 185m, T7 & T10-T14 - 200m

All heights mentioned are above ground level (AGL).



Client: **RWE**

Project: **CLACHAIG GLEN WIND FARM ENVIRONMENTAL IMPACT ASSESSMENT**

Title: **FIGURE 7.6a BLADE TIP ZONE OF THEORETICAL VISIBILITY (ZTV) WITH VIEWPOINTS**

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RWE

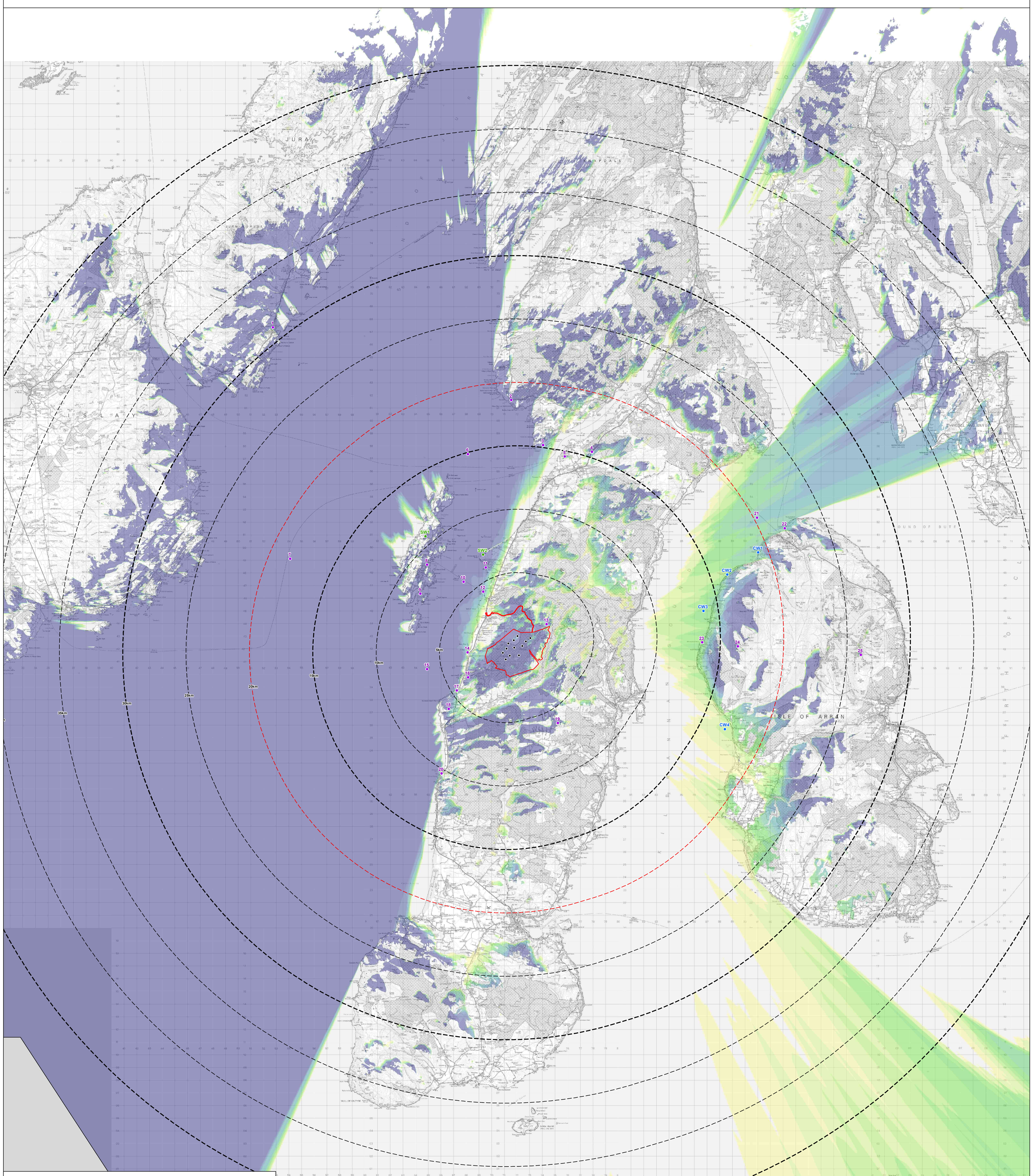
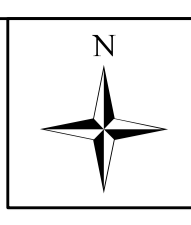
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EIAR LVIA Figures

Figure: 7.6b



KEY:

- Development Site
- 5km Distance Bands from Outermost Turbines
- Detailed Study Area
- Proposed Turbine Location
- LVIA Viewpoint Location
- Supplementary Wireline Viewpoint Location
- OS Terrain 5 DTM Extent

Number of Turbines Visible:

1	4	7	10
2	5	8	11
3	6	9	12

NOTE:
Zone of Theoretical Visibility (ZTV) has been generated using Ordnance Survey Terrain 5 digital terrain model, which does not take account of the screening effects of vegetation, buildings or other structures.
ZTV is based upon a maximum layout of 12 turbines using an observer eye height of 2m above ground level.
Tip Height: T1-T6 & T8 - 185m, T7 & T10-T14 - 200m
All heights mentioned are above ground level (AGL).
0 5 km

ID	Name	X	Y
1	Craghouse, Jura	162740	667370
2	BRO24 south of Liberry	171541	661630
3	Andpatrick	174063	658086
4	ABS north of Cochan	177920	657558
5	Dun Skieg	175775	657185
6	Kemnacraig - Port Askraig Ferry	168126	657382
7	Kemnacraig - Port Ellen Ferry	164201	648118
8	Andmirish, Gigha	164896	648662
9	South Pier, Gigha	164371	646362
10	Sound of Gigha from Gigha Ferry	167751	647310
11	Rhunaonaire Point Sands near the caravan park	165936	648433
12	Tayronan Ferry Terminal	166366	646531
13	Kirryre Way north of site	174336	643968
14	ACHallt	168106	641746
15	Sound of Gigha from recreational watercraft	164905	640419
16	North Muasdale	168136	639771
17	ABS south of Muasdale	167248	638737
18	Glenacardoch	166610	637267
19	Bearn an Tuic	176223	636169
20	ABS near Belochartory	160040	632191
21	Lochranza - Cavaig Ferry	160950	632364
22	Newton Point, Arran	163137	651538
23	ABS1 Whitebarran, Arran	166613	642531
24	Bearn Bhanran, Arran	159439	642218
25	Coastall, Arran	169136	641538
SW1	Craig Ehan, Gigha	164760	650900
SW2	Kirryre Way, Rhunaonaire north	166315	646455
CW1	Cavaig, Arran	161040	646930
CW2	Ruba Angh Binn, Arran	166950	647875
CW3	Kilbrannan Sound, northwest of Pimhill	186715	645010
CW4	Kilbrannan Sound, Machine Bay	188410	635690

