



# STRATEGIC INFRASTRUCTURE DEVELOPMENT CASTLEBANNY WINDFARM

Kilkenny County Council Meeting

29<sup>th</sup> March 2021

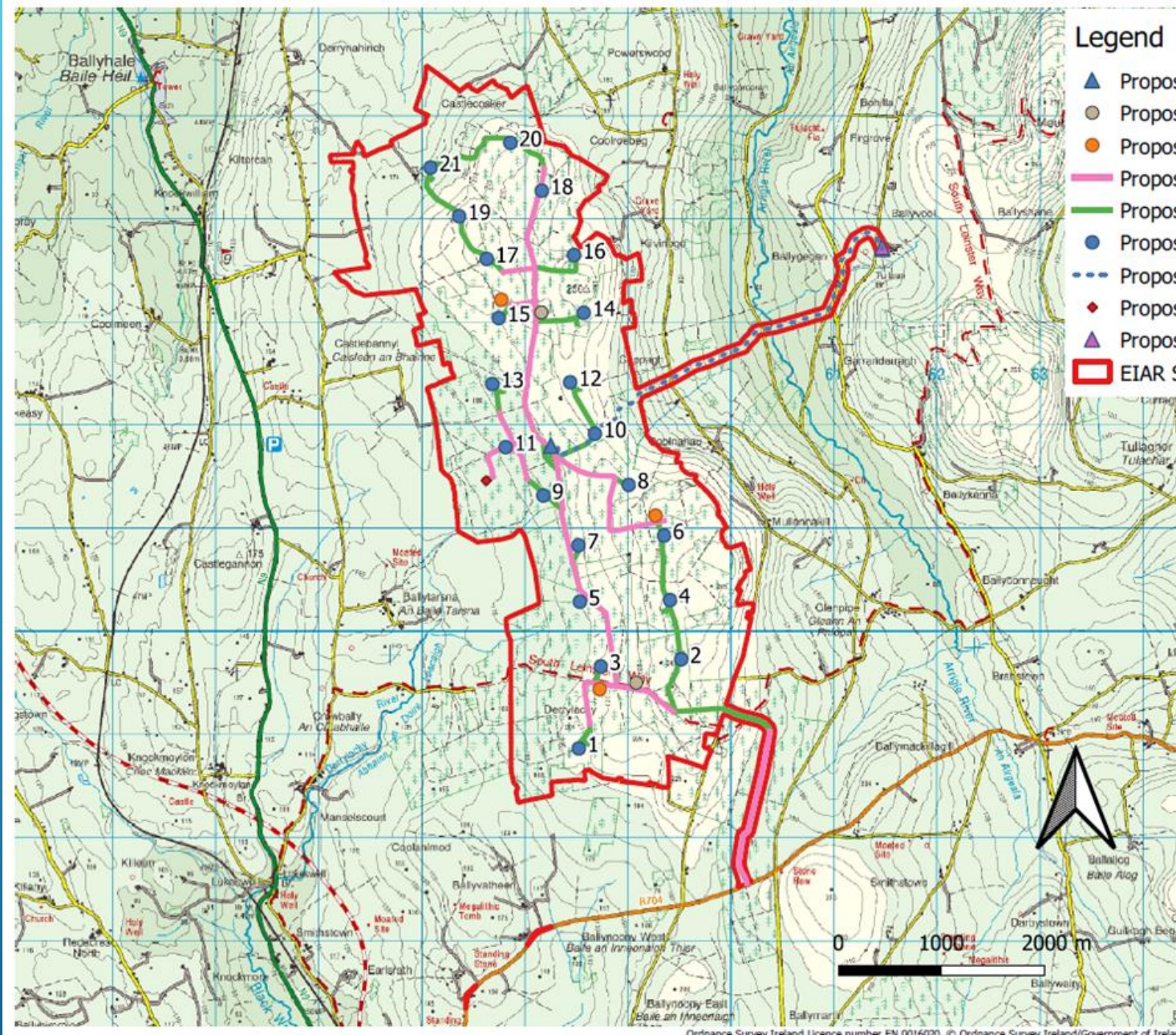


# Description of Development

- Erection of 21 no. wind turbines with an overall blade tip height of up to 185m
- Improvements and temporary modifications to existing public road infrastructure
- Construction of 2 no. temporary construction compounds with associated temporary site offices,
- 1 no. permanent meteorological mast up to a height of 100m,
- 3 no borrow pits
- new internal site access roads and upgrade of existing site roads,
- Construction of drainage and sediment control systems,
- 1 no. permanent 110kV electrical substation,
- a loop-in 110 kV underground cable connection approximately 4km in length to the existing overhead 110 kV line in the townland of Ballyvool,
- Ancillary forestry felling to facilitate construction,
- Development of a permanent public car park with seating/picnic tables,
- Permanent recreational facilities including marked walking and cycling trails and outdoor fitness equipment,
- A 10-year planning permission and 35-year operational life
- Estimate power output is 105 - 126MW ( total for 21 turbines)
- Equivalent to powering

Note : 1 GWh = 1,000.00 MWh.





