

KILKENNY COUNTY COUNCIL



Planning and Development Act 2000 (as amended)

Planning and Development (Strategic Infrastructure) Act 2006

Planning Authority report in accordance with the requirements of
Section 37E(4) of the Planning and Development Act 2000 (as amended)

and for submission to

Elected Members by the Chief Executive in accordance with Section 37E(5)

An Bord Pleanála Ref. No.:	309306
Applicant:	Springfield Renewables Limited
Agents:	Tobin Consulting Engineers
Site location:	<p>The proposed wind farm is located between the settlements of Mullinavat, Inistioge and Ballyhale, which are located approximately 4.1km southwest, 5.7km northeast and 1.9km northwest of the site of the proposed wind farm respectively and within the townlands of Castlecosker, Derrynahinch, Kiltorcan, Coolroe Beg, Baunskeha, Castlebanny, Kilvinoge, Cappagh, Coolnahau, Ballytarsna, Mullennakill, Glenpipe, Ballymartin, Ballyvatheen, Ballynoony West, Derrylacky, Garrandarragh, Ballygegan and Ballyvol Co. Kilkenny</p> <p>The site incorporates an area of approximately 1,434 hectares (ha). The boundary of the main wind farm site (which excludes the grid connection, the offsite forestry replanting lands and the temporary public road upgrade works associated with the Turbine Delivery Route) is shown in the attached map Fig 1.2 taken from the submitted Environmental Impact Assessment Report (EIAR) submitted with the application to An Bord Pleanála.</p>

The proposed development:

The application is for planning permission for the following:

- Erection of 21 no. wind turbines with an overall blade tip height of up to 185m and all associated foundations and hard-standing areas in respect of each turbine;
- Improvement of existing site entrance with access onto the R704 regional road, vertical realignment of the R704 in proximity to this entrance, and creation of two new site entrances on the L7451 to form a new crossing point;
- Improvements and temporary modifications to existing public road infrastructure to facilitate delivery of abnormal loads and turbine delivery and construction access at two locations on the R704 in the townland of Ballynoony West;
- Construction of 2 no. temporary construction compounds with associated temporary site offices, parking areas and security fencing;
- Installation of 1 no. permanent meteorological mast up to a height of 100m;
- 3 no borrow pits
- Construction of new internal site access roads and upgrade of existing site roads, to include passing bays and all associated drainage;
- Construction of drainage and sediment control systems;
- Construction of 1 no. permanent 110kV electrical substation including:
 - 2 no. control buildings containing worker welfare facilities and equipment store;
 - All electrical plant and infrastructure and grid ancillary services equipment;
 - Parking;
 - Security Fencing;
 - Wastewater holding tank;
 - Rainwater harvesting equipment;
 - All associated infrastructure and services including site works and signage;
 - All associated underground electrical and communications cabling connecting the wind turbines to the proposed wind farm substation;
- All works associated with the connection of the proposed wind farm to the national electricity grid, which will be via a loop-in 110 kV underground cable connection approximately 4km in length to the existing overhead 110 kV line in the townland of Ballyvool, Co. Kilkenny, with two new 16m high steel lattice loop-in/out masts at the connection point;
- All related site works and ancillary development including berms, landscaping, and soil excavation;
- Ancillary forestry felling to facilitate construction and operation of the proposed development and any onsite forestry replanting;
- Development of a permanent public car park with seating/picnic tables at the end of the construction phase of the development on the footprint of the southern temporary construction compound; and
- Permanent recreational facilities including marked walking and cycling trails along the site access roads, and associated recreation and amenity signage and outdoor fitness equipment.
- A 10-year planning permission and 35-year operational life from the date of commissioning of the entire wind farm is being sought.

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Application Timelines:

Date	Stages of the SID process
16/12/20	An Bord Pleanála opinion Issued
28/01/21	Application Lodged to An Bord Pleanála
26/03/2021	Closing date for public submission to AN Bord Pleanala
29/03/21	Kilkenny County Council Meeting
07/04/21	Chief Executive’s Report to An Bord Pleanála
29/07/21	Decision due by An Bord Pleanála

PART I – INTRODUCTION & PURPOSE OF THE REPORT

Introduction

On 16th December 2020 An Bord Pleanála served notice in writing to the applicants, that the proposed development would be strategic infrastructure within the meaning of Section 37A of the Planning and Development Act 2000 (as amended), hereafter referred to as the Act.

An application for permission for the proposed development was submitted directly to An Bord Pleanála on the 28th January 2021.

In accordance with Section 37E of the Act, the Chief Executive must submit a report to An Bord Pleanála setting out the views of the Planning Authority on the effects of the proposed development on the environment and the proper planning and sustainable development of the area.

The purpose of this report

In accordance with the requirements of Section 37E(4) the Act, the purpose of this report is to set out the views of the Planning Authority on the effects of the proposed development on the environment and on proper planning and sustainable development, with particular regard to the matters specified in section 34(2). Section 34(2) of the Act refers to those matters the Planning Authority considers when making its decision and/or recommending conditions in relation to a 'normal' planning application, namely:

- (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.

In addition to the above noted legislative requirements, the An Bord Pleanála '7th Schedule Strategic Infrastructure Developments - Guidelines for Planning Authorities', has also informed the content of this report.

Section 37E(4) of the Act requires that this report shall be submitted to An Bord Pleanála, who will consider it as part of their assessment of the proposed development.

Section 37E(5) of the Act requires that before this report is submitted to the Board, the Chief Executive shall submit it to the Elected Members, in order to seek their views on the proposed

development. The Members may, by resolution, decide to attach recommendations to the report (Section 37E(6) of the Act refers).

Section 37E(6) of the Act also provides that the views expressed by the members on the proposed development during the Council Meeting, can also be attached to this report i.e. the 'meetings administrator's record'. The Chief Executive's Report was presented to the Members of Kilkenny County Council on 29th March 2021 and the recorded views of the Members are enclosed in Appendix 2 of this report.

PART II – SITE LOCATION AND DEVELOPMENT DESCRIPTION

2.1 Site Location Overview

The proposed wind farm is located between the settlements of Mullinavat, Inistioge and Ballyhale, which are approximately 4.1km southwest, 5.7km northeast and 1.9km northwest of the site of the proposed wind farm respectively and within the townlands of Castlecosker, Derrynahinch, Kiltorcan, Coolroe Beg, Baunskeha, Castlebanny, Kilvinoge, Cappagh, Coolnahau, Ballytarsna, Mullennakill, Glenpipe, Ballymartin, Ballyvatheen. Ballynoony West, Derrylacky, Garrandarragh, Ballygegan and Ballyvool.

The site incorporates an area of approximately 1,434 hectares (ha). The boundary of the main wind farm site (which excludes the grid connection, the offsite forestry replanting lands and the temporary public road upgrade works associated with the Turbine Delivery Route) is shown in the attached map Fig 1.2 taken from the submitted Environmental Impact Assessment Report (EIAR) submitted with the application to An Bord Pleanála.

The topography of the site is gently sloping, rising from approximately 145m OD on the eastern and western sides to a high point of 250m OD in the north and 265m OD in the south. The site is enclosed by the regional road the R704 to the south and local roads to the east, north and west. The Arrigle River (which forms part of the River Barrow and River Nore Special Area of Conservation) runs south-north near the eastern boundary of the site. Several tributaries of the Arrigle and the Derrylacky River encroach on the periphery of the site. The South Leinster Way traverses the southern part of the site

PART III INTERNAL REFERRALS

Parks Department

The landscape character of this part of Kilkenny is predominantly of undulating topography with a variety of hills and valleys. Land use is typically agriculture with mono culture coniferous plantations and open wet grassland in the upland areas. The higher points are to the outer parts of the study area at Brandon Hill, Slieve Coiltia (Co. Wexford) to the east and the lower reaches of the Blackstairs Mountains to the west.

The significant amenity and heritage sites of importance in the area are Mount Juliet, Jerpoint Abbey, Woodstock Gardens and Knocktopher Abbey.

According to the analysis of views from the surrounding areas these do not seem to be impacted due mainly to the topography and presence of vegetation in the near and distant views.

A significant view would appear to be Viewpoint 6 to Thomastown north on approaching Thomastown from the Gowran Road. This view is quite dramatic on the skyline over the hills to the south of Thomastown for a section of approach to the town. The view diminishes as the land falls to the town centre from where there does not appear to be any significant views as a result of local topography of the river valley.

Kilkenny County Council Development Plan 2014-2020 Landscape Character Assessment shows the site as being within the 'Upland' landscape type. The ridge at Castlebanny actually runs north south along the division between the two sub categories within this main category – Upland Area C South Western Hills and Upland Area E – South Eastern Hills. The County's recent Draft Wind Energy Strategy shows the proposed site as within an area which is acceptable in principle for wind turbines to be located.

It might be considered as an additional compensatory measure to plant a biodiversity crop of lower canopy woodland species where locations present within or on the perimeter of the development to enhance local wildlife habitat.

The proposal to place the turbines along the ridge line rather than across the ridge line also assists in their placement in the landscape.

In conclusion, it is not considered that the proposed wind farm will give rise to significant visual impact; rather it is considered to be between moderate and slight dependent on the location of the view and as the distance from the development increases. It is therefore considered that this upland forested landscape has the capacity to absorb the proposed windfarm development.

Environment Section

The following recommendations / observations were made:

- Clean storm/surface water should be managed during the construction, operation & decommissioning stages, within the curtilage of the site. There shall be no discharge from the site to any surface waters or onto the public road or 3rd party land. This application does not include for the discharge of dewatered groundwater associated with any potential dewatering operations on this site. Where such a discharge is required the applicant should apply for and be in possession of a valid discharge licence for trade effluent as required under the Local Government (Water Pollution) Acts 1977 – 2007 (as amended), prior to any such operation taking place.

Prior to commencement of development the following should be required:

- Clearly labelled drawings showing the location of all drainage channels, boxed culverts, pipe drain crossings, inceptor ditches, spreaders and pipework with their gradients, which will clearly identify how surface water is dealt with for the overall site. The ultimate outfall point of the waters should also be indicated and the separation distances to all waterbodies and public / private water supplies
- A Surface Water Management Plan for the proposed development.
- Regular water sampling, testing and reporting of all relevant surface watercourses and wells (Public and Private Supplies) surrounding the site.
- A layout drawing identifying the locations where these samples will be obtained, a programme of monitoring by a competent indemnified third party.

A Waste Management Plan in accordance with Department of the Environment, Heritage and Local Government's Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects.

During the construction, operation and decommissioning stages, all tank and drum areas should be rendered impervious to the materials stored therein. In addition, tank and drum storage areas should be bunded either locally or remotely to a volume not less than 110% of the capacity of the largest tank or 25% of the total capacity requirement, whichever is the greatest. Drainage from the bunded area should be diverted for collection and safe disposal.

During the construction, operation and decommissioning stages, the applicant should ensure that all operations on site are carried out in a manner such that noise, dust, reflectance, shadow flicker, air emissions and/or odours do not result in significant impairment of, or significant interference with, amenities or the environment beyond the site. The following are recommendations for consideration by the planning authority:

- a. The hours of work for the site should be:
 - i. 07:00 to 19:00 Monday to Friday.
 - ii. 07:00 to 13:00 Saturdays.

The applicant should submit an Operations Manual to deal with

- Shadow Flicker
- Mitigate dust and air pollution

All activities at the site should not give rise to noise levels off site at the nearest occupied dwellings, which exceed the following sound pressure limits;

- DAY: 45dB(A) LA90 (10 minutes).
- NIGHT: 43dB(A) LA90 (10 minutes)

- The applicant should carry out noise and shadow flicker monitoring in order to determine the extent and characteristics of noise levels arising from the Wind Farm in the vicinity of the nearest occupied dwellings post commissioning.

Prior to the commencement of the development the applicant should submit for the written agreement of the Planning Authority

- Certification that the complete wastewater storage system has been satisfactorily designed, installed and meets with the maximum required operational capacity for the proposed development.

- Confirmation of the suitability of Borrow Pit number three, which is to be located in the south of the site.

- Where blasting occurs it should only take place when a detailed blasting procedure is agreed in writing with the Planning Authority. The blasting procedure shall address at a minimum, Health & Safety, Vibration, Air Overpressure, Monitoring and Notification to Local Residents. The procedure shall include specific measures to demonstrate compliance with limits as set out below

- Grounbourne vibration levels as a result of blasting should not exceed a peak particle velocity of 8mm/sec measured off site at the nearest inhabited dwellings and overpressure values shall not exceed 125dB(Lin) max.

- Results of monitoring for each blast shall be submitted to the Planning Authority with 2 weeks of the blast.

- The Construction Environmental Management Plan (CEMP) and all other Plans developed for this application should be considered to be live documents, and shall be updated as required to reflect any changes in work practices or procedures

Roads Design

The haul route required to transport components is noted to require third party lands both for widening, removal of fences, walls, trees, tree/hedge pruning etc and on occasion necessary to allow for over-sail requirements. The application documents do not appear to contain the necessary consent from the third-party landowners for any works necessary to carry out the necessary road improvements.

The haul route also requires the removal of street infrastructure to facilitate the transportation of components. These include lighting columns, safety barrier and signage.

It is not clear what the applicant's intentions are with respect to for example street lighting and vehicle restraint measures which the application has referred will also need to be removed. Similar considerations to that given to road signage needs to be applied to these important safety features on the road network.

The applicant needs to detail the methodology for the removal of the relevant infrastructure, temporary equivalent measures proposed, the necessary road safety audit stage 1/ stage 2 of the temporary measures proposed and proposals for reinstatement of the original infrastructure upon completion. Any reinstatement necessary to existing infrastructure in accordance with the applicable TII standards. All costs arising at the expense of the applicant.

