Our Case Number: ABP-314602-22

An Bord Pleanála

Cork County Council
Planning Department
County Hall
Carrigrohane Road
Cork
Co. Cork

Date: 24 November 2022

Re: Wind farm development of 14 turbines with 110kV electrical substation and all related site works and ancillary development.
The townlands of Cahernacaha, Gortnabinna, Derryfineen, Gortyrahilly, Rath West, Derree, Fuhiry, Derreenaculling and other townlands, Co. Cork and Derryreag, Cummeenavrick, Glashacormick, Clydaghroe and Cummeennabuddoge, Co. Kerry.

Dear Sir / Madam,

An Bord Pleanála has received your recent letter in relation to the above mentioned case. The contents of your letter have been noted.

If you have any queries in relation to the matter please contact the undersigned officer of the Board.

Please quote the above-mentioned An Bord Pleanála reference number in any correspondence or telephone contact with the Board.

Yours faithfully,

Doina Chiforescu
Executive Officer
Direct Line: 01-8737133

CH08

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The Secretary
An Bord Pleanála
64 Marlborough Street
Dublin 1
D01 V902

18th November, 2022

Dear Sir/Madam,

RE: The construction of 14 turbines with 110kv electrical substation and all related site works and ancillary development. ABP-314602-22

I refer to your letter of 14th September 2022, wherein you requested Cork County Council to submit to the Board a Report setting out the views of the Authority on the effect of the proposed development on the environment and the proper and sustainable development of the area of the Authority in respect of the above application to the Board. The deadline for submission was stipulated as Monday 22nd November 2022.

I enclose herewith this Planning Report dated 8th November 2022 which sets out the views of the Planning Authority on the effect of the proposed development on the environment and the proper and sustainable development of the area of the Authority.

I, as Chief Executive, submitted the Report dated 8th November, to the Members of Cork County Council and the matter was placed on the Agenda for Council meeting dated 14th November 2022.

I attach herewith Meeting Administrator's record of the views expressed by the Members on the proposed development, at the meeting of 14th November 2022.

A copy of this Report will be placed on the public file at the Planning Authority's office as requested

Yours faithfully,

TIM LUCEY
CHIEF EXECUTIVE
CORK COUNTY COUNCIL
Designated Public Official under the Regulation of Lobbying Act 2015

EXTRACT FROM MINUTES OF CORK COUNY COUNCIL MEETING MONDY 14TH NOVEMBER 2022

4/11-1

THE PLANNING & DEVELOPMENT ACT 2000 (AS AMENDED) & PLANNING & DEVELOPMENT (STRATEGIC INFRASTRUCTURE) ACT 2006.

Consideration of the Chief Executive's report to Elected Members in accordance with the requirements of Section 37E (4) and 37E (5) of the Planning and Development Act 2000 (as amended). Strategic Infrastructure Development Application – construction of 14 turbines with 110kv electrical substation and all related site works and ancillary development, in Gortyrahilly, Gortnatrubbid, Ballyvourney, Co.Cork

Michael Lynch, Director of Services outlined the proposal which involves the construction of 14 turbines with 110kv electrical substation and all related site works and ancillary development. A 10-year planning permission and 35-year operational life from the date of commissioning of the entire wind farm is being sought. The applicant, Gortyrahilly Wind Designated Activity Company, applied to An Bord Pleanála on 9th of September 2022.

The proposed development is located within the townlands of Townlands of The townlands of Cahernacaha (Cathair na Cáithe), Gortnabinna (Gort na Binne), Derryfineen (Doire Fhínín), Gortyrahilly (Gort Uí Raithile), Rath West (An Ráth Thiar), Derree (Na Doirí), Fuhiry (Na Foithrí), Derreenaculling (Doire an Chuilinn), Lumnagh Beg (An Lománach Bheag), Lumnagh More (An Lománach Mhór), Scrahanagown (Screathan na nGamhan), Bardinch (Barr d'Ínse), Milleeny (Na Millíní), Inchamore (An Inse Mhór), Derreenaling (An Doirín Álainn), Coolea (Cúil Aodha), Gortnatubbrid (Gort na Tiobraid), Murnaghbeg (An Muirneach Beag), Slievereagh (An Sliabh Riabhach), Togher (An Tóchar), Caherdowney (Cathair Dhúnaigh), County Cork.
The proposal also involves development in County Kerry. The location of the proposal is located approximately 4.3km south-west of Ballyvourney.

Mr. Lynch outlined the key points arising from the assessment by Cork County Council of the proposal:

- It is an objective under BE 15-2 of the Cork County Development Plan 2022 to protect and where possible enhance areas of local biodiversity value, ecological corridors and habitats that are features of the County's ecological network. The facilitation of this proposal would ultimately result in the loss of a significant area of Annex I Habitat and thus further reduce the extent of these diminishing and pressurized habitats at both a County and National level.

- There are significant concerns relating to this proposal regarding its location within habitats of County and National importance and the inadequacy of the information and assessment provided by way of supporting documentation.

- The Natura Impact Statement lacks sufficient detail as to provide a robust scientific assessment to establish beyond reasonable scientific doubt that adverse effects on the Killarney National Park, Macgillycuddys Reeks and Caragh River Catchment SAC and the Mullaghanish to Musheramore Mountains SPA will not occur as a result of the proposal.

- There are serious concerns in relation to the extent of habitats of high ecological value to be impacted. It is considered that the impact and assessment provided in relation to loss of habitats listed as Annex I Habitats under the Habitats Directive and habitats of high natural value has

been significantly underestimated. This is contrary to Objective ET 13-7 of the Cork County Development Plan which states *"commercial wind energy development is open to consideration in these areas where proposals can avoid adverse impacts on: Natura 2000 sites (SPA's and SAC's), Natural Heritage Areas (NHA'S), proposed Natural Heritage Areas and other sites and locations of significant ecological value".*

Mr. Lynch said it is the considered view of Cork County Council that based on the information submitted and the detailed assessment provided above that a refusal should be issued by An Bord. The Planning Authority recommends Refusal of Permission as follows:

The proposed development would contravene materially development objective BE 15-2 of the Cork County Development Plan 2022 the aim of which is to protect and where possible enhance areas of local biodiversity value, ecological corridors and habitats that are features of the County's ecological network. The facilitation of this proposal would ultimately result in the loss of a significant area of Annex I Habitat and thus further reduce the extent of these diminishing and pressurized habitats at both a County and National level. It is considered that the impact and assessment provided in relation to loss of habitats listed as Annex I Habitats under the Habitats Directive and habitats of high natural value has been significantly underestimated. This would contravene materially development objective ET 13-7 of the Cork County Development Plan which states "commercial wind energy development is open to consideration in these areas where proposals can avoid adverse impacts on: Natura 2000 sites (SPA's and SAC's), Natural Heritage Areas (NHA'S), proposed Natural Heritage Areas and other sites and locations of significant ecological value".

If An Bord Pleanála, (being the 'competent authority') consider **granting planning permission** for the proposal, a schedule of suggested conditions, as requested in the Advice Guidelines that accompanied the publication of the Planning and Development (Strategic Infrastructure) Act 2006 is attached (Appendix A).

If An Bord Pleanála, (being the 'competent authority') consider that **further information** is required, a schedule of items as requested in the Advice Guidelines that accompanied the publication of the Planning and Development (Strategic Infrastructure) Act 2006 is attached (Appendix B).

Mr Lynch said that the Elected Members are asked to note that, in accordance with Section 37E (6), the Elected Members of the Planning Authority may, by resolution, decide to attach recommendations specified in a resolution to the report. Where the Members so decide recommendations (together with the meetings administrators record) shall be attached to the Report submitted to the Board under Section 37E (4).

During a discussion, Members made the following points:

- Members said they have been in favour of windfarms providing renewable energy
- The EU might allow relaxation of ecological restrictions in the future to deal with the energy crisis
- Members said ecology is important but energy is a crucial issue and some sacrifices might have to be made
- Members said that An Bord Pleanála will have to take National and European regulations into consideration when deciding on the mater

The Chief Executive said the report of the Planning Authority goes directly to An Bord Pleanála.

I certify the foregoing to be a true extract from Minutes of proceedings at Council Meeting held on 14th November 2022.

MAIREAD LUCEY

SENIOR EXECUTIVE OFFICER
DATED: 14th November 2022

Cork County Council

Planning and Development Act 2000 (as amended)

Planning and Development (Strategic Infrastructure) Act 2006

An Bord Pleanála Ref. No:	ABP-313440-22
Applicant:	Gortyrahilly Wind Designated Activity Company,
Agents:	Jennings O'Donovan & Partners Ltd
Site Location:	Within the townlands of Cahernacaha (Cathair na Cáithe), Gortnabinna (Gort na Binne), Derryfineen (Doire Fhínín), Gortyrahilly (Gort Uí Raithile), Rath West (An Ráth Thiar), Derree (Na Doirí), Fuhiry (Na Foithrí), Derreenaculling (Doire an Chuilinn), Lumnagh Beg (An Lománach Bheag), Lumnagh More (An Lománach Mhór), Scrahanagown (Screathan na nGamhan), Bardinch (Barr d'Ínse), Milleeny (Na Millíní), Inchamore (An Inse Mhór), Derreenaling (An Doirín Álainn), Coolea (Cúil Aodha), Gortnatubbrid (Gort na Tiobraid), Murnaghbeg (An Muirneach Beag), Slievereagh (An Sliabh Riabhach), Togher (An Tóchar), Caherdowney (Cathair Dhúnaigh), County Cork. The proposal also involves townlands in County Kerry.
Proposed Development:	• Construction of 14 No. wind turbines with an overall ground to blade tip height ranging from 179m to 185m inclusive. The wind turbines will have a rotor diameter ranging from 149m to 155m inclusive and

	a hub height ranging from 102.5m to 110.5m inclusive. • Construction of permanent turbine hardstands and turbine foundations. • Construction of one temporary construction compound with associated temporary site offices, parking areas and security fencing. • Installation of one (35-year life cycle) meteorological mast with a height of 110m and a 4m lightning pole on top. • Development of two on-site borrow pits. • Construction of new permanent internal site access roads, upgrade of existing internal site access roads and upgrading of the L-34011-20 road (which forms part of the Beara-Breifne Way) and lies within the site, to include passing bays and all associated drainage infrastructure. • Development of an internal site drainage network and sediment control systems. • Construction of 1 no. permanent 110 kV electrical substation including 2no. control buildings with welfare facilities, all associated electrical plant and equipment, security fencing and gates, all associated underground cabling, wastewater holding tank, and all ancillary structures and works

	• All associated underground electrical and communications cabling connecting the wind turbines to the wind farm substation. • Ancillary forestry felling to facilitate construction of the development.
	• All works associated with the permanent connection of the wind farm to the national electricity grid comprising a 110kV underground cable in permanent cable ducts from the proposed, permanent, on site substation, in the townland of Gortyrahilly and onto the townlands of Derree, Derreenaculling, Lumnagh Beg, Lumnagh More, Scrahanagown, Bardinch, Milleeny, Inchamore, Derreenaling, Derryreag, Cummeenavrick, Glashacormick, Clydaghroe and Cummeennabuddoge to the existing Ballyvouskill 220 kV Substation in the townland of Caherdowney. • All associated site development works including berms, landscaping, and soil excavation. • Improvement of an entrance to an existing private road off the L-7405-0 local road to include localised widening of the road and creation of a splayed entrance to facilitate the delivery of abnormal loads and turbine component deliveries.

	• Improvement of an existing site entrance off the L-3402-36 local road to include removal of existing vegetation for visibility splays to facilitate the use of it for the delivery of construction materials to the site. • Upgrade works on the turbine delivery route to include the following: o Construction of a temporary bridge over the Sullane River to allow access to the L-3400-79 from the N22 in Ballyvourney for the duration of the construction works o Localised widening of the L-3405-0 road to a width of 4.5m, from the junction with the L3400-79 road to the junction with the L-7405-0 road o Localised widening of the L-7405-0 road to a width of 4.5m, from the junction with the L-3405-0 to the entrance to an existing private road off the L-7405-0. o The construction of a temporary access road off the N22 in the townland of Cummeenavrick to facilitate 180 degrees turning manoeuvre by the turbine delivery vehicles. 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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Planning Authority report to An Bord Pleanála in accordance with Section 37E (4) of the Planning and Development Acts (as amended).

4th November 2022

1) Summary

This application is being made directly to An Bord Pleanála as 'Strategic Infrastructure Development' (SID) under the provisions of Section 37E of the Planning and Development Act 2000 as amended.

This planning report sets out the relevant planning issues in relation to the proposed Wind Farm Development (and all associated works). For ease of reference to be referred to as the Gortyrahilly windfarm.

The proposed windfarm is located in the townlands of Cahernacaha (Cathair na Cáithe), Gortnabinna (Gort na Binne), Derryfineen (Doire Fhínín), Gortyrahilly (Gort Uí Raithile), Rath West (An Ráth Thiar), Derree (Na Doirí), Fuhiry (Na Foithrí), Derreenaculling (Doire an Chuilinn), Lumnagh Beg (An Lománach Bheag), Lumnagh More (An Lománach Mhór), Scrahanagown (Screathan na nGamhan), Bardinch (Barr d'Ínse), Milleeny (Na Millíní), Inchamore (An Inse Mhór), Derreenaling (An Doirín Álainn), Coolea (Cúil Aodha), Gortnatubbrid (Gort na Tiobraid), Murnaghbeg (An Muirneach Beag), Slievereagh (An Sliabh Riabhach), Togher (An Tóchar), Caherdowney (Cathair Dhúnaigh), County Cork. The proposal also involves townlands in County Kerry.

This project involves the construction of 14 turbines with 110kv electrical substation and all related site works and ancillary development. An EIAR has been prepared in respect of the overall project. It is considered that An Bord Pleanála is the "competent authority" for the purposes of assessing the adequacy of the EIAR. An Appropriate Assessment Screening and a Natura Impact Statement (NIS) have also been prepared in respect of the proposed development.

The key points arising from the assessment by Cork County Council of the proposal are:

- It is an objective under BE 15-2 of the Cork County Development Plan 2022 to protect and where possible enhance areas of local biodiversity value, ecological corridors and habitats that are features of the County's ecological network. The facilitation of this proposal would ultimately result in the loss of a significant area of Annex I Habitat and thus further reduce the extent of these diminishing and pressurized habitats at both a County and National level.

- There are significant concerns relating to this proposal regarding its location within habitats of County and National importance and the inadequacy of the information and assessment provided by way of supporting documentation.

- The Natura Impact Statement lacks sufficient detail as to provide a robust scientific assessment to establish beyond reasonable scientific doubt that adverse effects on the Killarney National Park, Macgillycuddys Reeks and Caragh River Catchment SAC and the Mullaghanish to Musheramore Mountains SPA will not occur as a result of the proposal.

- There are serious concerns in relation to the extent of habitats of high ecological value to be impacted. It is considered that the impact and assessment provided in relation to loss of habitats listed as Annex I Habitats under the Habitats Directive and habitats of high natural value has been significantly underestimated. This is contrary to Objective ET 13-7 of the Cork County Development Plan which states *"commercial wind energy development is open to consideration in these areas where proposals can avoid adverse impacts on: Natura 2000 sites (SPA's and SAC's), Natural Heritage Areas (NHA'S), proposed Natural Heritage Areas and other sites and locations of significant ecological value".*

It is the considered view of Cork County Council that based on the information submitted and the detailed assessment provided above that a **refusal** should be issued by An Bord. The key issues which the Planning Authority deem relevant are set out as points of note listed above. The Strategic Infrastructure Development application was referred to relevant internal departments within Cork County Council. A copy of each of the internal department reports is attached as Appendix C. Where Further Information is recommended the relevant points are set out in Appendix B and where a grant of permission is recommended a list of conditions is included in Appendix A.

2) The Purpose of This Report

In accordance with the requirements of Section 37E (4) the of the 2000 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 the proper planning and sustainable development of the area. An Bord Pleanála have requested that the report addresses, where relevant all the issues identified in Section 7 of the Guidelines for Planning Authorities in respect of Section 37A of the 2000 Act. Accordingly, all the relevant issues to the proposed development have been identified and are assessed below in the report.

Section 37E (5) of the 2000 Act requires that before this report is submitted to the Bord, 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 2000 Act refers).

Section 37E (6) of the 2000 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'.

There are four appendices to this report:

- Appendix A: Suggested Conditions
- Appendix B: Suggested Further Information
- Appendix C: Copies of Internal Technical Reports
- Appendix D: Pre-Planning Reports

3) Development Description

This application (accompanied by a Natura Impact Statement and EIAR) is made to An Bord Pleanála under Section 37E of the Planning and Development (Strategic Infrastructure) Act 2006 (as amended).

The proposal involves the construction of 14 turbines with 110kv electrical substation and all related site works and ancillary development. The project involves.

- Construction of 14 No. wind turbines with an overall ground to blade tip height ranging from 179m to 185m inclusive. The wind turbines will have a rotor diameter ranging from 149m to 155m inclusive and a hub height ranging from 102.5m to 110.5m inclusive.
- Construction of permanent turbine hardstands and turbine foundations.
- Construction of one temporary construction compound with associated temporary site offices, parking areas and security fencing.
- Installation of one (35-year life cycle) meteorological mast with a height of 110m and a 4m lightning pole on top.
- Development of two on-site borrow pits.
- Construction of new permanent internal site access roads, upgrade of existing internal site access roads and upgrading of the L-34011-20 road (which forms part of the Beara-Breifne Way) and lies within the site, to include passing bays and all associated drainage infrastructure.
- Development of an internal site drainage network and sediment control systems.
- Construction of 1 no. permanent 110 kV electrical substation including 2no. control buildings with welfare facilities, all associated electrical plant and equipment, security fencing and gates, all associated underground cabling, wastewater holding tank, and all ancillary structures and works
- All associated underground electrical and communications cabling connecting the wind turbines to the wind farm substation.
- Ancillary forestry felling to facilitate construction of the development.
- All works associated with the permanent connection of the wind farm to the national electricity grid comprising a 110kV underground cable in permanent cable ducts from the proposed, permanent, on site substation, in the townland of Gortyrahilly and onto the townlands of Derree, Derreenaculling, Lumnagh Beg, Lumnagh More, Scrahanagown, Bardinch, Milleeny, Inchamore, Derreenaling, Derryreag, Cummeenavrick, Glashacormick, Clydaghroe and Cummeennabuddoge to the existing Ballyvouskill 220 kV Substation in the townland of Caherdowney.
- All associated site development works including berms, landscaping, and soil excavation.
- Improvement of an entrance to an existing private road off the L-7405-0 local road to include localised widening of the road and creation of a splayed entrance to facilitate the delivery of abnormal loads and turbine component deliveries.
- Improvement of an existing site entrance off the L-3402-36 local road to include removal of existing vegetation for visibility splays to facilitate the use of it for the delivery of construction materials to the site.

- Upgrade works on the turbine delivery route to include the following:
    - Construction of a temporary bridge over the Sullane River to allow access to the L-3400-79 from the N22 in Ballyvourney for the duration of the construction works
    - Localised widening of the L-3405-0 road to a width of 4.5m, from the junction with the L3400-79 road to the junction with the L-7405-0 road
    - Localised widening of the L-7405-0 road to a width of 4.5m, from the junction with the L-3405-0 to the entrance to an existing private road off the L-7405-0.
    - The construction of a temporary access road off the N22 in the townland of Cummeenavrick to facilitate 180 degrees turning manoeuvre by the turbine delivery vehicles.

A 10-year planning permission and 35-yearoperational life from the date of commissioning of the entire wind farm is being sought.

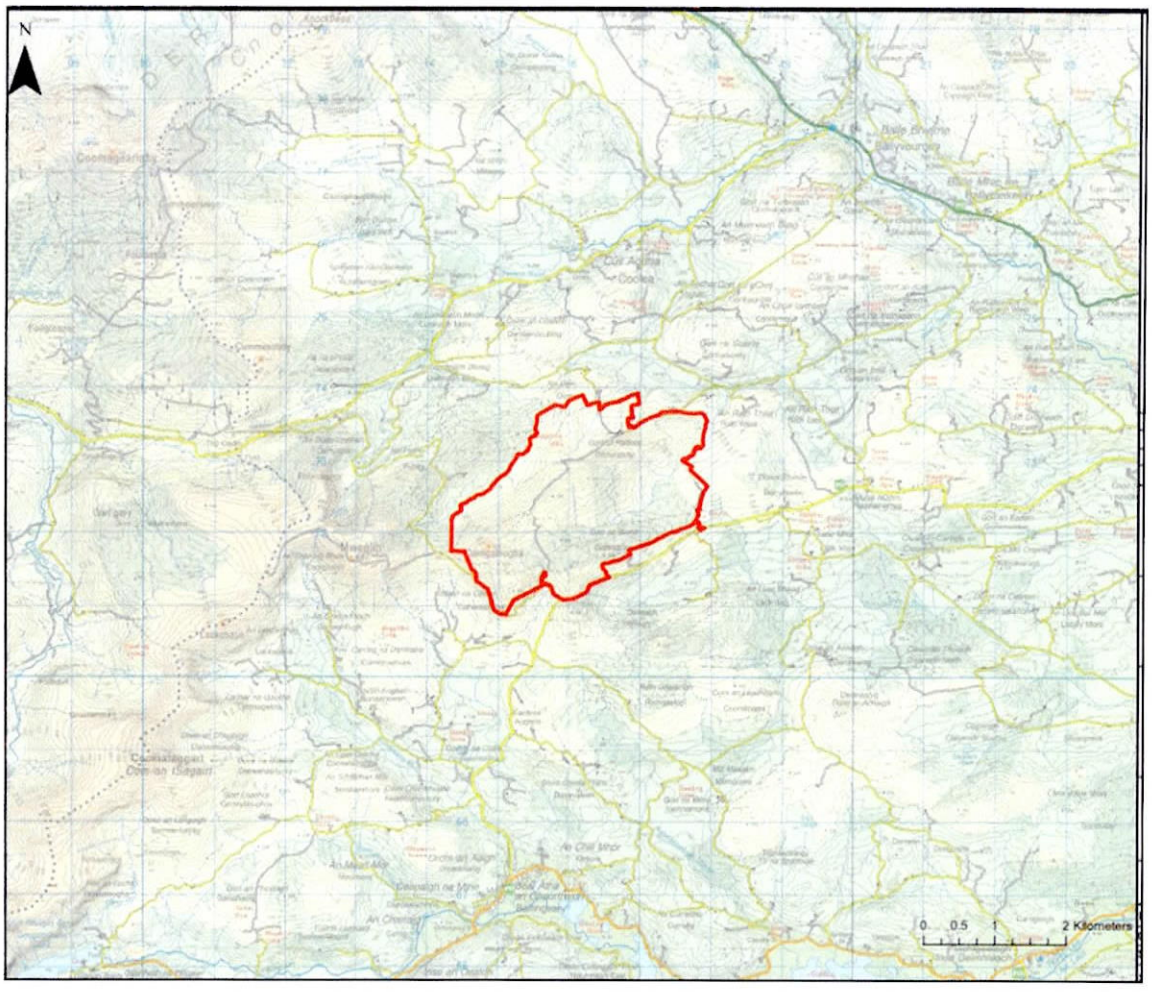
The application is looking for flexibility in the choice of turbine. It is stated that the turbine will have a height from base to tip ranging from 179m to 185m. For the purposes of the assessments a range of turbine parameters were assessed.

Turbine Parameter	Assessment Envelope
Turbine Blade Tip Height	179m to 185m
Rotor Diameter	149m to 155m
Hub Height	102.5m to 110.5m
Output	5.6w to 6.6mw

It is stated that each of these options within the proposed range have been fully assessed as part of the assessment of the full range proposed as part of the EIA and AA process.

The map below (taken from the submitted Planning Statement) illustrates the geographical context of the proposed development in County Cork.

The site is located approximately 4.3km south - west of Ballyvourney and 2km east of the county boundary between Cork and Kerry



In relation to Construction Phase Activities, it is expected that the construction phase, including civil, electrical and grid works, and turbine assembly will take between approximately 21 months in total.

i. Pre-Planning Consultation

The applicant has provided details of the pre-planning consultation with An Bord Pleanála (Case Number ABP-33440-22).

The Bord concluded:

1. The proposed development <u>does</u> constitute Strategic Infrastructure Development under the meaning of Section 37A of the Planning and Development Act, 200 as amended.

Pre-planning consultation took place between Cork County Council and the agent on the 14th January 2022. Relevant reports are included in Appendix D. It should be noted that Ecology Office of Cork County Council recommended that development on intact peatland habitats and upland habitats of high natural value is avoided.

ii. Justification for the Proposal

The Non-Technical Summary of the Environmental Impact Assessment Report (EIAR) and the submitted Planning Statement outline the reasons that have precipitated the subject application. It is stated that the proposed Gortyrahilly Wind Farm is necessary to produce renewable energy for the Irish national grid in order to transition Ireland to a low carbon economy.

The rationale behind this argument is noted and accepted.

iii. EIAR

In Ireland, Schedule 5 (Part 1 and Part 2) of the Planning and Development Regulations 2001, as amended, transposes Annex I and Annex II to amended EIA Directive 2014/52/EU. As the proposed development has more than 5 no. turbines and generating capacity of greater than 5MW the application includes an Environmental Impact Assessment Report (EIAR), prepared in accordance with the Planning and Development Regulations.