### Legend

- ▲ Proposed Substation
- Proposed Construction Compounds
- Proposed Borrow Pit
- Proposed Upgraded Road
- Proposed New Road
- Proposed Turbine Location
- - - Proposed Grid Connection Route
- ◆ Proposed Met Mast
- ▲ Proposed 110kV Loop in/out Masts
- ▭ EIAR Study Area

Map by: JS  
Checked by: ST  
Rev: 1

Client: Coillte  
Job: Castlebanny WF

**TOBIN**  
CONSULTING ENGINEERS

Figure: 2-1  
Title:  
Proposed Wind Farm Layout  
08.12.20







# The Application

Application for permission was submitted directly to An Bord Pleanála on the 28<sup>th</sup> January 2021,

Chief Executive must submit a report by the 8<sup>th</sup> April,

Sets out the views of the Planning Authority on the environment and the proper planning and sustainable development of the area with particular regard to

- i. The provisions of the development plan;
- ii. The provisions of any Section 28 Guidelines;
- iii. The provisions of any special amenity area order relating to the area;
- iv. Any European site or other area prescribed for the purposes of section 10(2)(c);
- v. Where relevant, the policy of the Government, the Minister or any Minister of the Government;
- vi. The matters referred to in subsection (4) – (i.e. conditions), and
- vii. Any other relevant provision or requirement of this Act, and any regulations made thereunder.

An Bord Pleanála will consider it as part of their assessment of the proposed development.

The Act also provides that the views expressed by the members during the Council Meeting be attached to the report



## Site Location

Between Mullinavat, Inistioge and Ballyhale, about 4.1km southwest, 5.7km northeast and 1.9km northwest of the site respectively and within the townlands of Castlecoster, Derrynahinch, Kiltorcan, Coolroe Beg, Baunskeha, Castlebanny, Kilvinoge, Cappagh, Coolnahau, Ballytarsna, Mullennakill, Glenpipe, Ballymartin, Ballyvatheen, Ballynoony West, Derrylacky, Garrandarragh, Ballygegan and Ballyvool.

## Site Area

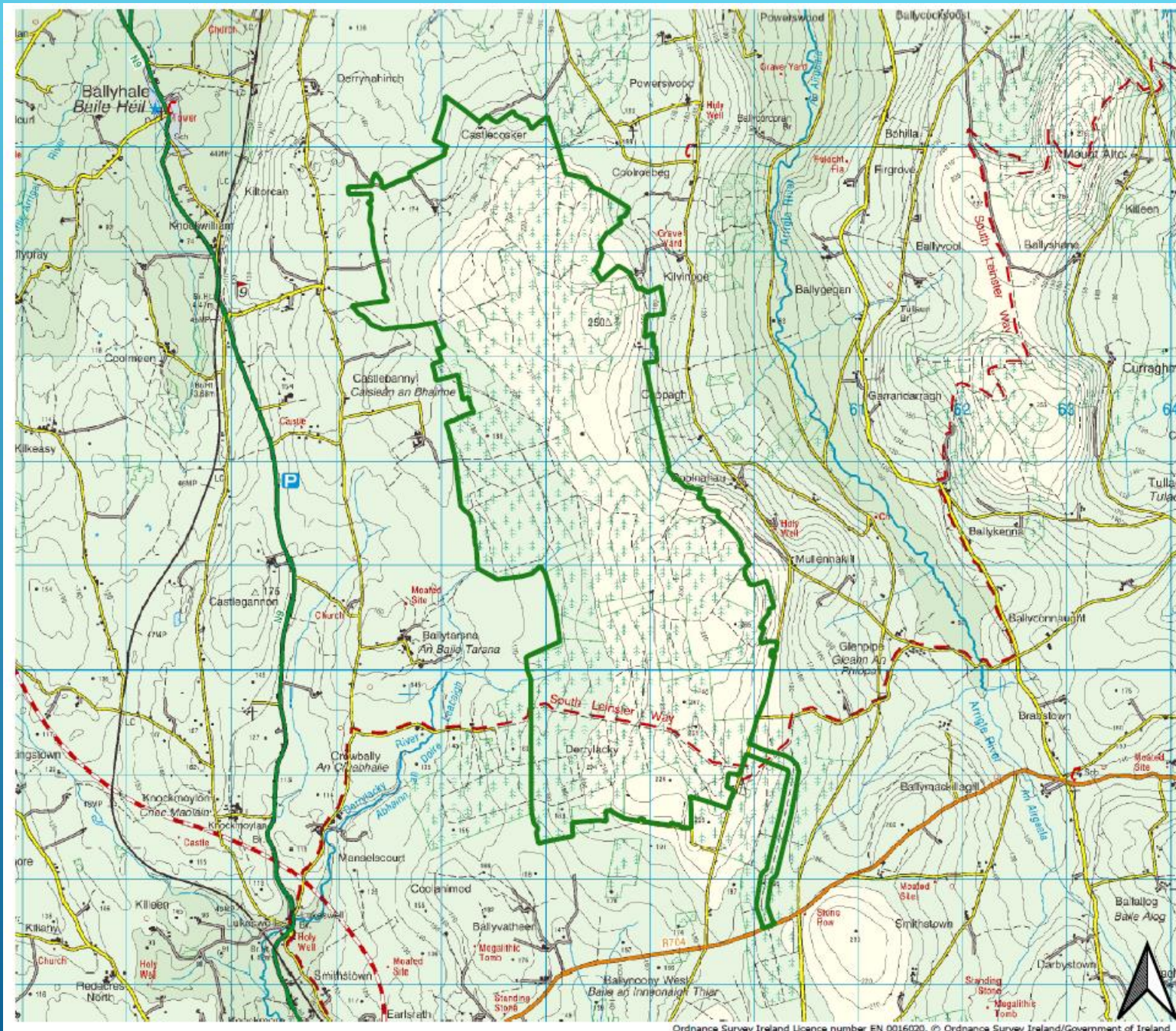
Approximately 1,434 hectares (ha) or 3541 acres. (Excludes Grid connection)