The haul route in particular will cross roads under the responsibility of Kilkenny and Waterford County Councils and also traverses roads under the responsibility of the MMaRC contractor, Egis Lagan. Each of these parties will need to be consulted in respect of road openings, abnormal load movements, traffic management etc with respect for works/traffic movements proposed or required in areas under their respective responsibilities.

The entire splayed entrance should be suitably structured to cater for the range of loads proposed and it should also be completed in a bituminous surfacing in order to provide adequate protection for the public road edge. The falls shall be off the public roadway edge to ensure the avoidance of pooling of surface water on the public roadway edge. This detail should be confirmed by the applicant.

There are concerns about the structural suitability of the proposed main construction crossing point of the LS7451. This roadway would not generally be expected to convey the range of trucks and vehicles proposed to use this section of the road. The applicant shall be required to undertake a Falling Weight Deflectometer (FWD) analysis 50m each side of the crossing point on the local road to determine the strengthening works required at this location. The applicant shall compile a report of the strengthening works necessary at this point coupled with any road drainage works required. This report shall be submitted to the Planning Authority for approval with all agreed works completed at the applicants own expense in the early construction phase.

The applicant shall complete an FWD analysis of the regional road, R704 to ensure the structural suitability of this for the range of vehicles proposed from the junction with the M9 to the entrance to the site.

The applicant shall be required to submit an undertaking to make good any construction deterioration/damage which occurs during the construction phase reasonably attributable as a result of the construction activities to/from the site.

At the latter end of the construction phase the applicant shall also complete a post construction phase FWD test of the R704 and any resultant damage/deterioration arising shall be repaired at the applicants own expense.

The applicant refers that during the operational phase that the main access shall be via the LS7451 which also links with the R704 to the west of the proposed construction access point. Given this will become the main access to the site for maintenance purposes it is recommended that the applicant be conditioned to complete road strengthening from the junction with the regional road, R704 for a distance of 2000m to bring it past the main construction crossing point. Full details to be agreed with the roads authority.

All reinstatement works on the public road as necessary shall be in accordance with that of the Purple Book. In addition, all works shall be undertaken in such a manner that the existing road drainage arrangements are unaffected and accommodated at all times.

To the west of the proposed main construction entrance onto the R704 it is noted that the applicant has indicated that works are necessary in order to address the vertical alignment of the existing road by removing a crest which is impeding visibility on exiting from the site. The applicant has not detailed the intended works required at this location. All works necessary shall be in accordance with TII standards and the Design Manual for Roads and Bridges (DMRB). The applicant shall be required to submit the required design for the works necessary to the Road Authority for approval. The applicant has indicated that the duration of works necessary at this location will be approximately 6 weeks.

This extended time period during construction works on the R704 traffic management to facilitate at least one-way traffic movements shall be required unless otherwise agreed with the Roads Authority.

There are concerns about potential see through at the construction road junction with the regional road, R704. Opposite the proposed location there is an access into other forestry lands. Advanced junction and stop warning signage are required on the internal road in advance of this junction. Signage should be placed off the roadway edge in accordance with the Traffic Signs Manual and it is recommended that it be placed on both sides in this case.

There are concerns in respect of potential danger of see through at the junction of the internal haul roads east and west of the junction with the LS7451. Advanced stop warning and stop signage is required on the internal road in advance of the junction. Signage should be placed off the roadway edge in accordance with the Traffic Signs Manual and it is recommended that it be placed on both sides. This detail should be confirmed by the applicant.

In the longer terms it is not clearly apparent exactly what is intended in respect of the proposed carpark for walkers on the site which is intended will be formed from the

construction compound. Details of its layout, how it links with the LS7451 etc are absent so it is not possible to assess the appropriateness or adequacy of this aspect of the proposal.

Area Engineer

Piltown Area

The following issues and mitigation measures were identified by the Piltown Area Engineering Office.

Issue	Measures to Mitigate Impact
Creation of new and upgrade of existing forest road accesses onto the public road.	<ul style="list-style-type: none"> • All new and upgraded accesses to be constructed in accordance with the latest version of Technical Standard for the Design of Forest Entrances from Public Roads. In particular: <ul style="list-style-type: none"> ○ 160m sightlines to be achieved. ○ No water from the site is to enter onto the public road. ○ The splayed entrance area to be suitably structured and surfaced with bituminous Macadam.
<i>Use of the public road network for haul routes</i>	
Damage to and extra wear of public roads.	<ul style="list-style-type: none"> • Internal forestry roads to be used where possible. • Local roads not to be used (except when crossing the L-7541). • The applicant to submit a road maintenance and traffic management programme to Kilkenny Co Co for approval prior to commencement of the works. • Bond issued to Kilkenny Co Co for repair of damage to public road. • Pavement Condition Survey to be carried out before and after works. • No water from the site shall be permitted to discharge onto the public road.
Proposed upgrades to the R-704.	<ul style="list-style-type: none"> • All work to be done to the relevant TII and DTTAS standards and guidance documents. • All works to be carried out under road opening licence. Additional relevant conditions to be applied the licence.
The temporary removal of signage, vehicle restraint systems, and other road infrastructure to facilitate vehicle movements.	<ul style="list-style-type: none"> • All abnormal loads to require an Abnormal Load Permit. • Road infrastructure to be reinstated as soon as practicable. • Applicant to responsible for certification of vehicle restraint systems replaced or reinstated along the route.
Increased traffic congestion.	<ul style="list-style-type: none"> • All abnormal loads to be conducted at night under Garda Escort. • Other deliveries to take place outside of peak times. • All queueing of work vehicles to take place within the confines of the site.

Build-up of muck and debris on the public road.	<ul style="list-style-type: none"> • Wheel washing to be provided on site. • Regular road sweeping to be carried out. Frequency and extent to be agreed with the Area Engineer and included as part of the road maintenance and traffic management programme. • No water from the site shall be permitted to discharge onto the public road.
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The operational phase is not anticipated to have an impact as significant as the other two phases on the road network. However some potential impacts could arise as follows which should be considered. The issues and potential mitigation are detailed below.

Issue	Measures to Mitigate Impact
The requirement to replace a significant element of the wind turbines, e.g. wind turbine blade, and the use of the public road network to transport same to site.	<ul style="list-style-type: none"> • Requirements to be as per construction stage.
The requirement to carry out works in the public road to maintain or improve ancillary infrastructure.	<ul style="list-style-type: none"> • All such work to require road opening licence. Conditions can be imposed on the licence at the time as required
Use of newly created or widened accesses onto the public road for the haulage of trees or purposes other than the construction of the wind farm.	<ul style="list-style-type: none"> • Permission should be strictly limited to construction of the wind farm and specifically named construction works. Any other works to require separate planning. • Tree felling to require separate tree felling licence.
Increased use of the South Leinster Way and other elements of the public road network for recreational purposes.	<ul style="list-style-type: none"> • Funding should be allocated to allow for improvements to adjacent sections of the South Leinster Way. • Road safety audit to be carried out. The scope of this audit should include internal roads within the site, entering the site from the public road, and crossing the L-7541 . The applicant shall be responsible for carrying out the works arising from the road safety audit.

At the decommissioning stage the following potential impacts have been identified:

Use of the public road network for haul routes, particularly:

- Damage to and extra wear of public roads.
- The temporary removal of signage, vehicle restraint systems, and other road infrastructure to facilitate vehicle movements.
- Increased traffic congestion.
- Potential that development in the interim impacts haul routes.

At the time of decommissioning the applicant should be required to submit proposals for agreement to Kilkenny Co Co. This should include a road maintenance and traffic management programme. A bond for the use of the public road should also be submitted.

Callan/Thomastown Area

The applicant proposes to install 4km of underground cables , a small section of which is within the Callan & Thomastown Municipal District. A road opening licenece shall be required to carry out the excavation works on the public road.

PART IV National/Regional/Local Policy context

National

As a signatory to the Paris Agreement, the Irish Government has committed to a decarbonisation pathway to 2030 consistent with reaching the EU Target of Zero emissions by 2050. The EU key targets are;

- At least 40% cuts in greenhouse gas emissions (from 1990 levels)
- At least 32% share for renewable energy
- At least 32.5% improvement in energy efficiency

Ireland's targets include at least 40% reduction in domestic Green House Gas emissions by 2030 compared to 1990 and an increase to 27 percent in renewable energy consumption.¹

The Government's Climate Action Plan sets out an ambitious course of action over the coming years to address climate disruption. The Plan clearly recognises that Ireland must significantly step up its commitments to reduce emissions and sets out targets per sector. In relation to onshore wind energy, the Plan estimates that in 2017 the total contribution of onshore wind was 3.3 GW. To meet the required level of emissions reduction, by 2030 the Plan aims to increase electricity generated from renewable sources to 70%, indicatively comprised of:

- at least 3.5 GW of offshore renewable energy
- up to 0.4 GW of grid-scale solar energy (NDP: 1.5 GW)
- up to 8.2 GW total of increased onshore wind capacity

The Plan provides that the vast majority of the target (c68%) will be sourced from additional on-shore wind projects. It is estimated that currently wind farms supply c3.8GW of electricity to the national grid. That effectively means more than doubling the current level of on-shore wind generation nationally by 2030.

The National Planning Framework (NPF) through NPO 55 promotes "renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050." The Country's transition to a low carbon energy future as outlined in National Strategic Outcome 8 of the NPF requires shift from predominantly fossil fuels to predominantly renewable energy sources.

¹ Department of Communications, Climate Action and Environment website

Regional Planning Policy (RSES)

Regional Spatial and Economic Strategy (RSES) for the Southern Region

The RSES recognises and supports the many opportunities for onshore wind as a major source of renewable energy. Opportunities for both commercial and community wind energy projects should be harnessed, having regard to the requirements of DoHPLG Guidelines on Wind Energy. Wind Energy, with current and future developments technology, has an important role in delivering value and clean electricity for Ireland.

RPO 99 - Renewable Wind Energy : It is an objective to support the sustainable development of renewable wind energy (on shore and off shore) at appropriate locations and related grid infrastructure in the Region in compliance with national Wind Energy Guidelines

Wind Energy Development guidelines 2006

These Guidelines provide for a consistency of approach throughout the country in the identification of suitable locations for wind energy development and the treatment of planning applications for wind energy developments. They included a Landscape Sensitivity Analysis Methodology which sets out a step by step process, to aid in the formulation of a landscape sensitivity classification, and wind energy strategy areas for the county.

Interim Guidelines on Statutory Plans etc 2017

These guidelines include requirements for Local Authorities when considering policies relating to wind energy.

It is a specific planning policy requirement under Section 28(1C) of the Act that, in making, reviewing, varying or amending a development plan, or a local area plan, with policies or objectives that relate to wind energy developments, the relevant planning authority shall carry out the following:

- (1) Ensure that overall national policy on renewable energy is acknowledged and documented in the relevant plan;
- (2) Indicate how the implementation of the relevant plan over its effective period will contribute to realising overall national targets on renewable energy and climate change mitigation, and in particular wind energy production and the potential wind energy resource (in megawatts); and
- (3) Demonstrate detailed compliance with item number (2) above in any proposal by them to introduce or vary a mandatory setback distance or distances for wind turbines from specified land uses or classes of land use into their plan.

Draft Revised Wind Energy Guidelines 2019

The Draft Guidelines address a number of key aspects such as

- New noise standards;
- Setback distances;
- Automatic shadow flicker control mechanisms;
- Community consultation;
- Community dividend;
- Grid connections;

which are the main differences from the 2006 guidelines.

The Kilkenny County Development Plan 2014 - 2020

Wind Energy Strategy

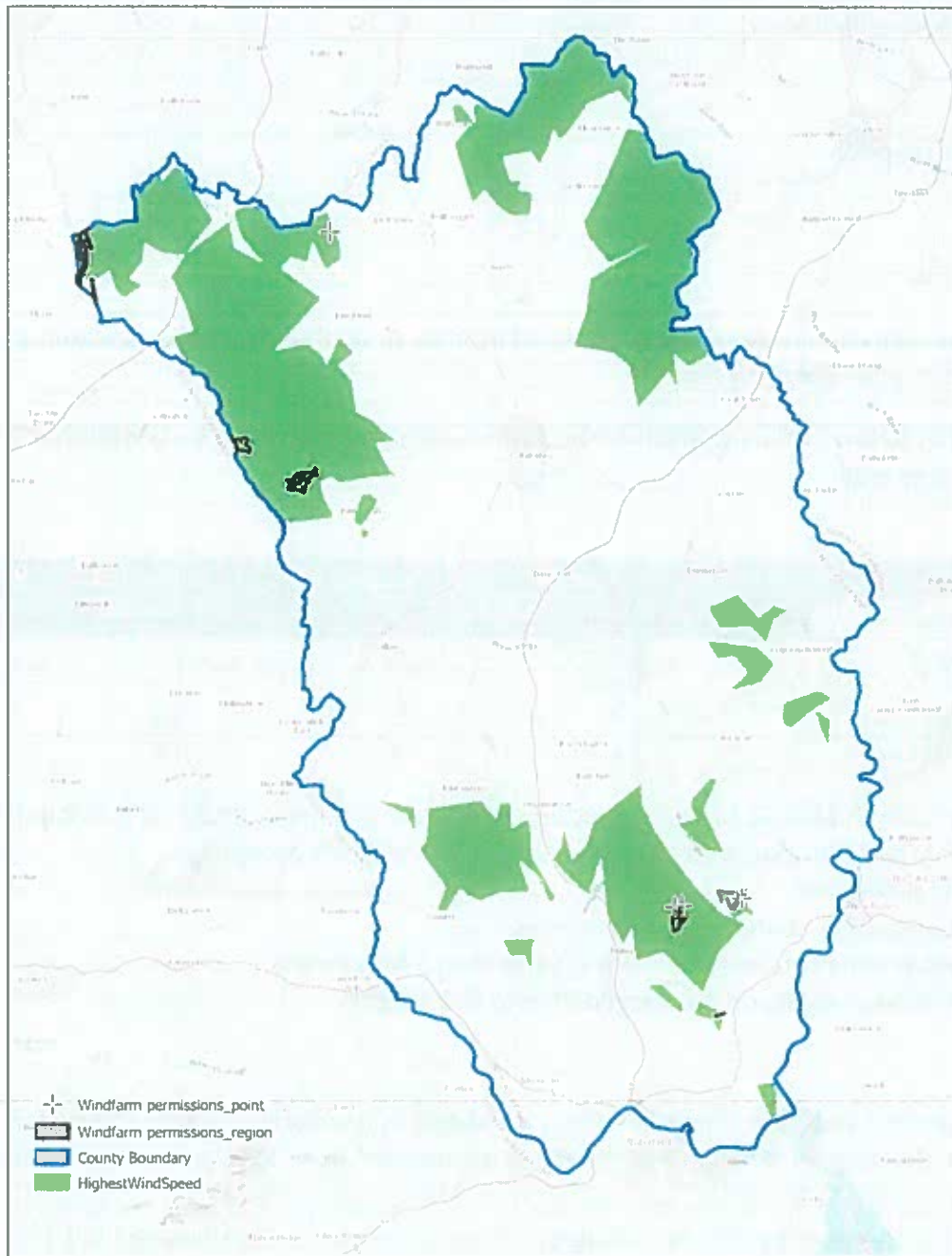
Chapter 10 of the current county Development Plan contains the renewable energy strategy for the County. Within that there is a separate and distinct wind energy strategy.