RWE

Clachaig Glen Wind Farm

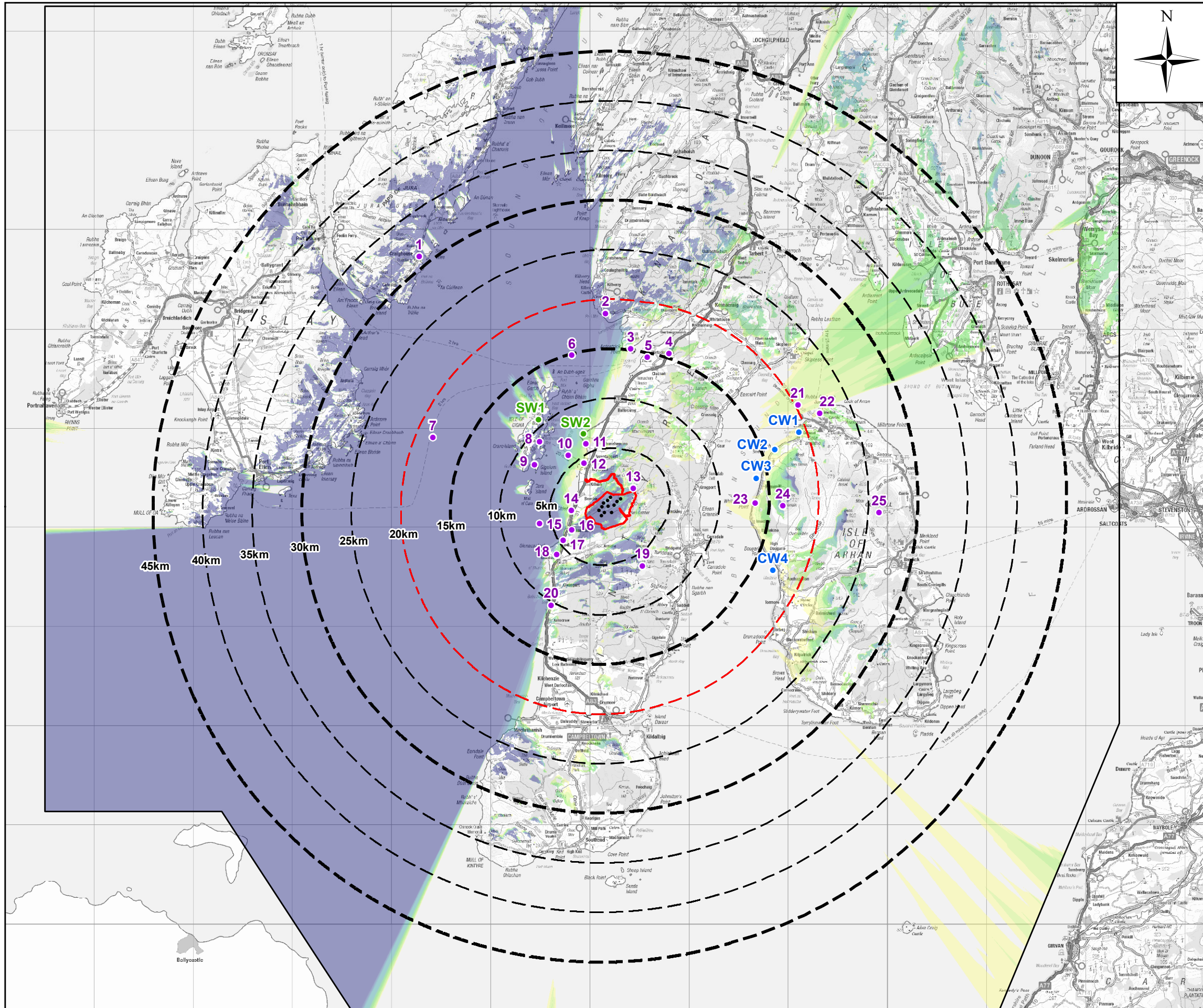
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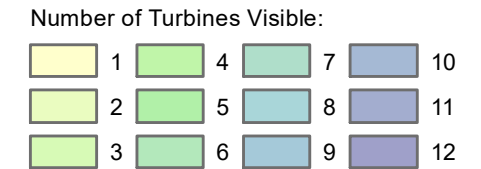
EIAR LVIA Figures

Figure: 7.7a





- KEY:**
- Development Site
 - Proposed Turbine Location
 - 5km Distance Bands from Outermost Turbines
 - Detailed Study Area
 - OS Terrain 5 DTM Extent
 - LVIA Viewpoint Location
 - Supplementary Wireline Viewpoint Location
 - Supplementary Cumulative Wireline Viewpoint Location



Viewpoint Location			
ID	Name	X	Y
1	Craighouse, Jura	152740	667370
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17	A83 south of Muasdale	167248	638737
18	Glenacardoch	166619	637287
19	Beinn an Tuirc	175223	636169
20	A83 near Bellochantuy	166040	632191
21	Lochranza - Claonaig Ferry	190950	652364
22	Newton Point, Arran	193137	651538
23	A841 Whitefarland, Arran	186613	642531
24	Beinn Bharrain, Arran	189439	642218
25	Goatfell, Arran	199135	641538
SW1	Creag Bhan, Gigha	164780	650900
SW2	Kintyre Way, Rhunahaorine north	169315	649455
CW1	Catcol, Arran	191040	649630
CW2	Rubha Airigh Beirg, Arran	188595	647875
CW3	Kilbrannan Sound, northwest of Pirmill	186715	645010
CW4	Kilbrannan Sound, Machrie Bay	188410	635690

NOTE:
Zone of Theoretical Visibility (ZTV) has been generated using Ordnance Survey Terrain 5 digital terrain model, which does not take account of the screening effects of vegetation, buildings or other structures.

ZTV is based upon a maximum layout of 12 turbines using an observer eye height of 2m above ground level.
Hub Height: T1-T6 & T8 - 112m, T7 & T10-T14 - 132m

All heights mentioned are above ground level (AGL).



Client: **RWE**

Project: **CLACHAIG GLEN WIND FARM ENVIRONMENTAL IMPACT ASSESSMENT**

Title: **FIGURE 7.7a HUB HEIGHT ZONE OF THEORETICAL VISIBILITY (ZTV) WITH VIEWPOINTS**

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RWE

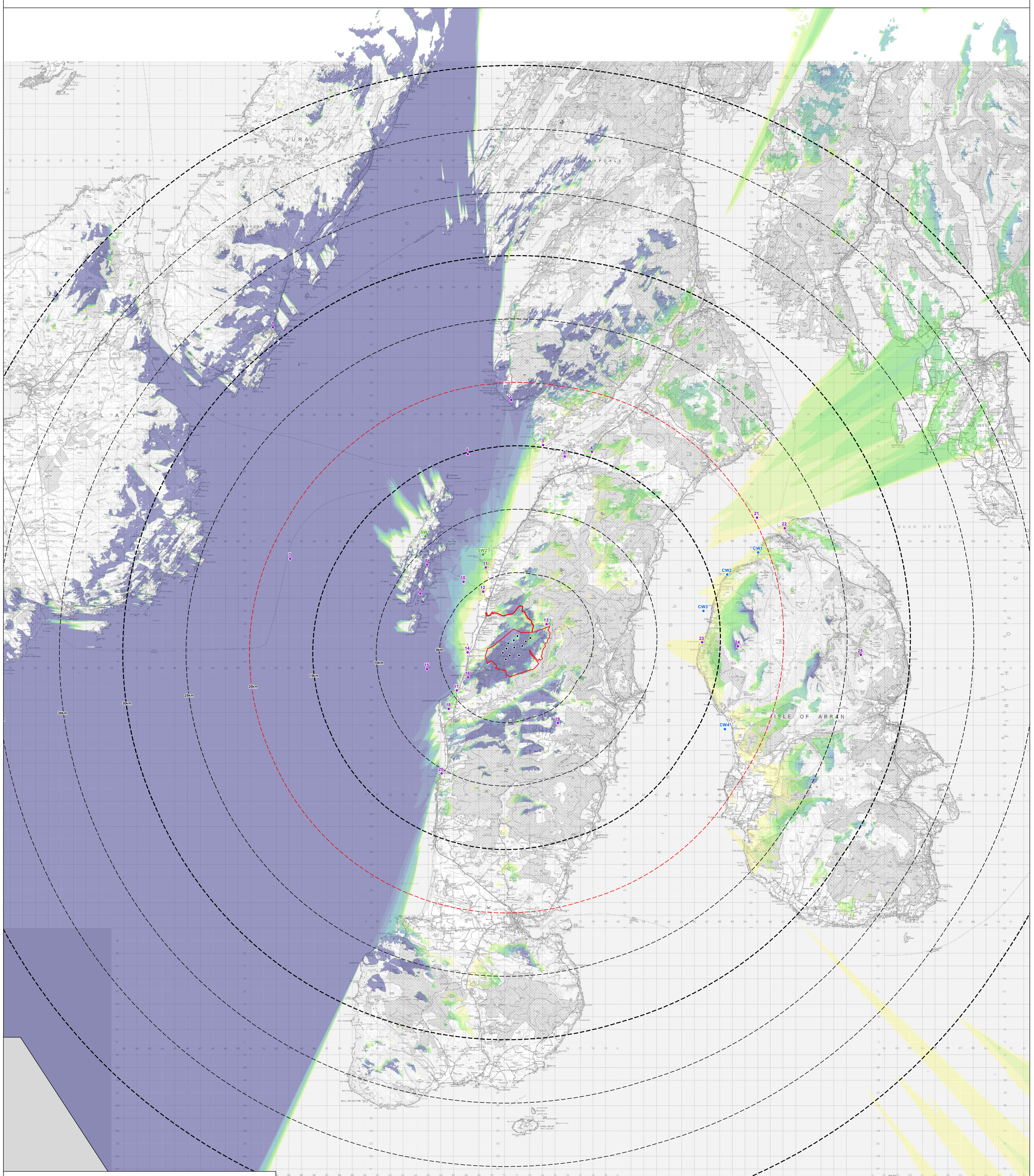
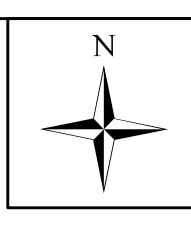
Clachaig Glen Wind Farm

Environmental Impact Assessment Report

Volume 2c

EIAR LVIA Figures

Figure: 7.7b



KEY:

- Development Site
- 5km Distance Bands from Outermost Turbines
- Detailed Study Area
- Proposed Turbine Location
- LVIA Viewpoint Location
- Supplementary Wireline Viewpoint Location
- Supplementary Cumulative Wireline Viewpoint Location
- OS Terrain 5 DTM Extent

Number of Turbines Visible:

1	4	7	10
2	5	8	11
3	6	9	12

NOTE:
Zone of Theoretical Visibility (ZTV) has been generated using Ordnance Survey Terrain 5 digital terrain model, which does not take account of the screening effects of vegetation, buildings or other structures.
ZTV is based upon a maximum layout of 12 turbines using an observer eye height of 2m above ground level.
Hub Height: T1-T6 & T8 - 112m, T7 & T10-T14 - 132m
All heights mentioned are above ground level (AGL).