Gently Sloping rising from approximately 145m OD on the eastern and western sides to a high point 250m OD in the north and 265m OD in the south.

Enclosed by the regional road the R704 to the south and local roads to the east, north and west.

The Arrigle River runs south-north near the eastern boundary of the site  
(Part of the River Barrow and River Nore Special Area of Conservation)





Legend  
Wind Farm Site Boundary

Map by: JS  
Checked by: ST  
Rev: 1

Client: Springfield Renewables Ltd.  
Job: Castlebanny WF

**TOBIN**  
CONSULTING ENGINEERS

Figure: 1-2  
Title: Proposed Wind Farm Site Boundary

0 947.706 1895.41 m

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# Internal Referrals

Parks Department

Road Design

Area Engineer

Environment Section

All seeking conditions to be attached in the event of a grant of permission

Full reports attached in Appendix 1



# National Regional & Local Policy



## National

Irish Government has committed to a decarbonisation reaching the EU Target of Zero emissions by 2050.

Key targets are:

at least 40% reduction in domestic Green House Gas emissions by 2030 from 1990 levels)  
an increase to 27 percent in renewable energy consumption,

### **Governments Climate Action Plan**

Plan clearly recognises Ireland must significantly step up its commitments to reduce emissions.

- More renewables
- More wind offshore and onshore

Increase offshore by 3.5 GW

Increase onshore by 8.2 GW

Note : 1 GWh = 1,000.00 MWh.

### **National Planning Framework & Regional Spatial & Economic Strategy**

Both these documents identify and support a National Strategic Outcome of :

*“Transitioning to a low carbon and climate resilient economy with electricity generated from renewable resources essential to achieve that outcome”. (NSO 8 p 147 NPF)*





## Local Policy

County Development Plan 2014 - 2020

Renewable Energy Strategy (Chapter 10 )

Strategic approach to wind energy

Area of Proposed Wind Farm identified as Open for consideration.

Strategy area	Preferred	Open for consideration	Unsuitable	Rest of county
<b>Project category</b>				
Individual turbine	✓	✓	✓	✓
Auto producer	✓	✓	✓	✓
Small scale wind farm	✓	✓	X	X
Large scale wind farm	✓	X	X	X

