

File With _____

CORRESPONDENCE FORM

Appeal No: ABP 322787-25

M _____

Please treat correspondence received on 11/07/25 as follows:

<p>1. Update database with new agent for Applicant/Appellant _____</p> <p>2. Acknowledge with BP <u>40</u></p> <p>3. Keep copy of Board's Letter <input type="checkbox"/></p>	<p>1. RETURN TO SENDER with BP _____</p> <p>2. Keep Envelope: <input type="checkbox"/></p> <p>3. Keep Copy of Board's letter <input type="checkbox"/></p>
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Amendments/Comments <u>observation from L Sheehan</u>

<p>4. Attach to file</p> <p>(a) R/S <input type="checkbox"/> (d) Screening <input checked="" type="checkbox"/></p> <p>(b) GIS Processing <input type="checkbox"/> (e) Inspectorate <input type="checkbox"/></p> <p>(c) Processing <input type="checkbox"/></p>	<p>RETURN TO EO <input type="checkbox"/></p>
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	Plans Date Stamped <input type="checkbox"/>
	Date Stamped Filled in <input type="checkbox"/>
EO: <u>Douglas W. Cash</u>	AA: _____
Date: <u>22/07/25</u>	Date: _____

File With _____

Appeal NO: ABP 322787-25

Defer Re O/H

TO: SEO

Having considered the contents of the submission dated/ receive d 11/07/25
from

con sheehan I recommend that section 131 of the Planning and Development Act, 2000
be not be invoked at this stage for the following reason(s): no new material information

E.O.: Diana Lita AM

Date: 06/09/25

For further consideration by SEO/SAO

Section 131 not to be invoked at this stage.

Section 131 to be invoked – allow 2/4 weeks for reply.

S.E.O.: _____

Date: _____

S.A.O.: _____

Date: _____

M _____

Please prepare BP _____ - Section 131 notice enclosing a copy of the attached submission

to: _____ Task No: _____

Allow 2/3/4weeks – BP _____

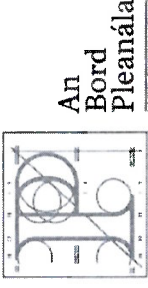
EO: _____

Date: _____

AA: _____

Date: _____

Lodgement Cover Sheet - LDG-081350-25



Details

Lodgement Date	11/07/2025
Customer	Con Sheehan
Lodgement Channel	Post
Lodgement by Agent	No
Agent Name	
Correspondence Primarily Sent to	
Registered Post Reference	

Lodgement ID	LDG-081350-25
Map ID	
Created By	Imogen McBean
Physical Items Included	No
Generate Acknowledgement Letter	
Customer Ref. No.	
PA Reg Ref	

Categorisation

Lodgement Type	Observation / Submission
Section	Processing

PA Name	Cork County Council
Case Type (3rd Level Category)	

Fee and Payments

Specified Body	No
Oral Hearing	No
Fee Calculation Method	System
Currency	Euro
Fee Paid	50.00
Refund Amount	

Observation/Objection Allowed?	
Payment	PMT-063842-25
Related Payment Details Record	PD-063681-25

BP40

Observation

Run at: 11/07/2025 15:11

Run by: Imogen McBean

ABP 322787

PA Case Number	
PA Decision Date	
County	
Development Type	
Development Address	
Appellant	
Supporting Argument	

Development Description	
Applicant	
Additional Supporting Items	

AN COIMISIÚN PLEANÁLA
LDG- 081350-25
ACP- _____
11 JUL 2025
Fee: € 50 Type: cheque
Time: 900 By: reg post

College road,
Carrignavar,
Co. Cork.

Date: 10 July 2025

Bord Pleanála,

64 Marlborough St, Rotunda, Dublin 1

Re: ABP case reference : PL04_322787

Applicant: Tullacondra Green Energy Limited

Proposed wind farm development at Polnareagha, Ardskeagh, Tullacondra, Croughta, Kilmaclenine, Ballyclogh, Knockaunavaddreen, , Copestown, Ballybeg, Baltydaniel East, Twopothouse, Caurraghakerry, Co. Cork .