The EIAR is to assist the Irish Competent Authority (An Bord Pleanála) in carrying out EIA for this project.

iv. Site Location and Description

The proposed development is located to the southwest of Ballyvourney. The main relevant townlands in County Cork are The townlands of Cahernacaha (Cathair na Cáithe), Gortnabinna (Gort na Binne), Derryfineen (Doire Fhínín), Gortyrahilly (Gort Uí Raithile), Rath West (An Ráth Thiar), Derree (Na Doirí), Fuhiry (Na Foithrí), Derreenaculling (Doire an Chuilinn), Lumnagh Beg (An Lománach Bheag), Lumnagh More (An Lománach Mhór), Scrahanagown (Screathan na nGamhan), Bardinch (Barr d'Ínse), Milleeny (Na Millíní), Inchamore (An Inse Mhór), Derreenaling (An Doirín Álainn), Coolea (Cúil Aodha), Gortnatubbrid (Gort na Tiobraid), Murnaghbeg (An Muirneach Beag), Slievereagh (An Sliabh Riabhach), Togher (An Tóchar), Caherdowney (Cathair Dhúnaigh).

In terms of Wind Strategy this area is classed as "Open to Consideration" as set out in the Cork County Development Plan 2022.

The site forms part of the "Transitional Rural Area" as set out in the Cork County Development Plan 2022 and is located in the West Cork Strategic Planning Area.

The landscape character designation covers two areas (1) Landscape Character Type: Glaciated Cradle Valleys and (2) Landscape Character Type: Rolling Marginal Middleground.

A Scenic route runs to the west of the site, namely Scenic Route (Reference No. - S25) – Section of winding local road joining The Coom & Reananerree Road Views of Foilanumera, Mweelin & Carrigalougha Mountains.

v. Planning History

Relevant planning history in the vicinity of the proposed site.

19/4732- SSE Renewables (Ireland) Ltd.- Retention of a meteorological mast, for a temporary period of 5 years, located in the townland of Gortyrahilly on private lands approximately 5km west of Renanirree village. The development consists of an 80m temporary meteorological mast and associated guy wires. The lattice mast holds anemometry equipment for wind measurement. Permission granted by the Planning Authority

4) Technical Reports (See also Appendix C)

The Strategic Infrastructure Development (SID) application was referred to relevant internal departments within Cork County Council. A copy of each of the internal department reports is attached as Appendix C. Where Further Information is recommended the relevant points are set out in Appendix B and where a grant of permission is recommended a list of conditions is included in Appendix A.

i. Area Engineer

A section of the proposed turbine access track coincides with a section of public road L-34011-20. This section is approximately 2km in length from a point north of T7 and running south past T3. The Area Engineer report provides conditions that should apply.

It is proposed to deliver the turbines from Ringaskiddy to the site. The route requires the deliveries to travel west of the Cork County Bounds before turning around and approaching Ballyvourney from the west. The route will cross over a temporary bridge on the River Sullane, follow the main Ballyvourney to Coolea Road west before turning south along the L-3405 and west onto the L-7405. Significant improvements will be required on the two latter roads. These are indicated in the application. The Area Engineer report provides conditions that should be applied to road widening. The temporary river crossing over the River Sullane is to be removed and the area reinstated upon completion of turbine delivery. A bond to the value of €150,000 shall be provided to ensure that this reinstatement takes place.

The Area Engineer report provides conditions that should be applied for the cable route.

The main access point to the site for the delivery of materials is off the L -3402 at Derryfineen. It is likely that all concrete deliveries, other construction material, site traffic etc will use this access. It is likely that construction traffic could approach this entrance from either Ballingeary or Reinaree. Works are planned for the L-3402 and the applicant should contribute to these planned works. The cost of upgrading road will be €660,000. The applicant should contribute 50% to this cost i.e €330,000 towards upgrading the L-3402.

The applicant should put in place a bond to ensure satisfactory maintenance of the road network affected by the works for the duration of the project and to ensure completion of all road works to the satisfaction of the local authority. The value of this bond should be €300,000.

ii. Ecology Section

This report highlights significant concerns about the proposal and recommends that no development should take place on intact peatland habitats, degraded peatland habitats or any habitats of high natural value. The facilitation of this proposal would ultimately result in the loss of a significant area of Annex I Habitat and thus further reduce the extent of these diminishing and pressurized habitats at both a County and National level. There are significant concerns relating to the inadequacy of the information and assessment provided by way of supporting documentation.

iii. Environment (Surface Water and Ground Water)

This report concludes that there is no overall objection to the proposal and recommended conditions are included.

iv. Environment (Air, Noise and Vibration)

This report recommends further information on noise and vibration. It also includes a set of recommended conditions.

v. Archaeology

The review of the application and specifically Chapter 14 Cultural Heritage has not highlighted any concerns and the Archaeologist is satisfied with the assessment and agrees with the recommendations.

5) Planning Policy and Context

i. EU Directives and Policies

A strong emphasis is placed on the need for a robust Renewable Energy sector in various documents produced by the European Union. The EU Renewable Energy Directive 2009/28/EC, European 2020 Strategy for Growth, 2030 Climate and Energy Framework, Energy Roadmap 2050, Recast Renewable Energy Directive (RED2) and the European Green Deal all emphasise the importance of this sector.

ii. National Policy

Support for Renewable Energy is a common theme through legislation and policy documents. Examples include the Climate Action and Low Carbon Development Act 2015, Project Ireland 2040: The National Planning Framework (NPF), Project Ireland 2040: National Development Plan 2018-2027, Climate Action Plan 2019, Climate Action and Low Carbon Development (Amendment) Bill 2020.

iii. Regional Level

At a Regional level the key document is the Southern Regional Spatial and Economic Strategy (RSES) which sets out a strategy to implement the NPF in the Southern Region. Various objectives within the strategy seek to promote a low carbon economy, the development of green industry and technologies with an emphasis on Sustainable Renewables and Renewable Wind Energy. It is an objective to support the sustainable development, maintenance and upgrading of electricity and gas network grid infrastructure to integrate renewable energy sources and ensure our national and regional energy system remains safe, secure and ready to meet increased demand as the regional economy grows.

iv. Cork County Development Plan 2022

The recently adopted County Development Plan, 2022, follows on from International, National and Regional policy. As with the previous County Development Plan, the new plan is supportive of renewable infrastructure proposal. This support is set out in Chapter 13 - Energy and Telecommunications and in Objectives such as ET13-1. Of particular relevance for this proposal is objective ET13-21.

Objective ET 13-21: Electricity Network

a) Support and facilitate the sustainable development, upgrade and expansion of the electricity transmission grid, storage, and distribution network infrastructure.
b) Support the sustainable development of the grid including strategic energy corridors and distribution networks in the region to international standards.
c) Facilitate where practical and feasible, infrastructure connections to wind farms, solar farms, and other renewable energy sources subject to normal proper planning considerations.
d) Proposals for development which would be likely to have a significant effect on nature conservation-sites and/or habitats or species of high conservation value will only be

approved if it can be ascertained, by means of an Appropriate Assessment or other ecological assessment, that the integrity of these sites will not be adversely affected.

Other relevant objectives in the Cork County Development Plan 2022 include the following:

Objective ET 13-1 Energy

a) Ensure that County Cork fulfils its potential in contributing to the sustainable delivery of a diverse and secure energy supply and to harness the potential of the county to assist in meeting renewable energy targets and managing overall energy demand.

b) During the life of this plan, the Planning Authority will prepare a renewable energy strategy for the county

Objective ET 13-2 Renewable Energy

a) Support Ireland's renewable energy commitments as outlined in Government Energy and Climate Change policies by facilitating the development of renewable energy sources such as wind, solar, geothermal, hydro and bio-energy and energy storage at suitable locations within the county where such development has satisfactorily demonstrated that it will not have adverse impacts on the surrounding environment (including water quality), landscape, biodiversity or amenities.

b) Support and facilitate renewable energy proposals that bring about a direct socio-economic benefit to the local community. The Council will engage with local communities and stakeholders in energy and encourage developers to consult with local communities to identify how they can invest in/gain from significant renewable energy development.

c) Support the development of new and emerging renewable energy technologies / fuels for the transport sector.

d) To promote the potential of micro renewables where it can be demonstrated that that it will not have adverse impacts on the surrounding environment (including water quality), landscape, biodiversity, or amenities

Objective ET 13-4: Wind Energy

In order to facilitate increased levels of renewable energy production consistent with national targets on renewable energy and climate change mitigation as set out in the National Energy and Climate Plan 2021-2030, the Climate Action Plan 2021, and any updates to these targets, and in accordance with Ministerial Guidelines on Wind Energy Development, the Council will support further development of on-shore wind energy projects including the upgrading, repowering or expansion of existing infrastructure, at appropriate locations within the county in line with the Wind Energy Strategy and objectives detailed in this chapter and other objectives of this plan in relation to climate change, biodiversity, landscape, heritage, water management and environment etc.

Objective ET 13-7: Open to Consideration

Commercial wind energy development is open to consideration in these areas where proposals can avoid adverse impacts on:

- Residential amenity particularly in respect of noise, shadow flicker and visual impact.
- Urban areas and Metropolitan/Town Green Belts.
- Natura 2000 Sites (SPA's and SAC's), Natural Heritage Areas (NHA's), proposed Natural Heritage Areas and other sites and locations of significant ecological value.
- Architectural and archaeological heritage.
- Visual quality of the landscape and the degree to which impacts are highly visible over wider areas. In planning such development, consideration should also be given to the cumulative impacts of such proposals.

Objective GI 14-9: Landscape

a) Protect the visual and scenic amenities of County Cork's built and natural environment.

b) Landscape issues will be an important factor in all land-use proposals, ensuring that a pro-active view of development is undertaken while protecting the environment and heritage generally in line with the principle of sustainability.

c) Ensure that new development meets high standards of siting and design.

d) Protect skylines and ridgelines from development.

e) Discourage proposals necessitating the removal of extensive amounts of trees, hedgerows and historic walls or other distinctive boundary treatments.

Objective BE 15-2: Protect sites, habitats, and species

a) Protect all natural heritage sites which are designated or proposed for designation under European legislation, National legislation, and International Agreements. Maintain and where possible enhance appropriate ecological linkages between these. This includes Special Areas of Conservation, Special Protection Areas, Marine Protected Areas, Natural Heritage Areas, proposed Natural Heritage Areas, Statutory Nature Reserves, Refuges for Fauna and Ramsar Sites. These sites are listed in Volume 2 of the Plan.

b) Provide protection to species listed in the Flora Protection Order 2015, to Annexes of the Habitats and Birds Directives, and to animal species protected under the Wildlife Acts in accordance with relevant legal requirements. These species are listed in Volume 2 of the Plan.

c) Protect and where possible enhance areas of local biodiversity value, ecological corridors and habitats that are features of the County's ecological network. This includes rivers, lakes, streams and ponds, peatland and other wetland habitats, woodlands, hedgerows, tree lines, veteran trees, natural and semi-natural grasslands as well as coastal and marine habitats. It particularly includes habitats of special conservation significance in Cork as listed in Volume 2 of the Plan.

d) Recognise the value of protecting geological heritage sites of local and national interest, as they become notified to the local authority, and protect them from inappropriate development

e) Encourage, pursuant to Article 10 of the Habitats Directive, the protection and enhancement of features of the landscape, such as traditional field boundaries, important for the ecological coherence of the Natura 2000 network and essential for the migration, dispersal and genetic exchange of wild species.

6) Assessment

This part of the report comments on the content of the Environmental Impact Assessment Report included with the application. There will be some level of overlap in terms of the issues raised in the internal reports, as submitted by the various internal departments of Cork County Council. It's noted that the Non-Technical Summary does not align with the EIAR in terms of chapter titles and layout.

i. Chapter 1 - Introduction

Chapter 1 of the EIAR introduces the proposed Gortyrahilly wind farm and provides details of the EIA project team and the structure of the report. The EAIR has been prepared by Jennings O'Donovan & Partners Limited, on behalf of Gortyrahilly Wind DAC. It is stated that the EIAR considers the development as a whole, including all relevant ancillary and subsidiary elements of the overall project and all direct and indirect effects, and cumulative impacts and interactions. Chapter 1 gives an index of terms used within the report for clarity at the outset. It identifies the applicant and explains that the proposal is a joint venture between FuturEnergy Ireland and SSE Renewables.

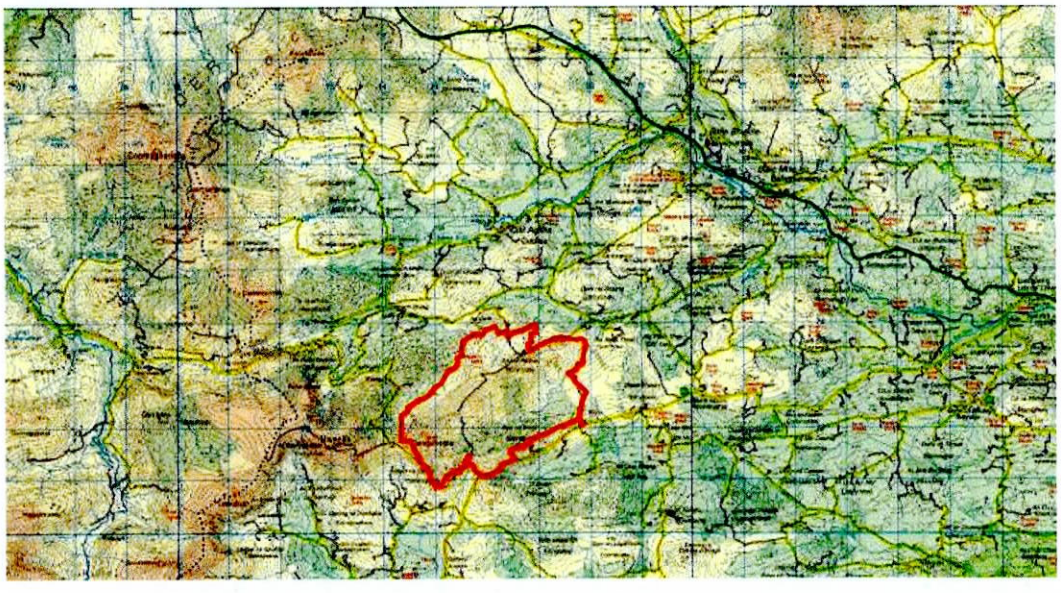


Figure 1.1 of the EIAR identifies the site location

The site comprises an area of 667 hectares, of which 154 hectares is commercial forestry owned by Coillte and the remaining land (approx. 513 hectares) is owned by third parties and is agricultural land. The site is in a rural setting and there are 106 dwellings within a 2km radius of the proposed turbines, comprising one off houses and farm holdings. The need for the development is alluded to and will be addressed further in the following chapters.

A 10-year planning permission and 35-year operational life from the date of commissioning of the entire wind farm is being sought. This reflects the lifespan of modern-day turbines. A permanent planning permission is being sought for the Grid Connection and substation as these will become an asset of the national grid under the management of EirGrid and will remain in place upon decommissioning of the wind farm.

ii. Chapter 2 – Project Description

Chapter 2 of the EIAR provides a detailed description of all elements of the project and forms the basis of the assessments presented in other chapters. Details are provided on the construction, operational and decommissioning phase within this chapter.

The proposed development will consist of the following:

- Construction of 14 No. wind turbines with an overall ground to blade tip height ranging from 179m to 185m inclusive. The wind turbines will have a rotor diameter ranging from 149m to 155m inclusive and a hub height ranging from 102.5m to 110.5m inclusive.
- Construction of permanent turbine hardstands and turbine foundations.
- Construction of one temporary construction compound with associated temporary site offices, parking areas and security fencing.
- Installation of one (35-year life cycle) meteorological mast with a height of 110m and a 4m lightning pole on top.
- Development of two on-site borrow pits.
- Construction of new permanent internal site access roads, upgrade of existing internal site access roads and upgrading of the L-34011-20 road (which forms part of the Beara-Breifne Way) and lies within the site, to include passing bays and all associated drainage infrastructure.
- Development of an internal site drainage network and sediment control systems.
- Construction of 1 no. permanent 110 kV electrical substation including 2 no. control buildings with welfare facilities, all associated electrical plant and equipment, security fencing and gates, all associated underground cabling, wastewater holding tank, and all ancillary structures and works.
- All associated underground electrical and communications cabling connecting the wind turbines to the wind farm substation.
- Ancillary forestry felling to facilitate construction of the development.
- All works associated with the permanent connection of the wind farm to the national electricity grid comprising a 110 kV underground cable in permanent cable ducts from the proposed, permanent, on-site substation, in the townland of Gortyrahilly and onto the townlands of Derree, Derreenaculling, Lumnagh Beg, Lumnagh More, Scrahanagown, Bardinch, Milleeny, Inchamore, Derreenaling, Derryreag, Cummeenavrick, Glashacormick, Clydaghroe and Cummeennabuddoge to the existing Ballyvouskill 220 kV Substation in the townland of Caherdowney.
- All associated site development works including berms, landscaping, and soil excavation.
- Improvement of an entrance to an existing private road off the L-7405-0 local road to include localised widening of the road and creation of a splayed entrance to facilitate the delivery of abnormal loads and turbine component deliveries.

- Improvement of an existing site entrance off the L-3402-36 local road to include removal of existing vegetation for visibility splays to facilitate the use of it for the delivery of construction materials to the site.
- Upgrade works on the turbine delivery route to include the following:
    - Construction of a temporary bridge over the Sullane River to allow access to the L-3400-79 from the N22 in Ballyvourney for the duration of the construction works.
    - Localised widening of the L-3405-0 road to a width of 4.5m, from the junction with the L3400-79 road to the junction with the L-7405-0 road.
    - Localised widening of the L-7405-0 road to a width of 4.5m, from the junction with the L-3405-0 to the entrance to an existing private road off the L-7405-0.
    - The construction of a temporary access road off the N22 in the townland of Cummeenavrick to facilitate a 180 degrees turning manoeuvre by the turbine delivery vehicles.

The site setting and location is described. The nearest settlement to the site is Re na nDoiri, which is 1.8km to the east. The Site is located within the townlands of Derree, Gortyrahilly, Rath West, Derryfineen, Gortnabinna, Derragh and Cahernacaha.

The Grid Connection, which extends over a length of 27.8km is in the townlands of Gortyrahilly, Derree, Dereenaculling, Lumnagh Beg, Lumnagh More, Scrahanagown, Bardinch, Mileeny, Inchamore, Derryreag, Derreenaling, Cummeenavrick, Glashacormick, Clydaghroe, Cummeennabuddoge and Caherdowney.

It is noted that there are 32 wind farms within 20km of the Site. Figure 2.3 shows the location of proposed, permitted, and operational wind farms within a 20km radius of the proposed turbines. Appendix 2.3 provides further information on these wind farms. The nearest operational wind farm is Derragh Wind Farm which is located 189m to the south of the Site. The nearest permitted but not yet constructed wind farm is Coolknoohil Incheeto 4.3km to the northwest.

iii. Chapter 3 – Alternatives Considered

Chapter 3 provides a description of the reasonable alternatives studied by the developer. Alternatives must be considered during the EIA process. Alternatives were assessed taking commercial, construction, operational and key environmental constraints into consideration.

It is noted that in the "Do Nothing" scenario, the prospect of creating sustainable energy through County Cork's wind energy resource would be lost at this Site.

This chapter describes a strategic site selection exercise which has been undertaken. This site emerged from a screening exercise which identified a number of other sites also, some of which are in the planning process already. It is stated that the site suitability has been fully informed by national, regional, and local policy constraints and the location accords with these policies and objectives. The site was further examined in the context of the following elements which are considered decisive in determining viability for a wind farm project:

- National Grid Connection Capacity
- Designated sites
- Wind Speeds
- Population Density

Grid route options were assessed and Ballyvouskill substation was selected because it had capacity available and because of its closer proximity to the site.

The site was chosen, as it is located predominantly within agricultural land and existing commercial forestry which allows the Site to take advantage of existing access roads (which will be upgraded in specific locations). This combined with the proximity to the existing Ballyvouskill substation further highlights the suitability of the Site as it can make further sustainable use of these established items of infrastructure. The Site is also designated as 'Open to Consideration' within the Cork County Development Plan, does not overlap with any designated sites and is located in an area with a relatively low population density with appropriate annual wind speeds.

Three different turbine layouts were considered, and a final layout selected having gone through the various options in detail.

This chapter describes the main reasons for selecting the site option along with a comparison of environmental effects.

iv. Chapter 4 – Population and Human Health

This chapter of the EIAR outlines assesses the impacts of the Development (Figure 1.2) on population and human health. Appropriate mitigation strategies are set out. The assessment considered the potential effects during the construction, operation, and decommissioning phases of the development. This chapter of the EIAR is supported by a shadow flicker assessment.

The assessment follows a broad area of investigation including the following:

- Population and Settlement Patterns
- Economic Activity and Tourism
- Employment
- Topography and Land Use
- Health Impacts of Wind Farms
- Property Value
- Natural Disaster and Major Accident

Three study areas were looked at: the site and environs, Cork County and Kerry County. The assessment looked at each study area under the different headings set out above.

The shadow flicker assessment uses a study area which is defined as 10 times the widest potential rotor diameter within the range (10 x 155m = 1,550m). A study area of 2,000m is used for completeness. A shadow flicker computer model was used to calculate the occurrence of shadow flicker at relevant receptors to the Development. The output from the

calculations is analysed to identify and assess potential shadow flicker impacts. Wind turbines, like other tall structures, can cast long shadows when the sun is low in the sky.

The three different turbine scenarios were modelled in the assessment along with the cumulative impacts of the nearby Derragh wind farm to ensure a proper detailed assessment of shadow flicker. There are 106 properties within the shadow flicker study area radius. The majority of houses are located to the east, north and south of the Development. No shadow flicker is experienced at 17 No. dwellings due to the orientation of these dwellings with respect to the proposed turbines in all scenarios assessed and these are therefore ruled out for further assessment. The remaining properties within the shadow flicker study area were considered. The worst-case scenario was outlined along with a more realistic scenario. Mitigation measures were factored in and a summary of significant effects given.

It is stated that the Development has been assessed as having the potential to result in effects of a slight positive, long-term impact overall. Through the implementation of mitigation measures, the cumulative effects associated with the Development are predicted to be not significant.

v. Chapter 5 – Terrestrial Ecology

This chapter assesses the impacts of the Development (Figure 1.2) on Terrestrial Ecology (namely habitats, flora, mammals, and Kerry Slug). The assessment considers the potential effects during the construction, operation, and decommissioning phases of the development.

It is stated that a Construction and Environmental Management Plan (CEMP) is appended to the EIAR in and this document will be a key construction contract document, which will ensure that all mitigation measures, which are considered necessary to protect the environment, are implemented.

The principal study area for habitats and flora, terrestrial mammals and Kerry Slug was the actual Site for the proposed wind farm at Gortyrahilly. This was considered adequate as the site does not adjoin any designated area or habitat of particular conservation value. However, the study area was extended to a distance of approximately 2 km from the wind farm boundary for the checking of potential bat roosts. The study area also included the route for the underground grid connection. This extends for a distance of approximately 27.8 km from the proposed substation at Gortyrahilly to the existing 220kV GIS substation at Ballyvouskill. For the turbine delivery route, an assessment was made of locations where physical works are required to facilitate the passing of the vehicles.

A desktop review was carried out to identify features of ecological importance within the study area and surrounding region. Field surveys were also carried out. The value of habitats has been measured against published selection criteria where available. It is stated that in assigning a level of value to a species, it was necessary to consider its distribution and status, including a consideration of trends based on available historical records. Reference has therefore been made to published lists and criteria where available. The effects were considered along with the cumulative effects when considered in combination with impacts pf other proposed or permitted developments.

The dominant habitat within the survey area is wet heath (HH3) which has developed on sloping terrain with a relatively shallow peat cover, generally less than 50 cm in depth

The Ecology Section of Cork County Council has reviewed this chapter, the NIS and supporting ecological survey information. Concerns have been raised as to the potential for the development to give rise to negative effects on habitats of high natural value, including peatland habitats. It is noted that the permanent loss of habitat to facilitate the construction of the project is approximately 40.2 ha, of which 28ha is wet heath.
Overall, it is concluded that there are serious concerns with regard to the proposed development from an ecological perspective as follows.

- Potential for the proposed development to give rise to negative effects on habitats of high ecological value.
- Potential for the proposed development to give rise to negative effects on designated sites.
- Potential for the proposed development to give rise to negative effects on populations of protected species.

The applicant is of the opinion that with mitigation, including the implementation of a habitat enhancement plan the significance of the development can be reduced to moderate. The Ecology Section of Cork County Council has raised a number of concerns with the development as it is currently proposed, which would not accord with this view.

vi. Chapter 6 – Aquatic Ecology

This chapter assesses the impacts of the Development on Aquatic Biodiversity. Where negative effects are predicted, the chapter identifies appropriate mitigation strategies therein. The assessment will consider the potential effects during the following phases of the Development:

- Construction of the Development
- Operation of the Development
- Decommissioning of the Development

Cumulative impacts are considered, and mitigation measures identified. A desktop study and field surveys were carried out. The focus in this section is on the effects on aquatic species and ecology.

The Ecology Section of Cork County Council has reviewed this chapter, the NIS and supporting ecological survey information. Concerns have been raised as follows.