Viewpoint Location			
ID	Name	X	Y
1	Craghouse, Jura	162740	667370
2	Birk24 south of Ilberry	171541	661630
3	Andpatrick	174063	658060
4	ABS north of Cochan	177920	657550
5	Dun Skieg	175775	657165
6	Kemnacrag - Port Askag Ferry	168126	657382
7	Kemnacrag - Port Ellen Ferry	164201	648118
8	Andmirish, Gigha	164896	648662
9	South Pier, Gigha	164371	646362
10	Sound of Gigha from Gigha Ferry	167751	647310
11	Rhunaheorie Point Sands near the caravan park	166536	648433
12	Tayrean Ferry Terminal	166366	646531
13	Kirryre Way north of site	174336	643960
14	ACHallt	168106	641746
15	Sound of Gigha from recreational watercraft	164605	640419
16	North Muasdale	168136	639771
17	ABS south of Muasdale	167248	638737
18	Glenacardoch	166610	637267
19	Bearn an Tuic	175223	636169
20	ABS near Belochartory	160040	632191
21	Lochranza - Cavaig Ferry	160595	632364
22	Newton Point, Arran	163137	651538
23	ABS1 Whitebarran, Arran	166613	642531
24	Bearn Bhanran, Arran	159439	642218
25	Coastall, Arran	169135	641538
SW1	Craig Ehan, Gigha	164760	650900
SW2	Kirryre Way, Rhunaheorie north	166315	646455
CW1	Cavaig, Arran	161040	646930
CW2	Ruba Angh Binn, Arran	166565	647875
CW3	Kilbrannan Sound, northwest of Pinnmill	186715	645010
CW4	Kilbrannan Sound, Machine Bay	188410	635660

RWE

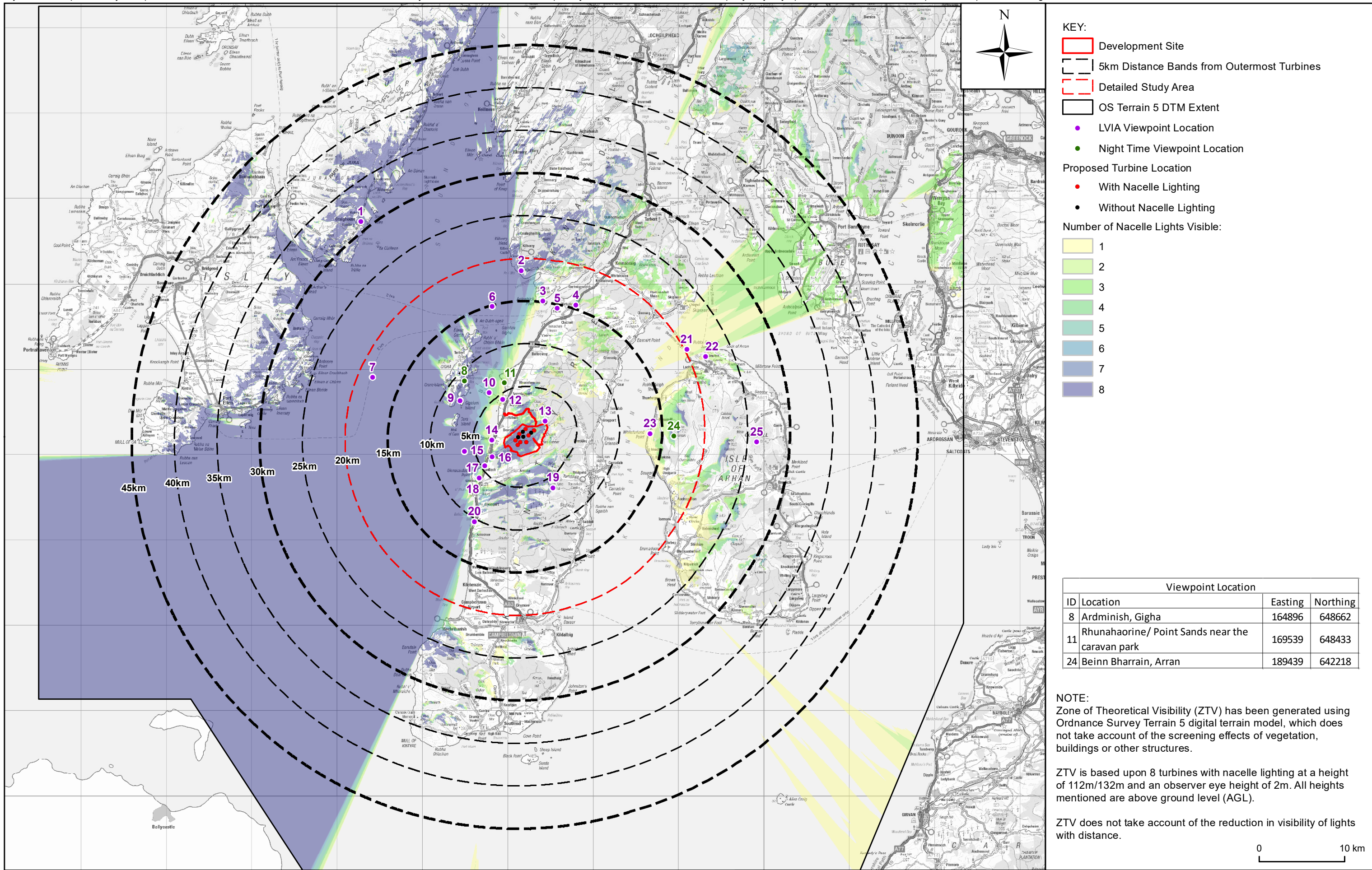
Clachaig Glen Wind Farm

Environmental Impact Assessment Report

Volume 2c

EIAR Figures

Figures: 7.8; 7.9; 7.10a; 7.10b



KEY:

- Development Site
- 5km Distance Bands from Outermost Turbines
- Detailed Study Area
- OS Terrain 5 DTM Extent
- LVIA Viewpoint Location
- Night Time Viewpoint Location
- Proposed Turbine Location With Nacelle Lighting
- Without Nacelle Lighting

Number of Nacelle Lights Visible:

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8

Viewpoint Location			
ID	Location	Easting	Northing
8	Ardminish, Gigha	164896	648662
11	Rhunahaorine/ Point Sands near the caravan park	169539	648433
24	Beinn Bharrain, Arran	189439	642218

NOTE:
Zone of Theoretical Visibility (ZTV) has been generated using Ordnance Survey Terrain 5 digital terrain model, which does not take account of the screening effects of vegetation, buildings or other structures.

ZTV is based upon 8 turbines with nacelle lighting at a height of 112m/132m and an observer eye height of 2m. All heights mentioned are above ground level (AGL).

ZTV does not take account of the reduction in visibility of lights with distance.