To date, a total of 7 wind farms have permission in Co. Kilkenny, four of which are constructed, see the table below.

Wind Farm name	Applicant	Townland	No. Turbines	Total output in MW
Bruckana	Bord na Mona	Rathpatrick, Bruckana & Baunmore, Johnstown	8	20
Foylature	Art Generation	Foylature, Courtstown, Tullaroan	7	12
Ballybeagh	ART Generation Ltd.	Ballybeagh, Tullaroan	7	13.8
Ballymartin Phase 1	ART Generation Ltd./Bord Gais Energy Paul Martin	Ballymartin, Smithstown	3	7
Ballymartin Phase 2	Bord Gais Energy	Smithstown, Tullogher	1	9.2
	ART Generation Ltd.		3	
Rahora	Ecopowers Developments Ltd.	Guillkagh More, Brownstown	5	4
		Lisdowney Ballyragget		9.2

Lisdowney Community	Matt Bergin and Thomas McEvoy		4	
Ballinclare	Michael Aylward	Glenmore	1	0.5
		Total	39	75.7

These windfarms are distributed across the County at the following locations.



A Wind Energy Study was first carried out by Kilkenny County Council in 2003. This Study was reviewed and updated as a Wind Energy Development Strategy for the 2008 Development Plan.

For the 2014 – 2020 Plan, the Strategy was revised. The full Strategy is contained in Appendix J of that Plan.

The Council’s policy in the current County Development Plan 2014- 2020 is that all wind farm applications be assessed in accordance with the Wind Energy Development Guidelines and the Wind Energy Development Strategy, as outlined in Appendix J.

The Strategy has divided the areas of highest wind speeds in the county into three wind strategy categories, as follows:

1. Preferred
2. Open for consideration
3. Unsuitable

See Fig 10.2 below

The area of the proposed development is straddled by area 18 on the map which is within an area designated as open for consideration.

A matrix is set out below outlining which of the various category scales will be considered in each Wind Strategy area.

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

As can be seen from the above table large scale wind farms are not considered suitable in areas of Open for Consideration with developments of a small scale acceptable.

Small scale being defined as:

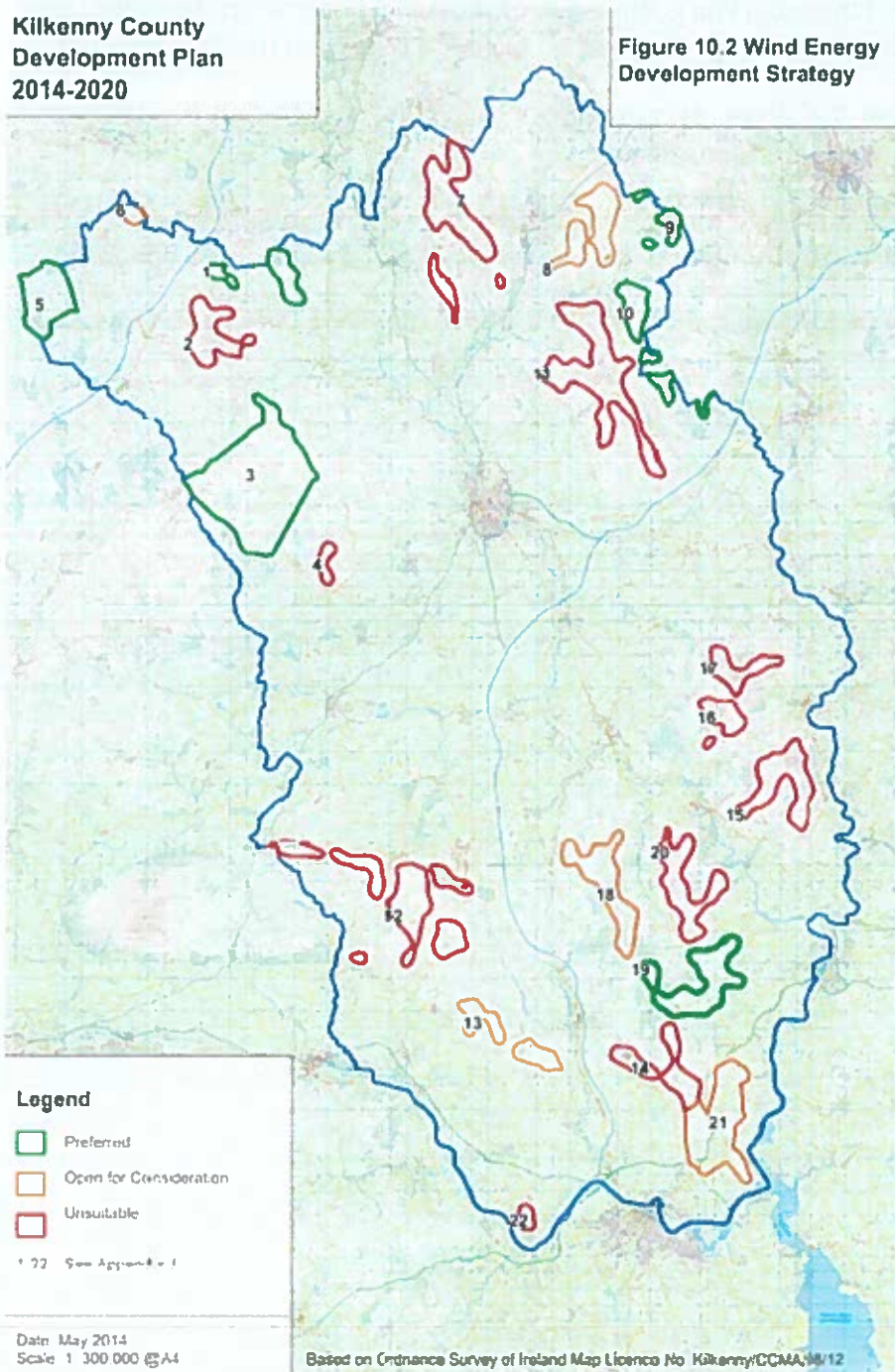
- Comprising no more than 5 turbines,
- Where the total output is not greater than 5 Megawatts,
- Turbine heights do not exceed 65m to hub height

Landscapes

The sensitivity of the Landscape Character Areas is defined as its overall resilience to sustain its character in the face of change and its ability to recover from loss or damage to its components

Landscape is of heritage value and the Heritage Chapter of the County Development Plan contains the following 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.”



The cultural landscape of County Kilkenny has emerged from its history of geology and relief, glaciations, soils and river valleys. The proposed site is located immediately adjacent to the River Arrigle Valley which contains some sensitive landscape features.

The proposed site lies within the character areas of the South Western hills (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)².

Notwithstanding that these two areas are separated by the Castlebanny ridgeline, immediately to the east of the ridge line is the valley of the Arrigle river which contains some sensitive landscape features. (See Map 2 Sensitivity factors, taken from the Kilkenny LCA).

The sensitivity is based on the slopes encountered in the valley and that it is a landscape feature in itself which is considered sensitive.

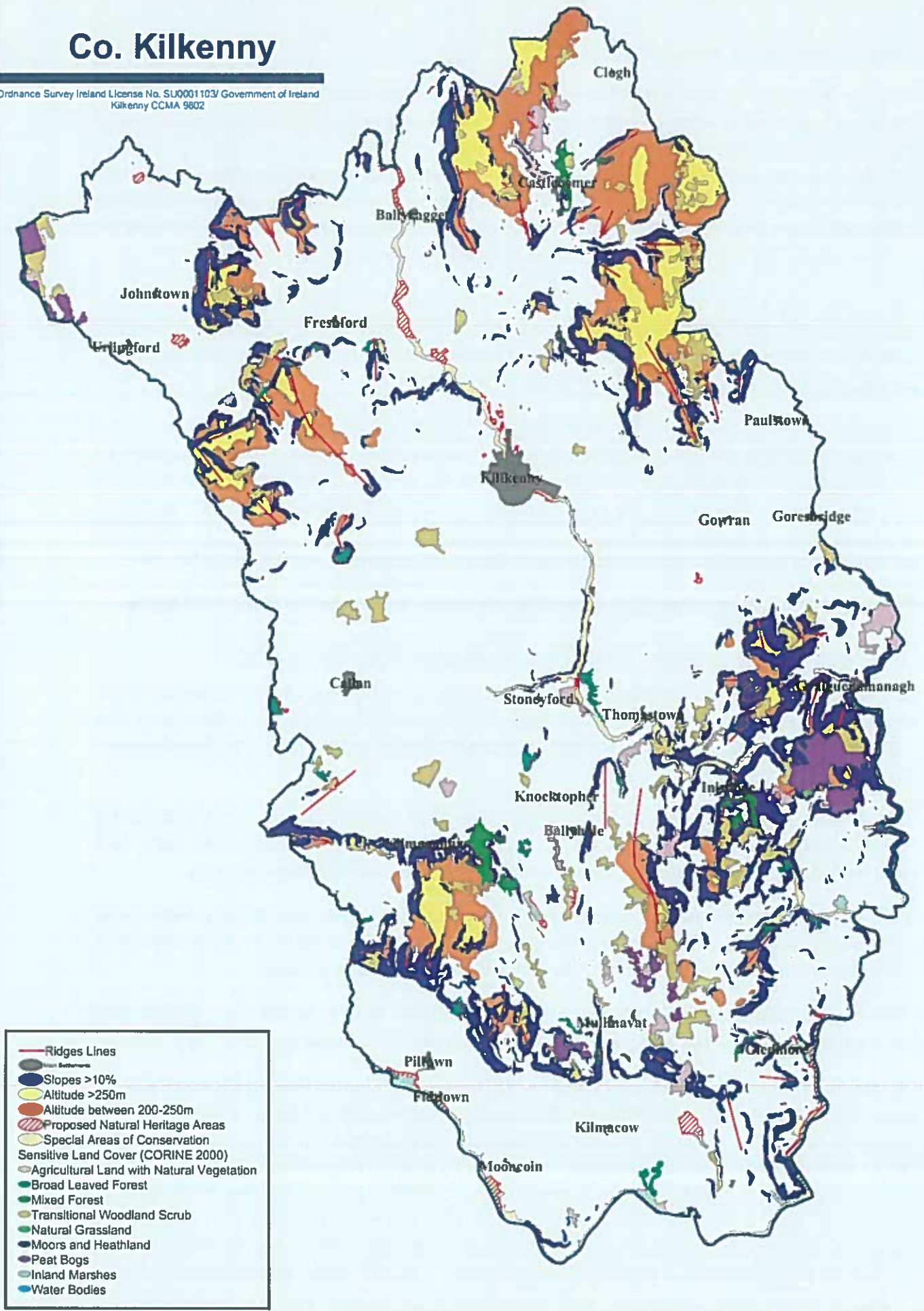
It is the contention of the Planning Authority that insufficient weighting has been given to the landscape sensitivity of this area in the design siting and layout of the proposed windfarm.

The landscape sensitivity factors are shown in Map 2 of the Landscape Character Assessment 2003 below.

² CAAS, Landscape Character Assessment of Co. Kilkenny, 2003

Co. Kilkenny

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Kilkenny CCMA 9802



Map 2 Landscape Sensitivity Factors

The EIAR (Section 13.3.4.1) states that:

“Whilst the guidance in respect of ‘height’ of turbines is quite conservative for this landscape type, it is important to recognise that exceptions are made for ridge top developments. In this regard, the Guidelines state:

“Turbines should relate in terms of scale to landscape elements and will therefore tend not to be tall. However, an exception to this would be where they are on a high ridge or hilltop of relatively large scale. The more undulating the topography the greater the acceptability of an uneven profile, provided it does not result in significant visual confusion and conflict.”