- Potential for the proposed development to give rise to negative effects on freshwater habitats and associated species.
- Potential for the proposed development to give rise to negative effects on populations of protected species.

Due to the potential significant risk of increased contamination and/or sedimentation of watercourses located within the highly sensitive catchments of the Clydagh River and the Sullane River which are known to be inhabited by sensitive aquatic species such as Freshwater

Pearl Mussel and Salmonids, it is recommended that details of environmental monitoring and surface water monitoring programs should be assessed and confirmed by a competent person in terms of specification and design. It is advised that due to the hydrological connection of the site to Salmonid and Freshwater Pearl Mussel habitat, turbidity monitoring should be conducted daily during the construction phase.

The report from the Ecologogy Section identifies gaps in the data submitted and additional details would be required to fully assess the proposal. Given the lack of information it is considered that a full and thorough assessment of the potential impacts and effects the proposal may have on lotic environments populated by sensitive aquatic species cannot be carried out at this time and it is advised that further information be requested in relation to these concerns.

vii. Chapter 7 – Ornithology

This Chapter considers the potential effects of the proposed Development on ornithology. It details the methods used to establish the bird species and populations present, together with the process used to determine their Nature Conservation Importance. The ways in which birds might be affected (directly or indirectly) by the construction and operation of the proposed Development are explained and an assessment is made with regards the significance of these effects.

Baseline field surveys were carried out. The study site supports a number of bird species characteristic of peatland habitats. On the basis of providing breeding and foraging habitat for several Annex I listed and Red-listed species, the site is rated as of County Importance for birds (following NRA 2009 Guidance).

It is noted that there are 32 wind farms within a 20 km radius of the Development (an area of 1,256 km2). Appendix 2.3 of Chapter 2 shows the locations and details of proposed, permitted, and operational wind farms within a 20 km radius of the proposed turbines. Of the 32, 21 No. are operational (182 turbines total), 9 No. are permitted (49 turbines) and 2 No. are proposed (23 turbines). This development if permitted would add 14 turbines.

This chapter notes that with mitigation measures implemented in full, and specifically construction phase mitigation for breeding birds of peatland habitats, as well as measures for White-tailed Eagle and Kestrel (as required) during operation phase, it is considered that the significance of the predicted effects on birds as a result of the proposed Development will range from Imperceptible to Moderate.

The Ecology Section of Cork County Council has reviewed this chapter, the NIS and supporting ecological survey information. Concerns have been raised as to the impact that intensification of windfarm development in this area along with other factors will negatively impact the population of both breeding and wintering hen harrier along with other competing species. It is noted that while the EIAR states that the Habitat Enhancement Plan will mitigate for the loss of breeding habitat for birds on site, the carrying capacity of 28ha (at a minimum) of existing good quality peatland habitat is not equivalent to 9ha of afforested peatland to be restored.

Overall, there are concerns that the degree of assessment provided falls short of elevating all concerns with regard to cumulative effects and the displacement of birds. As such, in order to complete a full and thorough assessment of the potential impacts it is advised that the Bord requests additional information.

viii. Chapter 8 – Soil and Geology

This chapter assesses the impacts of the Development on soils and geology. The assessment considers the potential effects during the following phases of the Development:

- Construction of the Development
- Operation of the Development
- Decommissioning of the Development

Desk survey's and site surveys inform this chapter. Various calculations and assessments were undertaken in order to evaluate the potential impacts of the Development on the soils, geology, and ground stability aspects of the environment at the Site.

The site is characterised as being rural agricultural land generally, however there are a number of established wind farms in the region including Derragh Wind Farm, 189m to the south east and Grousemount Wind Farm c. 5km west of the Site. The Site is characterised by relatively complex (hilly) topography with associated elevations ranging between c. 230 to 423 metres Above Ordnance Datum (m AOD) (Carrigalougha peak; 423m AOD). The geological formations underlying the site are all a variation of Devonian sandstone and siltstone.

Peat, subsoil, and slope stability assessments for the site including the Wind Farm, Turbine Delivery Route and Underground Cable Route are considered. Given the condition of the site in terms of land use practices, peat and soil quality, bedrock quality etc, Land, Soils and Geology as environmental attributes at the site are considered to be of Medium Importance in terms of their significance rating.

It is stated that this chapter comprehensively assesses all scenarios within the Turbine Range. The potential impacts that could arise from the Proposed Development during the construction, operational and decommissioning phases relate to the potential for increased stability issues and suspended sediment concentrations associated with site preparation activities and excavations for the infrastructure elements including the turbine foundations and cable trenches. There will be no change to the potential impacts or predicted effects irrespective of which turbine is selected within the Turbine Range.

It is acknowledged that there will naturally be a change in ground conditions at the site with natural materials such as peat, subsoil and bedrock being replaced with concrete and surfacing materials however it is stated that this is a localised change.

To ensure that the proposed mitigation measures are sufficiently robust with regards to ground stability in particular An Bord Pleanála should be satisfied that the assessments have been carried out to an acceptable standard.

ix. Chapter 9 – Hydrology and Hydrogeology

Chapter 9 describes the existing hydrology and water quality in the receiving environment in the study area and examines the aspects of the hydrology and water quality of the local environment that could be affected by the activities associated with the proposed development.

Desk top studies and filed work has informed this chapter and this chapter of the EIAR is supported by a Site-Specific Flood Risk Assessment, Photographs, Surface Water Hydrochemistry Database, Lab Certification, a Safety Material Datasheet – Clearbore and Conceptual and Info Graphics. Watercourse crossings have been identified. Surface water networks draining the site are mapped and presented and Surface water networks associated with particular turbine locations are presented. The Development is situated within the Lee, Cork Harbour and Youghal Bay catchment (ID: 19, Area: 2182km2). Surface water runoff associated with the Site drains into three sub catchments and/or four river sub basins, or four no. rivers:

- Sub Catchment: Lee (Cork) SC 010, River Sub Basin: (Lee Cork) 010
- Sub Catchment: Lee (Cork) SC 020; River Sub Basin: Toon 010
- Sub Catchment: Sullane SC 010; River Sub Basins: Sullane 010 and Douglas (Sullane) 010.

All surface waters drainage from the Site eventually combine in Carrigdrohid Reservoir, from which waters eventually flow to Cork Harbour and into the Celtic Sea.

The Site is characterised by a relatively extensive network of non-mapped natural and artificial drainage channels.

It is proposed that a silt fencing filtration system will be installed on all existing drainage channels before and for the duration of the cable construction to prevent contamination of any watercourse.

Mitigation measures are outlined to provide for the protection of water quality and prevent the release of sediment and toxic contaminants during construction. Specific details of surface water management mitigation measures are detailed in the CEMP.

The Councils Area Engineer has considered the proposal and notes that surface water drainage proposals are acceptable. The Environment Office has considered the proposal and this chapter and notes that the CEMP includes a dedicated Surface Water Management Plan. The CEMP & Surface Water Management Plan set out the key environmental management issues associated with the construction, operation, and decommissioning of the proposed project, to ensure that during these phases of the project, the environment is protected and impacts on the environment are minimised. A Drainage Engineer will be appointed by the contractor. The Drainage Engineer will have the authority to suspend the works if weather conditions are deemed too extreme for the effective protection of receiving watercourses. Mitigation measures to protect receiving watercourses will be put in place as directed by the Drainage Engineer in response to extreme forecasts.

There is no objection to a grant of permission on environmental grounds as they relate to Water quality. A schedule of conditions is attached to the report of the Environmental Officer.

x. Chapter 10 – Air and Climate

This chapter assesses the impacts of the development on air and on climate.

The assessment of air quality involved the following:
- A desk study of the air quality baseline in the area of the Development and nationally
- Evaluation of potential effects
- Evaluation of the significance of effects
- Identification of measures to avoid and mitigate potential effects

It is submitted that the proposed development is located within Air quality Zone D as designated by the Environmental Protection Agency. This represents rural areas away from large population centres.

An assessment of the potential impact of the proposed development during the construction and decommissioning phase is undertaken as per Section 10.2.7. It is submitted that the main potential sources of impacts on air quality during construction is dust with potential for the generation of dust from excavations and from construction including construction of access roads and hardstands and the trench for the cable ducting for the grid connection. It is also submitted that emissions from plant and machinery, including trucks during the construction of the proposed development are a potential impact and that the construction phase is likely to result in exhaust emission from construction vehicles and transport vehicles associated with the site works. It is further submitted that the impact on air quality from an increase in exhaust emissions will be short-term, slight negative impact.

In respect of the operational phase and decommissioning phase, an imperceptible negative impact is submitted. Construction phase mitigation measures to be employed are outlined per Section 10.2.8.1. In terms of cumulative impacts, it is submitted that negative cumulative impacts in relation to air quality would only occur if a large development was located in the vicinity of the site and in the process of construction at the same time as the development. The developments considered as part of the cumulative effect assessment are described in Appendix 2.3 and 2.5 respectively.

This assessment has identified no potentially significant effects, given the mitigation measures embedded in the design which will be implemented in the development stage.

The assessment of climate involved the following:
- A desk study of the climate baseline in the area of the Development and nationally
- Evaluation of potential effects
- Evaluation of the significance of effects
- Identification of measures to avoid and mitigate potential effects

Carbon losses and savings as a result of the development were examined. It is noted that there will be a long-term, moderate, positive impact on Climate as a result of reduced greenhouse gas emissions.

Chapter 10 has been assessed by the Council's Environment directorate. The cumulative benefit of the proposed wind farm with other renewable energy projects in reducing carbon

dioxide emissions by displacing fossil fuel in the production of electricity is recognised and it is accepted that the potential cumulative impact of the Development and other wind energy developments within 20 kilometres on climate will have a long-term, significant, positive impact.

xi. Chapter 11 – Noise and Vibration

This chapter of the EIAR assesses the effects of the Development from noise impacts. The Environment Office of Cork County Council has reviewed this chapter.

The assessment considers the potential effects during the construction, operational and decommissioning phases of the development. It is submitted that any effects arising as a result of the future decommissioning of the development, are considered to be no greater than the effects during construction.

An overview of the assessment criteria and legislation and guidance review is presented in Section 11.2. It is noted that the final turbine choice will be selected through a commercial tender process and that for the purpose of the Environmental Impact Assessment the Nordex N149 has been selected. It is submitted that the Nordex N149 has been selected as it reflects a worst-case scenario for the technical assessment as it generates the highest sound power levels of all turbines within the proposed range. It is also submitted that cumulative effects of all existing, consented or application-stage wind farms within 3 km of the wind farm have been taken into consideration as the potential for cumulative effects beyond this distance is considered negligible. On this basis the operational effect of the Derragh Wind farm was assessed.

Construction Assessment methodology is detailed per Section 11.2.12. It is submitted that construction noise from wind farm development or decommissioning is not considered an intense activity. The main noise sources will be associated with the excavation of the two borrow pits including blasting and crushing, construction of turbine foundations and hardstands, while lower levels are generated by activity such as access roads, temporary construction compound and a 110Kv substation.

Section 11.3 of the submitted documentation details the baseline description. It is submitted that based on layout, potential noise sensitive locations including occupied and unoccupied were identified from maps and that receptor locations shown in Figure 11.1. were verified through visits to the area surrounding the development. It is noted per page 10 from the planning statement that they are 106 houses within 2km of the proposed turbines and the closest inhabited dwelling (H3) is located 753m from the nearest turbine. It is also noted that there are a cluster of two residential buildings located 225m from T12. It is submitted that in the event that planning consent is achieved, these buildings will be in the control of the applicant and will not be inhabited for the operational period. It is also submitted that these buildings are uninhabited, and the landowner agrees with the above terms.

5 baseline noise survey locations are submitted as selected and measurements were recorded from 6th August to 3rd September,2020. These are referenced as receptor houses, H2, H3, H5, H15 and H36.Table 11.11 and Appendix 11.1. refers. The prevailing background noise

levels are presented as per Table 11.12. with locations of all receptors assessed given as per figure 11.1. It is submitted as per section 11.3.6 that the noise limits for the development are based on the limits contained within the Wind Energy Guidelines 2006 and on the background levels obtained in Table 11.13. It is also submitted that a more stringent limit is applied with the lowest background noise levels obtained at location H2 used as the basis for the assessment at all receptors with a limit of 43 dB(A) being applied for day and night.

Section 11.4 assesses the potential effects in respect of construction noise and decommissioning noise levels. It is noted and submitted that the main noise sources will be associated with the construction of the turbine foundations, turbine hardstands, grid connection, processing in the borrow pit locations, with lesser sources being site access roads and construction of a 110kV substation. Table 11.14 presents typical noise levels for construction works. It is submitted that decommissioning noise levels are expected to be similar to construction levels, but for a shorter period. Table 11.15 presents the predicted construction levels at the nearest receptor to the two borrow excavation and at varying distances due to the development of the grid connection. Section 11.4.1.3 assesses ground vibration and air overpressure. It is stated that the effects of blasting vibration and air overpressure from the development is at a distance greater that 870 m and is therefore considered not significant and will be kept within the recommended guidelines described in Section 11.2.8.3.1. I expect this is a typo and should refer to Section 11.2.12.3.1.

Table 11.16 presents the predicted noise levels from the development as LA90 at varying wind speeds (110.5 hub height). Predicted noise levels for the turbine in the lowest hub height range (102.5m) possible that may be used is given in Appendix 11.5.

Section 11.4.3 undertakes an assessment of the operational noise based on the assumption that all 14 no. turbines are directly down-wind. The predicted noise levels at all receptors are presented as per Table 11.17 and it is submitted that the predicted noise levels are lower than applied limits in all cases. Predicted day and night-time background noise level plots at the 5 monitoring receptors are presented per charts 11.1 to 11.10.

An assessment of the cumulative effects from the development together with the nearby six turbines operational Derragh Wind farm is presented in Section 11.4.4 with predicted cumulative noise levels presented in Table 11.18. It is submitted as per Section 11.4.4.4 that all predicted noise limits are within the applied limits. Table 11.19 presents the margin between the predicted cumulative noise levels and lower fixed limit of 43dB(A).

Construction and operational noise mitigation is submitted as per Section 11.5.1. and 11.5.2. It is noted as per section 11.5.2 that a warranty will be provided by the manufacturer of the turbine selected for the development in order to ensure that the turbine selected does not require a tonal noise correction under best practice. It is also noted and submitted that all 14 no. turbines will have as standard STE to reduce noise levels, so no mitigation is required.

The Councils Environment Directorate advises that having regard to the specific nature of Wind Farm noise impact assessment, the Bord should seek their own acoustic expertise to peer review the methodologies and modelling followed in the noise impact assessment.

xii. Chapter 12 – Landscape and Visual

This chapter assesses the impacts of the Development on landscape and visual amenity during the construction, operation, and decommissioning phases of the development.
This chapter is supported by Visual Impact Assessments at Selected Viewpoints and Cumulative Impact Analysis at Selected Viewpoints.

A classification system was used to determine the significance of the landscape and visual impacts. The landscape baseline represents the existing landscape context and is the scenario against which any changes to the landscape brought about by the proposal will be assessed.

The study area is characterised by a notable variance of landform, which arises from wide, lowland valleys less than 100m AOD, to mountain tops over 800m AOD; ranges mostly angled in a north-east/south-west direction. In terms of drainage, there is an abundance of rivers, streams and, to a lesser extent, loughs, and lakes throughout the study area.
All relevant designations and policies relating the development are identified

Computer generated Zone of Theoretical Visibility (ZTV) maps have been prepared to illustrate where the proposed development is potentially visible from. These are produced for a tip height of 179m and 185m in order to cover the range of potential turbines being assessed (the difference is fractional). The results of the ZTV analysis provide a basis for the selection of Viewshed Reference Points (more commonly abbreviated to viewpoints or VPs), which are the locations used to study the landscape and visual impact of the proposed wind farm in detail. It is stated that the final VP set was informed by public consultation and consultation with the Planning Authorities

The visual impact of a proposed development is assessed using up to 6 categories of receptor type as listed below:

- Key Views (from features of national or international importance).
- Designated Scenic Routes and Views.
- Local Community views.
- Centres of Population.
- Major Routes; and
- Amenity and heritage features

30 viewpoints were selected and assessed. A summary of the visual impact assessment at the viewpoint locations is set out in Table 12.7 (Appendix 1). The visual effects from each vantage point are clearly presented and summarised. The turbine dimension range was considered and in order to examine the full range of potential turbines dimensions and to illustrate the corresponding immaterial impact comparative photomontages at three of the previously selected viewpoints (VP1, VP26 and VP27) were prepared to represent short and mid-distance views of the development in differing contexts. It was not considered necessary to use long distance views (10km+) for this comparative exercise as any variation in turbine dimensions are even less likely to be read at longer distances.

It is noted, in respect of landscape sensitivity designations, the Site straddles the junction of three Landscape Character Types identified in the Cork Development Plan, which emphasises why this area is considered to be a transitional landscape generally. Two of the identified

landscape character types are classified as having 'High' value and 'High' sensitivity, but only with a 'Local' level of importance. Whereas the other relevant character type is assigned Medium value and sensitivity and also a 'Local' level of importance. Notably, none of these Landscape Character Types is considered to achieve the separate and distinct status of a High Value Landscape (HVL).

Overall, a detailed assessment has been provided as to the likely visual impacts of the proposed development on the landscape. The significance of effect of each turbine was examined and there was deemed to be a slight impact from 3 vantage points.

This is considered to be an intensively managed working landscape where wind existing energy development is already a strongly characteristic in combination with forest plantations and upland farming.

It is concluded in chapter 12 that within the context of the wider study area the proposed development is perceived as part of the Derragh and Cleanrath cluster which is physically and visually discrete from the other main clusters of wind farm developments within the study area (described as the Milllstreet Cluster and Kilgarvan cluster herein). Within this wider context, the cumulative effect is deemed to be Low.

xiii. Chapter 13 – Material Assets

This chapter assesses the impacts of the Development on material assets. The material assets considered in this chapter include:

- Land Use - Agriculture
- Land Use - Forestry
- Telecommunications
- Air Navigation
- Quarries
- Utilities (gas, water, waste)

It is noted that the total land-take of the Development, including the Site Access Roads, Turbine Hardstands, Turbine Foundations, Grid Connection Route, Turbine Delivery Route nodes and sub-station is 135 hectares. The Site is 667 hectares therefore the total land take is 20% of the Site. The proposed Site Access Roads and upgrade to existing roads will improve access for surrounding agricultural use.

The Site contains 154 hectares of forestry which is classified as commercial forestry. The proposed windfarm infrastructure layout (i.e., roads, Turbine Hardstands, etc.) affects forestry and 6 No. turbines are located within forestry (turbines 3,4,5,6,10,11).

The implementation of mitigation measures will ensure no interference with communication links. Therefore, no significant effects are predicted on telecommunications or radio reception as a result of the Development.

No significant impacts are predicted in terms of air navigation. In adherence to IAA Safety Regulations and ICAO Annex 15, aeronautical obstacle warning light schemes will be installed

as requested by IAA. Co-ordinates of ground and tip height elevations at each wind turbine location as constructed will be provided to the IAA. IAA will be notified of the provision of the intention to commence crane operations within a minimum of 30 days prior to erection.

While sub-base and base course materials for the Access Track and Turbine Hardstand construction will be sourced on site from borrow pits, crushed stone will be imported for the final running layer. The crushed stone (16,912m3) for construction of the Development will come from licenced quarries in the locality such as:

- McGroup Keim Quarry
- Coppeen Concrete, Enniskeane
- Mid-Cork Quarries, Gortnadiha
- McSweeney Bros, Kilmichael
- Keohane Readymix, Ballygurteen
- Murray Bros Tarmacadam Ltd, Ardcahan

These quarries will also be the source of crushed stone and concrete for widening works to the turbine haul route (N22 turnaround location, temporary bridge over Sullane River, L-3405-0 and L-7405-0), Turbine Foundations and for grid connection works. It is noted that there will be a slight permanent negative residual impact on natural resources in the area.

xiv. Chapter 14 –Cultural Heritage

Chapter 14 of the EIAR presents a baseline study of and impact assessment on, the cultural heritage of the site and the surrounding region. Site visits and desk studies were undertaken to identify and record any archaeological, architectural, and cultural heritage assets which may be affected by the Development. The significance of effect on an asset is considered by establishing the asset's value/sensitivity, and how that may be impacted based on the proposed design of the Development.

The wind farm layout was informed by the archaeological desktop studies and fieldwork undertaken during the design and assessment phases and the development was designed to avoid the known locations of the archaeological monuments within the PDS. The layout was also designed to avoid any potential significant impacts on the alignments of the two wedge tombs (CO069-003----and CO069-093----) located within the site. There will be no direct impact by the proposed development on any known archaeological monument.

However, the development site does contain potential for subsurface archaeology associated with the known archaeological monuments and the scale of the development and the nature of the landscape. The report has also assessed the impact of the proposed development on the indirect or visual impact the archaeological monuments within the PDS and the monuments in the surrounding area. The visual impact on the wedge tomb and CO069-093---- within the PDS and Enclosure CO069-002 immediately outside the PDS was deemed to be moderate while the remainder, including the wedge tomb CO069-003 within the PDS, were deemed slight. Given the nature of the wind farm turbines there are no mitigation measures that can address these visual impacts, but it is noted that they will be reversed following the decommissioning phase.

The indirect visual impact on archaeological monuments in the wider landscape during the operation phase, including monuments with certain celestial alignments and National monuments and sensitive cultural heritage sites were also considered. The proposed development will be visible from various archaeological monuments and cultural heritage assets in the wider landscape but will not result in likely significant indirect negative impacts on the settings or alignments of archaeological monuments and their alignment within the wider landscape.

The cumulative effect was assessed following a review of the wind farm developments permitted /in place in the surrounding area.

The report provides mitigation measures to alleviate negative impacts on archaeology and cultural heritage during the construction, operation, and decommissioning stages of the development.

The mitigation measures presented are outlined and include pre-construction and construction phase archaeological site investigations as well as protection measures for known monuments.

The County Archaeologist has reviewed chapter 14. It is noted that there are 3 archaeological monuments within the proposed development site (PDS) – 2 wedge tombs (CO069-003 & 93) and field boundary CO069-070) which has no surface evidence. The assessment has carried out documentary research and field surveys of the proposed development site. Some areas have restricted access. The field inspection carried out as part of the assessment identified one new potential archaeological site – a standing stone 70m south of T13. There are a number of archaeological sites within the study area (1km) including CO069-002 Enclosure and particularly in the wider landscape (10km). Many of these sites are associated with the Bronze age indicating a strong presence in the area during this period. Some are burial sites with two wedge tombs occurring within the PDS others are ritual sites – stone circles, alignments, and radial stone cairns.

The County Archaeologist is satisfied with the Archaeological and Cultural heritage assessment in the EIAR regarding archaeology and cultural heritage. It has assessed comprehensively the impact of the proposed development on the archaeological and cultural heritage and demonstrated there will be no direct impact on any know archaeological monuments. There will be moderate to slight visual impact on the monuments within and adjacent to the PDS which is unavoidable given the nature of the development. The impact on the archaeology in the wider landscape was not deemed significant. The assessment is agreed with, and it is recommended that all the mitigation measures outlined are attached as conditions if planning permission is to be granted.

xv. Chapter 15 – Traffic and Transportation

Chapter 15 of the EIAR sets out the effect that construction traffic would have on the road network, and the consequent effects that that could have on people and communities nearby. Potential effects associated with wind farm development are presented in two key forms: those from the transport of wind turbine components, and those as a result of the import of construction material, equipment, and personnel. A computer model of the turbine delivery vehicles is used to identify locations along the turbine component delivery route where road improvements will be required to facilitate delivery for abnormal loads between Ringaskiddy Port and the wind farm site.

The haul route is identified and set out. It is stated that a detailed Traffic Management Plan will be agreed with the relevant authorities including the community and will detail the measures to be implemented during the temporary construction/decommissioning phases. No significant effects related to operational phase traffic will occur due to the minimal traffic that would be generated during that phase of the Development.

The Area Engineer has reviewed chapter 15. He notes that the access road layout is acceptable. He recommends conditions which should be attached in the event of a grant of planning permission. It is noted that a section of the proposed turbine access track coincides with a section of public road L-34011-20. This section is approximately 2km in length from a point north of T7 and running south past T3.

In terms of the turbine delivery route it is noted that it is proposed to deliver the turbines from Ringiskiddy to the site. The route requires the deliveries to travel west of the Cork County Bounds before turning around and approaching Ballyvourney from the west. The route will cross over a temporary bridge on the River Sullane, follow the main Ballyvourney to Coolea Road west before turning south along the L- 3405 and west onto the L-7405. Significant improvements will be required on the two latter roads. These are indicated in the application. Conditions are recommended in this regard.

From the turbine site the cable route follows the L-7405 west for approximately 3.1km, L-7404 for 160m, L-3400-32 for 870m, L-7400 for 2700m, L-74001-0 for 955m. The remainder of the route is in Kerry or within the existing wind farm site north of the N22. Conditions are recommended in terms of the cable route.