Client: **RWE**

Project: **CLACHAIG GLEN WIND FARM ENVIRONMENTAL IMPACT ASSESSMENT**

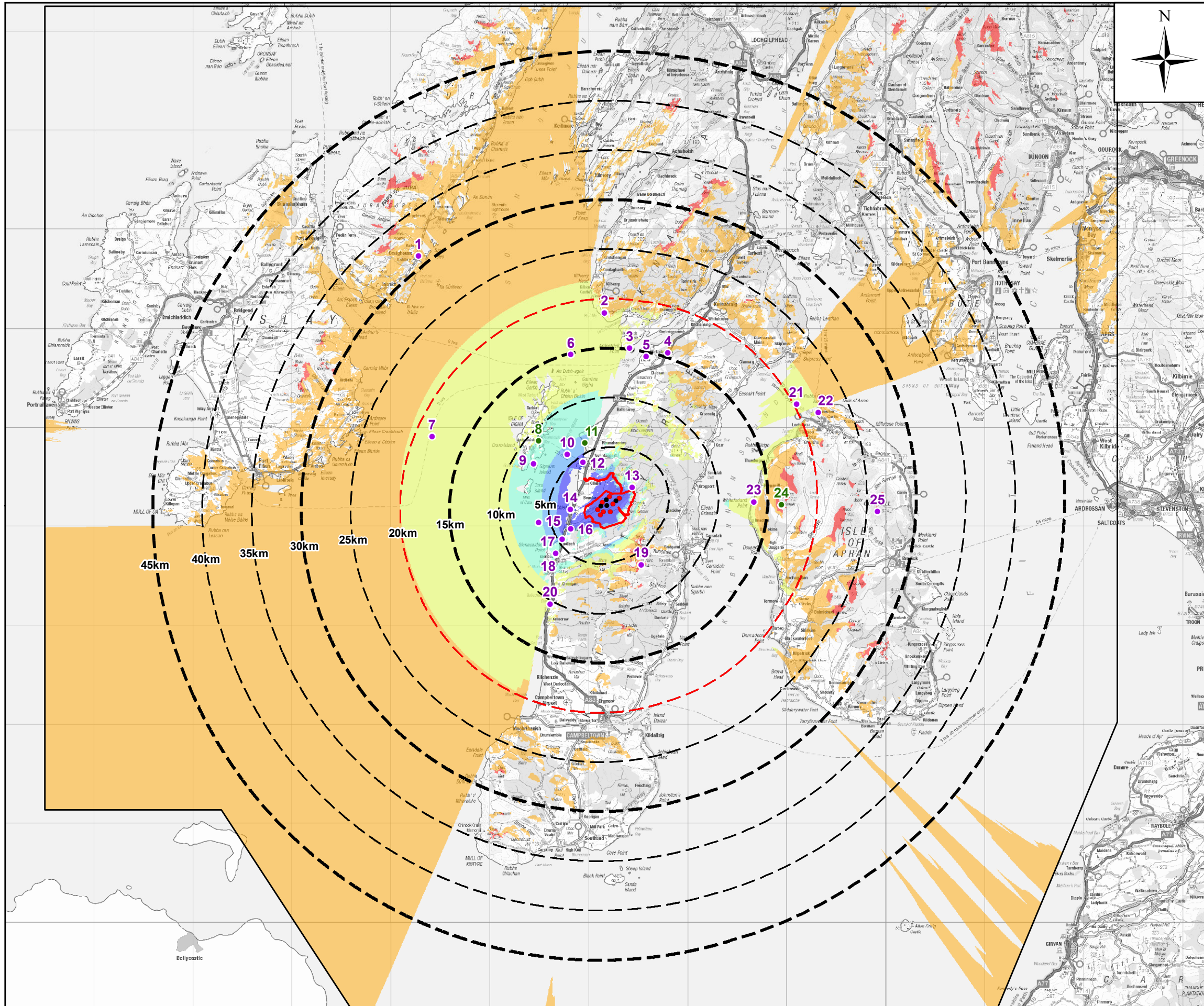
Title: **FIGURE 7.8 AVIATION LIGHTING ZONE OF THEORETICAL VISIBILITY (ZTV) NACELLE LIGHTING AT 112m/132m**

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Verified: JD	Approved: SW
Date: JANUARY 2022	Scale at A3: 1:400,000
Drawing Number: CG_220105_EIA7.8_v2	A3



KEY:

- Development Site
- 5km Distance Bands from Outermost Turbines
- Detailed Study Area
- LVIA Viewpoint Location
- Night Time Viewpoint Location

Proposed Turbine Location

- With Nacelle Lighting
- Without Nacelle Lighting

Nacelle Lights Visible at Specified Angle:

- 3° to 0°
- 0° to -1°
- 1° to -2°
- 2° to -3°
- 3° to -4°
- Below -4°
- OS Terrain 5 DTM Extent

Vertical angle of light from nacelle (120m)	Light intensity: 2000 cd*	Light intensity: 200cd
+3° to 0° (horizontal beam)	2500 cd to 2200 cd	250 cd to 220 cd
0° to -1°	2200 cd to 990 cd	220 cd to 99 cd
-1° to -2°	990 cd to 420 cd	99 cd to 42 cd
-2° to -3°	420 cd to 220 cd	42 cd to 22 cd
-3° to -4°	220 cd to 170 cd	22 cd to 17 cd
Below -4°	170 cd to 0 cd	17 cd to 0 cd

* Light intensity values are based on real world figures from detailed laboratory tests of a popular medium intensity red aviation obstruction light.

Viewpoint Location			
ID	Location	Easting	Northing
8	Ardminish, Gigha	164896	648662
11	Rhunahaorine/ Point Sands near the caravan park	169539	648433
24	Beinn Bharrain, Arran	189439	642218

NOTE:
Zone of Theoretical Visibility (ZTV) has been generated using Ordnance Survey Terrain 5 digital terrain model, which does not take account of the screening effects of vegetation, buildings or other structures.

ZTV is based upon 8 turbines with nacelle lighting at a height of 112m/132m and an observer eye height of 2m. All heights mentioned are above ground level (AGL).

ZTV does not take account of the reduction in intensity and visibility of lights with distance.



Client: **RWE**

Project: **CLACHAIG GLEN WIND FARM ENVIRONMENTAL IMPACT ASSESSMENT**

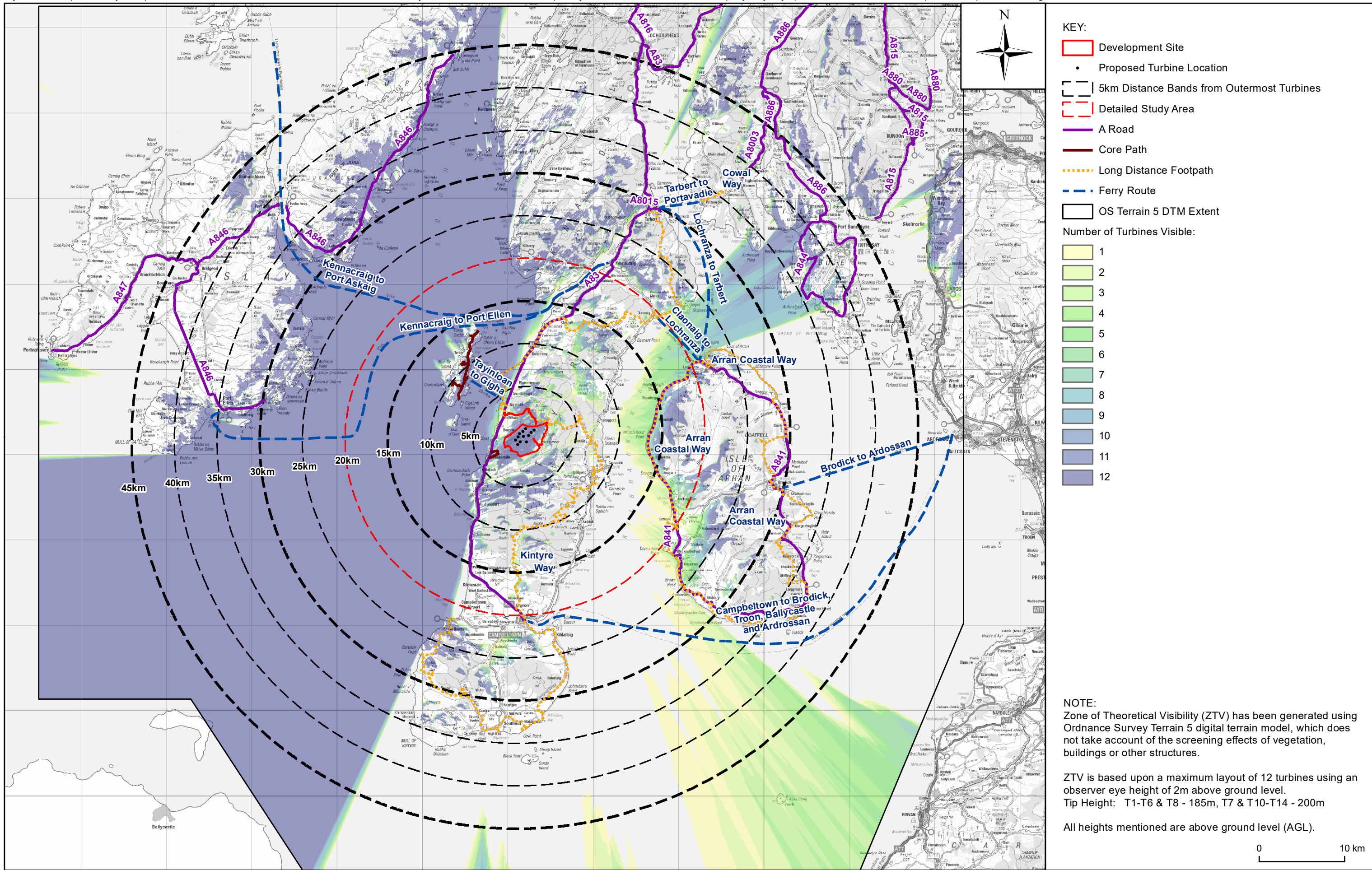
Title: **FIGURE 7.9 AVIATION LIGHTING INTENSITY ZONE OF THEORETICAL VISIBILITY (ZTV) NACELLE LIGHTING AT 112m/132m**

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Date: JANUARY 2022	Scale at A3: 1:400,000
Drawing Number: CG_220105_EIA7.9_v2	A3



KEY:

- Development Site
- Proposed Turbine Location
- 5km Distance Bands from Outermost Turbines
- Detailed Study Area
- A Road
- Core Path
- Long Distance Footpath
- Ferry Route
- OS Terrain 5 DTM Extent

Number of Turbines Visible:

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

NOTE:
 Zone of Theoretical Visibility (ZTV) has been generated using Ordnance Survey Terrain 5 digital terrain model, which does not take account of the screening effects of vegetation, buildings or other structures.