This is the only statement in landscape terms that justifies the height to blade tip of 185m and this is in the context of the 2006 Guidelines indicating that for the landscape type within which the proposed windfarm is situated that turbines should relate in terms of scale to the landscape elements and will therefore tend not to be tall.

It is considered therefore that the proposed windfarm by reason of its scale in terms of, the number of turbines proposed, the height of the turbines (185m) and its location adjacent to an areas of sensitive landscape characteristic, (River Arrigle with steep slopes, Ridge line) that the proposed development as designed would detract from the landscape character of the area and result in a significant negative visual impact on the landscape where it is the policy of the Council to protect and sustainably manage the landscape character of the County.

This statement is elaborated upon under the assessment of Chapter 13 of the EIAR below.

Kilkenny City & County Draft Development Plan 2021 -2027

A Wind Energy Strategy has been developed for this plan building on the strategies from previous development plans and having regard to Government policy on climate change and National Strategic Outcome 8 of the NPF and the Draft Revised Wind Energy Development Guidelines December 2019.

The Kilkenny City & County Draft Development Plan 2021 – 2027 has completed its statutory public display period which finished on the 12th March. Four hundred and sixty (460) submissions have been received, 48% of which relate to the Wind Energy Strategy.

As a result of the submissions, and internal review, further refinement of the policy will be considered, and this will include mapping sensitive landscape features in order to achieve a better planning outcome through the development management process.

The mapping of the sensitivity of areas and features should not be viewed as a prohibition on development, but instead as a guide on how to make the best decisions within such area.

In addition to the broad landscape patterns and designations as outlined in Section 8.2.10 of the CDP (2014), at a more specific level, the mapping of Landscape Sensitivity Factors provides guidance for use in project design and development management. These factors can be used by all parties to establish that development proposals address the issues that are likely to give rise to the biggest effects. In some areas, where sensitivity arises because of altitude or steepness, a closer focus on features will reveal that the most sensitive area may be the environs of a prominent ridge line, or visibility from a main settlement. The highest landscape sensitivity arises from a combination of three factors – Elevated steep-sided ridgelines, Slopes

in excess of 10% and altitudes in excess of 200m. These are illustrated on Figure 8.3 in the 2014 Plan. The mapping of the sensitivity of these areas and features should not be viewed as a prohibition on development, however the visual impact of any large scale wind energy development in proximity to these features of sensitivity needs to be addressed in a Landscape Impact Assessment report (as set out in Appendix 3 of the Draft Wind Energy Development Guidelines). As set out in the Guidelines, such a report should include mitigation measures to ensure that the proposal represents the least impactful option within a given area.

PART V ENVIRONMENTAL REPORTS

The applicant has sought permission from An Bord Pleanála under the Strategic Infrastructure Development provisions. The proposed development is described above under Proposed Development. An Environmental Impact Assessment Report (EIAR) and Natura Impact Statement (NIS) have been prepared in relation to the project and accompanies this planning application.

Natura Impact Statement

The proposed development is strategic in nature and the planning application has been made directly to AN Bord Pleanála. In those circumstances An Bord Pleanála is the competent in respect appropriate assessment of the project. A Natura Impact Statement (NIS) has been prepared in relation to the project and accompanies the planning application.

Elements of the project are outside the administrative area of Kilkenny County Council. The Board should satisfy itself that adequate detail has been given, in terms of various method statements and design details yet to be provided in order to ensure a full Appropriate Assessment can be carried out by the Board to determine if the development is likely to have direct, indirect or 'in combination' impacts on the habitats and/or species for which the nearest Natura 2000 sites are designated

EIAR

The EIAR is presented in the required format comprising of; a Non Technical Summary and Main Report

The main report has the following structure

Chapter	1	Introduction
Chapter	2	Description of Proposed Development
Chapter	3	Reasonable Alternatives
Chapter	4	Policy Planning & Development Context
Chapter	5	Population & Human Health
Chapter	6	Biodiversity
Chapter	7	Ornithology
Chapter	8	Land Soils & Geology
Chapter	9	Hydrology & Hydrogeology
Chapter	10	Shadow Flicker
Chapter	11	Potential effects, Mitigation & Residual Effects
Chapter	12	Noise & Vibration
Chapter	13	Landscape & Visual Impact Assessment
Chapter	14	Air Quality & Climate
Chapter	15	Cultural Heritage
Chapter	16	Traffic & Transport
Chapter	17	Interaction of the Foregoing
Chapter	18	Schedule of Mitigation Measures

Chapter 1 Introduction

The introduction sets out a summary description of the project, outlines the legislative context and a brief background to the project. It describes the consultation process and scoping procedures the structure of the EIAR and the introduces the study team.

Reference is made in this chapter to the development of a recreation plan to include approximately 13 km of walking/cycling trails, a car park and picnic facilities, outdoor exercise stations and signage. This is aspect of the proposed development that Council would consider to be a potentially significant planning gain for the community within County Kilkenny and would have the potential to enhance the viability of the rural area.

Chapter 2 Description of the Proposed Development.

A detailed description of the proposed development is given here including details of the site layout and infrastructure, turbine details and construction methodologies.

The proposed development can be summarised as 21 no. wind turbines with an overall blade tip height of up to 185m and all associated foundations and hard-standing areas in respect of each turbine; along with the construction of 1 no. permanent 110kV electrical substation. There will be a connection of the proposed wind farm to the national electricity grid, which will be via a loop-in 110 kV underground cable connection approximately 4km in length to the existing overhead 110 kV line in the townland of Ballyvool, Co. Kilkenny, with two new 16m high steel lattice loop-in/out masts at the connection point. The site of the proposed wind farm has an area of approximately 1,434 hectares and comprises a single elongated land parcel

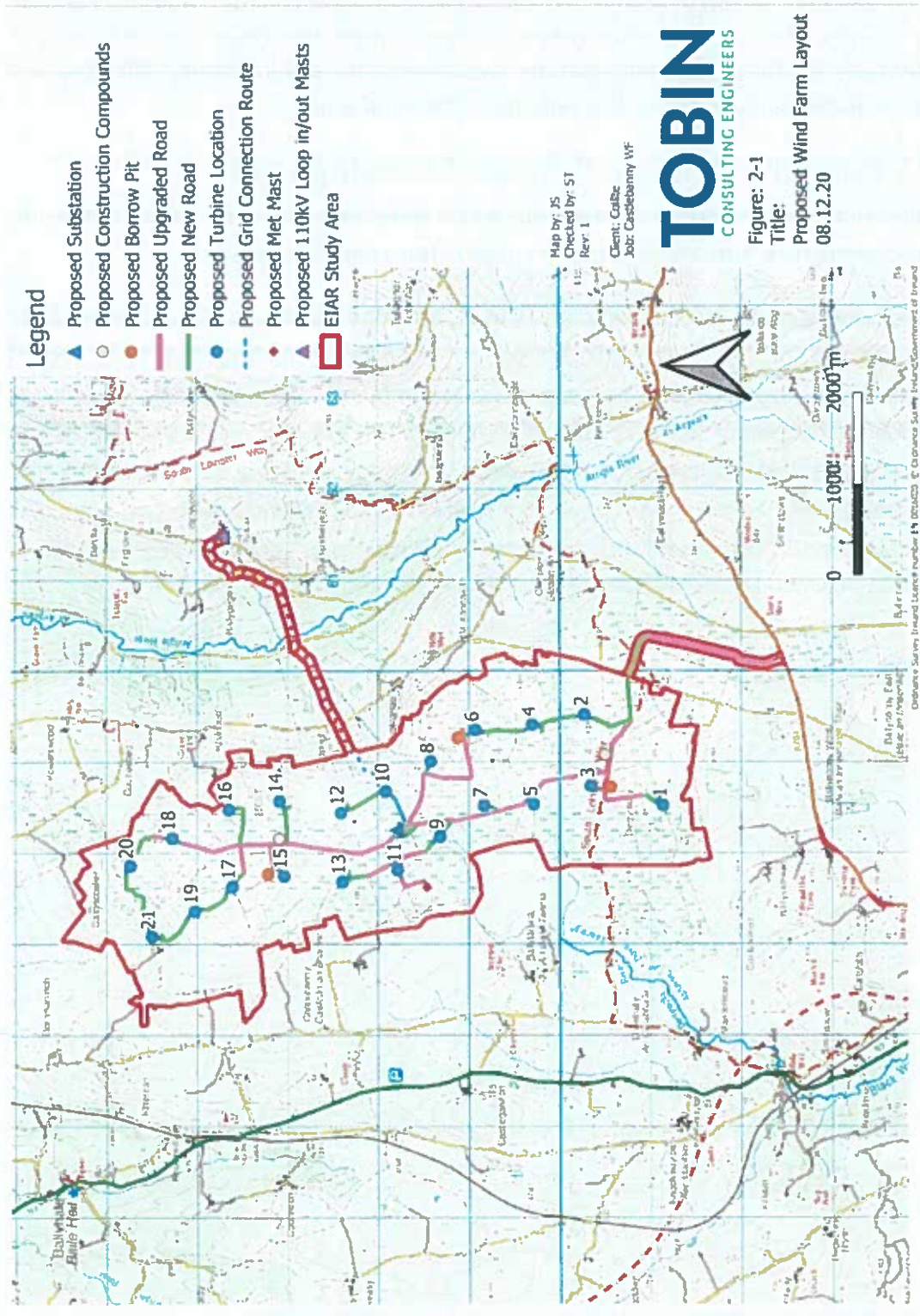


Figure 2.1 from the EIAR shows the proposed windfarm layout.

Chapter 3 Reasonable Alternatives

This chapter provides a description of the reasonable alternatives for project design, technology, location, size and scale considered by the project team.

Chapter 4 Policy Planning and Development Context.

This chapter provides the international, National, Regional and local policy context of the development.

Each of the chapters (Chapters 5 – 16) provides an examination of specific environmental aspects and uses a standardised approach of Introduction, Methodology, Existing Environment, Potential Effects, Mitigation Measures and Residual Effects.

Chapter 5 Population & Human Health

The proposed wind farm site (see Figure 1-2 of this EIAR) is approximately 7.3km long in the north/south direction and is approximately 2.7km wide in an east/west direction at the widest point. The site lies between the settlements of Mullinavat, Inistioge and Ballyhale, which are located approximately 4.1km southwest, 5.7km northeast and 1.9km northwest of the site of the proposed wind farm. The main urban centres in the region are Waterford City, located approximately 15.5km to the south of the proposed wind farm site and Kilkenny City, located approximately 20km to the north.

The proposed wind farm site is located within the townlands of Castlecoster, Derrynahinch, Kiltorcan, Coolroe Beg, Baunskeha, Castlebanny, Kilvinoge, Cappagh, Coolnahau, Ballytarsna, Mullennakill, Glenpipe, Ballymartin, Ballyvatheen, Ballynoony West and Derrylacky in County Kilkenny.

The landscape is predominately undulating in the wider area, with the proposed wind farm site being located on an elevated area with a topography of between 145m and 265mOD. A number of other areas to the east and south of the site are also elevated. The most significant features in the surrounding landscape are the River Arrigle valley, the upland areas containing the proposed wind farm and the upland areas to the east of the proposed wind farm site towards Inistioge.

All receptors within 1km of the site boundary have been identified and verified by means of the above desktop reviews and site surveys.

The locations of these receptors in relation to the proposed development are shown in Figure 5-3. In addition, a search of planning applications within 1km of the wind farm site boundary was carried out (most recently in November 2020) to identify proposed developments and consented, but as yet not built, developments.

A total of 128 no. receptors were identified within 1 km of the site boundary.

The closest sensitive receptor is located more than 750m from the nearest proposed turbine location which is in excess of the minimum setback requirement of 500m set out in the 2006 WEDGs.

The 2019 Draft WEDGs recommend a minimum setback distance from a turbine to the curtilage of a residential property equal to 4 times the turbine tip height or 500m, whichever is largest. The proposed development includes for the installation of turbines with a maximum height of up to 185m, therefore the minimum setback distance required in accordance with the 2019 Draft WEDGs is 740m.

The property which is closest to the turbine is not identified and this is important in assessing the potential impact of the development on the property particularly from a visual perspective.

In general, an object will appear to be very large or dominant at distances of less than a multiple of about 10 – 15 times the height of the object. So, a 185m high turbine is likely to be perceived as being increasingly dominant at distances of between 1.85km and 2.77 km.

Closer than 1.8 km a 180m high turbine will generally be perceived as very large and visually dominant, in approximately the following degrees;

- Unscreened views of 180m high turbines at distances of between 500m and 1,000m are very unlikely to be perceived as being anything other than profoundly to very significant.
- Unscreened visual impacts at distance between 1km and 2.0 km are very unlikely to be perceived as being anything other than very significant.
- Unscreened views of turbines closer than 3km are very unlikely to be perceived as being anything other than significant.

In these circumstances notwithstanding the separation distances of 750m minimum proposed which can be effective in dealing with noise it is considered the separation distances for developments so large could give rise to negative residential amenities at sensitive receptors.

Chapter 6 Biodiversity

Biodiversity is examined from a flora and fauna perspective and from an aquatic perspective. Extensive coverage is given in this chapter of the EIAR in respect of the different habitat types within the site and the potential impacts from the proposed development.

There is a significant habitat loss as a result of the construction and operational phase of the development. This is described in section 6.4.2.2 of the EIAR. In particular the impact on hedgerows, treelines and stone walls is described as having a significant negative effect at local scale and that it is also likely to contribute to a cumulative significant negative effect at the local scale on these habitats.

In section 6.5.3.1 it states that “Due to the nature of the sites available, it was not possible to provide like-for-like replacement of habitats lost, mainly hedgerows and broadleaved woodland”.