Dear Inspector,

I highly recommend this application be looked at in detail with respect to the turbine to turbine separation distances within this application site boundary. This small landholding is packed with turbines and as tight a design I have come across on approx. 40 designs I have studied in the last two years.

Added to this the Met mast location and its proximity to nearby turbines will render it useless.

I am a Chartered Land Surveyor, in private practice since 1994, becoming a Fellow member of the Society of Chartered Surveyors of Ireland & the RICS in 2006.

Since 2017 I have being working in a professional capacity mapping distances and dimensions of various Windfarms in Cork, Kerry, Waterford, Limerick and Wexford counties on behalf of certain residents who have complaints of noise nuisance created by the operation of wind turbines. I was the surveyor involved in mapping the dimensions of the Ballyduff wind farm on behalf of the Plaintiffs who were impacted by amplitude modulation and turbine noise to such an extent that one of the Plaintiffs had to abandon his home and was found to have suffered psychological injury. The findings in this case were made by the High Court in a Judgment of Ms. Justice Egan delivered on the 8th March 2024 (Webster & Anor -v- Meenacloughspar (Wind) Limited and Shorten & Anor-v- Meenacloughspar (Wind) Limited. In that Judgment regard is had to the proximity of the turbines to the homes of the Plaintiffs and to the many factors which may be contributing to turbine noise, including possible wake effects of one turbine on the other turbine (the particular windfarm in that case has just two turbines).

I was also the surveyor involved in mapping the dimensions of the Gibbett wind farm on behalf of the Plaintiffs who were impacted by wind turbine noise and where the developers admitted liability after many years of noise nuisance. Liability was only admitted after the plaintiffs acousticians evidence to the court, that being after 11 days of High court sitting.

I have recently carried out a study of all of the Windfarms I have worked on (on behalf of injured parties) and one factor that I happened upon is present in all. This is the spacing of certain turbines relative to each other. It is a factor in wake turbulence at particular turbines, creating noise nuisance for nearby residents. This will be certainly the case on this project if approved.