ZTV is based upon a maximum layout of 12 turbines using an observer eye height of 2m above ground level.
 Tip Height: T1-T6 & T8 - 185m, T7 & T10-T14 - 200m

All heights mentioned are above ground level (AGL).

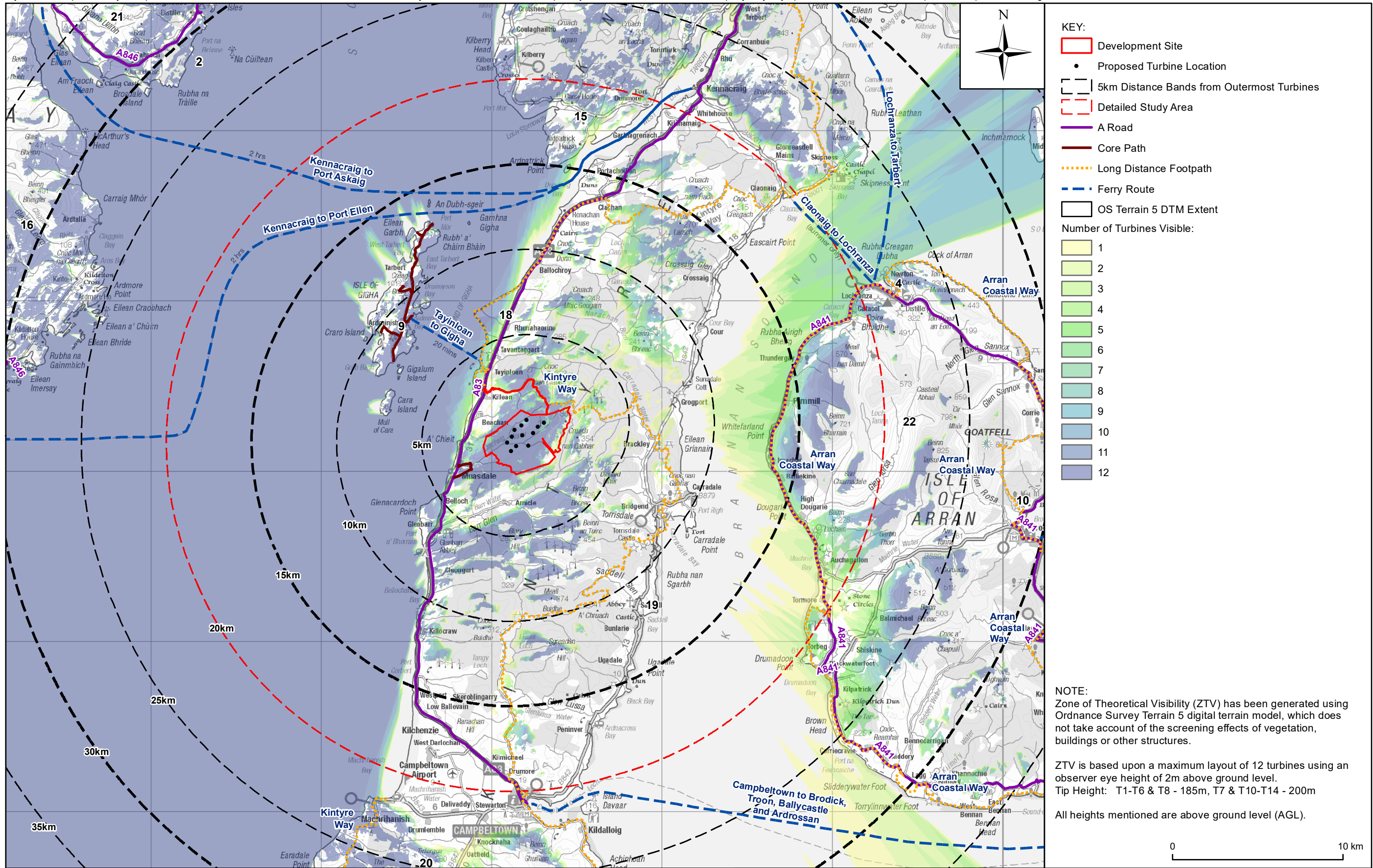
0 10 km

Client:	RWE
Project:	CLACHAIG GLEN WIND FARM ENVIRONMENTAL IMPACT ASSESSMENT

Title:	FIGURE 7.10a PRINCIPAL ROUTES
--------	----------------------------------

AECOM	Tel +44 (0) 191 224 6500 Fax +44 (0) 191 224 6599 www.aecom.com
One Trinity Gardens Quayside Newcastle, NE1 2HF	

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Date:	JANUARY 2022	Scale at A3:	1:400,000
Drawing Number:	CG_220105_EIA7.10a_v6		A3



KEY:

- Development Site
- Proposed Turbine Location
- 5km Distance Bands from Outermost Turbines
- Detailed Study Area
- A Road
- Core Path
- Long Distance Footpath
- Ferry Route
- OS Terrain 5 DTM Extent

Number of Turbines Visible:

1
2
3
4
5
6
7
8
9
10
11
12

NOTE:
Zone of Theoretical Visibility (ZTV) has been generated using Ordnance Survey Terrain 5 digital terrain model, which does not take account of the screening effects of vegetation, buildings or other structures.

ZTV is based upon a maximum layout of 12 turbines using an observer eye height of 2m above ground level.
Tip Height: T1-T6 & T8 - 185m, T7 & T10-T14 - 200m

All heights mentioned are above ground level (AGL).



Client:	RWE
Project:	CLACHAIG GLEN WIND FARM ENVIRONMENTAL IMPACT ASSESSMENT

Title:	FIGURE 7.10b DETAILED STUDY AREA PRINCIPAL ROUTES
--------	--

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Date:	JANUARY 2022	Scale at A3:	1:200,000
Drawing Number:	CG_220105_EIA7.10b_v6		A3