Under section 6.6 Significant negative effects at the local scale will remain for:

Broadleaf woodland (WD1) – lost to site infrastructure and bat buffer zones.

Stone walls (BL1), hedgerows (WL1), and treelines (WL2) – due primarily to losses in bat buffer zones.

Habitat Complex B –

The group of five mature trees near T21 –

Notwithstanding the habitat management measures the Council consider that given the extent of the site area involved 1,434 ha of which 1,220 are commercial Coillte forestry and the relatively small area consumed by the development a more robust and proactive approach could be taken in the replacement of habitat lost along with the enhancement measure.

As suggested by the KCC Parks Department an additional compensatory measure to plant a biodiversity crop of lower canopy woodland species where locations present within or on the perimeter of the development to enhance local wildlife habitat.

In terms of mitigation a commitment to an ecological Clerk of Works is given and if permission is granted by the Board this should be a condition of any grant.

Chapter 7 Ornithology

A full assessment was carried out and details of same set out in the EIA, AA and Appendices. The potential effects of the proposed development are then described in terms of the construction, operation and decommissioning phases of the development. The potential impacts considered include for on site, flight paths and wider connectivity. The assessment considers a range of bird species, habitat loss, displacement and collision

Of particular concern is the potential threat to the Woodcock within the site. The conclusion to chapter 7 states :

“The proposed wind farm has been assessed as being likely to have significant displacement impacts to breeding Woodcock and Snipe populations of county importance. However there is uncertainty about the scale of the impact to Woodcock due to the limited evidence available on their sensitivity to displacement effects.”

There is no compensatory/mitigation proposals counteract the predicted loss of Woodcock within the County. This is considered a significant biodiversity loss by the Council at a County scale as identified in section 7.4.6.4.3 of the EIA.

Chapter 8 Land Soils & Geology

Overall, the EIAR considers that development of a wind farm at Castlebanny, Co. Kilkenny will not have a significant negative impact on the soil and geological environment based on the mitigations measures that will be put in place and managed appropriately throughout the life cycle of the wind farm.

The Council has no comments to make on chapter 8

Chapter 9 Hydrology & Hydrogeology

There are no significant impacts identified in the EIAR on the hydrology or hydrogeology of the area as a result of the proposed development.

In the event of a grant of permission by An Bord Pleanala the Council would require appropriate conditions to provide for:

- Clean storm/surface water should be management through a surface water management plan,
- A Waste Management Plan in accordance with Department of the Environment, Heritage and Local Government's Best Practice
- Appropriate tank and drum areas to contain any potential spillages onsite,
- An adequate waste water storage system and appropriate disposal off site,

Chapter 10 Shadow Flicker

Chapter 10 assesses the potential for shadow flicker from the proposed Castlebanny Wind Farm development to impact on sensitive receptors in the surrounding area

Wind turbines can cast long shadows when the sun is low in the sky. '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.

The potential effect of shadow flicker diminishes as distance from the turbine increases. An industry standard approach is to use a distance of ten rotor diameters as a maximum limit within which significant shadow flicker effects can occur.

In this case the rotor diameter is to be 155m so the limit within which significant shadow flicker can occur is 1.55km.

A shadow flicker modelling was undertaken as part of the EIAR. A theoretical impact is developed with the model and then reduction factors to take account of average sunshine hours and variation in wind direction is applied.

There is also a commitment by the developer to zero flicker impact (section 10.4.1). This is a welcome commitment and in the event of a grant of planning permission condition(s) should be attached to ensure that no existing dwelling or other affected property will experience shadow flicker as a result of the wind energy development subject of the planning application

Chapter 11 Material Assets

Material assets for the purpose of EIAR in this chapter primarily deal with Aviation and Telecommunications.

Based on the assessment contained in the EIAR there will be no significant effects on aviation, telecommunications or other material assets (Water and electricity supply, waste services) at any stage of the proposed development.

Chapter 12 Noise & Vibration

For analysis of noise and vibration the background noise environment was established through noise monitoring surveys undertaken at several noise sensitive locations (NSL's) surrounding the Proposed Development. Typical background noise levels for day and night periods at various wind speeds were measured in accordance with best practice guidance contained in the Institute of Acoustics document 'A Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise' (IoA GPG). (see sections 12.2.3.4.7 & 12.3.1.9) of the EIAR.

In summary it is concluded that the noise and vibration impact of the proposed development is not significant having regard to national guidance for wind farm developments.

The Council do not disagree with this finding but would require that during the construction, operation & decommissioning stages, the developer is required to ensure all operations on site are carried out in a manner such that noise, dust, reflectance, shadow flicker, air emissions and/or odours do not result in significant impairment of, or significant interference with, amenities or the environment beyond the site

These requirements should set limits for hours of operation (construction) and limits for non exceedence of specified noise levels .

Chapter 13 Landscape and Visual Impact

The Landscape & Visual Impact Assessment (LVIA) chapter describes the landscape context of the proposed Castlebanny Wind Farm in Co. Kilkenny and assesses the likely landscape and visual impacts of the scheme on the receiving environment. As the proposed turbines are greater than 100m tip height, the minimum Zone of Theoretical Visibility (ZTV) radius recommended is 20km from the outermost turbines of the scheme.

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

It is stated in the EIAR, page(13-3) that when assessing the potential effects on the landscape resulting from a wind farm development, the following criteria are considered:

- Landscape character, value and sensitivity;
- Magnitude of likely effects; and
- Significance of landscape effects

It further states that *“the magnitude of a predicted landscape effect is a product of the scale, extent or degree of change that is likely to be experienced as a result of the proposed development. The magnitude takes into account whether there is a direct physical effect resulting from the loss of landscape components and/or a change that extends beyond the proposal site boundary that may have an effect on the landscape character of the area”* p(13-4).

The EIAR quotes the 2006 Wind Energy Guidelines as follows:

“Turbines should relate in terms of scale to landscape elements and will therefore tend not to be tall. However, an exception to this would be where they are on a high ridge or hilltop of relatively large scale. The more undulating the topography the greater the acceptability of an uneven profile, provided it does not result in significant visual confusion and conflict.”

This is in justification of the proposed height of 185m to blade tip along the ridgeline.

In relation to impacts on landscape character the EIAR states:

*“In summary, there will be physical impacts on the land cover of the site as a result of the proposed development, but these will be relatively minor in the context of this much-modified, permanently evolving, rural landscape. While 21 turbines are being proposed for this development, they will be positioned across a site that is up to approx. 7.3km long and 2.7km wide. It is a ‘Strategic Infrastructure Development’ scale of development, but it is also a strategic scale site with a broad / consistent land form and land cover context seldom found outside of peatland and upland areas. 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 Visual Effects

Residual visual effects are tabulated in table 13-7 of the EIAR.

The residual effects from all viewing points VP1 to VP38 are classed ranging from slight to moderate. The following is the summary of the EIAR:

In summary, there will be physical impacts on the land cover of the site as a result of the proposed development, but these will be relatively minor in the context of this much-modified, permanently evolving, rural landscape. While 21 turbines are being proposed for this development, they will be positioned across a site that is up to approx. 7.3km long and 2.7km wide. It is a ‘Strategic Infrastructure Development’ scale of development, but it is also a strategic scale site with a broad / consistent land

form and land cover context seldom found outside of peatland and upland areas. 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.

From the Council’s perspective, the evaluation of the likely effects of this development is guided by the general observation that routes and features at distances from a turbine closer than 2 km are likely to be very significantly affected.

Within that range there are 5 view points namely, VP 10, VP11(S), VP11(N), VP16, and VP37. There are a further 10 viewing points located within 5km of a turbine which are:

VP8, VP9, VP 12, VP 14, VP15,VP17, VP25,VP30,VP36,VP38.

The Council would consider that the impact of the proposed turbines on view 10 would be Significant and not Moderate as suggested in the EIAR.

It is noteworthy that the photomatages are prepared in such a way that as the before and after images are not directly comparable in many cases which makes direct comparison and evaluation difficult.

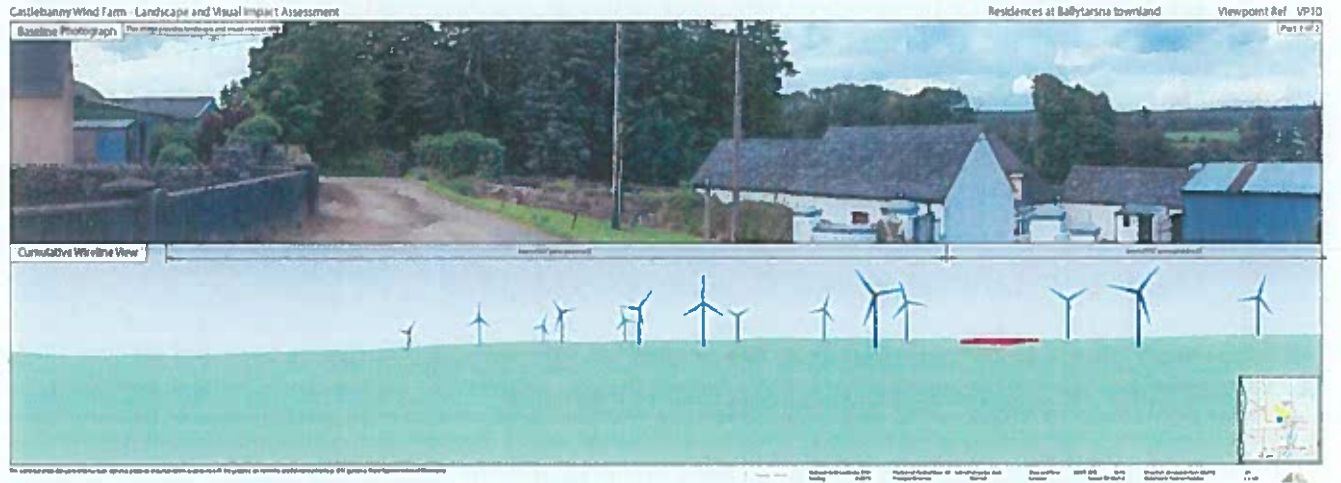
EIAR Assessment

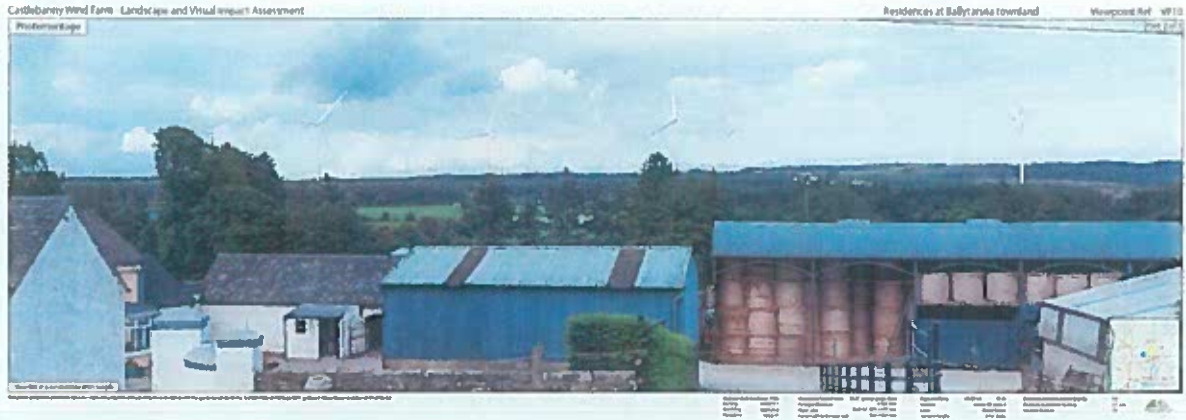
VRP No.	Distance to nearest turbine (km)	No. of turbine nacelles visible	Visual receptor Sensitivity (from Appendix 13-1a)	Visual Impact Magnitude	Significance of Visual effect
VP10	1.8km	10	Medium-low	High-medium	Moderate

Council Assessment

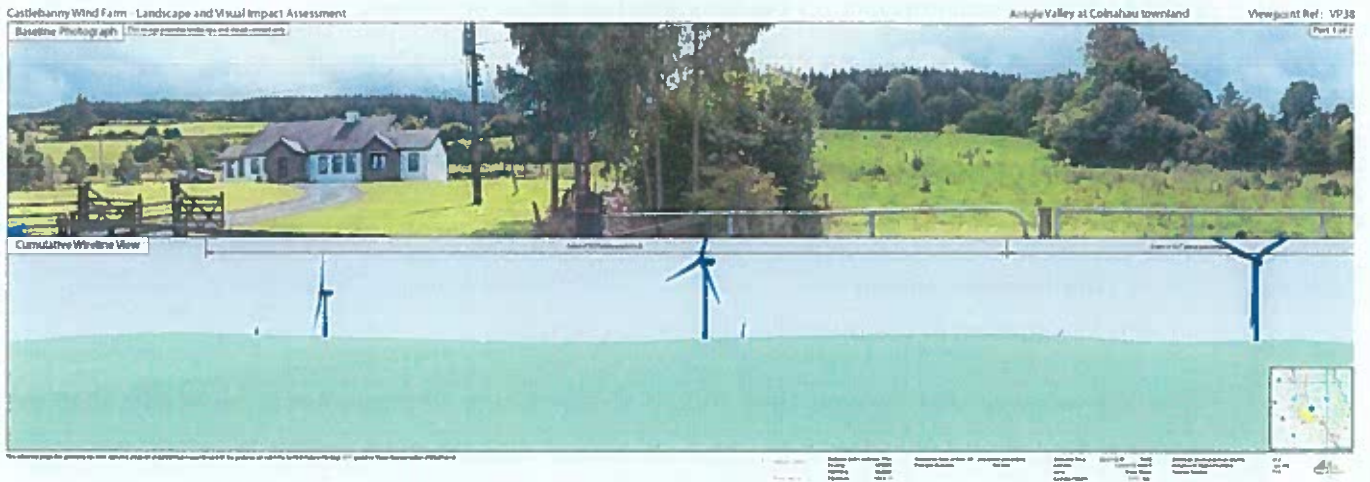
VP10	1.8km	10	High (given distance from nearest turbine)	Significant	Significant
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Images for VP10 from photomontages are show below for illustration





A similar example occurs at VP38





Similarly to VP10 the Council would consider the impact from this view point to be significant. It is noteworthy that at this view point there is an existing dwelling and it is clear from the images that the full impact on the dwelling has not been shown.