The main access point to the site for the delivery of materials is off the L -3402 at Derryfineen. It is likely that all concrete deliveries, other construction material, site traffic etc will use this access. It is likely that construction traffic could approach this entrance from either Ballingeary or Renaniree. Works are planned for the L-3402 and it is considered that the applicant should contribute to these planned works.

xvi. Chapter 16 – Major Accidents/Disasters

This section of the Environmental Impact Assessment Report (EIAR) describes the likely significant effects on the environment arising from the vulnerability of the proposed Gortyrahilly Wind Farm project (the "Development") as detailed in Chapter 2 to risks of major accidents and/or natural disasters.

The risk of a major accident and/or disaster during the construction of the Development is considered 'low' in accordance with the 'Guide to Risk Assessment in Major Emergency Management' (DoEHLG, 2010).

xvii. Chapter 17 – Interactions of the Foregoing

Chapter 17 of the EIAR outlines interactions and inter-relationships of various environmental aspects and details these in a table format. It states that the EIAR has considered these interaction s and inter-relationships through the assessment, first through the design of the wind farm site, the grid route and turbine delivery route to avoid impacts where possible and also in the definition of suitable mitigation measures to minimise potential impacts. The EIAR concludes that the significant impacts associated with the inter-actions of environmental effected will be avoided due to the implementation of mitigation measures outlines throughout the EIAR.

7) Natura Impact Statement (NIS).

A Natura Impact Assessment Report has been submitted. This has been reviewed by Cork County Council's Ecology Section (see full body of report under Appendix C below). The Ecologist highlights significant concerns in relation to the potential impacts and effects of the proposed windfarm development. The main concerns are the siting of the proposal within an area of high ecological value and in relation to the inadequacy of the information and assessment provided within both the NIS and EIAR.

Furthermore, the Ecology Section considered the proposal to offset the loss of habitat as a result of a windfarm through the creation of significantly smaller habitat management/enhancement area (9ha) is highly inadequate. It is noted that a large proportion of this area has been assessed as existing Annex I habitat, with proposed windfarm infrastructure dissecting the same. No assessment as to the potential operational impacts of the windfarm on this area has been thought-out e.g. underlying peatland hydrology etc.

8) Conclusion

The primary document for a Planning Authority in determining whether or not any proposal that comes before the authority is in accordance with the proper planning and sustainable development of an area is the Cork County Development Plan 2022. This sets out the policies, objectives and vision for the County.

Objective ET 13-2 of the Development Plan supports Ireland's renewable energy commitments as outlined in Government Energy and Climate Change policies by facilitating the development of renewable energy sources. Equally, it is an objective of the Development Plan to protect and where possible enhance areas of local biodiversity value, ecological corridors and habitats that are features of the County's ecological network. It is the Councils view that the facilitation of this proposal would ultimately result in the loss of a significant area of Annex I Habitat and thus further reduce the extent of these diminishing and pressurized habitats at both a County and National level.

The Ecology report from Cork County Council recommends that development on intact peatland habitats and upland habitats of high natural value is avoided. Taking this into consideration and noting the current provided extent of high valued habitats to be lost and impacted by the proposal while considering the lack of information pertaining to all site infrastructure and works and their associated impacts, it is considered that this proposal should be refused based on its current layout as it is contrary to Objectives BE 15-2 and ET 13-7 of the County Development Plan.

Should the Bord decide to grant approval, the Ecology Section recommends that the following Turbines and associated infrastructure at a minimum be removed from the proposal design and / or relocated to be entirely within areas of low valued habitat:

- Turbines 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12 and 13 along with the proposed substation area and borrow pit A – located wholly or partially within Wet Heath and/or Blanket Bog;

- Access road through Oak-birch-holly woodland and all internal road networks be relocated to areas of low valued habitat.

However, conditions designed to modify a development or to ensure the details of the development, should not substantially alter the nature of the development proposed. The development, as modified by conditions, should remain essentially that for which planning permission was sought. It is therefore submitted that conditions substantially altering the nature of the proposal should not be imposed. It is also submitted that a split decision is unacceptable as the substantial proportion of the proposed development (12 out of 14 turbines) is proposed to be omitted.

Having regard to the above, Cork County Council recommends a refusal as follows:

> The proposed development would contravene materially development objective BE 15-2 of the Cork County Development Plan 2022 the aim of which is to protect and where possible enhance areas of local biodiversity value, ecological corridors and habitats that are features of the County's ecological network. The facilitation of this proposal would ultimately result in the loss of a significant area of Annex I Habitat and thus further reduce the extent of these diminishing and pressurized habitats at both a County and National level. It is considered that the impact and assessment provided in relation to loss of habitats listed as Annex I Habitats under the Habitats Directive and habitats of high natural value has been significantly underestimated. This would contravene materially development objective ET 13-7 of the Cork County Development Plan which states *"commercial wind energy development is open to consideration in these areas where proposals can avoid adverse impacts on: Natura 2000 sites (SPA's and SAC's), Natural Heritage Areas (NHA'S), proposed Natural Heritage Areas and other sites and locations of significant ecological value".*

9) Conditions

If An Bord Pleanála, (being the 'competent authority') consider granting planning permission for the proposal, a schedule of suggested conditions, as requested in the Advice Guidelines that accompanied the publication of the Planning and Development (Strategic Infrastructure) Act 2006 is attached **(Appendix A).** However, the conditions that are recommended assume that any issues forming the basis of further information requests have already been dealt with. Therefore, it is proposed to provide recommendations for conditions more as a topic heading, rather than an exhaustive list.

If An Bord Pleanála, (being the 'competent authority') consider that further information is required, a schedule of items as requested in the Advice Guidelines that accompanied the publication of the Planning and Development (Strategic Infrastructure) Act 2006 is attached **(Appendix B).**

10) Community Gain

Section 37G of the 2006 Planning and Development (Strategic Infrastructure) Act allows An Bord Pleanála to attach conditions requiring the "construction of financing, in whole or in part of the construction of a facility, or the provision or the financing, in whole or in part, of the provision of a service..." in the area where the development is situated, provided it would constitute a substantial gain to the community. The Planning Authority has no objection to a condition being attached in relation to community gain.

In this regard it is noted that the applicant has indicated willingness to contribute in this way. Reference is made to the fact that "The Applicant is also committed to a 'Community Benefit' package. This package will be advertised annually and managed by the local community or an

independent body on behalf of the local community. The purpose of the community fund is to enable the local community to share in the benefits of the Development. FuturEnergy Ireland and SSE's community benefits funds typically support local projects, with funds allocated to projects from all aspects of the community." The Planning Authority would have no objection to the establishment of such a fund.

It is recommended to the Board that should it decide to grant permission for the proposed development, a condition should be attached clearly detailing the structure, particulars, and procedures under which funding and grants are to be administered and implemented.

11) General Development Contributions

General contribution applies in respect of the proposed buildings on site control buildings TSO Control Building (411 m^2) and IPP Control Building (104 m^2). General contributions shall be levied at a rate of €16.32 per sqm.

The total general contributions due to Cork County Council would be calculated as: 515m^2 x €16.32 = €8,404.80

Total suggested general contribution = €8,404.80

12) Special Development Contribution

The main access point to the site for the delivery of materials is off the L -3402 at Derryfineen. It is likely that all concrete deliveries, other construction material, site traffic etc. will use this access. It is likely that construction traffic could approach this entrance from either Ballingeary or Reinaree. The L-3402 is in fair condition however works are required. To address this the recommendation of the Area Engineer is to seek a Special Contribution towards works. This is calculated as follows:

Length of road from Reinaree to Mouth of the Glen – 5km.

Cost of upgrading road will be €660,000.

The applicant should contribute 50% to this cost i.e. €330,000 towards upgrading the L-3402.

Total suggested special contribution = €330,000

13) Bond

It is recommended by the Area Engineer that the developer provide a bond to Cork County Council to the Value of **€300,000** to ensure satisfactory reinstatement of any public roads that may be damaged by the development.

14) Appendix A: Suggested Conditions

i. Area Engineer

Turbines

- The L-34011-20 shall remain public road.
- The applicant shall locate T7 so that no part of the foundation lies beneath the public road.
- The full 2km section in question shall be fully reinstated, regraded with Cl 806 wetmix and double surface dressed.
- Site traffic is not permitted to use the L-34011-20 outside of this section.

Road widening:

- All culverts and surface water drains are to be replaced across the full width of the road. A report detailing each such crossing, including before and after photographs is to be submitted to the Roads Authority each week while this element of the work is in progress.
- All roadside drains are to be maintained or relocated. A report detailing each such drain, including before and after photographs is to be submitted to the Roads Authority each week while this element of the work is in progress.
- Fencing/bunding details are to be agreed with the Roads Authority.
- The entire road width is to be regraded and re-surfaced once the widening work is complete and prior to turbine delivery.
- All over-width areas are to be reinstated to the original condition upon completion of turbine delivery.
- The temporary river crossing over the River Sullane is to be removed and the area reinstated upon completion of turbine delivery.

Cable Route:

- All roads to be fully regraded across their full width with Cl 806 wetmix and double surface dressed.
- No cable is to be attached to or placed on top of any bridge structure.
- All culverts and surface water drains crossed by the cable route are to be replaced across the full width of the road. A report detailing each such crossing, including before and after photographs is to be submitted to the Roads Authority each week while this element of the work is in progress.
- All roadside drains are to be maintained or relocated. A report detailing each such drain, including before and after photographs is to be submitted to the Roads Authority each week while this element of the work is in progress.
- All diversion routes necessary for the works are to be maintained by the contractor for the duration of the diversion. Maintenance shall include hedge cutting, pothole filling and full road reinstatement where necessary at the direction of the Road Authority.
- All joint bay covers are to be located off the carriageway.
- No delivery traffic nor site traffic shall pass through Coolea village as part of this work – access is only to be from the wind farm site itself.

ii. **Ecology Section**

No.	Condition	Reason
	Turbines 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12 and 13, and their associated connection tracks, hardstanding areas etc shall be omitted from the proposed scheme.	In the interests of minimising negative impacts on habitats and species of high biodiversity value within the site.
	Prior to the commencement of development, an Ecological Protection Plan shall be submitted to, and agreed in writing with, the planning authority. The Plan shall include the following: a) Development of a habitat's protection plan for the overall site. b) Specific proposals to deal with the Hen Harrier, Golden Plover, White-tailed Sea Eagle, Kerry Slug and Bats during the construction and operational phases. c) Ongoing monitoring of the conservation status of protected habitats and species within the site. The developer shall review usage by protected species, with a focus on birds and bats, of the wind farm site and document any casualties through the monitoring programme. An annual report on the ecological monitoring shall be submitted to the planning authority including for seven years post commissioning of the project.	To protect the ecological value of the site.
	Prior to the commencement of development, the applicants shall submit a Conservation and Habitat Management Plan for the site. This should be based on revised design of the proposal. The plan shall provide details and programmes for the implementation of all habitat management / enhancement proposals	To minimise impacts on habitats and species of biodiversity value within the site.

	required to mitigate / compensate for the loss of or damage to habitats of biodiversity value, including habitats of value to protected faunal species. The plan shall include a map identifying the areas to be managed and shall also provide detailed information in relation to the measures to be implemented to achieve this. The plan shall also include a timeline for implementation of described measures and shall provide for ecological monitoring of management/enhancement works to examine the effectiveness of the proposal. The plan shall be prepared by a suitably qualified ecologist.	
	Prior to construction works being carried out between March and August, a survey for breeding birds shall be carried out by a suitably qualified ornithologist. The survey shall cover the area within a boundary of 500m of the works to be carried out during the above period. No construction works shall be carried out during the above period within 500m of a presenting breeding site and / or nest without the consent in writing of the planning authority.	In the interest of wildlife protection.
	A survey for breeding sites and resting places of protected terrestrial species, in particular Bats (all roost types), Otter, Badger, Red Squirrel and Pine Marten, will be carried out prior to construction works commencing. If these features are found, then appropriate mitigation measures shall be submitted to and agreed in writing with the planning authority, prior to commencement of development. Any mitigation measures in relation to otter or bat populations shall be carried out only under licence from the National Parks and Wildlife Service and details of any such	In the interest of wildlife protection.

	licence shall be copied to the planning authority.	

iii. Environment (Surface Water and Ground Water)

No.	Condition	Reason
	The construction of the development shall be managed in accordance with a Construction & Environmental Management Plan, which shall be submitted to, and agreed in writing with Cork County Council prior to commencement of development. This plan shall include a detailed Surface Water Management Plan.	In the interests of environmental protection.
	During the construction phase operations on site shall be carried out in such a manner that no polluting material, rubble, waste material or contaminated surface water enters any adjacent watercourses or public roadway around the site. No burning of waste material shall take place on site.	In the interests of environmental protection.
	All watercourses in or adjacent to the works area shall be monitored on a daily basis by the Drainage Engineer, or designate, to ensure they are not being impacted by silt/sediment laden storm water run-off from works area. A record of this monitoring shall be maintained on site.	To protect surface water quality.
	All over ground tanks containing hydrocarbons shall be contained in a waterproof bunded area, the capacity of the bund is to be the greater of the following: 110% of the largest tank size or 25% of total volume stored in the bunded area. All valves on the tank shall be contained within the bunded area. The bunded area shall be fitted with a locking	In the interests of environmental protection

	valve that shall be opened only to discharge storm water. The developer shall ensure that this valve is locked at all times.	
	Hydrocarbon spill kits shall be in place on all site vehicles/plant. Suitable interceptor drip trays shall be used when refuelling vehicles/plant & when vehicles/plant are parked. No servicing of vehicles/plant shall be carried out on site.	To prevent water pollution
	All drainage and sediment /silt traps shall be in place before any other works are undertaken on the site. All work shall be carried out in favourable weather conditions to minimise the generation of silt & fines.	To prevent water pollution.
	Silt fencing shall be constructed to protect watercourses on site from run-off of silt laden water prior to commencement of development. These silt fences shall be maintained as required during the construction phase, & on an ongoing basis, until the site is fully vegetated & the risk of silt run-off is minimised.	To protect water quality.
	The service roads shall be cambered to deflect surface water to the adjoining lands for attenuation. Service roads shall not discharge directly to open drains on site.	To prevent water pollution.

iv. Environment (Air, Noise and Vibration)

No.	Condition	Reason
	Wind turbine noise arising from the proposed development, by itself or in combination with any other permitted wind energy development in the vicinity, shall not exceed the greater of: (i) 5dB (A) above background noise levels or (ii) 43 dB(A) L90 10 mins when measured externally at noise sensitive locations.	In the interest of residential amenity.
	A noise compliance monitoring programme shall be submitted for agreement with the planning authority within 3 months of the commissioning of the proposed development. All results should be submitted to the Planning Authority within 1 month of the completion of any survey. The developer shall carry out any additional noise mitigation measures as may be deemed necessary following a review of such survey.	In the interest of residential amenity.
	A designated member of the company's staff shall interface with the Planning Authority or member of the public in the event of complaints or queries in relation to environmental emissions. Details of the name and contact details and the relationship to the operator of this person shall be available at all times to the Planning Authority on request whether requested in writing or by a member of staff of the Planning Authority at the site.	In the interest of residential amenity.
	The construction of the development shall be managed in accordance with a Construction Environmental Management Plan which shall be	In order to protest the Environment and Local amenities during construction.

	submitted to and agreed in writing with the Planning Authority prior to the commencement of the proposed development. In relation to air and noise, this plan shall provide details of the construction practice for the development including. (a) Proposals for the suppression of on-site noise (b) Proposals for the suppression of dust on site (c) Proposals for the suppression of vibration (d) Proposals to minimise any odours. This plan shall include a comprehensive monitoring plan to include inter alia noise, vibration, and dust with regular reporting to the planning authority.	

v. Archaeology

No.	Condition	Reason
	Prior to the commencement of the development the applicant shall engage the services of a suitably qualified archaeologist (licensed under the National Monuments Acts 1930–2004) to carry out a geophysical survey in the greenfield area impacted by T9, associated hardstand and access roads followed up by a program of archaeological testing (licensed under the National Monuments Acts 1930–2004) targeting the results of the geophysical survey. The result of the geophysical shall be submitted to the Planning Authority with a testing strategy for written approval prior to applying for a licence to test the site. No sub-surface work shall be	To protect the archaeological heritage of the area.

	undertaken in the absence of the archaeologist without his/her express consent. Where archaeological material is shown to be present, avoidance, preservation in situ will be the preferred option. The Planning Authority and National Monuments Service (NMS) of the Department of Housing, Local Government and Heritage will advise the Applicant with regard to these matters. The consultant archaeologist is advised to contact the National Monuments Service and Local Authority Archaeologist to agree a mitigation strategy. No site preparation or construction work shall be carried out until after the archaeologist's report has been submitted and permission to proceed has been granted.	
	The applicant is required to engage the services of a suitably qualified archaeologist to monitor under licence from the National Monuments Service (NMS) of the Department of Housing, Local Government and Heritage all ground works associated with the development in green field locations, the grid route and turbine delivery work areas. No ground works/ construction works /soil stripping in these areas shall take place in the absence of the archaeologist. The ground works /removal of topsoil shall carried out under the direction of the appointed archaeologist. The appointed archaeologist shall carry out an intermittent monitoring /watching brief of the all other areas of ground works including the excavation for the grid connection trench on public roadways and forest roads. The areas of monitoring	To protect the archaeological heritage of the area.

	and intermittent shall be agreed in advance with the County Archaeologist Mary Sleeman in advance of applying for a licence to the National Monuments Service. In the event archaeological material is found during the course of monitoring, the archaeologist shall have work on the site immediately stopped and notify the County Archaeologist and National Monuments Service. All archaeological features/deposits shall be hand-cleaned and clearly visible and no further soil removal shall take place pending a decision as to how best to deal with the archaeology. The developer shall be prepared to be advised by the Local Authority Archaeologist and the National Monuments Service in regard to any necessary mitigating action (e.g. preservation in situ, or excavation) and allow enough time to facilitate implementation of the agreed mitigation measures. The applicant shall facilitate the archaeologist in recording any material found. The Planning Authority and the National Monuments Service shall be furnished with a report describing the results of the monitoring.	
	The applicant is required to engage the services of a suitably qualified archaeologist to carry out a systematic advance programme of archaeological field-walking surveys within construction areas in forestry plantations following tree felling. Any archaeological features identified shall be recorded and then securely cordoned off while the County Archaeologist and the National Monuments Service are consulted to determine further appropriate mitigation measures, which may include	To protect the archaeological heritage of the area.

	preservation in situ (by avoidance) or preservation by record (archaeological excavation).	
	A buffer zone of 50m shall be established by a suitably qualified archaeologist around the monuments Wedge Tomb CO069-003----, Wedge Tomb CO069-093----and Enclosure CO069-002---- (withing the development site) and the newly identified standing stone 70m to the south of T13 . The buffer zone shall be securely cordoned off and clearly signed as 'No Entry: Archaeological Area' for the duration of the construction phase. Prior to the commencement of the development a site layout plan indicating the buffer zone and archaeological monument and photographic evidence of the buffer zone in place shall be submitted to the Local Authority for written approval. The locations of these monuments and buffer zones shall be identified as 'no-entry' areas during the construction phase site inductions. No construction works, stockpiling of topsoil etc, or any development, or landscaping and/or planting should take place within the designated buffer zone. No trees, plants etc shall be removed from this buffer zone. Subsequent to the completion of the development the buffer zone shall remain around the Archaeological Monument, i.e. no landscaping and/or planting should take place within the buffer zone. Planting within this buffer zone shall be limited to shallow-rooted plants and/or grass.	To protect the archaeological heritage of the area.

	All signage erected within the public realm during the construction phase will include Irish and English text.	To protect the archaeological heritage of the area.

15) Appendix B: Suggested items of Further Information

i. Ecology Section

(1) The proposed locations for Turbines 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12 and 13, and their associated connection tracks, hardstanding areas etc shall be omitted from the proposed scheme and revised locations considered. It is considered that no such development take place on intact peatland habitats, degraded peatland habitats or any habitats of high natural value but should be entirely within areas of low valued habitat. The proposed access road through Oak-birch-holly woodland and all internal road networks be relocated to areas of low valued habitat.

(2) An Ecological Protection Plan shall be submitted to, and agreed in writing with, the planning authority. The Plan shall include the following:

d) Development of a habitat's protection plan for the overall site.

e) Specific proposals to deal with the Hen Harrier, Golden Plover, White-tailed Sea Eagle, Kerry Slug and Bats during the construction and operational phases.

f) Ongoing monitoring of the conservation status of protected habitats and species within the site.

g) Set out a procedure to monitor usage by protected species, with a focus on birds and bats, of the wind farm site and document any casualties through the monitoring programme. Provision shall be made for the submission of an annual report on the ecological monitoring to the planning authority including for seven years post commissioning of the project.

(3) Submit a Conservation and Habitat Management Plan for the site. This should be based on revised design of the proposal. The plan shall provide details and programmes for the implementation of all habitat management / enhancement proposals required to mitigate / compensate for the loss of or damage to habitats of biodiversity value, including habitats of value to protected faunal species. The plan shall include a map identifying the areas to be managed and shall also provide detailed information in relation to the measures to be implemented to achieve this. The plan shall also include a timeline for implementation of described measures and shall provide for ecological monitoring of management/enhancement works to examine the effectiveness of the proposal. The plan shall be prepared by a suitably qualified ecologist between March and August, a survey for breeding birds shall be carried out by a suitably qualified ornithologist. The survey shall cover the area within a boundary of 500m of the works to be carried out during the above period

(4) A survey for breeding sites and resting places of protected terrestrial species, in particular Bats (all roost types), Otter, Badger, Red Squirrel and Pine Marten, will be carried out prior to construction works commencing. If these features are found, then appropriate mitigation measures shall be submitted to and agreed in writing. Any mitigation measures in relation to otter or bat populations shall be carried out only under licence from the National Parks and Wildlife Service and details of any such licence shall be copied to the planning authority.

ii. Environment (Air, Noise and Vibration)

(5) The respective number and distances of all noise sensitive receptors within 500m, 1000m,1500m and 2000m of the turbines should be presented and quantified.

(6) The referenced noise sensitive receptors that each background noise monitoring location is considered to be representative off should be quantified and also shown on a suitably scaled map.

16) Appendix C- Internal Reports

i. Area Engineer

SID Report on Gortyrahilly Wind Farm

Turbines

The access road layout and surface water drainage proposals are acceptable.

A section of the proposed turbine access track coincides with a section of public road L-34011-20. This section is approximately 2km in length from a point north of T7 and running south past T3.

The following conditions should apply:

- The L-34011-20 shall remain public road.
- The applicant shall locate T7 so that no part of the foundation lies beneath the public road.
- The full 2km section in question shall be fully reinstated, regraded with Cl 806 wetmix and double surface dressed.
- Site traffic is not permitted to use the L-34011-20 outside of this section.

Sub-station and Control Building

No objection to same – it is located away from the public road. Holding tank details are acceptable.

Turbine Delivery Route.

It is proposed to deliver the turbines from Ringaskiddy to the site. The route requires the deliveries to travel west of the Cork County Bounds before turning around and approaching Ballyvourney from the west. The route will cross over a temporary bridge on the River Sullane, follow the main Ballyvourney to Coolea Road west before turning south along the L-3405 and west onto the L-7405. Significant improvements will be required on the two latter roads. These are indicated in the application.

The following conditions should be applied to the road widening:

- All culverts and surface water drains are to be replaced across the full width of the road. A report detailing each such crossing, including before and after photographs is to be submitted to the Roads Authority each week while this element of the work is in progress.

- All roadside drains are to be maintained or relocated. A report detailing each such drain, including before and after photographs is to be submitted to the Roads Authority each week while this element of the work is in progress.
- Fencing/bunding details are to be agreed with the Roads Authority.
- The entire road width is to be regraded and re-surfaced once the widening work is complete and prior to turbine delivery.
- All over-width areas are to be reinstated to the original condition upon completion of turbine delivery.
- The temporary river crossing over the River Sullane is to be removed and the area reinstated upon completion of turbine delivery. A bond to the value of €150,000 shall be provided to ensure that this reinstatement takes place.

Cable/Connection Route.

From the turbine site the cable route follows the L-7405 west for approximately 3.1km, L-7404 for 160m, L-3400-32 for 870m, L-7400 for 2700m, L-74001-0 for 955m. The remainder of the route is in Kerry or within the existing wind farm site north of the N22.

The following conditions should apply for the cable route:

- All roads to be fully regraded across their full width with Cl 806 wetmix and double surface dressed.
- No cable is to be attached to or placed on top of any bridge structure.
- All culverts and surface water drains crossed by the cable route are to be replaced across the full width of the road. A report detailing each such crossing, including before and after photographs is to be submitted to the Roads Authority each week while this element of the work is in progress.
- All roadside drains are to be maintained or relocated. A report detailing each such drain, including before and after photographs is to be submitted to the Roads Authority each week while this element of the work is in progress
- All diversion routes necessary for the works are to be maintained by the contractor for the duration of the diversion. Maintenance shall include hedge cutting, pothole filling and full road reinstatement where necessary at the direction of the Road Authority.
- All joint bay covers are to be located off the carriageway.
- No delivery traffic nor site traffic shall pass through Coolea village as part of this work – access is only to be from the wind farm site itself.

Material Delivery Route

The main access point to the site for the delivery of materials is off the L -3402 at Derryfineen. It is likely that all concrete deliveries, other construction material, site traffic etc will use this access. It is likely that construction traffic could approach this entrance from either Ballingeary or Reinaree. The L-3402 is in fair condition however works are planned for the future. The applicant should contribute to these planned works.