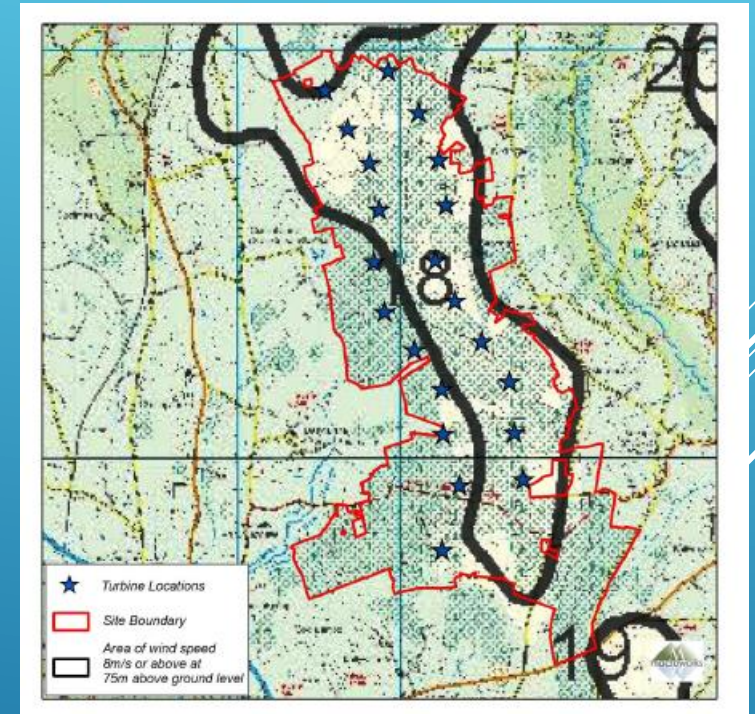
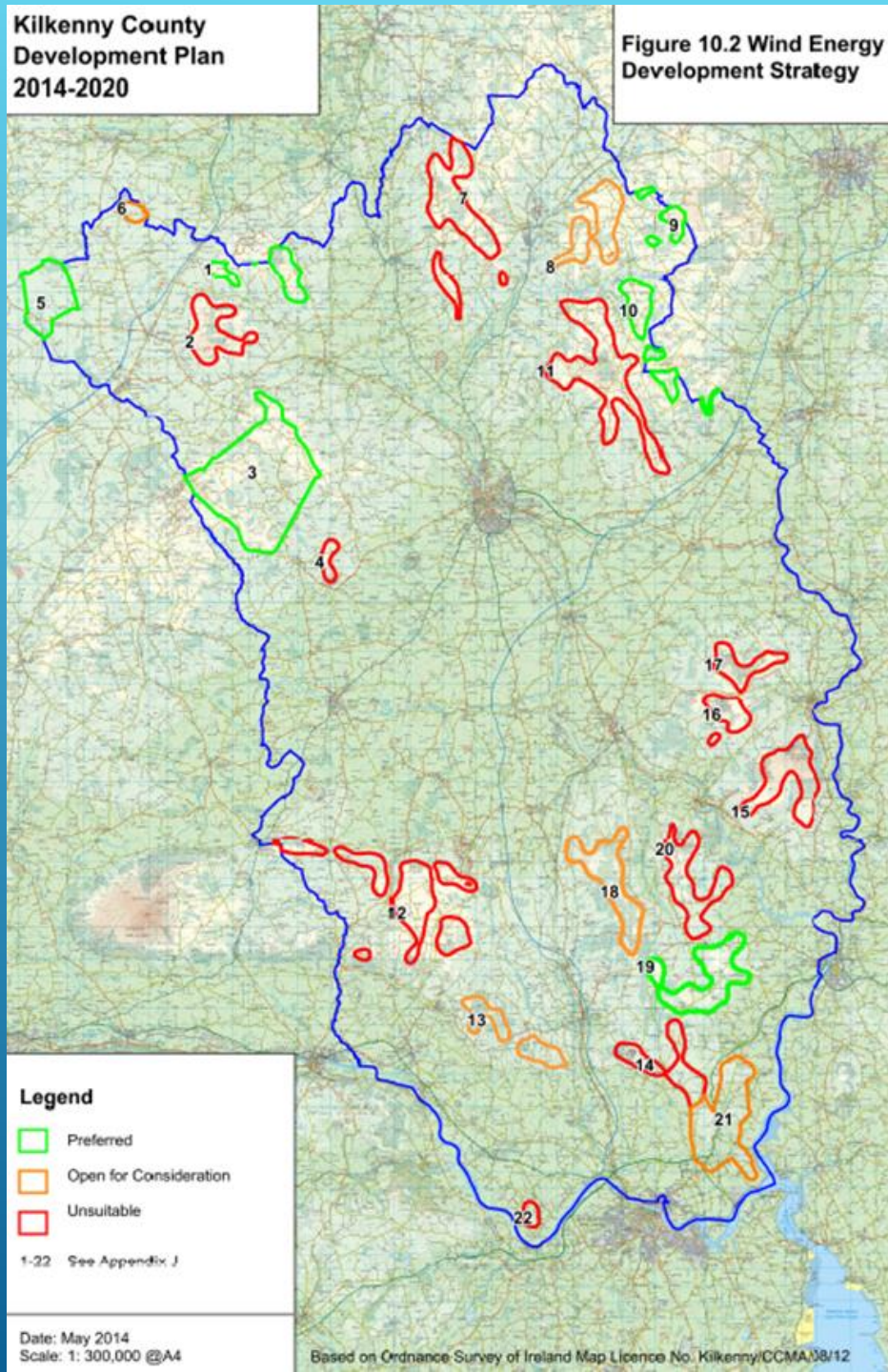
Open for Consideration means :

- Comprising no more than 5 turbines,
- Where the total output is not greater than 5 Megawatts,
- Turbine heights do not exceed 65m to hub height



Area 18 on the map is the  
area identified as Open  
for Consideration

It roughly equates to the  
area of the wind farm.