RWE

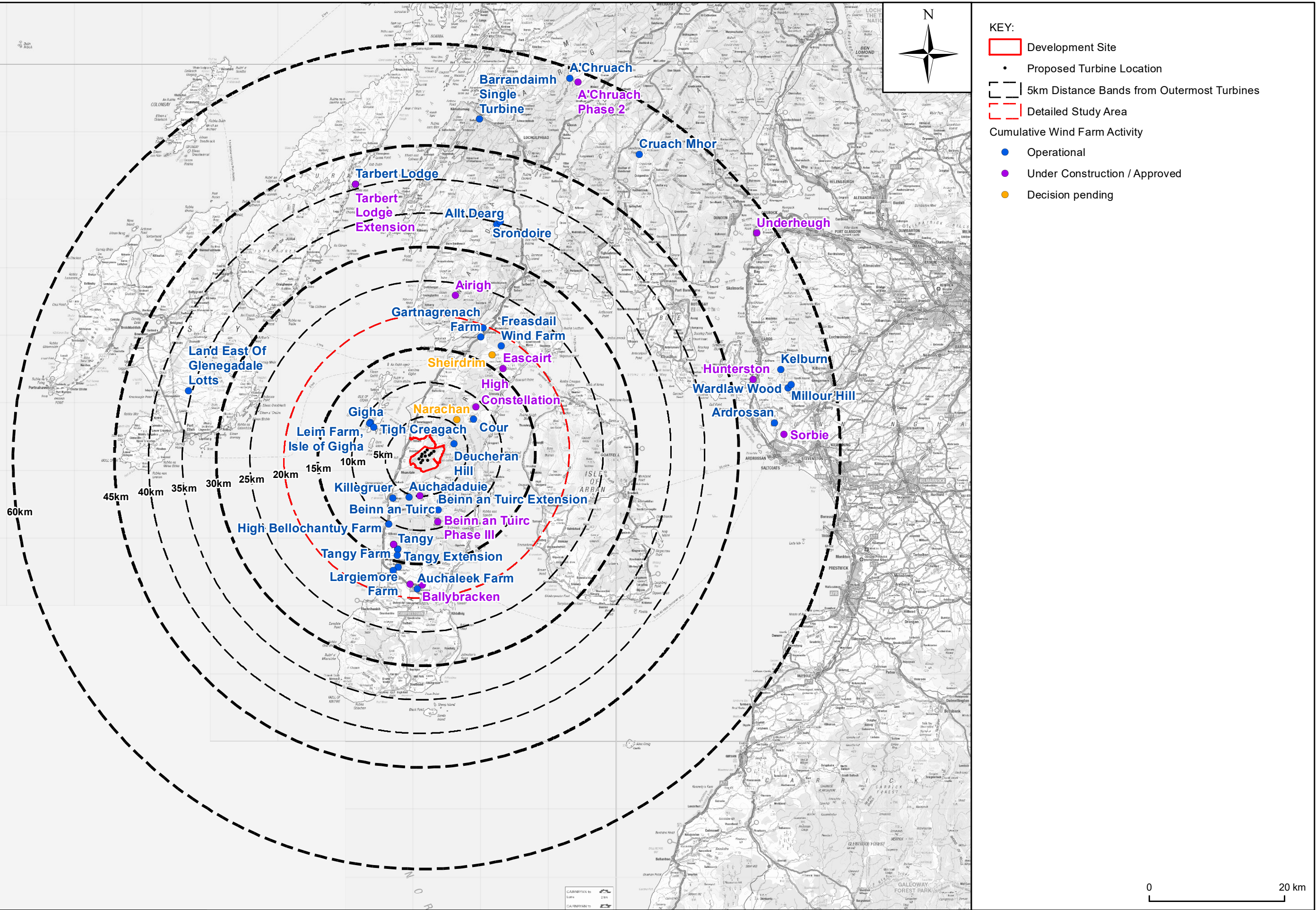
Clachaig Glen Wind Farm

Environmental Impact Assessment Report

Volume 2c

EIAR Figures

**Figures: 7.11; 7.12; 7.13; 7.14;
7.15**



KEY:

- Development Site
- Proposed Turbine Location
- 5km Distance Bands from Outermost Turbines
- Detailed Study Area

Cumulative Wind Farm Activity

- Operational
- Under Construction / Approved
- Decision pending

Client: **RWE**

Project: **CLACHAIG GLEN WIND FARM ENVIRONMENTAL IMPACT ASSESSMENT**

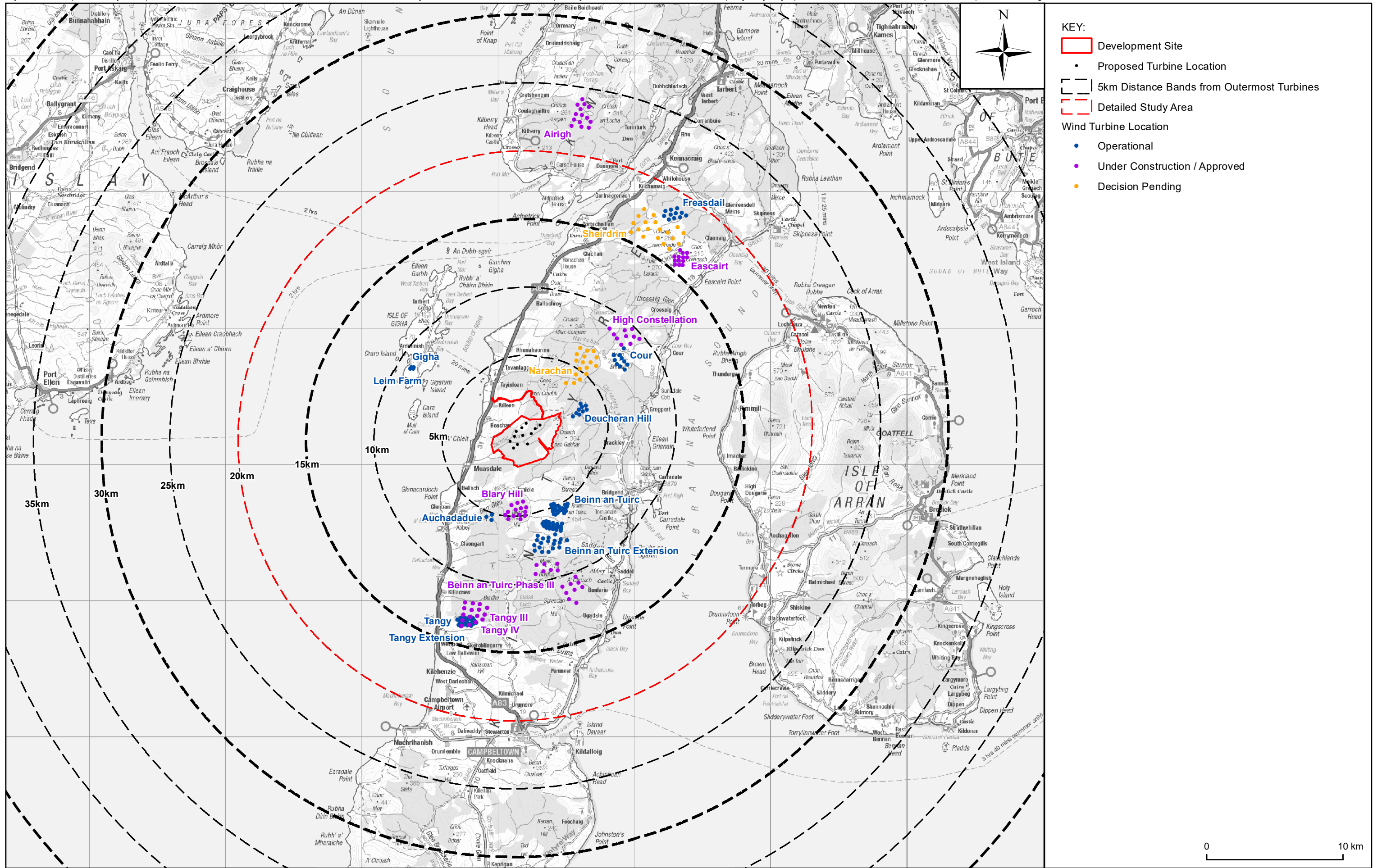
Title: **FIGURE 7.11 CUMULATIVE AREA OF SEARCH (60KM)**

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Date: JANUARY 2022	Scale at A3: 1:527,645
Drawing Number: CG_220105_EIA7.11_v2	A3