The value of this special contribution is calculated as follows:

Length of road from Reinaree to Mouth of the Glen – 5km.

Cost of upgrading road will be €660,000. The applicant should contribute 50% to this cost i.e. €330,000 towards upgrading the L-3402.

Bond

The applicant should put in place a bond to ensure satisfactory maintenance of the road network affected by the works for the duration of the project and to ensure completion of all road works to the satisfaction of the local authority.

The value of this bond should be €300,000.

James Dwyer, SEE

10th October 2022

ii. Ecology Section

Section 37E of the Planning and Development Act 2000 – Gortyrahilly Windfarm Strategic Infrastructure Development - An Bord Pleanála Ref No ABP-314602-22.

Cork County Council Ecology Office Report on Gortyrahilly Windfarm

This report relates to proposals for the development of new 14 turbine windfarm development, grid connection and all associated site works and considers potential for the proposals to give rise to impacts on sites designated for nature conservation, on habitats of high conservation value, and on protected species, having regard to information which has been provided in the Environmental Impact Assessment Report (EIAR) and the Natura Impact Statement (NIS).

Cork County Council Ecology Office has reviewed specific chapters of the EIAR, the NIS and the supporting ecological survey information which has been provided by the applicants prior to completing this report. No site visit has been made in relation to the proposal nor were all chapters of the EIAR, drawings and supporting documents reviewed due to time constraints. The supporting documentation needs to be cross checked for consistency with drawings and between the EIAR, NIS and CEMP.

The primary considerations from an ecological perspective and to which particular attention is paid to in this report are as follows:

- Potential for the proposed development to give rise to negative effects on habitats of high natural value, including peatland habitats, and habitats deemed to be a potential critical resource (foraging, commuting and/or breeding habitat) to protected species.
- Potential for the proposed development to give rise to negative effects on conservation objectives of Natura 2000 sites, in particular the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment Special Area of Conservation [000365] and Mullaghanish to Musheramore Mountains Special Protection Area [004162].
- Potential for the proposed development to give rise to negative effects on protected invertebrates, terrestrial mammals, and avian species; and
- Potential for the proposed development to give rise to negative effects freshwater habitats and species, including Salmonids and Freshwater Pearl Mussel.

All impacts / potential impacts of the proposal on habitats and species to be considered of particular concern to this office are discussed further below. It should be noted that this report does not include an Appropriate Assessment of the project and provides a summary the main underlying issues identified by this Office with the proposal and the inadequacy of the material submitted.

Brief Project Description

Project Elements: The proposed project development comprises the following.

- Construction of 14 No. wind turbines with an overall ground to blade tip height ranging from 179m to 185m inclusive. The wind turbines will have a proposed rotor diameter ranging from 149m to 155m inclusive and a hub height ranging from 102.5m to 110.5m inclusive. All 14 No. wind turbines and concrete plinths are to be removed during decommissioning.
- Construction of permanent turbine hardstands and turbine foundations. The Turbine Foundations are proposed to range between 20m to 25m in diameter and have a proposed depth ranging from 2.8m to 3.2m. The total Turbine Hardstands area is proposed to be 4,740m^2 and includes the main crane hardstand (2,770m^2), the component set down area (1,290m^2), the assist crane hardstands (290m^2) and the vehicle parking (390m^2). Overall, this gives a proposed surface area of 65,380m^2 for the 14 No. turbines. An additional 3,060m^2 will also be cleared of 'obstacles' and left as greenfield areas.
- Construction of one temporary construction compound with associated temporary site offices, parking areas and security fencing.
- Installation of one (35-year life cycle) meteorological mast with a height of 110m and a 4m lightning pole on top. The Met Mast foundation will have a proposed dimension of 10m by 10m, with a depth of 2.25m. It is proposed that the Met Mast will be a free-standing lattice type structure located in the north-west of the site. The mast will be removed during decommissioning.
- Development of two on-site borrow pits – The proposed location of Borrow Pit A will be north of Turbine 3 and will be 26,307m^2 (111m x 237m), with the proposed location of Borrow Pit B to be located north-west of Turbine 11 and will be 6,500m^2 (130m x 50m). The borrow pits are proposed to provide 56,723m^3 of excavated material to provide fill for the roads, hardstands, upfill to foundations and the temporary compound.
- Construction of new permanent internal site access roads, upgrade of existing internal site access roads and upgrading of the L-34011-20 road (which forms part of the Beara-Breifne Way) and lies within the site, to include passing bays and all associated drainage infrastructure - There will also be 10,440m of new site access roads required for the development. These will be constructed to provide a width of 4.5m and will cover an area of 46,980m^2 and require 28,188m^3 of crushed rock.
- Development of an internal site drainage network and sediment control systems – It is stated that site drainage has been designed in a manner to ensure there are no changes to the baseline water quality within or downstream of the site. All site drainage will be directed through either sediment traps, settlement ponds and/or buffered drainage outfalls to ensure that total suspended solid levels in all waters discharging to any watercourse will not exceed 25mg/l. It is stated that no works will occur within a distance of at least 65m from watercourses (excluding watercourse crossings) with no works occurring within a distance to land drains of at least 20m.
- Construction of 1 no. permanent 110 kV electrical substation including 2 no. control buildings with welfare facilities, all associated electrical plant and equipment, security fencing and gates, all associated underground cabling, wastewater holding tank, and

all ancillary structures and works. The proposed substation compound area will be 10,500m², with the proposed foundation being 0.6m in depth.

- All associated underground electrical and communications cabling connecting the wind turbines to the wind farm substation. There will be circa 11,695m of internal cabling to be laid 1m below the ground surface within the site roads and/or their verges. All underground electrical and communications cabling connecting the wind turbines to the wind farm substation. Ducting is to remain in-situ.
- Ancillary forestry felling to facilitate construction of the development.
- All works associated with the permanent connection of the wind farm to the national electricity grid comprising a 110 kV underground cable in permanent cable ducts from the proposed, permanent, on-site substation to the existing Ballyvouskill 220kV Substation - The overall length of the Grid Connection Route between the substation and the existing Ballyvouskill 220kV GIS substation is 27.8km, of which, 0.5km is within the site of the development, and 7.0km is located along the public road corridor. 19.9km is located along the route of an existing forestry road. The remaining 0.4km is located off road in third party lands. The depth of the trench for 110kV cables is 1m.
- All associated site development works including berms, landscaping, and soil excavation.
- Improvement of an entrance to an existing private road off the L-7405-0 local road to include localised widening of the road and creation of a splayed entrance to facilitate the delivery of abnormal loads and turbine component deliveries.
- Improvement of an existing site entrance off the L-3402-36 local road to include removal of existing vegetation for visibility splays to facilitate the use of it for the delivery of construction materials to the site.
- The turbine delivery route is proposed to originate at Ringaskiddy Port, County Cork and from there it will follow the N22 for some 7.7km north-west of Ballyvourney and then turn around towards Ballyvourney along the old (current) N22 and will travel across a new temporary crossing of the Sullane River onto the L-3400-79 and then on to the development site using the local roads L-3405-0 and L-7405-0 to the new access track on private lands and on to the site entrance. Upgrade works on the turbine delivery route to include the following:
    - Construction of a temporary bridge (single span structure) over the Sullane River to allow access to the L-3400-79 from the N22 in Ballyvourney for the duration of the construction works.
    - Localised widening of the L-3405-0 road to a width of 4.5m, from the junction with the L3400-79 road to the junction with the L-7405-0 road.
    - Localised widening of the L-7405-0 road to a width of 4.5m, from the junction with the L-3405-0 to the entrance to an existing private road off the L-7405-0.
    - The construction of a temporary access road off the N22 in the townland of Cummeenavrick to facilitate 180 degrees turning manoeuvre by the turbine delivery vehicles.

Project Timeline: A 10-year planning permission and 35-year operational life from the date of commissioning of the entire wind farm is being sought.

A permanent planning permission is being sought for the Grid Connection and substation as these will become an asset of the national grid under the management of EirGrid and will remain in place upon decommissioning of the wind farm.

It is envisaged that the construction phase will last approximately 21 months, with commissioning taking a further three months.

Watercourse Crossings: The development is proposed to entail the crossing of seven small watercourses (land drains and natural streams/flushes) along the access track network. The watercourses are all minor streams with limited fisheries value, though the downstream catchments are of significant value for salmonids as well as supporting populations of the Annex II listed Freshwater Pearl Mussel.

It is proposed that all water crossings will be clear span bridges and will avoid permanent disruption to the stream beds and banks, protecting fishery habitats.

It is stated that all bridge crossings associated with the underground cable connection (UCG) route have been surveyed with the result of insufficient clearance existing within each structure. It is proposed that Horizontal Directional Drilling (HDD) will be utilized in order to achieve satisfactory clearance along the cable route. There are (5 no.) bridges along the UCG route which will require HDD due to there being insufficient cover and depth in the bridge to cross within the bridge deck.

The UGC route will include up to nine Service crossings, 170 No. Culvert Crossings and four Watercourse/bridge Crossings. It is proposed that the crossing of existing culverts will be by the way of open trenching with either an undercrossing or an overcrossing, depending on the depth of the culvert. – It is noted that there are a number of discrepancies within the submitted documentation as to the number of culvert crossings and watercourse/bridge crossings along the UGC route.

With regard to the Turbine Delivery Route an existing bridge crossing of the Sullane River from Ballyvourney is inadequate to accommodate the turbine blade delivery trucks, and as such a temporary Bailey bridge crossing is proposed at a location a short distance upstream. This location was used as a temporary crossing of the Sullane River during the construction of the Grousemount Windfarm in 2018.

It is proposed that a silt fencing filtration system will be installed on all existing drainage channels before and for the duration of the cable construction to prevent contamination of any watercourse.

Management Plans: A Construction and Environmental Management Plan (CEMP) has been provided as part of the proposal which incorporates a number of management plans including a Peat and Spoil Management Plan, Surface Water Management Plan and Water Quality Management Plan. A Site Investigation Report and Peat Stability Risk Assessment has also been prepared.

The construction activities will be monitored by a Geotechnical Engineer, a qualified archaeologist, and an Ecological Clerk of Works (ECoW). The ECoW will be employed prior to

the commencement of the construction phase to monitor and review the pollution control measures and working practices during construction and have input into site remediation. The ECoW will have stop work authority if, for example, a sensitive habitat feature is encroached upon or there is the possibility of silt/pollution runoff to natural watercourses.

A Habitat Management/Enhancement Plan has been developed to provide ecological conservation of the site for the long term and to mitigate for the ecological effect of habitat loss as a result of the proposed project. It is stated that the Habitat Enhancement Plan will allow for the restoration of Annex I habitats that have been degraded by afforestation. A secondary objective of the plan is to create an area free of development for translocation of the Kerry Slug from areas on the development footprint to this enhancement area, enhance existing habitats for peatland associated species such as Red Grouse (Red-listed), Meadow Pipit (Red-listed) and the Irish Hare and to create an open corridor for wildlife through established forest connecting bog/heath to north and south.

Site Description: The proposed wind farm site is located in County Cork, between Coolea, Reananerree, and Ballyvourney. The Site extends to approximately 667 ha, of which approximately 154 ha is commercial forest owned by Coillte. The remaining land (approximately 513 ha) is third party property and the principal land use in the general area is stated to comprise of a mix of agricultural grazing, farmland, residential properties, and open mountain heath. Most of the 154ha owned by Coillte comprises different stages of coniferous plantation forestry.

Site elevations range from 420m AOD in the western side of the site to 220m AOD towards the eastern side of the site. The underlying hard geology within the study area is sandstone.

The Grid Connection, which extends over a length of 27.8km is in the townlands of Gortyrahilly, Derree, Dereenaculling, Lumnagh Beg, Lumnagh More, Scrahanagown, Bardinch, Mileeny, Inchamore, Derryreag, Derreenaling, Cummeenavrick, Glashacormick, Clydaghroe, Cummeennabuddoge and Caherdowney.

The Peat Stability Assessment Risk Ranking ranged from 'Very Low with isolated pockets associated with localised elevated stability risk' to 'Moderate'.

Regionally, the overall development (windfarm and grid connection) is located within the Laune-Maine-Dingle Bay (catchment ID_22) and the Lee, Cork Harbour and Youghal Bay (catchment ID_19) surface water catchments within the Hydrometric Areas 22 and 19 of the South Western River Basin District.

The windfarm site is located within three sub-catchments, all tributaries of the Lee. In the northern and main part of the site, there are three tributaries of the Douglas River which flows in to the Sullane River downstream of Ballyvourney. The Sullane flows into the River Lee within the Inishcarra Reservoir downstream of Macroom. In the southeast, the site drains to the headwaters of the Toon River which flows directly into the Lee, while in the south-west the Abha Bhun Silinn also flows directly into the Lee.

With regards to the grid connection route, this route extends into the catchment of the Clydagh River, which becomes the River Flesk in its lower reaches downstream of its

confluence with the Loo River. The Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC extends to include the Clydagh River upstream to its upper reaches on the county boundary.

Natura Impact Statement (Summary): A total of 13 European sites were considered within the potential Zone of Influence (ZOI) of the proposed development, namely.

1. Mullaghanish to Musheramore Mountains SPA (004162).
2. Blackwater River (Cork/Waterford) SAC (Site Code 002170).
3. The Gearagh SAC (000108).
4. The Gearagh SPA (004109).
5. Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC (000365).
6. Mullaghanish Bog SAC (001890).
7. St. Gobnet's Wood SAC (000106).
8. Derryclogher (Knockboy) Bog SAC (site code: 001873).
9. Glanlough Woods SAC (site code: 002315).
10. Kilgarvan Icehouse SAC (site code 000364).
11. Old Domestic Building, Curraglass Wood SAC (site code 002041)
12. Cork Harbour SPA (Site Code 004030).
13. Great Island Channel SAC (Site Code 001058).

The NIS identified that the works and activities associated with the construction and/or operation phase of the proposal have the potential to significantly affect four European sites in the absence of mitigation. These European sites are:

1. Killarney National Park, Macgillycuddy's Reeks & Caragh River Catchment SAC (site code 000365) - Approximately 20 km of the grid connection route is located along the route of an existing forestry road which runs parallel to the Clydagh River. The closest distance between the cable route corridor and the SAC is 41 m. It is concluded that a hydrological link exists between the project area and the SAC.
2. The Gearagh SAC (site code:000108) - A hydrological linkage occurs between the application site and the SAC via the extreme southwest sector of the site which drains to the Bunsheelin River, which in turn joins the River Lee at Ballingeery. The Lee flows through Lough Allua and continues towards the Gearagh.
3. Mullaghanish to Musheramore Mountains SPA (004162) - The habitats within the wind farm site have potential to support foraging Hen Harriers. Furthermore, a section of the grid connection route is located along the route of an existing forestry road which runs north of the SPA. The closest distance between the cable route corridor and the SPA is 170m.
4. The Gearagh SPA (004109) - A hydrological linkage occurs between the application site and the SPA via the extreme southwest sector of the site which drains to the Bunsheelin River, which in turn joins the River Lee at Ballingeery. The Lee flows through Lough Allua and continues towards the Gearagh.

Potential Impacts Identified: Although the proposed development is not located within the boundary of any European site, per the report the construction and decommissioning phase

could potentially affect hydrologically connected riverine habitats that support the European sites Qualifying Interests (QIs) and /or Species of Conservation Interests (SCIs), through the decrease of river water quality. The potential sources of effects on Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC, the Gearagh SAC, the Gearagh SPA identified within the NIS are as follows:

- Clearance of vegetation, soil, and rock for widening and construction of access roads, hardstand and turbine bases.
- Crossing of watercourses on the turbine access route, grid connection route and the turbine delivery route.
- Effects of tree felling (approximately 11.97 ha) on water quality as a result of sediment and nutrient release.
- Creation of temporary infrastructure such as blade set-down areas, associated storage and assembly areas and crane pads.
- Placement and storage of material arising from infrastructure works.
- Access by construction equipment, including access away from the proposed infrastructure location (compaction and other damage).
- Potential for accidental spillage of hydrocarbons and other pollutants including concrete laitance.
- Potential of peat slippage or failure, and,
- Removal and restoration of existing infrastructure at decommissioning stage.

For the Mullaghanish to Musheramore Mountains SPA, the significance of a subsequent effect on the SCI would depend on the level of potential disturbance to the breeding Hen Harriers. It is stated that the potential impacts that could affect Hen Harrier as a result of disturbance during the breeding season is only likely to occur during the construction phase of the grid connection only.

Mitigation measures proposed to avoid/manage impacts: The NIS includes details of measures and procedures to be implemented on site to provide for the protection of water quality and prevent the release of sediment and toxic contaminants during construction. Specific details of surface water management mitigation measures for the proposal has been detailed in the CEMP and its associated management plans.

Examples of proposed mitigation measures detailed within the NIS include.

- No works will take place within the 65 m buffer zone of watercourses except for construction of the clear span and box culverts on the access road network.

- Drainage measures have been developed to protect all receiving waters from potential impacts during the construction of the development in the catchment of the site and along the proposed grid connection. These measures are aimed at preventing sediments or other pollutants from entering watercourses through the containment and treatment on-site of all surface water run-off from areas of works. The appointed contractor will have appropriately qualified environmental personnel to ensure compliance during the construction stage with all mitigation measures, planning conditions and legislative requirements related to the maintenance of water quality.

An Ecological Clerk of Works (ECoW) will be appointed as part of the environmental team for the duration of the project.

- There will be no direct site run-off to watercourses during the construction phase with all outflows from drainage via settlement ponds from which treated surface water is released by diffuse overland flow at appropriate locations.
- De-watering of excavations, where required, will be through filtered 'silt socks' / dewatering bags or a 'Siltbuster' or similar system, prior to discharge.
- Daily monitoring of all sediment traps and settlement ponds will be undertaken by the Contractor and supervised by the Environmental Manager to ensure satisfactory operation and/or maintenance requirements.
- During the culvert installation and associated construction work, double silt fences shall be emplaced immediately downgradient and downstream of the construction area for the duration of the construction phase.
- Where bank strengthening or scour protection is required, (i.e., upstream and downstream of new structures, to ensure no undercutting or destabilisation of either the structure or riparian bank areas occurs) this will utilise sensitively placed rock armour with appropriate landscaping to tie the feature into the existing riverbank profile. Gabion baskets and Reno mattresses shall not be used. This work shall be overseen by the Ecological Clerk of Works.

With regard to measures to avoid disturbance to breeding Hen Harriers it is stated that cable laying works for the relevant section proximal to the SPA will take place outside of the bird nesting season (March-August inclusive) so as to avoid any risk of disturbance to breeding Hen Harrier (the Special Conservation Interest of the SPA). A similar approach would be taken for the removal of the cable during the decommissioning stage. This would be subject to review of the boundary of the SPA at the time (which may have changed over 35 years).

NIS Conclusion: The conclusions of the NIS states that in the light of the conclusions of the assessment, the Board is enabled to ascertain that the proposed development will not adversely affect the integrity of any of the European sites concerned.

Environmental Impact Assessment Report Biodiversity Chapters (Summary): Desktop survey and field survey methods are described and the results of data gathering, and survey work are provided within Chapter 5 'Terrestrial Ecology', Chapter 6 'Aquatic Ecology' & Chapter 7 'Ornithology' of the EIAR. These chapters include an assessment of the potential for the proposed project to impact negatively on sites designated or proposed to be designated for nature conservation, on protected species and/or on habitats of high natural value.

Potential for the development to give rise to impacts on designated nature conservation sites: Potential negative impacts on European designated sites due to their connectivity e.g. hydrological, have been addressed in the submitted NIS. In relation to potential impacts on NHAs, 3 occur within a 15km radius of the site with the nearest NHA being the Sillahertane Bog NHA, which is approximately 2 km to the west. Per the EIAR as all 3 are designated for

peatlands and lack any ecological or hydrological connectivity it is stated that it can be concluded with full scientific certainty that the proposed wind farm project could not have any impacts on these 3 NHA sites.

With regards to pNHA's 14 occur within a 15 km radius of the proposed wind farm site of which a hydrological linkage exists between the wind farm site and the Killarney National Park, Macgillycuddy's Reeks & Caragh River Catchment pNHA (site code 000365), The Gearagh pNHA (site code: 000108), St Gobnet's Wood pNHA (site code: 000106) and Lough Allua pNHA (site code: 001065). As such mitigation is proposed to minimise any such risk.

Potential for the development to give rise to negative impacts on terrestrial habitats and protected plant species: As per the EIAR, the proposed wind farm site at Gortyrahilly consist of a range of primarily peatland and/or high valued habitats which are as follows:

- Wet heath (HH3) – the site is dominated by this habitat which is stated to be generally in a good condition, with some degraded areas through intensive sheep grazing. The habitat is noted to be equivalent to the EU Annex 1 Habitat 'Northern Atlantic wet heaths with *Erica tetralix* (4010)' and overall has been assigned a valuation of County Importance. Turbines 1, 2, 4, 6, 7, 8, 10, 11, 12 and 13 along with the proposed substation area and borrow pit A occur wholly or partially within this habitat type.
- Exposed siliceous (sandstone) rock (ER1) – noted to be a prominent component of the survey area and often found occurring in a mosaic with wet heath. The habitat recorded is stated to be equivalent to the EU Annex 1 Habitat 'Siliceous rocky slopes with chasmophytic vegetation (8220)'. Per the EIAR, due to this Annex I habitats widespread distribution on site in association with wet heath, it has been assigned an overall valuation of County Importance.
- Dry heath (HH1) - widespread particularly in the southern half of the site where grazing levels are lower and occurs in a mosaic with wet heath. Dry heath recorded at the site is stated to be equivalent to the EU Annex 1 Habitat 'European dry heaths (4030)'. Per the EIAR, due to this Annex I habitats widespread distribution on site in association with wet heath, it has been assigned an overall valuation of County Importance.
- Lowland blanket bog (PB3) – stated to be largely confined to a small number of areas in the southern half of the site and is noted to be equivalent to the EU Annex 1 Habitat 'Blanket bog (7130)'. However, it is stated that while some of the blanket bog can be considered as active (priority habitat), overall blanket bog naturally has a low representation on site and is assigned an overall rating of Local Importance (higher value). Turbines 10 and 11 partially occur within this habitat. It is further noted that uncut upland blanket bog (PB2) has been recorded within the site. No description of the same has been provided but it can be assumed given its intact nature that it conforms with the EU Annex 1 Habitat 'Blanket bog (7130)' also. Per the EIAR the loss of a very small area (0.17ha) of uncut blanket bog at Turbine 3 is considered, at most, a slight effect as it is stated the bog is a remnant and is not considered active.

- Cutover blanket bog (PB4) – stated to occur occasionally within the survey area and tend to be located along roads and tracks where access was convenient. Turbines 4, 8 and 9 are noted to partially within this habitat.
- Poor fen and flushes (PF2) – stated to be a relatively infrequent habitat within the survey area. The habitat occurs in sloping wet areas where there is some degree of flushing by base-poor surface waters.
- Dry humid acid grassland (GS3) – stated to be a relatively uncommon habitat within the survey area. It occurs on the sloping drier mineral soils in the northern half of the site. Most of the areas are heavily grazed by sheep and the habitat can be considered as semi-improved in places.
- Oak-birch-holly woodland (WN1) – a small area of this woodland habitat which is stated to be equivalent to the EU Annex 1 Habitat 'Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles (91A0)' was recorded on a rocky ridge in the north of the survey area where the proposed access road into site is located. However, per the report given the restricted distribution of this Annex I habitat to one small area in the north of the site, the habitat it has been rated as Local Importance (higher value).
- Eroding/upland river (FW1) – No description or impact assessment provided.

Per the EIAR, cutover blanket bog, poor fen and flushes, dry humid acid grassland, wet grassland and scrub have all been assigned a valuation varying from Local Importance (lower value) to Local Importance (higher value). Other habitats to be impacted by the windfarm include Conifer plantation (WD4) which was noted to be a widespread habitat in the south of the survey area where areas of blanket bog and heath have been planted in the past. The conifer areas vary from areas of immature plantation, which have been recently planted following a conifer clearfell, to tall plantation, greater than 10 metres tall. Turbines 3 and 5 occur wholly within this habitat, along with borrow pit B. Turbines 6, 10 and 11 occur partially within the habitat along with areas of peatland (HH3 and/or PB3). The loss of conifer plantation has been assessed as not significant given its low intrinsic ecological interest.

According to the EIAR, the permanent loss of habitat to facilitate the construction of the turbines and substation is approximately 40.2ha. Overall it has been assessed that the development will result in the loss of 28ha of wet heath, which includes areas of dry heath, outcropping silicious rock and some blanket bog (all Annex I listed habitats) to facilitate the turbine and substation works. This effect is considered ***significant*** and of ***permanent*** duration.

To mitigate against this loss a Habitat Enhancement Plan (HEP) has been prepared. The primary objective is to enhance some unplanted high bog and to rehabilitate areas of wet and dry heath which had been planted to varying degrees or where self-seeded conifers are established. A secondary objective of the HEP is to create a corridor through forestry which will connect areas of open bog/heath. The total area of the HEP is 9.5 ha. Taking the HEP and other mitigation measures into consideration it has been assessed that the significance of the predicted effect on habitats as a result of the proposed wind farm development can be reduced to a moderate residual long-term negative effect.