Site Area in Red  
Area 18 in Black



# Landscapes

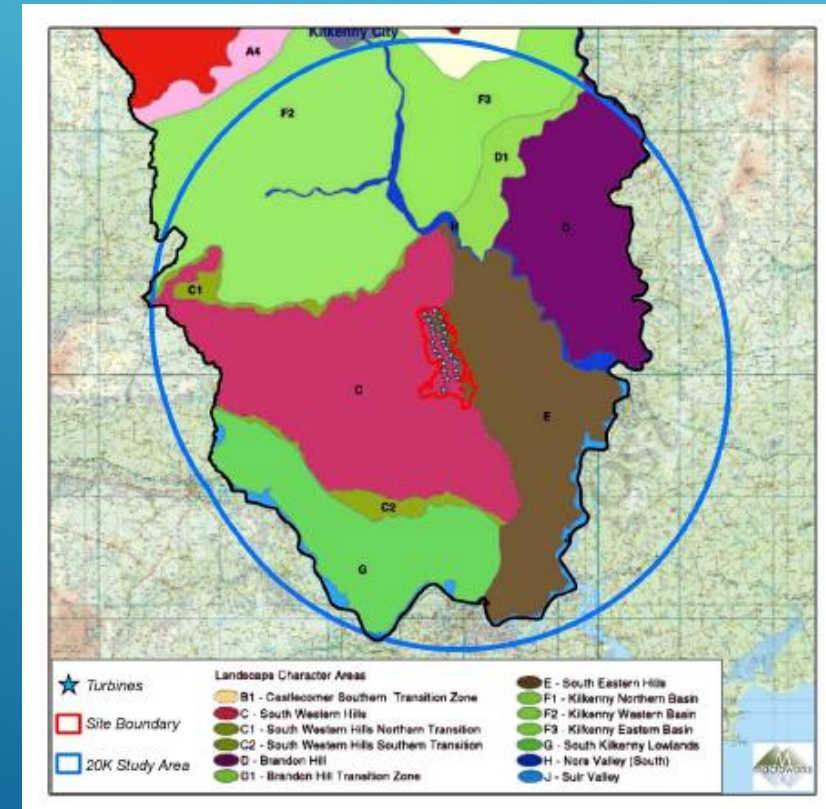
Heritage Chapter 8 of the County Development Plan

Objective 8G

*“To protect and sustainably manage the landscape character of County Kilkenny, having regard to the findings of the landscape character assessment and the development management standards as set out in this chapter for the sustainable development of the county and appropriate conservation of its landscape character.”*

Site is located within :  
Landscape Character Area C : South Western uplands

Area encompasses an undulating landscape of several hills, with primary and secondary ridgelines at an average elevation of approximately 300m above sea level.





The proposed site lies within the character areas of the South Western uplands (C) while forming a long linear feature which is adjacent to the South Eastern Hills (E) as identified in the 2003 Landscape Character Assessment (LCA)

These two areas are separated by the Castlebanny ridgeline,

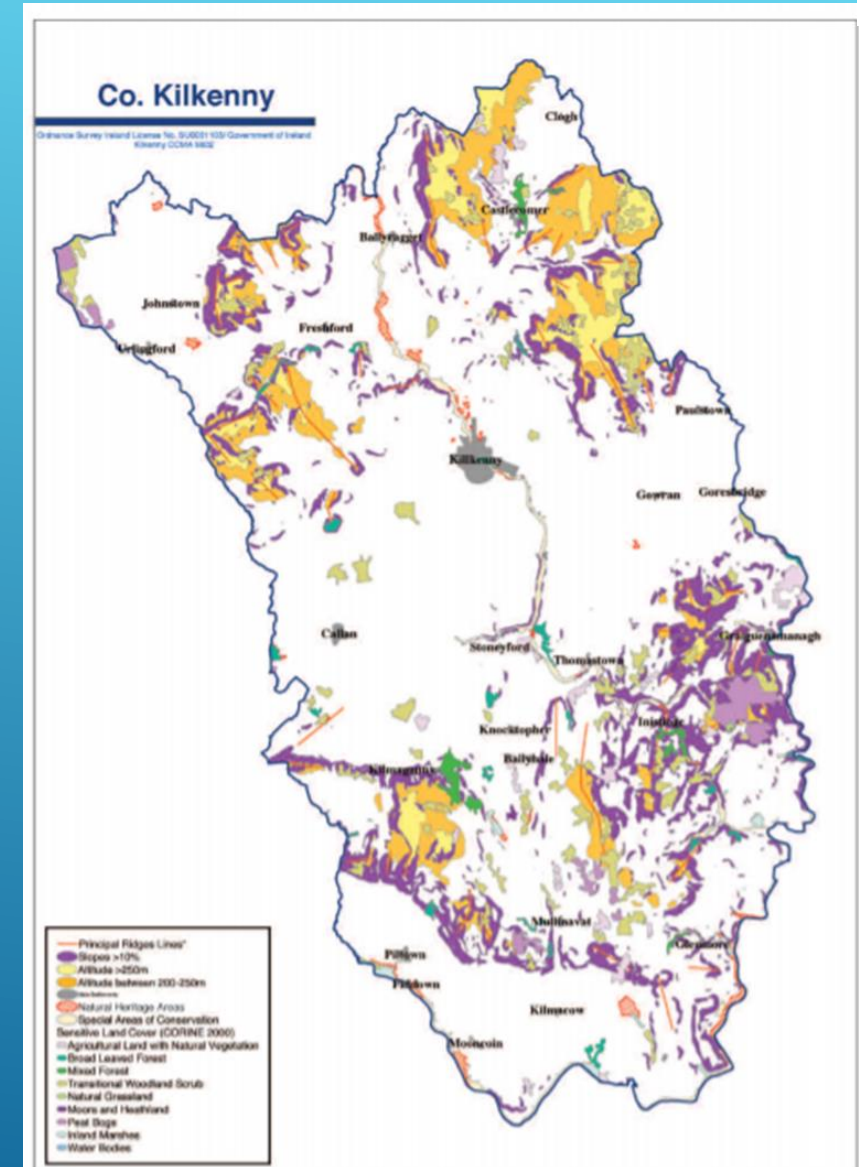
Immediately to the east of the ridge line is the valley of the Arrigle River,

Contention of the Planning Authority that insufficient weighting has been given to the landscape sensitivity of this area in the design siting and layout of the windfarm.