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 particularly within the 2 to 5 km range of the turbines 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 14 Air Quality & Climate

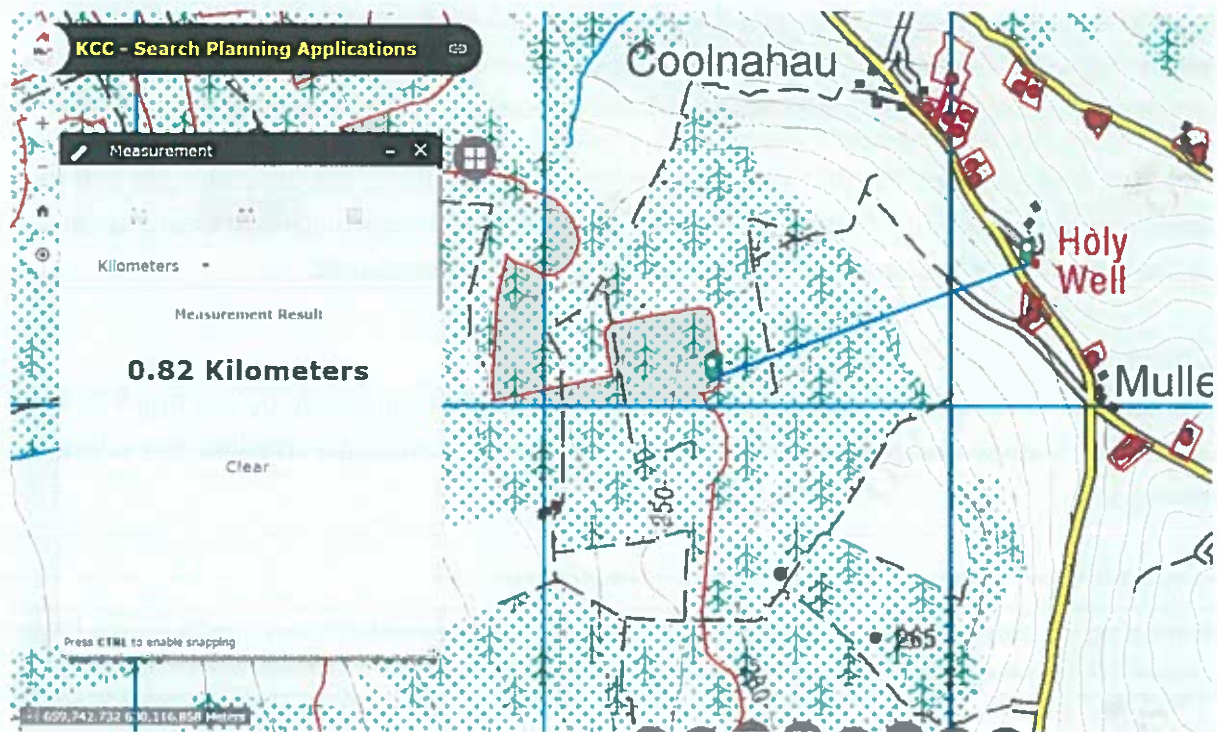
This chapter assesses the effect on air quality and climate for the region surrounding the proposed Castlebanny Wind Farm`

The Council has no comment to make in relation to this chapter except that in the event of a grant of permission suitable conditions are attached to control and monitor potential impacts.

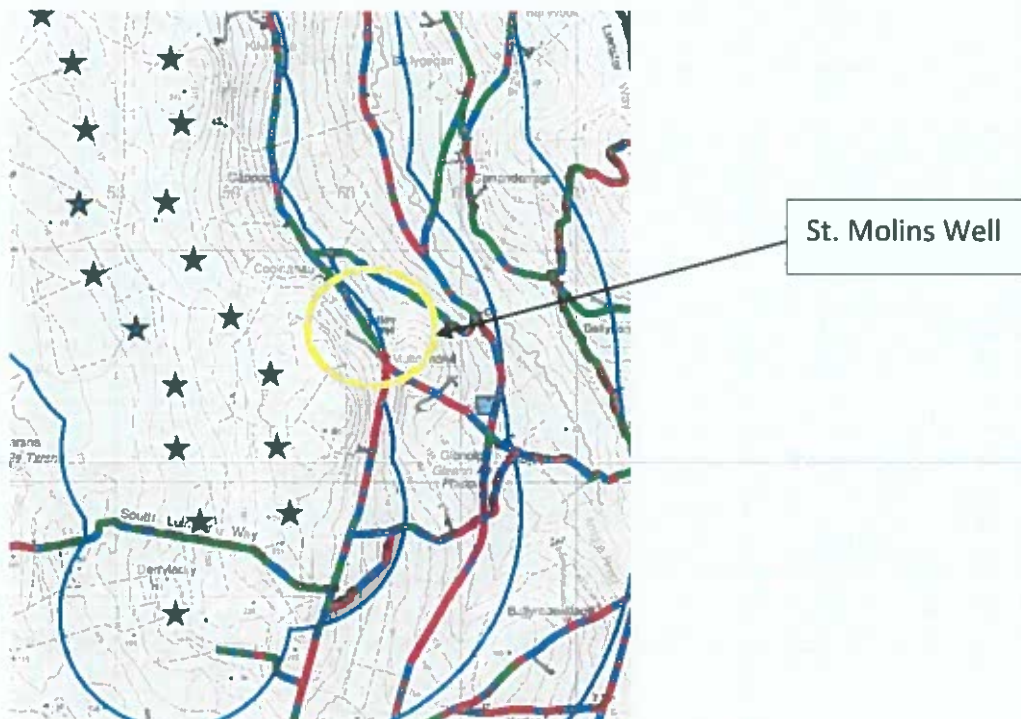
Chapter 15 Cultural Heritage

A particular aspect of the cultural heritage analysis which the Council considers is weak is the impact of the proposed development on St Molin's well.

The well is located directly east of the proposed windfarm across the Arigle River Valley. It is of the order of 800m as the crow flies from the nearest turbine.



In an examination of the route analysis in appendix 13-3 it can be seen that the holey well is within a location along the public road which is identified as having an open view to the site.



Further examination of the potential impact on this archeological site is required particularly in the context of the site being identified as “One of the most prominent sites near to the project area is St Molin’s Well (KK036-012). This roadside well, on the east side of Glenville Road (L7451), is accessed down some stairs which lead to a landscaped area that includes the well, a statue, font and other features. The area is still venerated, particularly on the feast day or pattern day on July 25th, when large numbers of devotees attend the site”

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.

Chapter 16 Traffic & Transport

The traffic and transport issues have been dealt with comprehensively by the Road Design Section of Kilkenny County Council and the Area Engineers which are detailed elsewhere in this report.

Chapter 17 Interaction of the Foregoing

A matrix is presented in Chapter 17 outlines the different environmental aspects which have potential to interact as a result of the proposed development.

The landscape and visual impact of the development during the operational phase is considered to be one of the potentially significant environmental impacts for this type of development. The Council’s comments in relation to the deficiencies it considers are contained in the visual impact assessment have been outlined under chapter 13 and 15 above.

PART VI CONDITIONS, COMMUNITY GAIN AND BONDS

Should An Bord Pleanála consider that the issues raised in this report are addressable and ultimately 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
 - o Max tip height
 - o 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
 - o Construction hours
 - o 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

2017-18 Strategic Plan

The Strategic Plan sets out the long-term vision and strategic objectives for the Council. It provides a framework for the Council's activities and ensures that all decisions are made in line with the Council's strategic direction.

The Strategic Plan is based on the following key principles:

- **Transparency** - All decisions and actions should be open and accountable to the community.
- **Efficiency** - Resources should be used effectively to deliver the best possible services.
- **Partnership** - Working in partnership with other organisations to achieve common goals.
- **Community First** - Putting the needs of the community at the heart of all decisions.

The Strategic Plan is supported by a range of policies and strategies, including:

- **Financial Strategy** - Ensuring the Council has sufficient resources to meet its obligations.
- **Human Resources Strategy** - Attracting and retaining the best talent.
- **Information Systems Strategy** - Ensuring the Council has the most up-to-date information systems.
- **Marketing Strategy** - Promoting the Council's services and achievements.

The Strategic Plan is reviewed annually to ensure it remains relevant and effective. It is also subject to external audit to ensure it is being implemented as intended.

The Strategic Plan is a living document and will be updated as circumstances change. It is the responsibility of all Council members and staff to ensure it is implemented successfully.

The Strategic Plan is available on the Council's website and can be accessed at any time. It is also available in large print and Braille for those who need it.

The Strategic Plan is a key document for the Council and its members. It provides a clear and concise overview of the Council's strategic direction and the actions that need to be taken to achieve it.

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PART VII OVERALL CONSIDERED VIEW

The proposed development is located within an area designated as open for consideration in the wind energy strategy of the current County Development Plan policy 2014-2020. Open for Consideration allows for small scale wind energy developments.

Small scale being defined as:

- 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

The proposed development comprises turbines that are in excess of the number and height allowable in the current Development Plan.

The Council has concerns in relation to the scale of the project in terms of the number and height of the proposed turbines and how the sensitivities of the landscape have been addressed in the EIAR.

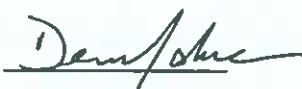
It is the view of the Council that insufficient weighting has been given to the sensitivities surrounding the proposed site in particular in relation to the impact on residential amenities for the properties within the 1km to 2km range.

If this is not addressed the Council is of the opinion that significant residual landscape effects could result from the proposed development which in turn 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. An example highlighted is the potential impact on the archeological and historical site of St. Molin's Well which in the view of the Council received little in depth or evidential analysis from the point view of potential impact.

On that basis it is considered the 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

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.



Denis Malone
Senior Planner



Sean McKeown
Director of Services



Colette Byrne
Chief Executive

APPENDIX 1

INTERNAL REPORTS

Kilkenny County Council
Callan/Thomastown Area
Offices, Co. Kilkenny.



Comhairle Chontae Chill Chainnigh
Tel: 056-7793340 (Thomastown)
Tel: 056-7755520 (Callan)

Your Ref: SD-21-1

Date: 8th March 2021

Mrs Una Kealy,
Administrative Officer,
Planning Section.

Applicant: Castlebanny Wind turbines.
Location: The construction of 21 turbines and ancillary works at Castlebanny, Co Kilkenny.

A Chara,

Thank you for your letter and enclosures.

Having regard to the information supplied, I have noted the following:

An application for the above has been received by An Bord Pleanála. It is noted from the application that the construction haulage routes, proposed entrances and vertical realignment are not within the municipal district of Callan & Thomastown area. The applicant proposes to install 4km of underground cables, a small section of this will be within the Callan and Thomastown Municipal District. A road opening licence shall be required to carry out excavation works on public lands.

The following condition applies: -

1. Prior to any excavation works taking place the applicant shall obtain a road opening licence from the Municipal District Engineer for the proposed works.

Mise le meas,

Maeve Good
Assistant Engineer
Callan Area Office

23rd March, 2021

Denis Malone,
Senior Planner,
Kilkenny County Council

RE : Comments from Parks Department on Application for Windfarm at Castlebanny

A Chara,

I refer to an application for a proposed windfarm at Castlebanny, Co. Kilkenny by Spring Fields Renewables. The following are comments from the Parks Department, Kilkenny County Council. The site is located at Castlebanny approximately 5km to the east of Mullinavat, and 2.7km from Ballyhale, the closest centre of population to the proposed development. The site itself is predominantly of a character dominated by a single species coniferous plantation however due to the scale of the development the study area is well beyond the site taking in approximately 20km of the surrounding landscape north, south, east and west.

This landscape character of this part of Kilkenny is predominantly of undulating topography with a variety of hills and valleys. Land use is typically agriculture with mono culture coniferous plantations and open wet grassland in the upland areas. The higher points are to the outer parts of the study area at Brandon Hill, Slieve Coiltia to the east and the lower reaches of the Blackstairs Mountains to the west.

The significant amenity and heritage sites of importance in the area are Mount Juliet, Jerpoint Abbey, Woodstock Gardens and Knocktopher Abbey. According to the analysis of views from the surrounding areas these do not seem to be impacted due mainly to the topography and presence of vegetation in the near and distant views. One of the most significant views would appear to be Viewpoint 6 to Thomastown north on approaching Thomastown from the Gowran Road. This view is quite dramatic on the skyline over the hills to the south of Thomastown for a section of approach to the town. The view diminishes as the land falls to the town centre from where there do not appear to be any significant views as a result of local topography of the river valley.

Kilkenny County Council Development Plan 2014-2020 Landscape Character Assessment shows the site as being within the 'Upland' landscape type. The ridge at Castlebanny actually runs north south along the division between the two sub categories within this main category – Upland Area C South Western Hills and Upland Area E – South Eastern Hills. The County's recent Draft Wind Energy Strategy shows the proposed site as within an area which is acceptable in principle for wind turbines to be located.