Further to this, the proposed borrow pit to the north of Turbine 2 will involve the removal of an additional area of 26.3ha of wet heath. Per the report, this area was considered blanket bog in the past and that the wet heath present has developed since cutting and with mitigation a heath type vegetation can be reinstated. Therefore, it has been assessed that the effect of borrow pit development on this habitat will be moderate and short-term in duration.

According to the EIAR, further areas of habitat adjoining the infrastructure (estimated average width of 2.75m from the edge of the permanent built structures across the site) will be disturbed due to the actual construction works, including the need for construction of a drainage system and for the insertion of the cable ducts. It is stated that areas of sensitive habitat such as bog and heath and the hydrology of these systems would be disturbed to facilitate these works with an effect of disturbance considered to be ***significant*** and potentially ***long-term***. A programme of ongoing monitoring and rehabilitation will be followed during construction phase to mitigate the disturbance impact.

With regards to the grid connection route it is stated that the route is dominated by forest tracks and public roads. However, to the north-west of Ballyvouskill substation the proposed route crosses through an area of wet heath (HH3) on sloping ground. Habitats adjoining forestry tracks were also noted to include wet heath.

Least cudweed (*Filago minima*) a species listed in the Flora Protection Order (2015) and considered to be Near Threatened in Ireland was recorded growing along forestry track margins of the grid connection route. Approximately 10 flowering heads of the species were noted at two locations in the townland of Derryreagh, where forest track runs through areas of recently felled and replanted coniferous plantation. A pre-construction survey for this species has been proposed and should the species occur across within the works area, a licence will by sought from NPWS to remove the plants from the required work area and to transplant to a suitable location elsewhere. It is stated that the existing known areas where the plant occurs will be avoided by the trench excavations and all works in such areas will be supervised by an ecologist with experience in rare plants.

Potential for the development to give rise to negative impacts on Bats: General active surveys and static surveys were completed for the site, as detailed within the EIAR. The information submitted indicates that area is used by a number of bat species with the most-abundant species in all cases being Common pipistrelle, with lesser numbers of Soprano pipistrelle, Leisler's Bat and Natterer's bat. Nathusius' bat, Daubenton's bat, Whiskered bat, Brown long-eared bat and Lesser horseshoe bat were also recorded. A total of 28,953 recordings in 2019 and 11,790 recordings in 2021 static surveying are noted with high bat activity recorded at turbines T1, T3, T6, T8, T9, T10, T11, T12 & T13. The bat activity overall at the site being assessed as low to moderate. Common, Nathusius's and Soprano Pipistrelle alongside Leisler's bats are noted to be high risk species for wind farm collisions and based on an overall risk assessment carried out in respect of the proposal it was determined that for Soprano Pipistrelle and Leisler's bat the risk of Collison is moderate to high at the site, while the overall collision risk for Common Pipistrelle is high. Mitigation measures have been proposed to reduce the potential risk. No significant collision related effects are anticipated in relation to Myotis spp., Lesser horseshoe bat and Brown long-eared bat.

Three confirmed roosts were recorded during emergence surveys, all within 500 m of the study site. These included a disused house and derelict house present in the north east of the site. The disused house was classified as being of high suitability for bats and was confirmed as a minor summer roost site for male Common pipistrelle, Soprano pipistrelle, and Natterer's bat. The derelict house was classified as being of moderate suitability for bats and was confirmed as a minor summer roost site for male Common and Soprano pipistrelle bats. The final confirmed summer roost was in the south west of the Gortyrahilly site and was a high suitability dwelling that acted as a maternity roost for Common (c.40 bats) and Soprano (c. 10 bats) pipistrelles. It is stated that no significant effects with regard to loss or damage to roosts are likely to occur from the proposed development.

Per the EIAR no significant effects with regard to loss of commuting and foraging habitat are likely to occur from the proposed development. This assessment has been based on that the site is predominantly located within upland peatland habitats with coniferous plantations and such there will be no significant loss of bat foraging/commuting habitat such as woodland edge associated with the wind farm development. Furthermore, it is stated that the development has the potential to increase the quantity of linear features typically used by bats when grid connection and road corridors are created.

Potential for the development to give rise to negative impacts on Terrestrial Mammals: Several terrestrial (non-volant) mammals were identified within the study area during primarily two days of surveying in June 2021. Of particular interest are the following species:

- Irish hare – This species was observed on the heath and grassland areas and is expected to breed on site.
- Badger – No Badger evidence of were recorded during the surveys, but it is stated that this species would be expected within the afforested areas of the site, as well as within the more improved land in the north.
- Pine Marten – This species was recorded within the local conifer plantations during the 2019/20 surveys.
- Red Squirrel – It is stated that this species could occur within the afforested areas.
- Otter – Per Chapter 5 there is no significant habitat on site to support otter. However, otter occurs widely in the Sullane River system and it is possible that otter might at times travel upstream to the site.

As per the EIAR, potential impacts on non-volant mammals from the construction of the proposed wind farm is considered not significant on the basis that the species involved are all widespread species of the countryside which occur in similar habitats in the immediate and wider environs. Nonetheless, a pre-construction survey for Badger is to be carried out.

Potential for the development to give rise to negative impacts on Kerry Slug – A total 86 individual Kerry slugs were recorded, 62 of which were from hand searches with the remaining by way of live refuge trapping. As such based on the 2020 survey, it is considered that the habitat types "wet heath / blanket bog and rock outcrop habitat" at the Gortyrahilly site support an important population of Kerry Slug, which is rated as County Importance.

According to the EIAR based on the likely extent of habitat loss throughout the wind farm site, this impact is likely to be minor and localised as only a small proportion of suitable Kerry Slug habitat (primarily the mosaic of heath and outcropping rock) within the site will be impacted. However, during construction, works could also result in the death of individual Kerry Slugs due to machinery movements in areas of suitable habitat. Mitigation is required to minimise potential loss of individual slugs; this includes pre-construction surveys of work areas in wet heath / blanket bog / rock outcrop habitat and transfer of any Kerry slug found to suitable habitat in the surroundings. Taking the mitigation measures into consideration it has been assessed that the effect of the proposed development on Kerry Slug would not be significant.

Potential for the development to give rise to negative impacts on Reptiles & Amphibians – Both Common Lizard and Common frog were recorded at the site. It is stated that common frog is widespread on site and that common lizard is expected to occur at low densities throughout the heath dominated areas. Per the EIAR, populations of both species will be affected by loss of habitat during the construction works and some individuals may be killed. Mitigation has been proposed in relation to Common frog. As such the significance of the effect on amphibian and reptile species within the site is rated as slight.

As per the EIAR, areas where construction works are due to commence during the period February to August will be checked by the ECoW for the presence of frog spawn, tadpoles, and adult frogs. If present, these will be removed under licence from NPWS and transferred to suitable ponds, drains or wetlands in the vicinity.

Potential for the development to give rise to negative impacts on Aquatic Habitats & Species – Per Chapter 6 of the EIAR surveys of watercourses at and within a potential zone of influence of the development were undertaken in 2020 in support of the application. A total of 8 locations were subject to electrofishing, 12 locations were surveyed for Freshwater Pearl Mussel (FPM), with water quality assessed using the Q Value biotic index system at the 8 locations sampled for electro-fishing on each of the watercourses draining the development. It is noted that no FPM surveys were conducted as part of the grid connection route.

Based on a desktop review, the Sullane River supports good populations of brown trout (*Salmo trutta*) with resident populations as well as larger fish running up from the Innishcarra Reservoir downstream of the site. Further to this there are records of Freshwater Pearl Mussel (FPM) from the River Douglas at Rahoonagh West. There are also records of FPM from the immediate vicinity of the proposed bailey bridge crossing of the river at Gortnatubbrid in Ballyvourney.

None of the 12 locations surveyed for Freshwater Pearl Mussel recorded evidence of the species even though the habitat quality at some of the location was conducive with FPM occurrence. All watercourses are in Good or High status with the exception of Site 4 an upland eroding stream in the River Douglas Catchment which was rated as Q3-4 (WFD status poor) on account of the limited macroinvertebrate diversity and the high algal cover within the stream. Nonetheless, while no FPM were recorded within the survey sites, given their known occurrence in the wider catchment proximal to the site, per the EIAR any impact on FPM as a

result of construction phase activities would be considered a medium term significant negative effect at the international scale.

The EIAR does not provide a breakdown of aquatic species recorded e.g. fish species, age structure, abundance etc. However, per the information provided Brown trout were recorded at a minimum of 3 survey sites. With regards to the fisheries potential of each site this ranged from no fisheries potential to excellent nursery and spawning area for Brown trout.

Overall, it is stated that in the absence of mitigation, potential impacts on the aquatic environment during construction are classified as being medium term significant negative at the international scale on account of the sensitive Freshwater Pearl Mussel populations in the downstream catchments and the value of the lower reaches of the watercourses for salmonids. According to the EIAR impacts on water quality and aquatic habitats occurring during the operational phase is not considered likely in view of the distance between the turbines and substation and watercourses (>65m) and the standard operating procedures employed to avoid such risks.

A number of mitigation measures have been proposed and in order to verify the efficacy of pollution prevention and mitigation works during construction Water Quality Monitoring will be undertaken prior to, during and post completion of construction works in accordance with the parameters and schedules as set out in the Water Quality Management Plan. Monitoring will be undertaken in all watercourses within the catchment of the construction area. Monitoring will be overseen by a qualified and experienced Environmental Manager or Ecological Clerk of Works. It is stated that subject to the successful implementation of the mitigation measures, there is considered to be no significant risk of a deterioration in water quality associated with the proposed development. Overall, it has been assessed that with the proposed mitigation successfully implemented, the proposed wind farm development at Gortyrahilly will result in an overall negligible to low significance residual impact upon the aquatic ecological features that lie within the Zone of Influence.

Potential for the development to give rise to negative impacts on Avian Fauna: As per the Chapter 7 Ornithology, bird surveys completed at the site followed SNH/NatureScot guidance. A broad summary of the field survey results of highly sensitive species recorded within the EIAR is detailed below.

- Hen Harrier – There were no records of this species during the summer period, however Hen Harrier was recorded on site in each of the 3 survey winters. There were 10 observations over 5 dates in winter 2017/18, 7 of which involved a male and the remaining three a ringtail. Flightlines were both within the site and off-site to the north-west and to the east. Several of the records are considered to refer to the same individuals.

There were 2 observations in the 2018/19 winter, both involving a single male bird hunting, with 4 records in winter 2020/21. 3 observations were of single males and one sighting involved 2 males (recorded as two observations). Most of the records involved birds hunting.

Hen Harrier were also recorded during the hinterland surveys carried out from October 2020 to March 2021.

From the pattern of records, it is considered that Hen Harrier is an occasional winter visitor to the site and its environs. There was no evidence to indicate that Hen Harriers roost within the site, however a single bird was recorded roosting in the hinterland in December 2020. It is stated that the presence of hunting birds in winter in areas such as the site is consistent with their dispersal from breeding areas such as the Mullaghanish to Musheramore Mouintains SPA.

- Merlin – This species was recorded during vantage point watches in the 2018 summer survey period when there were 7 records from along the eastern, south-western, and north-western boundaries of the site. As one of the records involved a pair in July 2018, it is possible that breeding occurred or was at least attempted locally in that year. During the winter survey periods all 3 records of Merlin (winter 2017/18 1 record and winter 2018/19 2 records) were recorded off-site. Overall, Merlin is considered a rare species within the site.

- White-tailed Sea Eagle – There were 2 observations of this species within the site. A single juvenile individual was observed on two occasions over a single day February 2019. White-tailed Sea Eagle was recorded on 5 occasions in 2018 during hinterland surveys some 3-km from the site. Per the chapter, it is considered that this species has a presence in the wider area, but it is rare within the development site.

- Peregrine (single bird) was observed to the south-west of site in May 2021 and in the north-east sector of the site in winter 2017/18. Peregrine was recorded during the hinterland surveys. There are no known Peregrine breeding territories within the vicinity of the wind farm.

- Golden Plover – This species was recorded within the site in each of the winter surveys. Most records were within the north-west part of the site. Winter 2017/18 produced the most records with birds present on 5 dates with flocks ranging from 18 birds to 35. In the winter 2018/19, Golden Plover were also recorded on 5 dates with flocks ranging from 2 birds to 48 birds. There was only one record of Golden Plover in winter 2020/21, involving a single bird in October. A flock of 9 birds recorded in in the north-west sector in April 2021. Per the report, from the pattern of records it is considered that Golden Plover is an occasional visitor to the site in winter and at times of spring and autumn migrations.

- Whooper Swan – This species was recorded during the hinterland surveys.

- Chough – This species was observed 8 times in the winter of 2017/18. These records were within the north-west sector of the site as well as off-site to the north-west and involved up to 4 birds from October to December. Chough is considered an occasional visitor to the area.

- Red Grouse – This species is noted to be resident onsite. There was incidental sighting of several birds during the habitat surveys of the site, with a single male bird recorded during the Red Grouse survey in February 2019. Pellets and droppings were also noted. Per the EIAR, the amount of suitable habitat for grouse would indicate capacity for several territories.
- Kestrel - This species was the most frequently encountered bird of prey and is expected to be resident in the area and at times hunts within the study site. It was the most frequently recorded target species in each of the summer periods and was recorded both on and off site in each of the 3 survey winters. Most of the summer observations were from the southern, eastern, and western sectors of the site, with regular observations off-site to the west. The majority of records were of birds hunting and involved both male and female birds. There was no evidence of nesting within the site however the level of activity recorded for this species is indicative of a breeding territory in the vicinity of the site.
- Sparrowhawk was a scarce species on site, with single records in summers 2020 and 2021. The species was observed occasionally through the winter period though most records were off-site. Habitats suitable for breeding and foraging occur within the Site and in surrounding areas.

- Lesser Black-backed Gull was recorded within the site in 2017 and 3 times over the 2020 summer season, all in May and involving groups of 5-9 individuals. It is stated that gulls are expected to forage occasionally in farmland in surrounding lowland areas but are unlikely to be regular visitors to the site.

- Curlew- This species was recorded on three occasions during winter vantage point surveys in 2018/19. All were of the species heard calling (i.e., birds not seen).

- Snipe – This species has been confirmed breeding onsite. A Snipe was recorded drumming in wet heath, suitable breeding habitat for the species, in June 2021 approximately 200m west of proposed T6 location. This species was also recorded during winter transect surveys.

- Meadow pipit was noted to be widespread during the breeding bird transect surveys at Gortyrahilly in the summers of 2017 and 2018. Post-breeding flocks often seen in late summer and autumn. The species is noted to breed on site and also present in winter (though scarcer then).

- Grey wagtail – a pair was recorded in 2017 and would be expected to breed on the larger watercourses within the site.

Per the EIAR, the permanent loss of habitat to facilitate the construction of the project is approximately 40.2 ha, of which 28ha is wet heath. Given that it is stated that there is an estimated total resource of 404 ha of wet heath within the site any impact on species utilising the same i.e. Red Grouse, Kestrel, Snipe and Meadow Pipit, is considered to be a slight adverse

effect of long-term duration. Additionally, it is stated that the Habitat Enhancement Plan will mitigate for the loss of breeding habitat for birds.

Furthermore, it is stated that taking the amount of potentially suitable heath and bog habitat within the site and surrounding areas into account, it is expected that viable populations of the bird species which were recorded during the baseline surveys will remain on site after the project is complete.

The report notes that during the breeding season construction works are likely to have potential disturbance effects on breeding birds of conservation importance, namely Red Grouse, Merlin, Snipe and Hen Harrier (latter only along part of grid connection cable route). In relation to these species it has been assessed that the potential disturbance effect on the same is considered to be a significant adverse effect of short-term duration, with the exception of Snipe which is considered a slight adverse effect of short-term duration. A number of mitigation measures have been proposed to avoid or minimise such effects. These measures include that should any of these species be recorded breeding within 500m of the works area (as established through monitoring during construction), a buffer zone shall be established around the expected location of the nest and works will be restricted until it can be demonstrated by an ecologist that the species has completed breeding in the identified area.

During operation of the windfarm at the site, species of conservation importance identified as being potentially at some risk of collision are White-tailed Sea Eagle, Hen Harrier, Sparrowhawk, Kestrel, Peregrine, Merlin, Chough and Golden Plover. The collision risk in relation to Hen Harrier, Sparrowhawk, Kestrel, Peregrine, Merlin and Golden Plover has been assessed as ranging from not significant (Hen Harrier, Sparrowhawk & Peregrine) to long-term slight to moderate negative effect (Merlin, Kestrel, Chough & Golden Plover). Mitigation is provided to minimise the risk of collision for Kestrel, this includes clearing rank vegetation from around the relevant turbine(s) (identified as a confirmed collision risk to the species during monitoring) to make it less suitable for supporting prey items such as small mammals.

In relation to White-tailed Sea Eagle collision risk modelling has calculated a rate of 0.05 collisions per year (or 1 bird every 20 years) for the Siemens Gamesa and Vestas turbine models and 0.04 collisions per year (or 1 bird every 25 years) for the Nordex turbine model. While these rates are relatively low, the risk to this Annex I species is considered **significant in the context of the national population**. Given that this species is known to be attracted by carrion measures will be employed during the operational phase to remove carcasses (mainly sheep) from the site, with searches to be carried out on a weekly basis by site management. Therefore, according to the EIAR with this mitigation in place, the significance of the effect of collision risk to White-tailed Eagle as a result of the project is reduced to a slight, negative, long-term effect.

During operation of the windfarm post-construction bird monitoring will take place to establish possible effects on bird species as a result of the project. This will include collision

searches / carcass searches with dogs. The collision searches will be carried out on a monthly basis in Years 1, 2, 3, & 5 of the operational phase of the wind farm.

According to the report the site has not been identified as being along a migration route for birds such as wetland species (swans, geese etc.) or birds of prey, the issue of a possible barrier effect does not arise.

Assessment

I have a considerable number of concerns relating to this proposal. The main concern is the siting of the same within an area of high ecological value. Further to this I have concerns in relation to the inadequacy of the information and assessment provided within both the NIS and EIAR.

The primary considerations from an ecological perspective in respect of the windfarm development are the following:

- Potential for the proposed development to give rise to negative effects on habitats of high ecological value.
- Potential for the proposed development to give rise to negative effects on designated sites.
- Potential for the proposed development to give rise to negative effects on freshwater habitats and associated species.
- Potential for the proposed development to give rise to negative effects on populations of protected species.

The information provided below is a summary of some but not all concerns I have in respect of this proposal.

Habitats

In respect to first point, I have serious concerns in relation to the extent of habitats of high ecological value to be impacted and I believe that fundamentally the facilitation of this proposal is contrary to Objective BE 15-2 of the Cork County Development Plan and the Habitats Directive.

The impact and assessment provided in relation to loss of habitats listed as Annex I Habitats under the Habitats Directive and habitats of high natural value has been grossly underestimated in my opinion. Per the EIAR, the total loss of Annex I listed habitats i.e. wet heath, dry heath, outcropping silicious rock and blanket bog is 28ha and has been assessed as a significant and permanent effect. While I consider the loss of 28ha of Annex I as substantial anyway, I note this loss relates solely to that of the Turbines and substation footprint. No quantification and assessment of direct impacts on the same Annex I habitats has been provided in relation to the following works within and outside the windfarm site:

- Construction compound.
- New permanent internal roads.

- Drainage infrastructure.
- Underground cabling within and outside the site.
- Improvements to existing site entrance and roads.
- Berms etc.

Furthermore, as noted by the EIAR, indirect negative effects through impact on drainage patterns and the hydrological functionality of adjacent peatland and heathland habitats could cause indirect habitat loss which has been considered as a significant negative impact. No assessment has been provided as to the potential operational and decommissioning stage impacts the proposal may have on habitats and associated species. This detail is critical in order for a reasoned and informed assessment to be made on the potential loss of habitat as a result of the proposal from a site perspective but also from County and National level. A map indicating the location of areas of higher value habitat relative to the proposed works should also be provided given the degree of habitats occurring. Nonetheless, the quantified loss as it stands is a significant concern to the Cork County Council Ecology Office.

It is also my belief that the evaluation assigned to all Annex I habitats encountered within the site may have has been underestimated. The Annex I habitat wet heath which dominates the site is largely noted to be in a good condition. Under Article 17 reporting on the conservation status of the natural habitats and species, it is noted that nationally the EU Annex 1 Habitats 'Northern Atlantic wet heaths with *Erica tetralix* (4010)' along with other Annex I habitats recorded within the site i.e. 'European dry heaths (4030)' and 'Blanket bog (7130)' are considered to have an overall conservation status of 'Unfavourable - Bad', with the overall area covered by these habitat types considered 'Unfavourable - inadequate'. As such, it is my belief that these habitats should be evaluated as National Importance at a minimum and the loss of the same could have a significant negative effect at a National level. I further note other Annex I habitats encountered within the site and to be impacted by the proposal include 'Siliceous rocky slopes with chasmophytic vegetation (8220)'which has an overall conservation status as 'Unfavourable -Inadequate 'and the EU Annex 1 Habitat 'Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles (91A0)' who's conservation status of area, structure and functions and future prospects have been assessed as 'Unfavourable - Bad'.

As per the pre-planning advice issued by the Cork County Council Ecology Office, this office recommends that development on intact peatland habitats and upland habitats of high natural value is avoided. Taking this into consideration, and noting the current provided extent of high valued habitats to be lost and impacted by the proposal while considering the lack of information pertaining to all site infrastructure and works and their associated impacts, it is my opinion that this proposal should be Refused based on its current layout as it is not compatible with Objectives BE 15-2 and ET 13-7 of the County Development Plan. Should the Bord be minded to grant approval than I recommend that the following Turbines and associated infrastructure at a minimum be removed from the proposal design and / or relocated to be entirely within areas of low valued habitat:

- Turbines 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12 and 13 along with the proposed substation area and borrow pit A – located wholly or partially within Wet Heath and/or Blanket Bog;

- Access road through Oak-birch-holly woodland and all internal road networks be relocated to areas of low valued habitat.

Furthermore, I consider the proposal to offset the loss of habitat as a result of a windfarm through the creation of significantly smaller habitat management/enhancement area (9ha) as highly inadequate. It is noted that a large proportion of this area has been assessed as existing Annex I habitat, with proposed windfarm infrastructure dissecting the same. No assessment as to the potential operational impacts of the windfarm on this area has been thought-out e.g. underlying peatland hydrology etc.

Deficiencies in the information provided within the NIS to complete assessment

Designated Sites

In respect to the second point, it is my opinion that the Natura Impact Statement lacks sufficient detail as to provide a robust scientific assessment to establish beyond reasonable scientific doubt that adverse effects on the Killarney National Park, Macgillycuddys Reeks and Caragh River Catchment SAC and the Mullaghanish to Musheramore Mountains SPA will not occur as a result of the proposal.

With regards to the Killarney National Park, Macgillycuddys Reeks and Caragh River Catchment SAC, it is noted that approximately 20km of the grid connection route runs parallel to the Clydagh River / SAC with approximately 9km within 41m and 9.5km within 170m. Per the submitted documentation, 170 No. Culvert Crossings and 4 Watercourse/bridge Crossings are required in respect of the underground cable route. No indication as to the fisheries potential and/or the potential for these watercourses to be inhabited by ex-situ qualifying species of the SAC has been provided. Furthermore, given the proximity of the works to the SAC species-specific surveys such as for otter have not been carried out and as such it is not possible at this time to rule of potential disturbance/displacement effects on the same.

The submitted documentation, including the NIS provides no information in relation to dedicated invasive species surveys or any indication if Third Schedule non-native high risk species occur within the overall works site. As such the potential impact from the spread of invasive alien plant species during the project construction phase cannot be assessed. This office is aware that at least one Third Schedule species, namely *Rhododendron ponticum* occurs proximal to the grid connection route and it is considered any such potential spread of invasive species would be long term significant negative at the local scale and could impact in-situ and adjacent high valued habitats. Furthermore, given the location of the site with hydrological connections and proximity to Natura 2000 sites, the potential impact from the spread of non-native invasive plant species could potentially to lead to significant negative impact at the local to international scale. Therefore, I would recommend that clarification in relation to the presence / absence of invasive species onsite be sought as to allow for a more accurate assessment of the likely impacts the proposal may have on key ecological receptors.

Furthermore, the NIS, which should be a standalone document, lacks an assessment of potential collision risk associated with the operation of the windfarm on avian species particularly Hen Harrier (*Circus cyaneus*), a species of conservation interest of the

Mullaghanish to Musheramore Mountains SPA. Hen Harrier has been recorded at the site and is stated to be associated with the SPA per the submitted documentation.

Overall, it is my opinion that additional information will be required in order to complete Appropriate Assessment of this proposed project and the Bord should consider the same.

Deficiencies in the information provided within the EIAR to complete assessment

Aquatic Environments

In relation to the third point, potential for the proposed development to give rise to negative effects on freshwater habitats and associated species, while the principle of the mitigation measures proposed look reasonable, due to the potential significant risk of increased contamination and/or sedimentation of watercourses located within the highly sensitive catchments of the Clydagh River and the Sullane River which are known to be inhabited by sensitive aquatic species such as Freshwater Pearl Mussel and Salmonids, it is recommended that details of environmental monitoring and surface water monitoring programs should be assessed and confirmed by competent person from a technical point of view in terms of specification and design. The specified mitigation measures, monitoring programs and peat stability assessment should be agreed with and resolved prior to a grant of permission. It is advised that due to the hydrological connection of the site to Salmonid and Freshwater Pearl Mussel habitat, turbidity monitoring should be conducted daily during the construction phase.