Guidance in respect of 'height' of turbines is conservative,

*“Turbines should relate in terms of scale to landscape elements and will therefore tend not to be tall” ( 2006 WEGL)*

Considered therefore the proposed development would detract from the landscape character of the area and result in a significant negative visual impact





# Kilkenny City & County Draft Development Plan 2021 -2027



Revised Wind Energy Strategy has been developed for this plan

Building on the strategies from previous development plans

Has had regard to :

- Government policy on climate change
- National Strategic Outcome 8 of the NPF
- 2006 WEGL
- Interim Planning Guidelines 2017
- Draft WEGL 2019

Criteria broadened : in particular wind speed of 7m/s instead of 8m/s

Area designated as “permitted in principle” in Draft City & County Development Plan.

460 submissions to Draft Plan

48% 220 submissions relating to wind energy (Lingaun Valley & Castelbanny)

Identified to ABP that this process is ongoing.



# ENVIRONMENTAL REPORTS (NIS & EIAR)

## Natura Impact Statement (NIS)

ABP is competent authority for the project

A Natura Impact Statement (NIS) has been prepared and submitted.

Elements of the project are outside KCC area.

Board should satisfy itself adequate detail supplied, to enable a full Appropriate Assessment

## Environmental Impact Assessment Report (EIAR)

The EIAR is presented in the required format

Non Technical Summary

Main Report 18 chapters

Chapters 1 – 3 , Introduction, description & Alternatives Considered.

Chapter 4 – Policy Context.

Chapter 5 – 16 provides an examination of specific environmental aspects and uses

- Population & human health, Biodiversity, Ornithology, Land soils & Geology, Hydrology & Hydrogeology,
- Shadow Flicker, Material Assets, Noise & Vibration, Landscape & Visual Impact, Air Quality & Climate, Cultural Heritage, Roads & Traffic .

Chapter 17 - Interaction of the Foregoing, Chapter 18 – Schedule of Mitigation Measure.





## Focus on Main Issues

Chapters 6 Biodiversity, Chapter 7 Ornithology, Chapter 10 Shadow Flicker, Chapter 13 Landscape & Chapter, 15 Heritage.

### Chapter 6 Biodiversity

Habitat loss as a result of the development is acknowledged.

Impact on hedgerows, treelines and stone walls is significant at a local level.

Like for like replacement not possible

Habitat Management measures proposed.

*KCC considers having regard to the scale of the site (1,434 ha) that a more robust and proactive approach could be taken in the replacement of habitat lost along with the enhancement measure.*

*e.g. an extra compensatory measure to plant a biodiversity crop of lower canopy woodland species.*

### Chapter 7 Ornithology

A full assessment was carried out and details of same set out in the EIAR, AA and Appendices, Potential effects of the proposed development described,

Of particular concern is the potential threat to the Woodcock within the site.

There is no compensatory/mitigation proposals to counteract the predicted loss of Woodcock.

Considered a significant loss at local level.



## Chapter 10 Shadow Flicker

Chapter 10 assesses the potential for shadow flicker from the proposed Castlebanny Windfarm

Shadow flicker' is an effect that occurs when the rotating blades of a wind turbine cast a moving shadow over a building. The effect is experienced indoors where a moving shadow passes over a window in a nearby property and results in a rapid change or flicker in the incoming sunlight.

Potential effect of shadow flicker diminishes as distance from the turbine increases

Can be significant at a distance of up to ten rotor diameters. (Industry Standard)

In this case the rotor diameter is to be 155m  
Significant shadow flicker can occur up to 1.55km away.

Shadow flicker modelling was undertaken suggesting no significant impact. (< 30 hrs & < 30minutes a day)

A commitment given for ZERO-flicker impact ( section 10.4.1) This is a welcome commitment.

Technology exists to ensure that no flicker occurs at a sensitive receptor.

This should be conditioned in the event of a grant of permission.





## Chapter 13 Landscape & visual Impact

Zone of Theoretical Visibility (ZTV) radius is 20km from the outermost turbines of the scheme (Turbines > 100m)

*Magnitude of a predicted landscape effect is a product of :  
the scale, and the extent or degree of change that is likely to be experienced as a result of the proposed development.*

*Impact of the development analysed from 38 view points.*

EIAR states:

*“there will be physical impacts on the land cover of the site”*

*“but these will be relatively minor in the context of this much-modified, permanently evolving, rural landscape”*

*Turbines “positioned across a site that is up to approx. 7.3km long and 2.7km wide.”*

*“Thus, such scale of development can be comfortably assimilated into this landscape context without undue conflicts of scale with underlying landform and land use patterns.” p(13-55)*

Residual effects from all viewing points VP1 to VP38 range from slight to moderate.