It is understood that the proposed felling of coniferous plantation to facilitate the proposed development will take place in the course of normal forest operations anyway. The compensatory

replanting which is typically attached to any felling licence by the Forest Service is to take place out side of the county. It might be considered as an extra compensatory measure to plant a biodiversity crop of lower canopy woodland species where locations present within or on the perimeter of the development to enhance local wildlife habitat.

Due to the scale of the proposed development and with similar wind energy developments it is not possible to screen wind turbines from view. The lower elements such as sub-station, security fencing, borrow pits and access roads will be screened locally by the presence of existing conifer plantations. The proposal to place the turbines along the ridge line rather than across the across the ridge line also assists in their placement in the landscape.

Wind turbines within the local landscape have been a feature of the area for some time now so the introduction of further turbines whilst significant in scale and impact have less of an impact that if they were to be introduced to a landscape where they have not become part of the character.

In conclusion is not considered that the proposed wind farm will give rise to significant visual impact ; rather we consider it to be between moderate and slight dependent on the location of the view and as the distance from the development increases. It is therefore considered that this upland forested landscape has the capacity to absorb the proposed windfarm development.

I trust this is in order,

Claire Goodwin

Parks Section



ABP Ref: 306229

Date: 15/03/2021

Permission: 22 wind turbines with an estimated output capacity of circa 110 megawatts together with grid connection and all associated infrastructure.
Located at: Castlebanny, Co. Kilkenny

A Chara,

As requested, I have reviewed the submission with particular regard to issues which may arise as a result of the proposed development which would be of concern to the area office. There are three phases of the development to consider: construction, operational and decommissioning.

Construction

The construction phase is anticipated to have the most significant impact on the road network. The following impacts have been identified.

- Creation of new and upgrade of existing forest road accesses onto the public road.
- Use of the public road network for haul routes, particularly:
 - Damage to and extra wear of public roads.
 - Proposed upgrades to the R-704.
 - The temporary removal of signage, vehicle restraint systems, and other road infrastructure to facilitate vehicle movements.
 - Increased traffic congestion.
 - Build-up of muck and debris on the public road.

Issue	Measures to Mitigate Impact
Creation of new and upgrade of existing forest road accesses onto the public road.	<ul style="list-style-type: none"> • All new and upgraded accesses to be constructed in accordance with the latest version of Technical Standard for the Design of Forest Entrances from Public Roads. In particular: <ul style="list-style-type: none"> ○ 160m sightlines to be achieved. ○ No water from the site is to enter onto the public road. ○ The splayed entrance area to be suitably structured and surfaced with bituminous Macadam.

<i>Use of the public road network for haul routes</i>	
Damage to and extra wear of public roads.	<ul style="list-style-type: none"> • Internal forestry roads to be used where possible. • Local roads not to be used (except when crossing the L-7541). • The applicant to submit a road maintenance and traffic management programme to Kilkenny Co Co for approval prior to commencement of the works. • Bond issued to Kilkenny Co Co for repair of damage to public road. • Pavement Condition Survey to be carried out before and after works. • No water from the site shall be permitted to discharge onto the public road.
Proposed upgrades to the R-704.	<ul style="list-style-type: none"> • All work to be done to the relevant TII and DTTAS standards and guidance documents. • All works to be carried out under road opening licence. Additional relevant conditions to be applied the licence.
The temporary removal of signage, vehicle restraint systems, and other road infrastructure to facilitate vehicle movements.	<ul style="list-style-type: none"> • All abnormal loads to require an Abnormal Load Permit. • Road infrastructure to be reinstated as soon as practicable. • Applicant to responsible for certification of vehicle restraint systems replaced or reinstated along the route.
Increased traffic congestion.	<ul style="list-style-type: none"> • All abnormal loads to be conducted at night under Garda Escort. • Other deliveries to take place outside of peak times. • All queueing of work vehicles to take place within the confines of the site.
Build-up of muck and debris on the public road.	<ul style="list-style-type: none"> • Wheel washing to be provided on site. • Regular road sweeping to be carried out. Frequency and extent to be agreed with the Area Engineer and included as part of the road maintenance and traffic management programme. • No water from the site shall be permitted to discharge onto the public road.

Operation

The operational phase is not anticipated to have an impact as significant as the other two phases on the road network. There is, however, some potential for significant impacts on the road network including:

- The requirement to replace a significant element of the wind turbines, e.g. wind turbine blade, and the use of the public road network to transport same to site.
- The requirement to carry out works in the public road to maintain or improve ancillary infrastructure.
- Use of newly created accesses onto the public road for the haulage of trees or purposes other than the construction of the wind farm.
- Increased use of the South Leinster Way and other elements of the public road network for recreational purposes.

The following measures will help mitigate the impact of the above potential issues.

Issue	Measures to Mitigate Impact
The requirement to replace a significant element of the wind turbines, e.g. wind turbine blade, and the use of the public road network to transport same to site.	<ul style="list-style-type: none"> • Requirements to be as per construction stage.
The requirement to carry out works in the public road to maintain or improve ancillary infrastructure.	<ul style="list-style-type: none"> • All such work to require road opening licence. Conditions can be imposed on the licence at the time as required
Use of newly created or widened accesses onto the public road for the haulage of trees or purposes other than the construction of the wind farm.	<ul style="list-style-type: none"> • Permission should be strictly limited to construction of the wind farm and specifically named construction works. Any other works to require separate planning. • Tree felling to require separate tree felling licence.
Increased use of the South Leinster Way and other elements of the public road network for recreational purposes.	<ul style="list-style-type: none"> • Funding should be allocated to allow for improvements to adjacent sections of the South Leinster Way. • Road safety audit to be carried out. The scope of this audit should include internal roads within the site, entering the site from the public road, and crossing the L-7541 . The applicant shall be responsible for carrying out the works arising from the road safety audit.

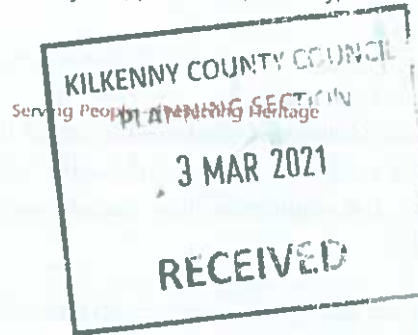
Decommissioning

While the application is for permission for an initial 10 years, the anticipated operational lifespan of the development is 35 years from date of commissioning. The windfarm could be decommissioned at that stage or the owners could seek a permission to retain the windfarm, potentially with significant rehabilitation or upgrade works. It is therefore difficult to say at this remove what issues may arise at decommission phase, nevertheless, the following potential impacts have been identified:

- Use of the public road network for haul routes, particularly:
 - Damage to and extra wear of public roads.
 - The temporary removal of signage, vehicle restraint systems, and other road infrastructure to facilitate vehicle movements.
 - Increased traffic congestion.
 - Potential that development in the interim impacts haul routes.

At the time of decommissioning the applicant should be required to submit proposals for agreement to Kilkenny Co Co. This should include a road maintenance and traffic management programme. A bond for the use of the public road should also be submitted.

Mise le meas,
Stan Cullen,
 Senior Executive Engineer.



Una Kealy,
Administrative Officer,
Planning,
Kilkenny County Council.

01/03/21

Ref: SD-21-1. Castlebanny Wind Turbines. The construction of 21 turbines and ancillary works at Castlebanny, Co. Kilkenny.

A Chara,

Further to an inspection of the site for the proposed development, the following is noted:

The application indicates that the wind-farm development will be located entirely in County Kilkenny. The primary access point from the public road to the proposed development site during the construction is indicated to be via the R704 regional road which links Mullinavat and New Ross. The construction phase is indicated to take approximately 24 months.

The permission is requested to be valid for 10 years with a 35-year operational life indicated.

It is noted that the applicant refers that during the operational phase that the main access shall be via the LS7451 which also links with the R704 to the west of the proposed construction access point. From the junction of the LS7451 with the R704 the crossing point is approximately 1.9km north.

The haul route required to transport components is noted to require third party lands both for widening, removal of fences, walls, trees, tree/hedge pruning etc and on occasion necessary to allow for over-sail requirements. The application documents do not appear to contain the necessary consent from the third-party landowners for any works necessary.

The haul route also requires the removal of street infrastructure to facilitate the transportation of components. These include lighting columns, safety barrier and signage. The applicant has indicated that any street signage shall be replaced with socketed foundations to aid removal during transport periods with any signage being immediately replaced when the load has passed. However, it is not clear what the applicant's intentions are with respect to for example street lighting and vehicle restraint measures which the application has referred will also need to be removed. Similar considerations to that given to road signage needs to be applied to these important safety features on the road network. The applicant needs to detail the methodology to the removal of the relevant infrastructure, temporary equivalent measures proposed, the necessary road safety audit stage 1/2 of the temporary measures proposed and proposals for reinstatement of the original infrastructure upon completion. Any reinstatement necessary to existing infrastructure in accordance with the applicable TH standards. All costs arising at the expense of the applicant.

It is recommended that the applicant be conditioned to provide bituminous surfacing on the proposed C1804 granular fill on all locally widened sections of public road. A minimum depth of 80mm of bituminous material shall be provided and the surface course shall contain a high PSV (>Psv 60) aggregate and be surface dressed to match existing pavement. The applicant shall agree the



temporary measures necessary to ensure definition of the roadway edge in advance of works. Detail all the works necessary.

The applicant shall be conditioned to reinstate any temporary works to roads, junctions and accesses on completion of the construction works to their former layout. The permanent reinstatement shall comply with the requirements of the Design Manual for Roads and Bridges (DMRB) and TII standards as necessary.

All works necessary in respect of infrastructure adjustments along the haul route shall be subject to the requirement to obtain a Road Opening Permission from the relevant Roads Authority.

In addition to the Road Opening Permissions a separate application for an abnormal load permit is also required. In this context to note it is the applicant's responsibility to assess the appropriateness of the proposed haul route.

The haul route in particular will cross roads under the responsibility of Kilkenny and Waterford County Councils and also traverses roads under the responsibility of the MMarC contractor, Egis Lagan. Each of these parties will need to be consulted in respect of road openings, abnormal load movements, traffic management etc with respect for works/traffic movements proposed or required in areas under their respective responsibilities.

At the location of the proposed junctions with the public road it is not readily apparent as to the structural make-up of the access roadway that is proposed and in particular its juncture with the regional/local road. The entire splayed entrance should be suitably structured to cater for the range of loads proposed and it should also be completed in a bituminous surfacing in order to provide adequate protection for the public road edge. The falls shall be off the public roadway edge to ensure the avoidance of pooling of surface water on the public roadway edge. This detail should be confirmed by the applicant.

There are concerns about the structural suitability of the proposed main construction crossing point of the LS7451. This roadway would not generally be expected to convey the range of trucks and vehicles proposed to use this section of the road. The applicant shall be required to undertake an FWD analysis 50m each side of the crossing point on the local road to determine the strengthening works required at this location. The applicant shall compile a report of the strengthening works necessary at this point coupled with any road drainage works required. This report shall be submitted to the planning authority for approval with all agreed works completed at the applicants own expense in the early construction phase. All works necessary subject to the obtaining of a road opening permission.

The applicant shall complete an FWD analysis of the regional road, R704 to ensure the structural suitability of this for the range of vehicles proposed from the junction with the M9 to the entrance to the site. The applicant shall compile a report of the strengthening works necessary coupled with any road drainage works required. This report shall be submitted to the planning authority for approval with all agreed works required completed at the applicants own expense in the early construction phase of the works. All works necessary subject to the obtaining of a road opening permission.

The applicant shall be conditioned to undertake a photographic survey of the regional and local roads affected by the proposed development. At a minimum these will include the R704, LP3418, LS7451, LS8273 & LS8276 road network in the vicinity of the site but the precise locations shall be subject to agreement with the road authority prior to the commencement of the development. The applicant shall be required to submit an undertaking to make good any construction deterioration/damage which occurs during the construction phase reasonably attributable as a result of the construction activities to/from the site.

At the latter end of the construction phase the applicant shall also complete a post construction phase FWD test of the R704 and any resultant damage/deterioration arising shall be repaired at the applicants own expense.

As noted previously the applicant refers that during the operational phase that the main access shall be via the LS7451 which also links with the R704 to the west of the proposed construction access point. Given this will become the main access to the site for maintenance purposes it is recommended that the applicant be conditioned to complete road strengthening from the junction with the regional road, R704 for a distance of 2000m to bring it past the main construction crossing point. The applicant shall liaise directly with the roads authority on the agreed requirements but it shall as a minimum include the application of 75mm of DMB surface dressed in accordance with the latest IAT guidelines. Furthermore, the verges adjacent to the improved section shall be raised to match the finished surface of the improved section of road. Passing bays shall be provided at strategic points along the 2000m extent of road referred at locations to be agreed with the roads authority. These strengthening works shall be undertaken by the applicant during the final stages of the construction phase. All works necessary subject to the obtaining of a road opening permission.

It is noted that the applicant has indicated that on the grid connection route the road width over an approximate 300m+ section of the LP3418 is narrow and such as to necessitate a full road closure. The applicant shall be required to obtain both a road opening permission and permission to close the public road from the roads authority. It shall be noted that all costs arising shall be at the applicants own expense including any traffic management required.

All reinstatement works on the public road as necessary shall be in accordance with that of the Purple Book. In addition, all works shall be undertaken in such a manner that the existing road drainage arrangements are unaffected and accommodated at all times.