Further to this, the Bord may wish to consider requesting further details as to the morphology, hydrology and species composition of watercourses looked within the windfarm site as details regarding the same have not been provided. Per the EIAR, the windfarm site is characterized by a relatively extensive network of non-mapped natural and artificial drainage channels.

Additionally, the Bord may wish to consider requesting further details as to any proposed instream works. The NIS refers to bank strengthening or scour protection works in relation to new structures, ensuring no undercutting or destabilization of either the structure or riparian bank areas occurs upstream and downstream of the same. As noted by the developer, all construction activities, and in particular instream works, have the potential to cause negative effects to receiving watercourses and aquatic species and habitats as a result of the release of suspended solids, concrete, and hydrocarbons in run-off. Increased silt loads can negatively impact salmonid spawning habitat and fine sediment can affect adult Freshwater Pearl Mussel, as it interferes with filter feeding. It can also dramatically change the nature of a riverbed where juveniles require water movement through gravel beds to obtain oxygen. Even short-term sedimentation is likely to kill all juveniles present.

No information has been provided in respect any instream works including potential locations of the same, instream works method statement, potential direct and indirect impacts of sensitive aquatic species potentially impacted such as Freshwater Pearl Mussel and protective measures in relation to any site dewatering required, translocation of salmonids, emergency procedures in result of failure of instream construction mitigation measures and monitoring of aquatic environment during proposed works. Given this, it is my opinion that a full and

thorough assessment of the potential impacts and effects the proposal may have on lotic environments populated by sensitive aquatic species cannot be carried out at this time and I recommend further information be requested in relation to these concerns.

Avian Species

The proposed development site is located within an upland area of Cork known to support protected species and species of conservation concerns such as Hen Harrier, White-tailed Sea Eagle, Golden Plover and Red Grouse.

In relation to Hen Harrier which have been recorded onsite, it is noted that these birds are generally considered to form part of the population of associated with the Mullaghanish to Musheramore SPA. This population survives in an increasingly afforested area in Cork, which is also subject to considerable windfarm development and agricultural intensification. As such, the availability of alternative suitable foraging habitat (heath, rough grassland etc) has declined significantly in recent decades in the area and this has resulted in significant pressures on the Hen Harrier population. As stated within the supporting documentation, the Hen Harrier population in the Mullaghanish to Musheramore Mountains SPA has undergone serious decline in the last 10 years.

With the intensification of windfarm development within the area, in addition to forestry transitioning to a closed canopy, the site in question may overtime become a vital resource to this species given its already known site usage. I have concerns that the proposal in combination with other driving factors of habitat loss / alteration in the area e.g. there are 32 wind farms / 279 turbines within 20km of the site, will negatively impact the population of both breeding and wintering Hen Harrier along with other competing species e.g. Merlin and Kestrel. While the EIAR states that the Habitat Enhancement Plan will mitigate for the loss of breeding habitat for birds on site, the carrying capacity of 28ha (at a minimum) of existing good quality peatland habitat is not equivalent to 9ha of afforested peatland to be restored.

As with Hen Harrier, the availability of suitable habitat for species such as Golden Plover within the surrounding landscape is diminishing. I note that the occurrence of the Annex I species Golden Plover at the site and surrounding land is largely focused on wintering season and as a stopover point on migration.

Golden Plover abundance have been shown to be significantly reduced by up to 79% by operational windfarms and significantly displaced by the same by up to 400m[1]. Therefore, given the degree of existing turbines in the area, factored in with what is proposed and the potential limited availability of suitable habitat in the immediate area, I consider that there is a risk of significant cumulative displacement effects to this species.

Furthermore, it is my opinion that the Bord should request a more detailed assessment regarding the barrier effect of turbines on birds such as Golden Plover and Whooper Swan. The EIAR states that the site has not been identified as being along a migration route for birds such as wetland species or birds of prey and as such the issue of a possible barrier effect does

[1] Sansom, Alex & Pearce-Higgins, James & Douglas, David. (2016). Negative impact of wind energy development on a breeding shorebird assessed with a BACI study design. Ibis. 158. n/a-n/a. 10.1111/ibi.12364.

not arise. However, it should be noted that numerous species are known to migrate at night or during periods of low light when ornithological surveys will not be undertaken. Therefore, without further assessment/surveys at appropriate times for all species it cannot be decisively concluded that the site does not from part of a migration route. Further to this given the proliferation of windfarms both permitted and under consideration in the wider area, there is the potential that birds may be pushed towards the site due to barrier effect or vice versa and taking the cumulative effect into consideration, migrating birds maybe pushed off traditional staging points which may result in increased flight times, increased energy expenditure and reduced foraging and roosting time which may in turn have a detrimental impact on a birds survival.

Additionally, and as per the EAIR, White-tailed Sea Eagle is a species that is prone to collision with turbines. While the collision risk has been assessed as 1 bird every 20 years, the risk to this Annex I species is considered significant in the context of the national population. It is my opinion that a cumulative assessment of the potential operational impacts of the proposal along with the emerging threat avian flu should be considered. It is noted that approximately two White-tailed Sea Eagles have perished from the virus in the last year, further adding an additional stress factor to an already vulnerable population.

Overall, I have concerns that the degree of assessment provided falls short of elevating all concerns with regard to cumulative effects and the displacement of birds. As such, in order to complete a full and thorough assessment of the potential impacts the Bord may want to consider requesting additional information as to the concerns above.

<u>Kerry Slug</u>

Per the EIAR, it is considered that the habitat types "wet heath / blanket bog and rock outcrop habitat" at the Gortyrahilly site support an important population of Kerry Slug, a species protected under the EU Habitats Directive 92/43/EC and under the Wildlife Act, which is rated as County Importance. However, it is stated that the extent of habitat loss throughout the wind farm site is likely to be minor localised impact as only a small proportion of suitable Kerry Slug habitat (primarily the mosaic of heath and outcropping rock) within the site will be affected.

As per my comments in respect of habitat loss, I consider the potential impact on Kerry Slug as significant not only from direct mortality due to the movement of machinery and stockpiling of material but also from the direct loss of habitat. It is noted that the Kerry slug survey conducted concentrated only on one small section of the site with no indication that surveys took place in respect of access route, grid connection etc. Information available to this office in relation to other developments in the wider area, including proximal to the grid connection route, recorded the presence of Kerry slug in additional habitats such as commercial forestry where they were located on trees, grassland habitats where the species was recorded on associated rocky outcrops, fence posts and the edges of existing forestry tracks.

Taking this into consideration, the proposal has the potential to impact a significant proportion of the local Kerry slug population. Therefore, given that Kerry Slug is likely

widespread within overall development site and as such potentially subject to direct mortality, the Bord may wish to consider requesting additional information in relation Kerry Slug distribution within the overall site and recommend that the applicant engage a competent malacologist to carry out dedicated Kerry Slug surveys and draw up in agreement with the NPWS, a Kerry Slug Management Plan to identify, create and manage a suitable receiving environment for the long-term trans-location of the Kerry Slug in areas affected by the proposed development should permission be granted.

Bats

I consider that the recorded levels of bat activity at this site to be moderate to relatively high and I am not satisfied that while taking the proposed mitigation measures into consideration, that there will not be a significant impact on the local bat population. Of particular concern to this office is the presence of 3 bat roosts, including a maternity roost within 1km of the windfarm which is of a size that at a minimum value would be at least locally significant.

The assessment provided only takes into consideration the 2 bat roosts which were recorded to the north of the site and does not take into consideration the Common and Soprano pipistrelle maturity roost which is located within 500m of the development site and approx. 1km from Turbine 1.

While I concur that there will be no direct impact to these roosts during construction, no assessment has been made in respect of the potential indirect effects the proposal may have these roosts. I note that these roosts all occur within the core sustenance zone (CSZ) of the bat species recorded roosting i.e. CSZ of pipistrelle species is c. pip = 2km & s. pip = 3km. Therefore, given the level of bat activity recorded at the site and the proximity of the roosts, it extremely likely that the bats recorded within the proposal site are associated with these roosts.

Per the EIAR, no significant effects with regard to loss of commuting and foraging habitat are likely to occur from the proposed development. This assessment has been based on the fact that the site is predominantly located within upland peatland habitats with coniferous plantations and such there will be no significant loss of typical bat foraging/commuting habitat such as woodland edge habitat.

There is conflicting information on file as to the extent of forestry to be removed to facilitate the proposal, however I note that it is stated that 35.4ha of coniferous forestry will need to be clear-felled. No indication as to quantity of edge land habitat currently available with the site has been provided and further to this no assessment has been made as to the extent of the edge land habitat which will be available post works and the degree of connectivity of the same to roosting, commuting and foraging habitat for bats within the site and wider area.

Given the extent of tree removal required there is the potential for a significant loss of foraging and commuting habitat at a local context for bats associated with the nearby roosts. Additionally, given that both Common and Soprano pipistrelle are considered high risk collision species for wind farm collisions, these bats and their roosts are potentially at significant risk from the proposal. It should be noted that the resilience and conservation

status of these roosts will very likely be heavily influenced by the habitat availability and quality within the windfarm site and surrounding area. Taking into consideration other planning applications and land use practices proximal to the site, the risk of cumulative impacts on the roosts is also considered potentially significant.

Furthermore, the potential for direct mortality due to the risk of collision with turbines is likely increased at this site given the proximity of these roosts. I note, and as referenced within the submitted documentation, a recently published scientific paper has indicated that the activity of some bat species, particularly Common pipistrelle peak at windfarm sites i.e. Common pipistrelle activity was 37% higher at turbines than at control locations, and as such there is an increase fatality risk of collision to this species. Given the recorded maternity roost in close proximity to the site, this raises significant concerns to this office, especially when immature bats are on the wing.

Preconstruction bat surveys do not provide an accurate prediction of bat activity post-construction. While consideration was given to this fact within the EIAR, nonetheless this also raises concerns as it may lead to variations of routes through the site bringing bats within closer proximity to turbines and as such at a greater risk of collision and/or barotrauma.

While a number of mitigation and procedures measures have been proposed including curtailment, feathering and clear felling of trees around turbines to reduce collision risk. However, given the degree of utilisation of the site by bat species, including Leisler's bat which will forage and commute through open spaces at height, I am not satisfied that the proposal will not have a significant impact on the local bat populations even when taking the mitigation measures into consideration. I am also concerned that attempting to apply and enforce a number of measures described e.g. curtailment strategy's in relation to wind speeds, temperature etc. by way of condition attached to a planning permission would not, in reality, be feasible or easily enforced.

Therefore, taking the above into consideration, the Bord may wish to consider requesting a revised impact assessment having regard to the core sustenance zone (CSZ) of species identified as occurring within the site and the potential impact of loss of habitat, reduction in prey abundance, collision risk and the potential for colony collapse. Cumulative impacts should also be addressed. The revised assessment should also confirm whether the mitigation measures proposed are sufficient to ensure the avoidance of significant effects on any potentially vulnerable species and their resting place. The mitigation measures should have cognisance to the resilience and conservation status of bat roosts.

Other Terrestrial Mammals

I consider two days of general terrestrial mammal surveys for a site which extends to approximately 667ha as inadequate to fully represent the von-volant mammals in which the site may support. Further to this and as noted within the EIAR the survey for badger was conducted outside the optimal recommended period i.e. winter. Therefore, given that badger are known to occur within the wider area, along with a number of other protected non-volant species, it is recommended that further surveys be carried out along with the use of

appropriately placed trail cameras as to provide for an accurate usage (spatial, temporal and degree) and assessment of the site by terrestrial mammals.

Overall, it is my opinion that for such a large and potentially disruptive and impactful development additional surveys including species-specific surveys should have been conducted to robustly assess the potential implications the proposal may have on fauna utilising the site itself and within its zone of influence. Therefore, I recommended that serious consideration should be given to the same.

Conclusions

Overall, I have significant concerns relating to this proposal be it either the siting of the same within habitats County / National Importance or the inadequacy of the information and assessment provided by way of the supporting documentation.

While I note that there is a push for renewable energy projects within the county and nationwide in light of the climate and energy crisis, recognition also needs to be given to the fact that there is currently a biodiversity crisis ongoing. It is my opinion that this proposal would be contrary to proper planning and contravene the objectives and polices for the projection of biodiversity as laid out in the County Development Plan. It is an objective of the Development Plan to protect and where possible enhance areas of local biodiversity value, ecological corridors and habitats that are features of the County's ecological network. The facilitation of this proposal would ultimately result in the loss of a significant area of Annex I Habitat and thus further reduce the extent of these diminishing and pressurized habitats at both a County and National level.

It is the recommendations of Cork County Council Ecology Office that that no such development take place on intact peatland habitats, degraded peatland habitats or any habitats of high natural value.

Should the Bord wish to consider this application further, I consider that significant proposal redesign is required along with additional information which takes into consideration a number of direct, indirect and cumulative impacts to complete both Appropriate Assessment and Environmental Impact Assessment of this proposal.

Notwithstanding these concerns we have been asked and have provided conditions. However, it should be noted that I have substantial concerns in relation to the proposal, which I believe should be resolved prior to a grant of permission and not done so by way of condition.

Conditions

No.	Condition	Reason
	Turbines 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12 and 13, and their associated connection tracks, hardstanding areas etc shall be omitted from the proposed scheme.	In the interests of minimising negative impacts on habitats and species of high biodiversity value within the site.

	Prior to the commencement of development, an Ecological Protection Plan shall be submitted to, and agreed in writing with, the planning authority. The Plan shall include the following: h) Development of a habitat's protection plan for the overall site. i) Specific proposals to deal with the Hen Harrier, Golden Plover, White-tailed Sea Eagle, Kerry Slug and Bats during the construction and operational phases. j) Ongoing monitoring of the conservation status of protected habitats and species within the site. The developer shall review usage by protected species, with a focus on birds and bats, of the wind farm site and document any casualties through the monitoring programme. An annual report on the ecological monitoring shall be submitted to the planning authority including for seven years post commissioning of the project.	To protect the ecological value of the site.
	Prior to the commencement of development, the applicants shall submit a Conservation and Habitat Management Plan for the site. This should be based on revised design of the proposal. The plan shall provide details and programmes for the implementation of all habitat management / enhancement proposals required to mitigate / compensate for the loss of or damage to habitats of biodiversity value, including habitats of value to protected faunal species. The plan shall include a map identifying the areas to be managed and shall also provide detailed information in relation to the measures to be implemented to achieve this. The plan shall also include a timeline for implementation of described	To minimise impacts on habitats and species of biodiversity value within the site.

	measures and shall provide for ecological monitoring of management/enhancement works to examine the effectiveness of the proposal. The plan shall be prepared by a suitably qualified ecologist.	
	Prior to construction works being carried out between March and August, a survey for breeding birds shall be carried out by a suitably qualified ornithologist. The survey shall cover the area within a boundary of 500m of the works to be carried out during the above period. No construction works shall be carried out during the above period within 500m of a presenting breeding site and / or nest without the consent in writing of the planning authority.	In the interest of wildlife protection.
	A survey for breeding sites and resting places of protected terrestrial species, in particular Bats (all roost types), Otter, Badger, Red Squirrel and Pine Marten, will be carried out prior to construction works commencing. If these features are found, then appropriate mitigation measures shall be submitted to and agreed in writing with the planning authority, prior to commencement of development. Any mitigation measures in relation to otter or bat populations shall be carried out only under licence from the National Parks and Wildlife Service and details of any such licence shall be copied to the planning authority.	In the interest of wildlife protection.

Ian McDermott

Cork County Council, Assistant Ecologist

iii. Environment (Surface Water and Ground Water)

Report on Planning Application for Gortyrahilly Wind Farm

This report deals only with the potential impacts on surface water and ground water.

Frank O'Flynn, Senior Executive Scientist, Environment Directorate.
Date 7/10/2022.

This report refers to the application to An Bord Pleanala, by Gortyrahilly Wind DAC, for the construction of a wind energy development.

The proposed project consists of three main elements:

- **The Main Wind Farm site;**

The proposed project will primarily consist of a wind farm of 14 no. wind turbine generators (WTG's) with a proposed maximum tip height of up to 185m, hardstanding areas, upgrade of existing tracks, and construction of new access tracks, 1 no. meteorological mast, opening of 2 no. onsite borrow pits and electrical substation compound, temporary site compound, along with ancillary civil and electrical infrastructure.

- **Turbine delivery route (TDR);**

It is expected that large components associated with the wind farm construction will be transported to site via a turbine delivery routes (TDR's), approaching from the north east of the site.

- **Grid Connection Route (GCR).**

The 110kV grid connection cable will consist of underground cable and will connect the proposed on-site substation to the existing Ballyvouskill 220 kV Substation in the townland of Caherdowney. The underground cable route is approximately 27.8km in length and traverses in a west to south westerly direction from the existing Ballyvouskill 220kV substation to the Gortyrahilly Wind Farm substation utilising public local road networks, existing access tracks and private forestry access tracks.

Horizontal directional drilling (HDD) will be used to cross existing watercourse crossings and the N22 road.

Location;

The proposed wind farm is located within an agricultural and forested landscape, between Coolea, Reananerree, and Ballyvourney, in Co. Cork. The site is located 62km west of Cork City, and 34km east of Kenmare, Co. Kerry. The site extends to approximately 667 ha, of which approximately 154 ha is commercial forest owned by Coillte. The remaining land (approximately 513 ha) is third party property and the principal land use in the general area is comprised of a mix of agricultural sheep and cattle grazing, farmland, residential properties, and open mountain heath.

Hydrology & Water Quality
The proposed wind farm is located within Hydrometric Area No. HA 19, Lee, Cork Harbour and Youghal Bay. Surface runoff from the wind farm site drains to the Douglas [Sullane], & Toon River.

Land Use & Soils.

The land use across the site is predominantly made up of agricultural lands and coniferous forestry at various stages of their lifecycle.
The subsoils across the site comprise predominantly Peat and Loamy Drift while large portions of the site are indicated as Rock at surface. Based on site investigations peat depths are generally shallow, particularly at higher elevations. Isolated minor pockets of deeper peat are observed at some locations.

The Site is characterised by relatively complex (hilly) topography with associated elevations ranging between c. 230 to 423 metres Above Ordnance Datum (m AOD) (Carrigalougha peak; 423m AOD).

Groundwater Vulnerability
The GSI Groundwater Map Viewer indicates that the Wind Farm Site is underlain by areas classified predominantly by Rock at or Near Surface (X) vulnerability rating particularly at higher elevations, with some areas mapped as Extreme (E) vulnerability rating which tend to be at lower elevations. Both the Turbine Delivery Route and Grid Connection Route traverse land with groundwater vulnerability ratings ranging from 'Moderately Vulnerable' to 'Extreme Vulnerability'.

Construction and Environmental Management Plan & Surface Water Management Plan.
The applicants have submitted a Construction and Environmental Management Plan (CEMP) for the proposed development. This CEMP includes a dedicated Surface Water Management Plan.
The CEMP & Surface Water Management Plan set out the key environmental management issues associated with the construction, operation, and decommissioning of the proposed project, to ensure that during these phases of the project, the environment is protected and impacts on the environment are minimised.

The applicants have confirmed that this CEMP will be updated prior to construction to take account of any amendments arising during the consenting process and relevant conditions attached to the planning permission and will be implemented for the duration of the construction phase of the project. The Surface Water Management Plan will be finalised following the appointment of the contractor for the main construction works.

The applicants have also confirmed that any adjustments to the CEMP will be carried out on the basis that they do not increase the impacts as addressed in the EIAR.

A Drainage Engineer will be appointed by the contractor. The Drainage Engineer will have the authority to suspend the works if weather conditions are deemed too extreme for the

effective protection of receiving watercourses. Mitigation measures to protect receiving watercourses will be put in place as directed by the Drainage Engineer in response to extreme forecasts.
An onsite Ecological Clerk of Works (ECoW) will be present to oversee construction works where required, to ensure that all agreed mitigation measures are carried out by the appointed contractor(s).
Ongoing monitoring of the efficacy of the mitigation measures will be carried out throughout the construction stage.

Method statements have been provided for the key elements of the construction process as follows;

- Site Entrance
- Temporary Site Compound
- Concrete Washout Area and Wheel Washing
- New Site Access Tracks
- Upgrade of Existing Internal Access Tracks
- Cable Works
- Borrow Pit Construction
- Crane Hardstands
- Turbine Foundations
- Substation Compound
- Electrical Works
- Turbine Erection
- Grid Connection works
- Horizontal Directional Drilling

Potential Impacts on Water Quality
During the construction period, the development has the potential to have impacts on hydrology and water quality unless appropriate mitigations are applied.
Tree felling, new access tracks and upgrade of existing tracks, turbine hardstanding areas, the on-site substation and other new, hard surfaces have the potential to contribute to an increase in runoff.
The applicant has identified that the risk to hydrology is relatively low because the development will not have a major impact on run-off rates.

There is a significant risk to water quality, primarily due to potential for run-off of sediment to surface water due to excavation, traffic movements, stream crossings, etc. There is also a risk to surface & groundwater due to leakage or loss of fuel or hydrocarbons from plant, this can be mitigated with good management, & provision of appropriate spill response equipment & procedures.

The applicants have identified the potential impacts on water quality during the construction period & have detailed the most sensitive locations such as stream crossings, borrow pits, substation construction, etc. Site specific mitigation measures have been identified to minimise any impacts on water quality at the most vulnerable sites, as well as general mitigation measures.

An emergency response procedure has been specified to deal with any pollution incidents on site. All personnel working on site will be trained in pollution incident control response. An emergency response plan will be prepared which will ensure that appropriate information will be available on site outlining the spillage response procedure and a contingency plan to contain silt. A regular review of forecasts of heavy rainfall will be carried out, and a contingency plan will be prepared for before and after such events.

No instream works are proposed.

The applicant states that a water quality monitoring programme will be established to ensure that water quality is maintained. This programme will ensure that designed mitigation measures are working so water quality is not affected.

Daily visual inspections of drains and outfalls will be performed during the construction period to ensure suspended solids are not entering the streams and rivers of the site, to identify any obstructions to channels, and to allow for appropriate maintenance of the drainage regime.
If excessive suspended solids are noted, construction work will be stopped, and remediation measures will be put in place immediately.
Visual inspections will be continued during the operational period until vegetation is established on site.
A record will be kept of daily visual examinations of watercourses which receive flows from the permitted development, during and for an agreed period after the construction phase.

A detailed water quality monitoring programme will be undertaken during the construction phase of the proposed development, in addition to the visual inspections outlined above, to ensure the effective implementation of the proposed mitigation measures. Field measurements and grab samples will be taken at suitable locations, which will be decided prior to the construction phase commencing.
The field measurements will be recorded at the site and will include measurement of the following parameters, electrical conductivity (µs/cm), pH, temperature (ºC), suspended solids (mg/l) and dissolved oxygen (mg/l).
An ECOW will propose new mitigation measures if results exceed pre work levels.

The information submitted by the applicant indicates that there would be little risk of impact on water quality once the proposed activity is operational, & once the site is fully vegetated. There will be no personnel based on site. There will be no frequent vehicular traffic to or from the site, or through the site, during the operational stage.

Conclusion

The applicant have submitted detailed proposals to protect water quality during the construction & operational stages of this proposed development. The CEMP & Surface Water Management Plan will be finalised following the appointment of the contractor for the main construction works.
I have no objection to grant of permission on environmental grounds.

Recommended Conditions if Permission is to be granted:

I recommend that the following conditions should be applied to any permission granted.

No.	Condition	Reason
1	The construction of the development shall be managed in accordance with a Construction & Environmental Management Plan, which shall be submitted to, and agreed in writing with Cork County Council prior to commencement of development. This plan shall include a detailed Surface Water Management Plan.	In the interests of environmental protection.
2	During the construction phase operations on site shall be carried out in such a manner that no polluting material, rubble, waste material or contaminated surface water enters any adjacent watercourses or public roadway around the site. No burning of waste material shall take place on site.	In the interests of environmental protection.
3	All watercourses in or adjacent to the works area shall be monitored on a daily basis by the Drainage Engineer, or designate, to ensure they are not being impacted by silt/sediment laden storm water run-off from works area. A record of this monitoring shall be maintained on site.	To protect surface water quality.
4	All over ground tanks containing hydrocarbons shall be contained in a waterproof bunded area, the capacity of the bund is to be the greater of the following; 110% of the largest tank size or 25% of total volume stored in the bunded area. All valves on the tank shall be contained within the bunded area. The bunded area shall be fitted with a locking valve that shall be opened only to discharge storm water. The developer	In the interests of environmental protection

	shall ensure that this valve is locked at all times.	
5	Hydrocarbon spill kits shall be in place on all site vehicles/plant. Suitable interceptor drip trays shall be used when refuelling vehicles/plant & when vehicles/plant are parked. No servicing of vehicles/plant shall be carried out on site.	To prevent water pollution
6	All drainage and sediment /silt traps shall be in place before any other works are undertaken on the site. All work shall be carried out in favourable weather conditions to minimise the generation of silt & fines.	To prevent water pollution.
7	Silt fencing shall be constructed to protect watercourses on site from run-off of silt laden water prior to commencement of development. These silt fences shall be maintained as required during the construction phase, & on an ongoing basis, until the site is fully vegetated & the risk of silt run-off is minimised.	To protect water quality.
8	The service roads shall be cambered to deflect surface water to the adjoining lands for attenuation. Service roads shall not discharge directly to open drains on site.	To prevent water pollution.