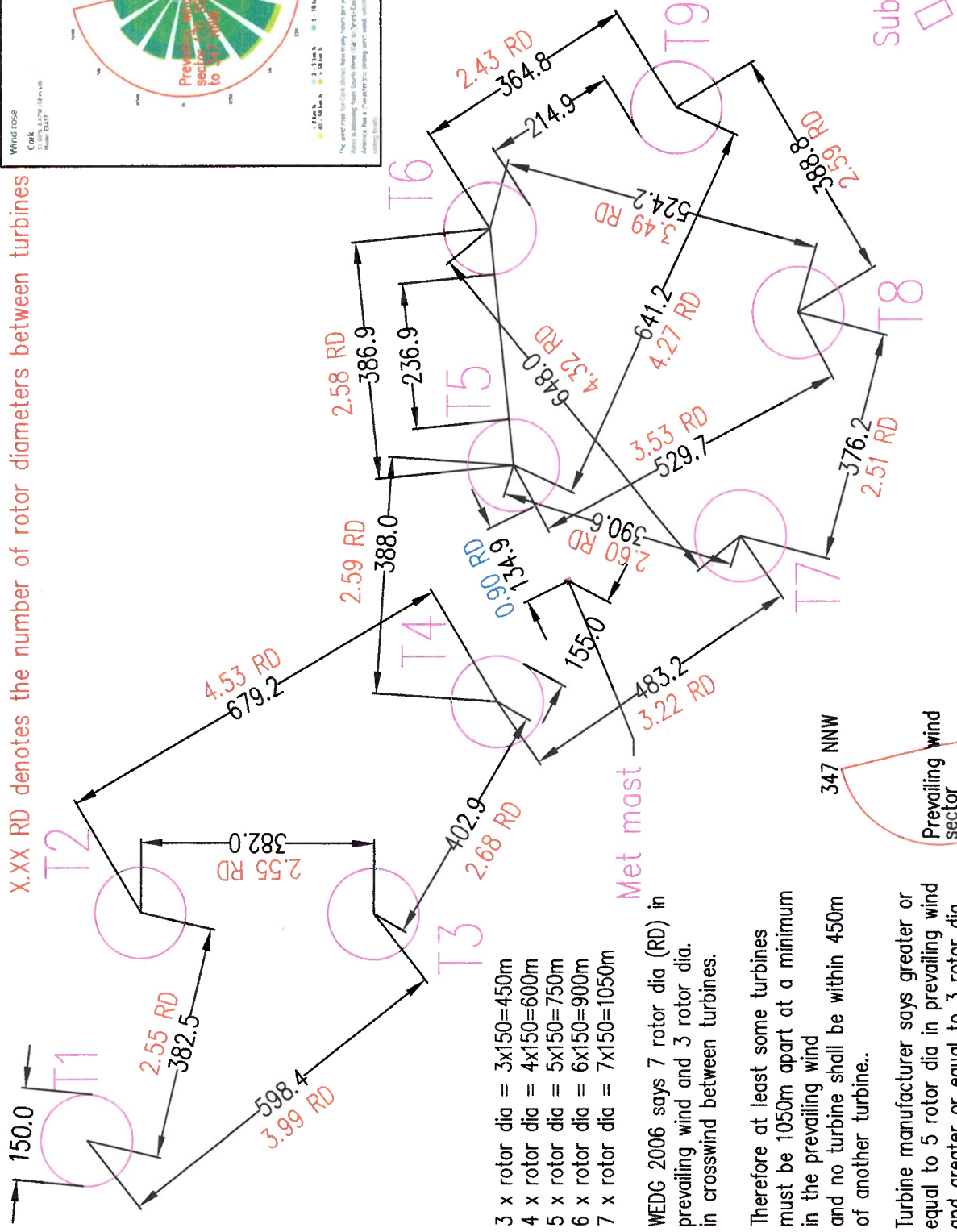
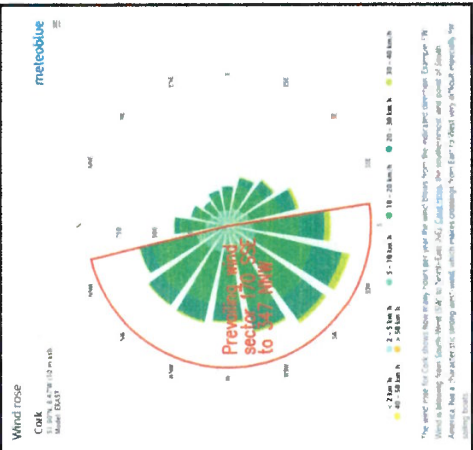
On reading the WEDG 2006 guidelines, referring to "wind take" on page 34, the recommended siting of turbines relative to each other (as distinct from siting relative to dwellings and adjacent windfarms / properties outside of the windfarm control) are given.

It reads "In general, to ensure optimal performance and to account for turbulence and wake effects, the minimum distances between wind turbines will generally be three times the rotor diameter ($=3d$) in the crosswind direction and seven times the rotor diameter ($=7d$) in the prevailing downwind direction."

IN ABP case reference PL04_322787 to which this observation refers, the applicant has, as one can see in Map 1, (next page) completely ignored the turbine separation distances from adjacent turbines.

As mentioned earlier the Met Mast location for the project beggars belief.

X.XX RD denotes the number of rotor diameters between turbines



- 3 x rotor dia = 3x150=450m
- 4 x rotor dia = 4x150=600m
- 5 x rotor dia = 5x150=750m
- 6 x rotor dia = 6x150=900m
- 7 x rotor dia = 7x150=1050m

WEDG 2006 says 7 rotor dia (RD) in prevailing wind and 3 rotor dia. in crosswind between turbines.

Therefore at least some turbines must be 1050m apart at a minimum in the prevailing wind and no turbine shall be within 450m of another turbine..

Turbine manufacturer says greater or equal to 5 rotor dia in prevailing wind and greater or equal to 3 rotor dia. in crosswind between turbines.

Therefore at least some turbines must be 750m apart at a minimum in the prevailing wind and no turbine shall be within 450m of another turbine..

Horizontal separation distances between turbines

Tullacondra Green Energy Windfarm layout



Map 1

SEAI have published in 2024 a series of documents on how to design and plan a windfarm layout, see the following link: <https://www.seai.ie/sites/default/files/publications/Community-Toolkit-Planning->

Noise Levels

Noise generation is perceived to be an adverse impact of wind turbine operations, although noise levels of modern wind energy are generally very low. Improvements in technologies have reduced mechanical noise impacts significantly. However, it is important that turbines are located an appropriate distance from noise sensitive developments to minimise any adverse impacts upon local amenity.