The Council considers that the proposed layout requires to be reviewed and revised according to a more realistic impact analysis which would require :

- (a) A reduction in the number of turbines
- (b) A greater set back from sensitive receptors .. and/or
- (c) A reduction in the overall height of the turbines.

It is the view of the Council that should these design improvements be made that the proposed development would be more sustainable and could therefore be in accordance with the proper planning and sustainable development of the area.

## Chapter 15 Heritage



This Chapter gives a cultural heritage impact assessment that addresses archaeological and architectural heritage.

Study identifies previously recorded archaeological and architectural sites.

Numerous archaeological monuments identified, 28 are within 1km

North and east is the medieval site associated with the early Christian bishop St Molin.

The Council considers the assessment of impacts of the proposed development on St Molin's well is weak.

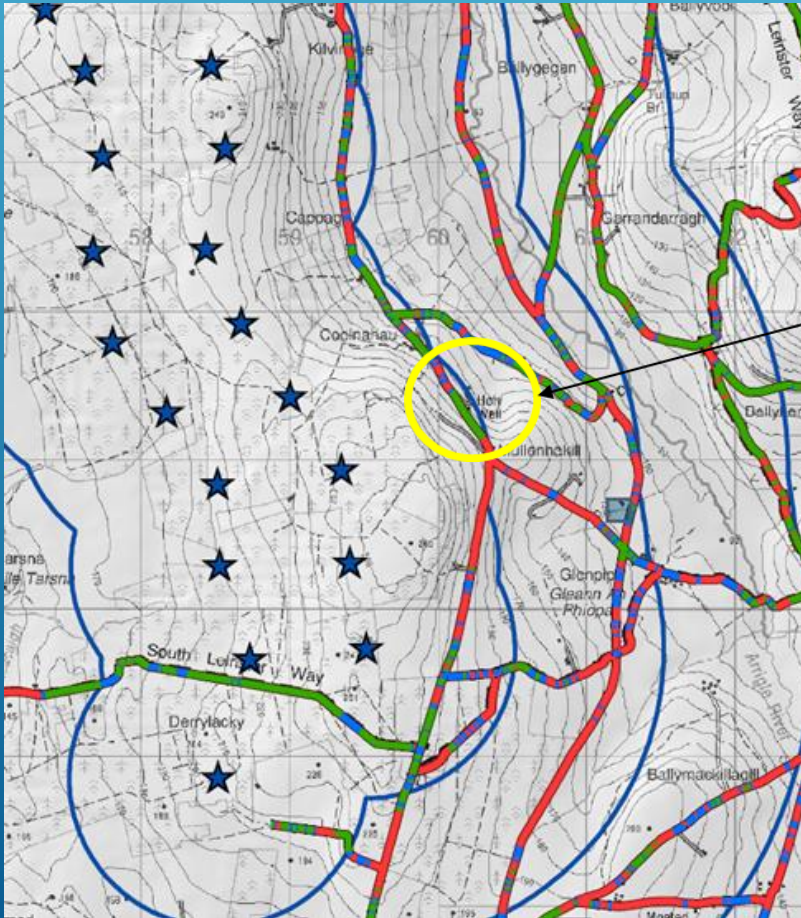
The well is located directly east of the proposed windfarm across the Arrigle River Valley.

It is of the order of 800m as the crow flies from the nearest turbine.