To the west of the proposed main construction entrance onto the R704 it is noted that the applicant has indicated that works are necessary in order to address the vertical alignment of the existing road by removing a crest which is impeding visibility on exiting from the site. The applicant has not detailed the intended works required at this location. All works necessary shall be in accordance with TII standards and the Design Manual for Roads and Bridges (DMRB). The applicant shall be required to submit the required design for the works necessary to the road authority for approval. The applicant has indicated that the duration of works necessary at this location will be approximately 6 weeks. Given this extended time period during construction works on the R704 traffic management to facilitate at least one-way traffic movements shall be required unless otherwise agreed with the roads authority. Once the proposed design for these works has been approved the applicant shall be required to seek a road opening permission for the works. All works necessary including traffic management shall be completed at the developers own expense in the early stages of the construction phase.

Although not specifically referenced in the Road Safety Audit provided I have concerns about potential see through at the construction road junction with the regional road, R704. Opposite the proposed location there is an access into other forestry lands. Advanced junction and stop warning signage are required on the internal road in advance of this junction. Signage should be placed off the roadway edge in accordance with the Traffic Signs Manual and it is recommended that it be placed on both sides in this case.

It is noted that gates are proposed at the proposed entrance off the R704. It is important that the gates are opened in advance of deliveries to avoid queuing of traffic on the public road network waiting to access the site. These arrangements should be clearly detailed by the applicant.

It is considered that there is a danger of see through at the junction of the internal haul roads east and west of the junction with the LS7451. Advanced stop warning and stop signage is required on the internal road in advance of the junction. Signage should be placed off the roadway edge in accordance with the Traffic Signs Manual and it is recommended that it be placed on both sides. This detail should be confirmed by the applicant.

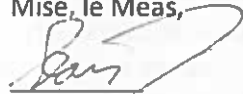
The applicant shall be conditioned to prepare and agree a construction and traffic management plan with the Municipal District Office prior to commencement of the proposed development works. The plan shall include a detailed programme of all works required which affect the operation of the public roads in the vicinity of the proposed site. The plan shall also include a Roads Maintenance Plan which shall be submitted for the prior agreement of the Ferrybank Municipal District Engineer before the commencement of the works. The Road Maintenance Plan shall ensure that the public road network is kept in a safe condition at all times.

It is recommended that the applicant be conditioned to continue to engage the services of a project liaison officer through the construction phase who can act as a primary point of contact for residents in the area.

The applicants long term intentions in respect of the future recreational opportunities that arise is noted and is encouraged. The South Leinster way passes through the site. The applicant shall ensure that measures are employed to facilitate those users of the South Leinster Way. This management of walkers etc will have to be dynamic as the project proceeds on different areas of the site.

In the longer terms it is not clearly apparent exactly what is intended in respect of the proposed carpark for walkers on the site which is intended will be formed from the construction compound. Details of its layout, how it links with the LS7451 etc are absent so it is not possible to assess the appropriateness or adequacy of this aspect of the proposal.

Mise, le Meas,



Seamus Foley,
Senior Executive Engineer,
Road Design.

To: Planning Section
Re: Submission regarding Planning Application: Castlebanny-Wind Turbines, Co. Kilkenny. Application to An Bord Pleanála.

A Chara,

I refer to the above; please note the following recommendations / observations:

1. Clean storm/surface water should be managed during the construction, operation & decommissioning stages, within the curtilage of the site. There shall be no discharge from the site to any surface waters or onto the public road or 3rd party land. This application does not include for the discharge of dewatered groundwater associated with any potential dewatering operations on this site. Where such a discharge is required the applicant should apply for and be in possession of a valid discharge licence for trade effluent as required under the Local Government (Water Pollution) Acts 1977 – 2007 (as amended), prior to any such operation taking place. In addition, and prior to the commencement of the development the applicant should submit.
 - a. Clearly labelled and dimensioned layout drawings showing the location of all drainage channels, boxed culverts, pipe drain crossings, inceptor ditches, spreaders and pipework with their gradients, which will clearly identify how surface water is dealt with for the overall site. The ultimate outfall point of the waters should also be indicated and the separation distances to all waterbodies and public / private water supplies as maybe relevant to each outfall location.
 - b. The applicant should provide a Surface Water Management Plan for the proposed development. Prior to the commencement of the site works the applicant should confirm details of the sediment control techniques to be used on the surface water drainage system in advance of all outfall locations. The maintenance requirements for same should include all oil separators and the management regime to be employed to oversee such maintenance.
 - c. The applicant should provide for regular water sampling, testing and reporting of all relevant surface watercourses and wells (Public and Private Supplies) surrounding the site. The developer should provide a layout drawing identifying the locations where these samples will be obtained, a programme of monitoring by a competent indemnified third party. Full details of all sampling shall be submitted including locations, depths of sampling and a copy of all test results. The surface water and drinking water parameters to be used should be agreed with the Planning Authority prior to commencement of work on site.
 - d. All staff on-site should be inducted as to the requirements of the Surface Water Management Plan.
 - e. The applicant should provide for the monitoring of these works / measures by a suitably qualified and indemnified Environmental Engineer / Ecologist, who will be on-site for the duration of the works.
2. The proposed development should be undertaken so as to facilitate the minimization of waste production. The developer should prepare a Waste Management Plan in accordance with Department of the Environment, Heritage and Local Government's Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects. During the construction, operation & decommissioning stages, the applicant should provide sufficient space for the segregation of all wastes into recyclable, biodegradable and residual waste streams. The plan should outline measures for the management of any waste including oils or fuels. In addition, and prior to the commencement of the development the applicant should confirm that:

- a. Any wastes sent off site for recovery or disposal shall only be conveyed by an authorised waste contractor and transported from the location to an authorised site of recovery/disposal in a manner which will not adversely affect the environment.
 - b. All employees shall be made aware of their obligations under the plan.
 - c. The plan shall be available for inspection on-site at all reasonable times for examination by any officer of the local authority / planning authority.
 - d. Any changes to work practices for this site/development shall be reflected in a revised Waste Management Plan.
 - e. Measures or provisions are in place within the CEMP (See no. 9 below) and Waste Management Plan for dealing with contaminated land and invasive species if encountered. Methodologies to be employed for remediation or removal should ideally be agreed with the Planning Authority in advance.
 - f. The applicant should provide for the monitoring of these works / measures by a suitably qualified and indemnified Environmental Engineer / Ecologist, who will be on-site for the duration of the works.
3. During the construction, operation & decommissioning stages, all tank and drum areas should be rendered impervious to the materials stored therein. In addition, tank and drum storage areas shall be bunded either locally or remotely to a volume not less than 110% of the capacity of the largest tank or 25% of the total capacity requirement, whichever is the greatest. Drainage from the bunded area shall be diverted for collection and safe disposal.
 4. During the construction, operation & decommissioning stages, the applicant should ensure that all operations on site are carried out in a manner such that noise, dust, reflectance, shadow flicker, air emissions and/or odours do not result in significant impairment of, or significant interference with, amenities or the environment beyond the site. The following are recommendations for consideration by the planning authority:
 - a. The hours of work for the site should be:
 - i. 07:00 to 19:00 Monday to Friday.
 - ii. 07:00 to 13:00 Saturdays.
 - b. The applicant has not confirmed the exact model of Wind Turbine being proposed for this site. The design parameters should not exceed those as confirmed in the planning conditions and or those set out in the Castlebanny Wind Farm Environmental Impact Assessment Report (EIAR).
 - c. The applicant should submit an Operations Manual for the written agreement of the Planning Authority:
 - i. To include measures for the removal of the nuisance caused by Shadow Flicker.
 - ii. To include measures to mitigate dust and air pollution. The applicant shall confirm the suitability of the water being proposed for the item of work involving dust suppression.
 - iii. The applicant should insure that all activities at the site shall not give rise to noise levels off site at the nearest occupied dwellings, which exceed the following sound pressure limits;
 - DAY: 45dB(A) L_{A90} (10 minutes).
 - NIGHT: 43dB(A) L_{A90} (10 minutes).
 - d. Within six months of commissioning the Wind Turbines referred to in this application, the applicant should undertake noise monitoring in order to determine the extent and characteristics of noise levels arising from the Wind Farm in the vicinity of the nearest occupied dwellings. The results should be forwarded to the Planning Authority.
 - e. The applicant should be required, if requested by the Planning Authority, to carry out at the applicant's expense noise or shadow flicker monitoring and any other such investigations and emission monitoring as may be deemed necessary to demonstrate that onsite activity is not resulting in significant impairment of, or significant interference with amenities or the environment beyond the site.

- f. The applicant should provide for the monitoring of these works / emissions (Air, Noise & Water) by a suitably qualified and indemnified Environmental Engineer.
5. The on-site Wastewater Storage System proposed should be constructed in accordance with the recommendations of the design engineer and manufacturer. Wastewater shall only be discharged to the proposed wastewater treatment system, there shall be no discharge of trade effluent which is chemically or biologically dissimilar to that of normal domestic effluent. In addition, and prior to the commencement of the development the applicant should submit for the written agreement of the Planning Authority.
- Certification that the complete wastewater storage system has been satisfactorily designed, installed and meets with the maximum required operational capacity for the proposed development. The certification shall include written confirmation with capacity calculations.
 - The applicant shall arrange and provide for the continuous and indefinite maintenance and monitoring of the wastewater storage system for its complete working life. The tank storage volume shall be banded either locally or remotely to a volume not less than 110% of the capacity confirmed by the capacity monitoring alarm system. In addition, and prior to works commencing on-site, the applicant should furnish the Planning / Authority with a copy of the contract in relation to the maintenance and disposal associated with the provision of the Wastewater Storage System. The applicant will also be required to retain all receipts for the maintenance and disposal of wastewater from the tank for the lifespan of the development.
 - The applicant should be advised that this condition where considered appropriate by the Planning Authority has been inserted having regard to the relatively short construction period and the low maintenance requirements during the operation phase of the wind farm. Where the intensity of use is expected to increase the applicant should comply with condition 5.e. below.
 - The wastewater from this storage system should be sent off site for disposal and shall only be conveyed by an authorised waste contractor and transported from the location to an authorised site of disposal in a manner which will not adversely affect the environment.
 - Where it is found during any stage of the above development that the above cannot be achieved or where the intensity of use increases significantly the applicant shall design for an on-site Wastewater Treatment System in accordance with the recommendations in the EPA Wastewater Treatment Manuals, Treatment Systems for Small Communities, Business, Leisure Centres and Hotels 1999 and / or the Code of Practice Wastewater Treatment and Disposal System Serving Single Houses (PE ≤ 10) 2009. A separate planning application should be submitted in this instance.
6. The applicant should design a Site Works Plan at appropriate stages for both the construction & the decommissioning phases to include a programme, which shall confirm the site practices to deal with the excavation of soil / peat, excavation of rock (hydraulic hammering / blasting), crushing of rock, stock piling of materials, sediment control, soil erosion / stability, reinstatement, emergencies and the phasing of the works. In the opinion of the Environment Section Kilkenny County Council blasting is not considered to be appropriate or necessary for this project due to its elevated location and given the nature of the project i.e. a construction project with limited excavation depths and extents, which is not comparable with say a quarrying operation where blasting may be permitted as a necessity. Prior to the commencement of the development the applicant should submit the following for the written agreement of the Planning Authority.
- The applicant shall confirm the suitability of Borrow Pit number three, which is to be located in the south of the site.
 - Excavation in the Borrow Pits shall not where possible be carried out below the winter water table level. Please refer also to no. 1 above.

- c. The crushing operations has the potential to give rise to significant fines which pose a significant risk to surface waters. Surface water if contaminated by such activities should be considered as trade effluent and treated accordingly. The applicant shall undertake an Environmental Risk Assessment to determine the risk associated with the crushing operations, the generation of trade effluent mixing with surface waters and shall provide detailed mitigation measures to eliminate the risk as required.
 - d. Where the Planning Authority deem that blasting is appropriate it should only take place when a detailed blasting procedure is agreed in writing with the Planning Authority. The blasting procedure shall address at a minimum, Health & Safety, Vibration, Air Overpressure, Monitoring and Notification to Local Residents. The procedure shall include specific measures to demonstrate compliance with limits as set out below and to include details of the number and location of monitoring stations, instruments and methods, which will be subject to review.
 - i. Grounbourne vibration levels as a result of blasting should not exceed a peak particle velocity of 8mm/sec measured off site at the nearest inhabited dwellings and overpressure values shall not exceed 125dB(Lin) max.
 - ii. Results of monitoring for each blast shall be submitted to the Planning Authority with 2 weeks of the blast.
 - e. Provide location maps of all excavation and reinstatement locations.
 - f. The applicant should provide for the monitoring of these works / measures by a suitably qualified and indemnified Geotechnical Engineer or Engineering Geologist.
7. The applicant should design a Vehicle Inspection & Maintenance Plan for the construction, operation & decommissioning stages, which shall confirm the site practices to deal with the parking compound, storage of fuels, refuelling of vehicles, fuel spillages, inspection and maintenance of vehicles, emergencies and the training of personnel. Prior to the commencement of the development the applicant shall submit for the written agreement of the Planning Authority.
8. The applicant should appoint a Complaint Liaison Officer who shall be responsible for dealing directly with members of the public and officials from the Planning and local Authority in relation to any potential complaints arising during the construction, operation or decommissioning stages of the development. Details (Contact Details) of the Complaint Liaison Officer shall be submitted to the Planning Authority prior to the commencement of the development
9. The Construction Environmental Management Plan (CEMP) and all other Plans developed for this application should be considered to be live documents, and shall be updated as required to reflect any changes in work practices or procedures, which should be inducted to all personnel working on the site. In the event of a change of ownership and or the processes at this development, the conditions associated with the Grant of this Application should be deemed applicable to the new occupant and processes.



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