Wind turbines also create noise, which can impact on the amenity of the occupants of any nearby dwellings. As such, it is recommended that a separation distance of at least 500 metres or four times tip height is incorporated between the turbine and any other dwelling.

Appropriate Distance

You will need to consider appropriate distance between all wind turbines and power lines when planning for grid connections. The minimum clearance for all turbines and overhead transmission lines must be falling distance (measured from the edge of the foundation) plus an additional flashover distance for the relevant voltage. EirGrid advises that the distance between an overhead transmission line (110kV, 22kV or 400kV) and a commercial wind turbine should not be less than three and a half rotor diameters unless EirGrid has agreed a reduction based on a risk assessment. ESB Networks should be consulted on applications, and evidence of any pre-application discussions should be submitted as part of the planning application.

It is advisable to achieve a safety setback from national and regional roads and railways of a distance equal to the height of the turbine to the tip of the blade plus 10%.

In general, to ensure optimal performance and to account for turbulence and wake effects, the minimum distances between wind turbines will generally be three times the rotor diameter in the crosswind direction and seven times the rotor diameter in the prevailing downwind direction. Bearing in mind the requirements for optimal performance, a distance of not less than two rotor blades from adjoining property boundaries will generally be acceptable, unless by written agreement of adjoining landowners to a lesser distance.

→ Decommissioning and Site Restoration

Solar farms and wind turbines have a finite life and, should planning permission be granted, it is likely to be subject to a condition requiring the turbine to be decommissioned and removed when no longer in use. A condition may also be added requiring certain colours and finishes of the mast, blades and hub, but this will be specific to the turbine's location.

3.2 Identify Site Constraints

→ Refer to the Wind Energy Maps or Renewable Energy Strategy in the County Development Plan to check wind energy designations. Refer to the Council's Landscape Assessment (if any) to see where the site lies in relation to landscape sensitivity.



The above SEAI recommendation is in line with the WEDG guidelines

This windfarm designer must be referring to the 2012 Irish Wind Energy Association "Best practice guidelines for the Irish Wind Energy Industry" (link below) instead of the WEDG2006 guidelines when preparing their applications. These IWEA 2012 guidelines are in conflict with the WEDG 2006 and SEAI guidelines in many areas and should not be used in Windfarm design.

<https://windenergyireland.com/images/files/9660bdfb5a4f1d276f41ae9ab54e991bb600b7.pdf>

Recommendation

On the basis of what I have outlined and experienced, I highly recommend the following information be sought from the developers to enable ABP and other parties carry out an in-depth analysis of the proposal, and in fact, the entire validity of the proposal in relation to the Wind Energy Development Guidelines 2006.

1: The manufacturer's specifications for the particular model of turbines used in their design (Vestas V150 4.5MW) with specific reference to the minimum separation distances from turbine to turbine within the windfarm (not windfarm to windfarm).
(Turbine manufacturers recommend separation distances to avoid excess turbulence, wind shear, noise and other impacts on the integrity of the turbines).
This is to enable them provide a warranty for the turbine being used.

It is my opinion that the developers will not get a valid warranty for the eventual turbine, after their tender process, for a spacing less than 5 rotor diameters in the prevailing wind direction and 3 rotor diameters in other directions. The layout on Map 1 still shows a significant lack of spacing, using the manufacturers recommendations.

Regarding the Gibbett Hill windfarm, the turbines were all over 1049 m from the dwelling where the nuisance is confirmed and mitigation was not possible to halt this nuisance.
The 3 turbines ordered to be shut down were, as in this application, less than the recommended guidelines apart.

I am available for consultation or other forum if needed.
I enclose a cheque for 50 Euro made out to Bord Pleanala.

Yours sincerely,



Con Sheehan,
Land surveyor /Fellow, "Society of Chartered Surveyors Ireland"

College Road ,
Carrignavar,
Co Cork, T34 TK26
Ireland.

Phone: ++353 21 4884923
Mobile: ++353 87 2751882
Email: consheehan61@gmail.com