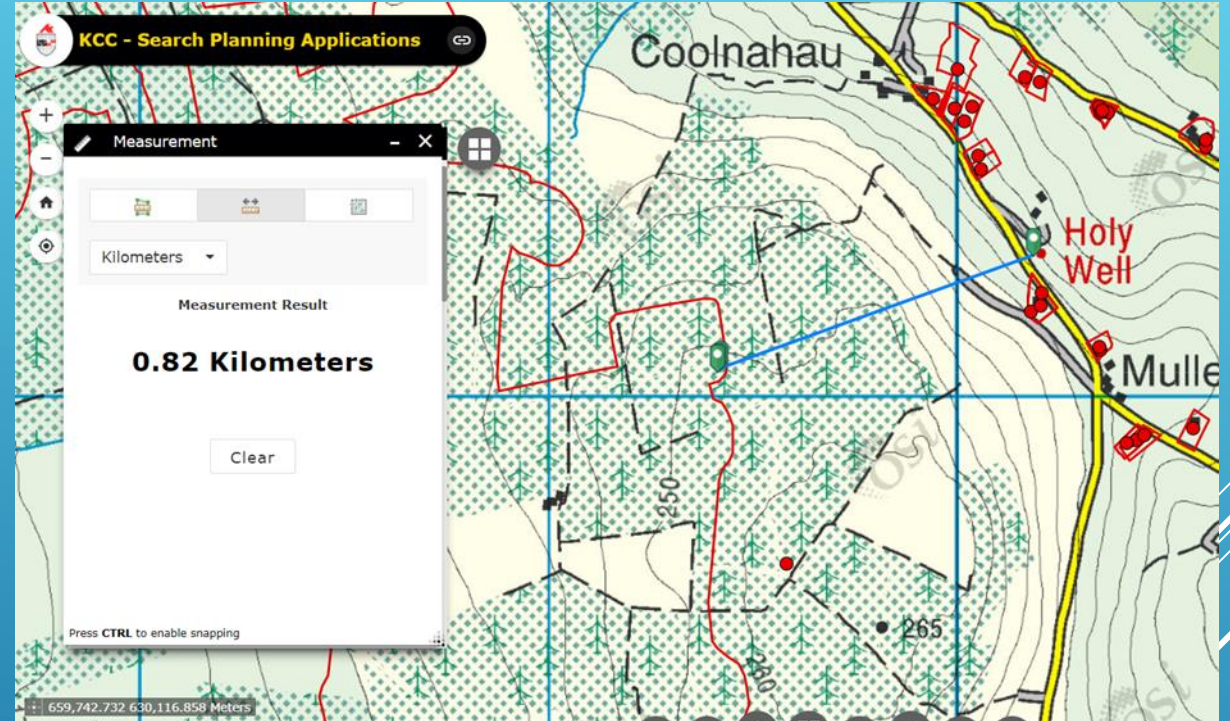


## Route analysis in appendix 13-3

St. Molin's Well is within a location along the public road which is identified as having an open view to the site.



St. Molins Well



The Council would consider that given the proximity of the site to the development and the clear views from the Holy Well across the river valley that the potential impact here needs to be examined in more detail and mitigation measures to be introduced.



# CONDITIONS, COMMUNITY GAIN AND BONDS

Should ABP decide to grant permission:

The following conditions should be considered for inclusion;



- - 10 year permission
- - All mitigation and monitoring details within the EIAR and NIS to be fully implemented
- - 35 year operational life
- - Noise threshold
- - Shadow flicker controls including a mechanism to ensure no flicker at sensitive receptors as committed to in the EIAR
- - Final turbine details to be agreed
  - Max tip height
  - Rotor diameter by turbine
- - Final number and location of turbines
- - Finish Level of turbine foundations
- - Construction and Environmental Management Plan including but not limited to
  - Construction hours
  - Maintenance of local road network
- - Additional biodiversity compensation measures as outlined under Chapter 6 heading above.
- - Requirement for an Ecologist Clerk of Works
- - Control of storage and stockpiling material
- - Surface water management plan with controls including silt management etc.
- - Dust suppression and monitoring
- - Consultation with District Engineer regarding pre and post condition survey, repair of damages at developers own cost and agreement for strengthening of haul routes
- - Traffic Management Plan
- - Advance notice for road closures and extra ordinary loads
- - Correct control of all fuels and chemicals on site
- - Protocol for maintenance of telecommunications
- - Irish Aviation Authority requirements
- - Monitoring for archaeology
- - Full details around reinstatement / decommissioning
- - A detailed Recreational and Amenity Plan agreed with the Planning Authority prior to commencement of development.
- - Bond
- - Development Contribution condition.
- - Community Benefit Fund
- - Appointed Community Liaison Officer for duration of construction works and initial period or commissioning / operation



## OVERALL CONSIDERED VIEW

- Development is located within an area designated as open for consideration for wind energy developments 2014 – 2020
- Council has concerns in relation to the scale of the project,  
in terms of number and height of the proposed turbines  
how the sensitivities of the landscape have been dealt with.
- The Council considers that insufficient weighting has been given to the sensitivities,  
in particular in relation to the impact on residential amenities for the properties within the 1km to 2km range,
- If this is not addressed significant residual landscape effects could result from the proposed development,  
Which would lead to an unacceptable impact on residential amenity to properties in particular within the range of  
1 to 2 km of the turbines,
- The Council also has a concern in relation to the route screening analysis carried out and how it was applied,  
example highlighted is the potential impact on site of St. Molin's although which in the view of the Council received  
little in depth or evidential analysis even though within area identified as having clear views to the development.



## OVERALL CONSIDERED VIEW cont....

- Visual Impact Assessment provided is not sufficiently robust and should have included additional viewpoints both locally having regard to dwelling locations and also along the open areas of the route analysis.
- Some view points were chosen where local features obscure or partially obscure the development, e.g. VP10 & V38

On the basis of the above **shortcomings** of the submitted EIAR documents it is considered the development as currently presented **should be redesigned** in terms of **extent and scale**, as the developer has not robustly demonstrated that the proposed development would not have negative impacts on the visual and residential amenities of the local and wider area and that the development may result in significant negative impacts on the natural and built environment of the area.

**END**





The Board may decide to grant a permission for development, or any part of a development, even if the proposed development, or part thereof, contravenes materially the development plan relating to the area.

The Board may seek further information

The Board may refuse permission.

**Case is due to be decided by 29/07/2021**

**Boards website**