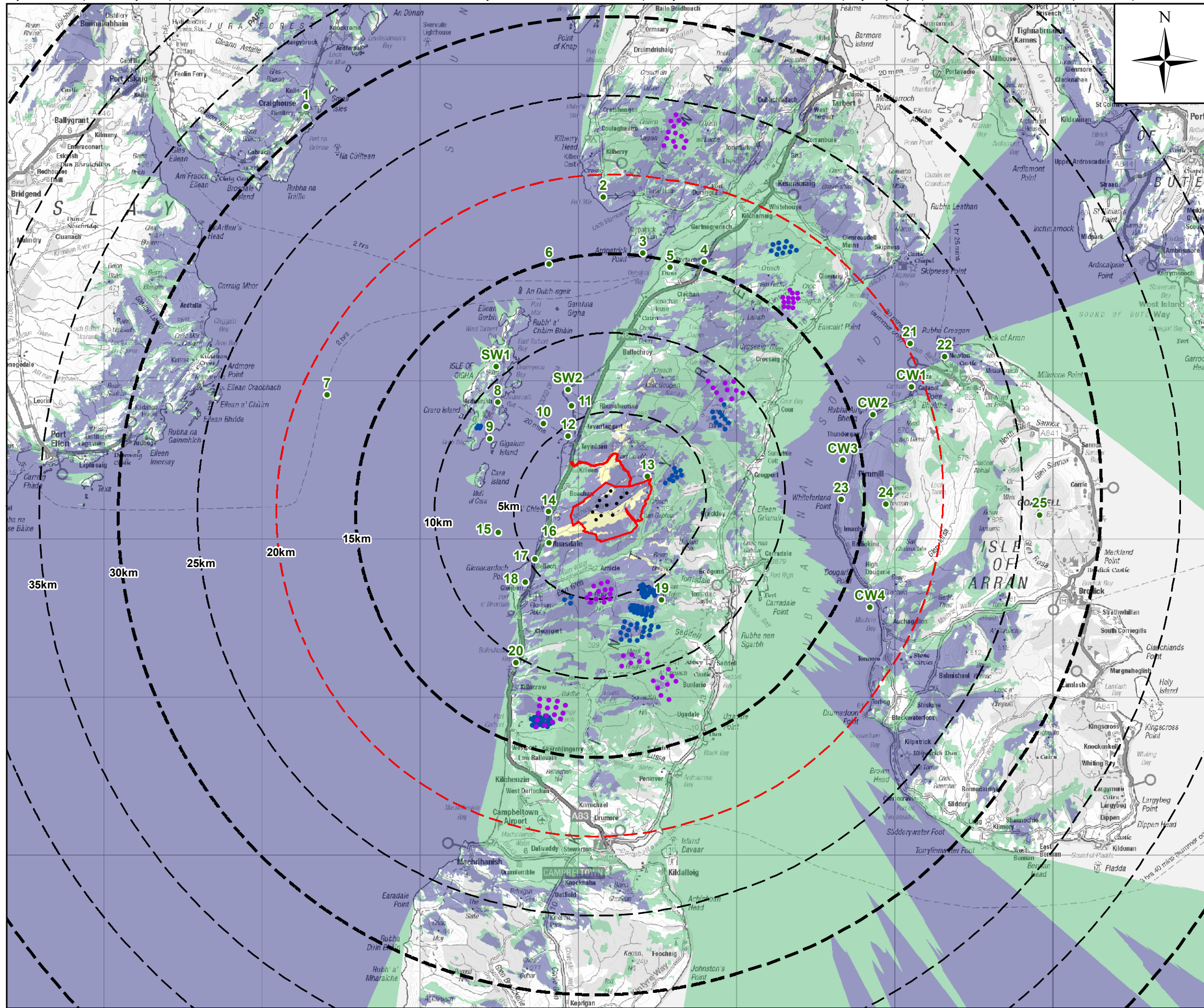


Client:	RWE
Project:	CLACHAIG GLEN WIND FARM ENVIRONMENTAL IMPACT ASSESSMENT

Title:	FIGURE 7.12 CUMULATIVE SCHEMES INCLUDED IN THE ASSESSMENT
--------	---

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Quayside	www.aecom.com
Newcastle, NE1 2HF	

Drawn:	LC	Checked:	AR
Verified:	JD	Approved:	SW
Date:	JANUARY 2022	Scale at A3:	1:250,000
Drawing Number:	CG_220105_EIA7.10_v4		A3



KEY:

- Development Site
- Proposed Turbine Location
- Viewpoint Location
- 5km Distance Bands from Outermost Turbines
- Detailed Study Area

Wind Turbine Location

- Operational
- Under Construction / Approved

Cumulative Visibility:

- Clachaig Glen only
- Scenario 1 only
- Clachaig Glen and Scenario 1

Viewpoint Location			
ID	Name	X	Y
1	Craighouse, Jura	152740	667370
2	B8024 south of Kilberry	171541	661638
3	Ardpatrick	174063	658086
4	A83 north of Clachan	177920	657558
5	Dun Skeig	175775	657185
6	Kennacraig - Port Askaig Ferry	168126	657382
7	Kennacraig - Port Ellen Ferry	154091	649118
8	Ardminish, Gigha	164896	648662
9	South Pier, Gigha	164371	646362
10	Sound of Gigha from Gigha Ferry	167781	647310
11	Rhunahaorine/ Point Sands near the caravan park	169539	648433
12	Tayinloan Ferry Terminal	169336	646531
13	Kintyre Way north of site	174336	643968
14	A'Chleit	168106	641746
15	Sound of Gigha from recreational watercraft	164905	640419
16	North Muasdale	168136	639771
17	A83 south of Muasdale	167248	638737
18	Glenacardoch	166619	637287
19	Beinn an Tuirc	175223	636169
20	A83 near Bellochauty	166040	632191
21	Lochranza - Claonaig Ferry	190950	652364
22	Newton Point, Arran	193137	651538
23	A841 Whitefarland, Arran	186613	642531
24	Beinn Bharrain, Arran	189439	642218
25	Goatfell, Arran	199135	641538
SW1	Creag Bhan, Gigha	164780	650900
SW2	Kintyre Way, Rhunahaorine north	169315	649455
CW1	Catcol, Arran	191040	649630
CW2	Rubha Airigh Beirg, Arran	188595	647875
CW3	Kilbrannan Sound, northwest of Pirmill	186715	645010
CW4	Kilbrannan Sound, Machrie Bay	188410	635690

NOTE:
 Zone of Theoretical Visibility (ZTV) has been generated using Ordnance Survey Terrain 5 digital terrain model, which does not take account the screening effects of vegetation, buildings or other structures.
 ZTV has been generated based upon an observer eye height of 2m. All heights mentioned are above ground level (AGL).

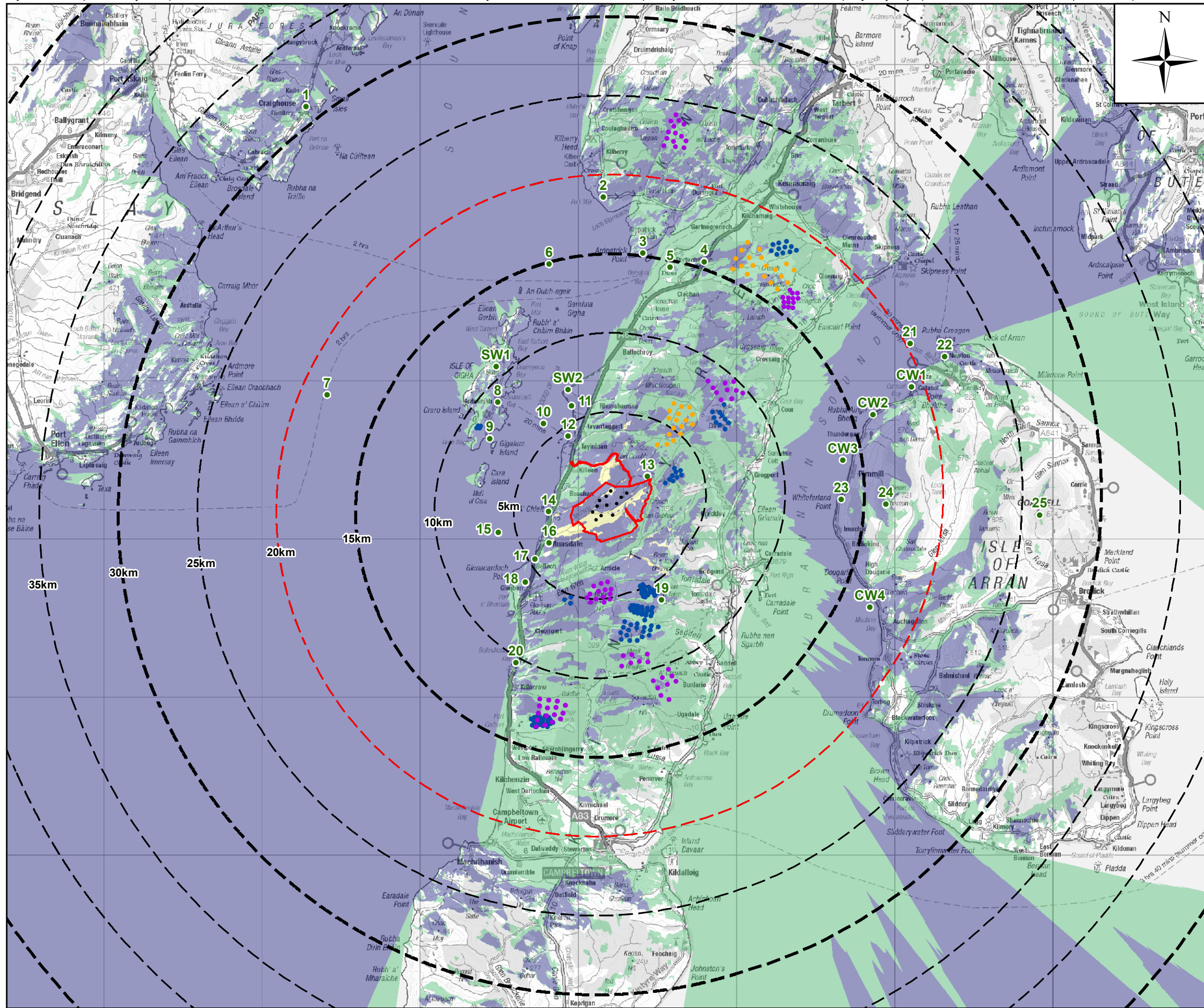
Client: **RWE**

Project: **CLACHAIG GLEN WIND FARM ENVIRONMENTAL IMPACT ASSESSMENT**

Title: **FIGURE 7.13 CUMULATIVE ZONE OF THEORETICAL VISIBILITY (ZTV) TIP HEIGHT - OPERATIONAL, CONSENTED AND UNDER CONSTRUCTION (SCENARIO 1)**

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 Verified: JD Approved: SW
 Date: JANUARY 2022 Scale at A3: 1:250,000
 Drawing Number: CG_220105_EIA7.13_v4 A3



KEY:

- Development Site
- Proposed Turbine Location
- Viewpoint Location
- 5km Distance Bands from Outermost Turbines
- Detailed Study Area

Wind Turbine Location

- Operational
- Under Construction /
- Decision Pending

Cumulative Visibility:

- Clachaig Glen only
- Scenario 2 only
- Clachaig Glen and Scenario 2

Viewpoint Location				
ID	Name	X	Y	
1	Craighouse, Jura	152740	667370	
2	B8024 south of Kilberry	171541	661638	
3	Ardpatrick	174063	658086	
4	A83 north of Clachan	177920	657558	
5	Dun Skeig	175775	657185	
6	Kennacraig - Port Askaig Ferry	168126	657382	
7	Kennacraig - Port Ellen Ferry	154091	649118	
8	Ardminish, Gigha	164896	648662	
9	South Pier, Gigha	164371	646362	
10	Sound of Gigha from Gigha Ferry	167781	647310	
11	Rhunaheorine/ Point Sands near the caravan park	169539	648433	
12	Tayinloan Ferry Terminal	169336	646531	
13	Kintyre Way north of site	174336	643968	
14	A'Chleit	168106	641746	
15	Sound of Gigha from recreational watercraft	164905	640419	
16	North Muasdale	168136	639771	
17	A83 south of Muasdale	167248	638737	
18	Glenacardoch	166619	637287	
19	Beinn an Tuirc	175223	636169	
20	A83 near Bellochantuy	166040	632191	
21	Lochranza - Claonaig Ferry	190950	652364	
22	Newton Point, Arran	193137	651538	
23	A841 Whitefarland, Arran	186613	642531	
24	Beinn Bharrain, Arran	189439	642218	
25	Goatfell, Arran	199135	641538	
SW1	Creag Bhan, Gigha	164780	650900	
SW2	Kintyre Way, Rhunaheorine north	169315	649455	
CW1	Catcol, Arran	191040	649630	
CW2	Rubha Airigh Beirg, Arran	188595	647875	
CW3	Kilbrannan Sound, northwest of Pimmill	186715	645010	
CW4	Kilbrannan Sound, Machrie Bay	188410	635690	

NOTE:
Zone of Theoretical Visibility (ZTV) has been generated using Ordnance Survey Terrain 5 digital terrain model, which does not take account the screening effects of vegetation, buildings or other structures.

ZTV has been generated based upon an observer eye height of 2m. All heights mentioned are above ground level (AGL).



Client: **RWE**

Project: **CLACHAIG GLEN WIND FARM ENVIRONMENTAL IMPACT ASSESSMENT**

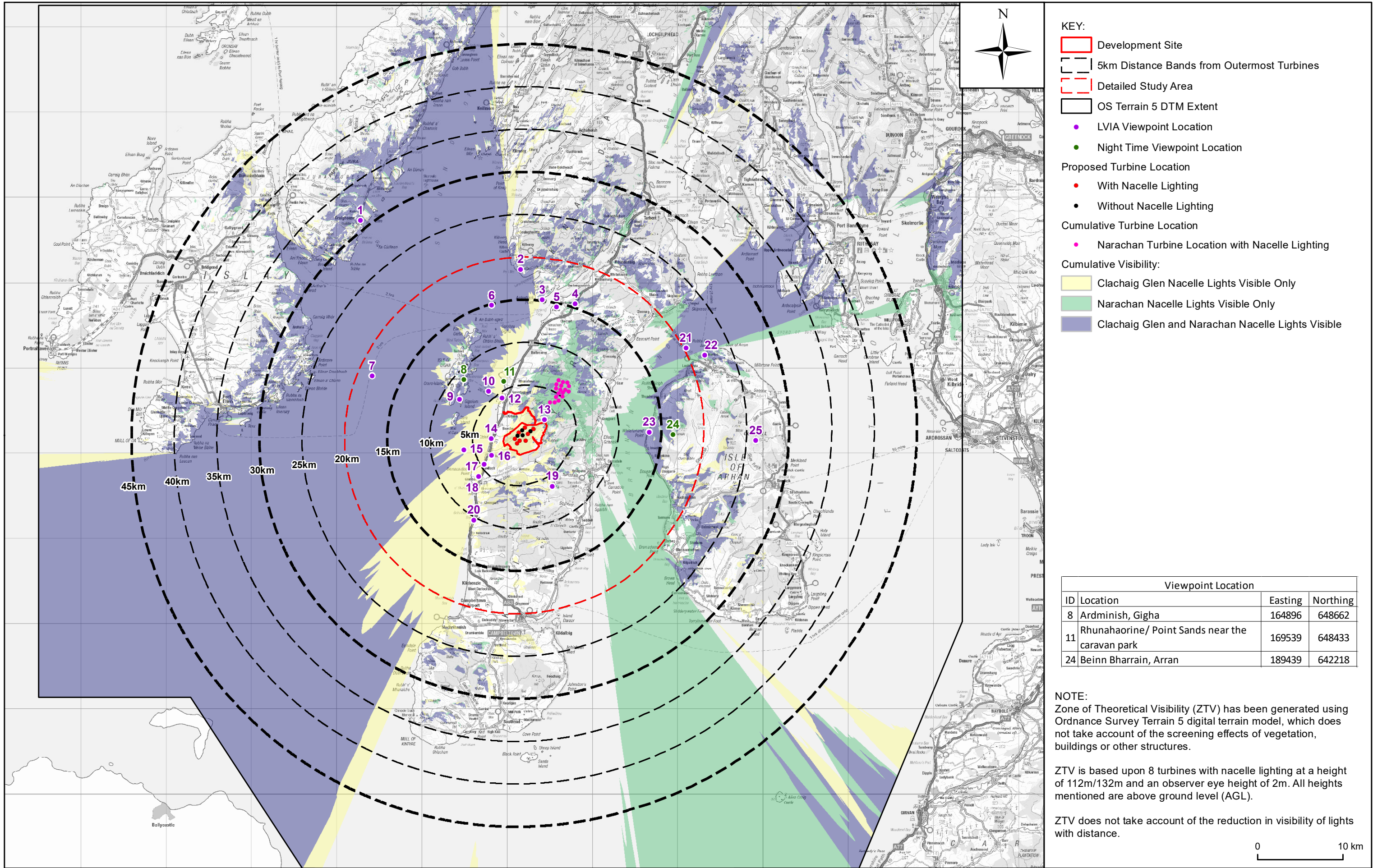
Title: **FIGURE 7.14 CUMULATIVE ZONE OF THEORETICAL VISIBILITY (ZTV) TIP HEIGHT - OPERATIONAL, CONSENTED, UNDER CONSTRUCTION AND PROPOSED SCHEMES (SCENARIO 2)**

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Date: JANUARY 2022	Scale at A3: 1:250,000
Drawing Number: CG_220105_EIA7.14_v4	A3



- KEY:**
- Development Site
 - 5km Distance Bands from Outermost Turbines
 - Detailed Study Area
 - OS Terrain 5 DTM Extent
 - LVIA Viewpoint Location
 - Night Time Viewpoint Location
 - Proposed Turbine Location**
 - With Nacelle Lighting
 - Without Nacelle Lighting
 - Cumulative Turbine Location**
 - Narachan Turbine Location with Nacelle Lighting
 - Cumulative Visibility:**
 - Clachaig Glen Nacelle Lights Visible Only
 - Narachan Nacelle Lights Visible Only
 - Clachaig Glen and Narachan Nacelle Lights Visible

Viewpoint Location			
ID	Location	Easting	Northing
8	Ardminish, Gigha	164896	648662
11	Rhunahaorine/ Point Sands near the caravan park	169539	648433
24	Beinn Bharrain, Arran	189439	642218

NOTE:
 Zone of Theoretical Visibility (ZTV) has been generated using Ordnance Survey Terrain 5 digital terrain model, which does not take account of the screening effects of vegetation, buildings or other structures.

ZTV is based upon 8 turbines with nacelle lighting at a height of 112m/132m and an observer eye height of 2m. All heights mentioned are above ground level (AGL).

ZTV does not take account of the reduction in visibility of lights with distance.



Client: **RWE**

Project: **CLACHAIG GLEN WIND FARM ENVIRONMENTAL IMPACT ASSESSMENT**

Title: **FIGURE 7.15 CUMULATIVE MEDIUM INTENSITY AVIATION LIGHTING ZONE OF THEORETICAL VISIBILITY (ZTV) NACELLE LIGHTING AT 112m/132m**

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Drawn: LC	Checked: AR
Verified: JD	Approved: SW
Date: JANUARY 2022	Scale at A3: 1:400,000
Drawing Number: CG_220105_EIA7.15_v3	A3