Frank O'Flynn,
Senior Executive Scientist,
Environment Directorate.

iv. Environment (Air, Noise and Vibration)

Environmental Report Prepared For: Proposed Gortyrahilly Wind Farm, Ballyvourney, Co. Cork (Ref. No. ABP 313440-22)

AIR

Chapter 10 and associated Appendices of the submitted Environmental Impact Assessment (EIS) assesses Air impact of the proposed development. Section 10.2 details the assessment methodology as well as the relevant legislation and guidance. It is submitted that the proposed development is located within Air quality Zone D as designated by the Environmental Protection Agency. This represents rural areas away from large population centres.

An assessment of the potential impact of the proposed development during the construction and decommissioning phase is undertaken as per Section 10.2.7. It is submitted that the main potential sources of impacts on air quality during construction is dust with potential for the generation of dust from excavations and from construction including construction of access roads and hardstands and the trench for the cable ducting for the grid connection. It is also submitted that emissions from plant and machinery, including trucks during the construction of the proposed development are a potential impact and that the construction phase is likely to result in exhaust emission from construction vehicles and transport vehicles associated with the site works. It is further submitted that the impact on air quality from an increase in exhaust emissions will be short-term, slight negative impact.

In respect of the operational phase and decommissioning phase, an imperceptible negative impact is submitted. Construction phase mitigation measures to be employed are outlined per Section 10.2.8.1. In terms of cumulative impacts, it is submitted that negative cumulative impacts in relation to air quality would only occur if a large development was located in the vicinity of the site and in the process of construction at the same time as the development. The developments considered as part of the cumulative effect assessment are described in Appendix 2.3 and 2.5 respectively.

NOISE & VIBRATION:

Having regard to the specific nature of Wind Farm noise impact assessment, I would respectively suggest that the Bord should seek their own acoustic expertise to peer review the methodologies and modelling followed in the noise impact assessment. It is not in any way questioning the competency of the author of the submitted noise impact assessment report.

Chapter 11 of the submitted Environmental Impact Assessment (EIS) and associated appendices assesses the effects of the development from noise impacts. The assessment considers the potential effects during the construction, operational and decommissioning phases of the development. It is submitted that any effects arising as a result of the future decommissioning of the development, are considered to be no greater than the effects during construction.

An overview of the assessment criteria and legislation and guidance review is presented in Section 11.2. It is noted that the final turbine choice will be selected through a commercial tender process and that for the purpose of the Environmental Impact Assessment the Nordex N149 has been selected. It is submitted that the Nordex N149 has been selected as it reflects a worst-case scenario for the technical assessment as it generates the highest sound power levels of all turbines within the proposed range. It is also submitted that cumulative effects of all existing, consented or application-stage wind farms within 3 km of the wind farm have been taken into consideration as the potential for cumulative effects beyond this distance is considered negligible. On this basis the operational effect of the Derragh Wind farm was assessed.

Construction Assessment methodology is detailed per Section 11.2.12. It is submitted that construction noise from wind farm development or decommissioning is not considered an intense activity. The main noise sources will be associated with the excavation of the two borrow pits including blasting and crushing, construction of turbine foundations and hardstands, while lower levels are generated by activity such as access roads, temporary construction compound and a 110Kv substation.

Section 11.3 of the submitted documentation details the baseline description. It is submitted that based on layout, potential noise sensitive locations including occupied and

unoccupied were identified from maps and that receptor locations shown in Figure 11.1. were verified through visits to the area surrounding the development. I note per page 10 from the planning statement that they are 106 houses within 2km of the proposed turbines and the closest inhabited dwelling (H3) is located 753m from the nearest turbine. It is also noted that there are a cluster of two residential buildings located 225m from T12. It is submitted that in the event that planning consent is achieved, these buildings will be in the control of the applicant and will not be inhabited for the operational period. It is also submitted that these buildings are uninhabited, and the landowner is in agreement with the above terms.

5 baseline noise survey locations are submitted as selected and measurements were recorded from 6th August to 3rd September,2020. These are referenced as receptor houses, H2,H3,H5,H15 and H36.Table 11.11 and Appendix 11.1. refers. The prevailing background noise levels are presented as per Table 11.12. with locations of all receptors assessed given as per figure 11.1. It is submitted as per section 11.3.6 that the noise limits for the development are based on the limits contained within the Wind Energy Guidelines 2006 and on the background levels obtained in Table 11.13. It is also submitted that a more stringent limit is applied with the lowest background noise levels obtained at location H2 used as the basis for the assessment at all receptors with a limit of 43 dB(A) being applied for day and night.

Section 11.4 assesses the potential effects in respect of construction noise and decommissioning noise levels. It is noted and submitted that the main noise sources will be associated with the construction of the turbine foundations, turbine hardstands, grid connection, processing in the borrow pit locations, with lesser sources being site access roads and construction of a 110kV substation. Table 11.14 presents typical noise levels for construction works. It is submitted that decommissioning noise levels are expected to be similar to construction levels, but for a shorter period. Table 11.15 presents the predicted construction levels at the nearest receptor to the two borrow excavation and at varying distances due to the development of the grid connection. Section 11.4.1.3 assesses ground vibration and air overpressure. It is stated that the effects of blasting vibration and air overpressure from the development is at a distance greater that 870 m and is therefore considered not significant and will be kept within the recommended guidelines described in Section 11.2.8.3.1. I expect this is a typo and should refer to Section 11.2.12.3.1.

Table 11.16 presents the predicted noise levels from the development as L_{A90} at varying wind speeds (110.5 hub height). Predicted noise levels for the turbine in the lowest hub height range (102.5m) possible that may be used is given in Appendix 11.5.

Section 11.4.3 undertakes an assessment of the operational noise based on the assumption that all 14 no. turbines are directly down-wind. The predicted noise levels at all receptors are presented as per Table 11.17 and it is submitted that the predicted noise levels are lower than applied limits in all cases. Predicted day and night-time background noise level plots at the 5 monitoring receptors are presented per charts 11.1 to 11.10.

An assessment of the cumulative effects from the development together with the nearby six turbines operational Derragh Wind farm is presented in Section 11.4.4 with predicted cumulative noise levels presented in Table 11.18. It is submitted as per Section 11.4.4.4 that all predicted noise limits are within the applied limits. Table 11.19 presents the margin between the predicted cumulative noise levels and lower fixed limit of 43dB(A).

Construction and operational noise mitigation is submitted as per Section 11.5.1. and 11.5.2. It is noted as per section 11.5.2 that a warranty will be provided by the manufacturer of the turbine selected for the development in order to ensure that the turbine selected does not require a tonal noise correction under best practice. It is also noted and submitted that all 14 no. turbines will have as standard STE to reduce noise levels, so no mitigation is required.

Items the Bord may request or seek further clarification on:

Noise & Vibration

1.)The respective number and distances of all noise sensitive receptors within 500m, 1000m,1500m and 2000m of the turbines should be presented and quantified.

2.) The referenced noise sensitive receptors that each background noise monitoring location is considered to be representative off should be quantified and also shown on a suitably scaled map.

Suggested Conditions:

1.) Wind turbine noise arising from the proposed development, by itself or in combination with any other permitted wind energy development in the vicinity, shall not exceed the greater of.

(i) 5dB (A) above background noise levels or

(ii) 43 dB(A) $L_{90\ 10\ mins}$

when measured externally at noise sensitive locations.

Reason: In the interest of residential amenity.

2.) A noise compliance monitoring programme shall be submitted for agreement with the planning authority within 3 months of the commissioning of the proposed development. All results should be submitted to the Planning Authority within 1 month of the completion of any survey. The developer shall carry out any additional noise mitigation measures as may be deemed necessary following a review of such survey.

Reason: In the interest of residential amenity.

3.) A designated member of the company's staff shall interface with the Planning Authority or member of the public in the event of complaints or queries in relation to environmental emissions. Details of the name and contact details and the relationship to the operator of this person shall be available at all times to the Planning Authority on request whether requested in writing or by a member of staff of the Planning Authority at the site.

Reason: In the interest of residential amenity.

4.) The construction of the development shall be managed in accordance with a Construction Environmental Management Plan which shall be submitted to and agreed in

writing with the Planning Authority prior to the commencement of the proposed development. In relation to air and noise, this plan shall provide details of the construction practice for the development including.

(a) Proposals for the suppression of on-site noise

(b) Proposals for the suppression of dust on site

(c) Proposals for the suppression of vibration

(d) Proposals to minimise any odours.

This plan shall include a comprehensive monitoring plan to include inter alia noise, vibration, and dust with regular reporting to the planning authority.

Reason: In order to protest the Environment and Local amenities during construction.

Report By: Andrew Mc Donnell,

Executive Scientist,

Environment Directorate,

Cork County Council.

Date: 19th October,2022.

v. **Archaeology**

Re: SID for Gortyrahilly Wind Farm for the construction of 14 No. wind turbines, a meteorological mast, an on-site substation and all ancillary works, works along the turbine delivery route and the construction of an underground Grid Connection to Ballyvouskill 220kV GIS substation, Co. Cork.

County Development Plan 2022 Objectives HE 16-2: Protection of Archaeological Sites and Monuments *Secure the preservation (i.e. preservation in situ or in exceptional cases preservation by record) of all archaeological monuments and their setting included in the Sites and Monuments Record (SMR) (see www.archaeology.ie) and the Record of Monuments and Places (RMP) and of sites, features and objects of archaeological and historical interest generally. In securing such preservation, the planning authority will have regard to the advice and recommendations of the Development Applications Unit of the Department of Housing, Local Government and Heritage as outlined in the Frameworks and Principles for the Protection of the Archaeological Heritage policy document or any changes to the policy within the lifetime of the Plan.*

County Development Plan 2022 Objectives HE 16-3: Underwater Archaeology

Protect and preserve the archaeological value of underwater archaeological sites and associated underwater and terrestrial features. In assessing proposals for development, the development will take account of the potential underwater archaeology of rivers, lakes, wetlands, intertidal and sub-tidal environments through appropriate archaeological assessment by a suitably qualified archaeologist.

County Development Plan 2022 Objectives HE 16-4: Zones of Archaeological Potential in Historic Towns and Settlements *Proposed development works in Historic Towns and settlements, Zones of Archaeological Potential, Zones of Notification and the general historic environs in proximity to the zones, should take cognisance of the impact potential of the works, and all appropriate archaeological assessments employed to identify and mitigate the potential impacts.*

County Development Plan 2022 Objectives HE 16-5: Zones of Archaeological Potential

Protect the Zones of Archaeological Potential (ZAPs) located within historic towns, urban areas, and around archaeological monuments generally. Any development within the ZAPs will need to take cognisance of the upstanding and potential for subsurface archaeology, through appropriate archaeological assessment.

County Development Plan 2022 Objectives HE 16-6: Industrial and Post Medieval Archaeology

Protect and preserve industrial and post-medieval archaeology and long-term management of heritage features such as mills, limekilns, forges, bridges, piers and harbours, water-related engineering works and buildings, penal chapels, dwellings, walls and boundaries, farm buildings, estate features, military and coastal installations. There is a general presumption for retention of these structures and features. Proposals for appropriate redevelopment including conversion should be subject to an appropriate assessment and record by a suitably qualified specialist/s.

County Development Plan 2022 Objectives HE 16-7: Battlefield, Ambush and Siege Sites and Defensive Archaeology *Protect and preserve the defensive archaeological record of County Cork including strategic battlefield, ambush and siege sites, and coastal fortifications and their associated landscape due to their historical and cultural value. Any development within or adjoining these areas shall undertake a historic assessment by a suitably qualified specialist to ensure development does not negatively impact on this historic landscape.*

County Development Plan Objectives HE 16-8: Burial Places

Protect all historical burial places and their setting in County Cork and encourage their maintenance and care in accordance with appropriate conservation principles.

County Development Plan Objectives HE 16-9: Archaeology and Infrastructure Schemes

All large scale planning applications (i.e. development of lands on 0.5 ha or more in area or 1km or more in length) and Infrastructure schemes and proposed roadworks are subjected to an archaeological assessment as part of the planning application process which should comply with the Department of Arts, Heritage and the Gaeltacht's codes of practice. It is recommended that the assessment is carried out following pre planning consultation with the County Archaeologist, by an appropriately experienced archaeologist to guide the design and layout of the proposed scheme/development, safeguarding the archaeological heritage in line with Development Management Guidelines.

County Development Plan Objectives HE 16-10: Management of Monuments within Development Sites

Where archaeological sites are accommodated within a development it shall be appropriately conservation/ protection with provision for a suitable buffer zone and long-term management plan put in place all to be agreed in advance with the County Archaeologist.

County Development Plan Objectives HE 16-11: Archaeological Landscapes

To protect archaeological landscapes and their setting where the number and extent of archaeological monuments are significant and as a collective are considered an important archaeological landscape of heritage value.

County Development Plan Objectives HE 16-12: Raising Archaeological Awareness

As part of the Heritage Plan it is an objective to develop a management plan, if resources allow, for the archaeology of County Cork, which could include an evaluation of the Historic Character Assessment of Cork County helping to identify areas for tourism potential, and strategic research while also promoting best practice in archaeology and encouraging the interpretation, publication and dissemination of archaeological findings from the development application process.

County Development Plan Objectives HE 16-13: Undiscovered Archaeological Sites

To protect and preserve previously unrecorded archaeological sites within County Cork as part of any development proposals. The Council will require preservation in situ to protect archaeological monuments discovered. Preservation by record will only be considered in exceptional circumstances.

Archaeological and Cultural heritage report

I have read and assessed chapter 14 of the EIAR Cultural Heritage prepared by Tony Cummins and David Murphy of John Cronin & Associates which has assessed the impact of all elements of the application for the construction of Gortyrahilly Wind Farm. The proposed development is for the construction of 14 No. wind turbines, a meteorological mast, an on-site substation, and all ancillary works, works along the turbine delivery route and the construction of an

underground Grid Connection to Ballyvouskill 220kV GIS substation, Co. Cork. The assessment has examined all aspects of the proposed development, identifying all known archaeology and cultural heritage sites within the proposed development site (PDS), the study of 1km and the surrounding wider landscape (10Km).
There are 3 archaeological monuments within the proposed development site (PDS) – 2 wedge tombs (CO069-003 & 93) and field boundary CO069-070) which has no surface evidence. The assessment has carried out documentary research and field walked the proposed development site. Some areas had restricted access. The field inspection carried out as part of the assessment identified one new potential archaeological site – a standing stone 70m south of T13.

There are a number of archaeological sites within the study area (1km) including CO069-002 Enclosure and particularly in the wider landscape (10km). Many of these sites are associated with the Bronze age indicating a strong presence in the area during this period. Some are burial sites with two wedge tombs occurring within the PDS others are ritual sites – stone circles, alignments, and radial stone cairns.

The wind farm layout was informed by the archaeological desktop studies and fieldwork undertaken during the design and assessment phases and the development was designed to avoid the known locations of the archaeological monuments within the PDS. The layout was also designed to avoid any potential significant impacts on the alignments of the two wedge tombs (CO069-003----and CO069-093----) located within the site.

There will be no direct impact by the proposed development on any known archaeological monument. However, the development site does contain potential for subsurface archaeology associated with the known archaeological monuments and the scale of the development and the nature of the landscape.

The report has also assessed the impact of the proposed development on the indirect or visual impact the archaeological monuments within the PDS and the monuments in the surrounding area. The visual impact on the wedge tomb and CO069-093--- within the PDS and Enclosure CO069-002 immediately outside the PDS was deemed to be moderate while the remainder, including the wedge tomb CO069-003 within the PDS, were deemed slight. Given the nature of the wind farm turbines there are no mitigation measures that can address these visual impacts, but it is noted that they will be reversed following the decommissioning phase.
The indirect visual impact on archaeological monuments in the wider landscape during the operation phase, including monuments with certain celestial alignments and National monuments and sensitive cultural heritage sites were also considered. the proposed development will be visible from various archaeological monuments and cultural heritage assets in the wider landscape but will not result in likely significant indirect negative impacts on the settings or alignments of archaeological monuments and their alignment within the wider landscape.

The cumulative effect was assessed following a review of the wind farm developments permitted /in place in the surrounding area and was the proposed development will not act in combination with the reviewed wind farm developments to result in likely significant

indirect negative cumulative impacts on the archaeological monuments in the surrounding landscape.

Finally, the report provides mitigation measures to alleviate negative impact archaeology and cultural heritage during the construction, operation, and decommissioning stages of the development

The mitigation measures presented are outlined in 14.6 and include pre-construction and construction phase archaeological site investigations as well as protection measures for known monuments.
I am satisfied with the Archaeological and Cultural heritage assessment in the EIAR regarding archaeology and cultural heritage. It has assessed comprehensively the impact of the proposed development on the archaeological and cultural heritage and demonstrated there will be no direct impact on any know archaeological monuments. There will be moderate to slight visual impact on the monuments within and adjacent to the PDS which is unavoidable given the nature of the development. The impact on the archaeology in the wider landscape was not deemed significant.
I concur with the assessment and recommend all the mitigation measures outlined in 14.6 and outlined below are attached as condition if planning permission granted.

Recommendation
The following conditions are attached if planning permission granted:
1. Prior to the commencement of the development the applicant shall engage the services of a suitably qualified archaeologist (licensed under the National Monuments Acts 1930–2004) to carry out a geophysical survey in the greenfield area impacted by T9, associated hardstand and access roads followed up by a program of archaeological testing (licensed under the National Monuments Acts 1930–2004) targeting the results of the geophysical survey. The result of the geophysical shall be submitted to the Planning Authority with a testing strategy for written approval prior to applying for a licence to test the site. No sub-surface work shall be undertaken in the absence of the archaeologist without his/her express consent. Where archaeological material is shown to be present, avoidance, preservation in situ will be the preferred option. The Planning
Authority and National Monuments Service (NMS) of the Department of Housing, Local Government and Heritage will advise the Applicant with regard to these matters. The consultant archaeologist is advised to contact the National Monuments Service and Local Authority Archaeologist to agree a mitigation strategy. No site preparation or construction work shall be carried out until after the archaeologist's report has been submitted and permission to proceed has been granted.

2. The applicant is required to engage the services of a suitably qualified archaeologist to monitor under licence from the National Monuments Service (NMS) of the Department of Housing, Local Government and Heritage all ground works associated with the development in green field locations, the grid route and turbine delivery work areas. No ground works/ construction works /soil stripping in these areas shall take place in the absence of the archaeologist. The ground works /removal of topsoil shall carried out under the direction of the appointed archaeologist. The appointed archaeologist shall carry out an intermittent monitoring /watching brief of the all other areas of ground works including the excavation for

the grid connection trench on public roadways and forest roads. The areas of monitoring and intermittent shall be agreed in advance with the County Archaeologist Mary Sleeman in advance of applying for a licence to the National Monuments Service. In the event archaeological material is found during the course of monitoring, the archaeologist shall have work on the site immediately stopped and notify the County Archaeologist and National Monuments Service. All archaeological features/deposits shall be hand-cleaned and clearly visible and no further soil removal shall take place pending a decision as to how best to deal with the archaeology. The developer shall be prepared to be advised by the Local Authority Archaeologist and the National Monuments Service in regard to any necessary mitigating action (e.g. preservation in situ, or excavation) and allow enough time to facilitate implementation of the agreed mitigation measures. The applicant shall facilitate the archaeologist in recording any material found. The Planning Authority and the National Monuments Service shall be furnished with a report describing the results of the monitoring.
3. The applicant is required to engage the services of a suitably qualified archaeologist to carry out a systematic advance programme of archaeological field-walking surveys within construction areas in forestry plantations following tree felling. Any archaeological features identified shall be recorded and then securely cordoned off while the County Archaeologist and the National Monuments Service are consulted to determine further appropriate mitigation measures, which may include preservation in situ (by avoidance) or preservation by record (archaeological excavation).

4. A buffer zone of 50m shall be established by a suitably qualified archaeologist around the monuments Wedge Tomb CO069-003----, Wedge Tomb CO069-093----and Enclosure CO069-002---- (withing the development site) and the newly identified standing stone 70m to the south of T13 . The buffer zone shall be securely cordoned off and clearly signed as 'No Entry: Archaeological Area' for the duration of the construction phase. Prior to the commencement of the development a site layout plan indicating the buffer zone and archaeological monument and photographic evidence of the buffer zone in place shall be submitted to the Local Authority for written approval.

The locations of these monuments and buffer zones shall be identified as 'no-entry'areas during the construction phase site inductions. No construction works, stockpiling of topsoil etc, or any development, or landscaping and/or planting should take place within the designated buffer zone. No trees, plants etc shall be removed from this buffer zone. Subsequent to the completion of the development the buffer zone shall remain around the Archaeological Monument, ie. no landscaping and/or planting should take place within the buffer zone. Planting within this buffer zone shall be limited to shallow-rooted plants and/or grass.

5. All signage erected within the public realm during the construction phase will include Irish and English text.

County Archaeologist
20/10/2022

17) Appendix D - Pre-planning Reports

i. Ecology Section

Ecology Office Advices - Pre-Planning / General Scoping

PPW: 6225 Gortyrahilly Wind Farm, Co. Cork and PPW: 6226 Inchamore Wind Farm, Co. Cork

These comments are made without prejudice and are based on a review of General Scoping Documents and Ecology Scoping documents received in respect of the above mentioned windfarm sites and are also based on publicly available information. I do not have access to any site specific ecological data in relation to these sites.

Please note that this document was updated following receipt of Ecological Scoping Reports – text included in purple to reflect same.

At the outset, given the proximity of the two windfarm sites to one another (c.3km) and given their location within the same general area and catchment and probable use of the same grid connection infrastructure and access, the question of project splitting will need to be addressed at the outset to determine whether the two projects should be considered as a single project.

In any event both projects will need to be assessed as part of the cumulative impacts assessment together. Any cumulative impacts assessment should also consider solar projects within the area having particular regard to cumulative impacts on protected species, habitats of high natural value including peatland habitats, other upland habitats and on freshwater habitats.

Having regard to the site context, the assessment of peat stability will be an important element of these applications. Key concerns from an ecological perspective are:

- Potential for impact on sites designated or proposed to be designated for protection of biodiversity;
- Potential for impact on habitats of high natural value; and
- Potential for impact on protected species.

Aerial imagery indicates that the proposed developments comprises of areas intact peatland habitats and upland habitats of high natural value. This is a concern from an ecological perspective as it is generally recommended to **avoid intact upland habitats**, in particular peatland habitats when identifying appropriate sites for development of wind farms. For this reason, I would refer you to policy HE 2-3 of the CDP and to reconsider the positioning of some of the works (see detailed comments below in respect of sites).

Based on the mapping presented, it appears that neither of the sites overlap with the boundaries of any site which is designated or proposed to be designated for nature conservation. However, screening for Appropriate Assessment will be required to identify whether there are any potential pathways for impact linking these sites to any such site, looking in particular at potential hydrological linkages to any such site. To that end it should be noted that the site is located within the Lee -Sullane River catchment.

Without direct knowledge of the site, issues we will be likely to be looking closely at are:

- Assessment of impact on upland habitats including intact peatlands. Per above, it is recommended that development **on intact peatland habitats and upland habitats of high natural value is avoided**.
- Potential for the project to give rise to negative effects on freshwater habitats and having particular regard to potential impacts on Fresh water pearl Mussel and Salmon. To this end, there should be a focus at design stage on providing for an appropriately designed surface water management system which minimises risk of release of contaminants to surface waters and ensures that there is no increase in surface water run-off from the site. Avoidance of disturbance of peat based habitats will greatly assist with this.
- Any species specific surveys which are deemed to be required including bird surveys must be completed by qualified and experienced practitioners following recognised best practise methods. It should be noted that up to two years' full season surveys are required for certain bird species should a potential impact on any such species be identified as a possible risk having regard to reference. Ornithological summary results presented in scoping documentation dates from 2017 to 2019 and given the time lapse, supplementary surveys for the intervening period will be required. Please present mapping of any habitat loss respective to foraging and breeding sites as part of assessment.
- With regard to bat activity, if commuting and foraging routes of bats relative to proposals could be presented and if these routes could also be presented respective of habitats on site including any habitat loss associated with the development.
- Decommissioning and reinstatement should be considered in detail and shall include opportunities for biodiversity enhancement where possible.

The Biodiversity chapter of the EIAR should be prepared to accord with CIEEM Guidelines should be prepared taking account of National and EU Guidelines as well as recent case law.

No details of grid connection options were incorporated into the pre-planning enquiry. As per the AP's comments full details of options shall be detailed and assessed as part of the applications.

Specific Comments in relation to Inchamore Windfarm

Per above comments and based on constraints mapping, it is recommended that development is avoided within areas identified as:

- 'largely intact upland blanket bog' and 'cutaway blanket bog with intact areas' located in proximity to turbine 3 and associated developable areas within the vicinity of these habitats; and
- areas comprising of a 'Mosaic of Upland Blanket Bog and Wet Heath' in proximity to the developable area associated with turbine 1.
- Ecological Scoping document acceptable in principle

Specific Comments in relation to Gortyrahilly Windfarm

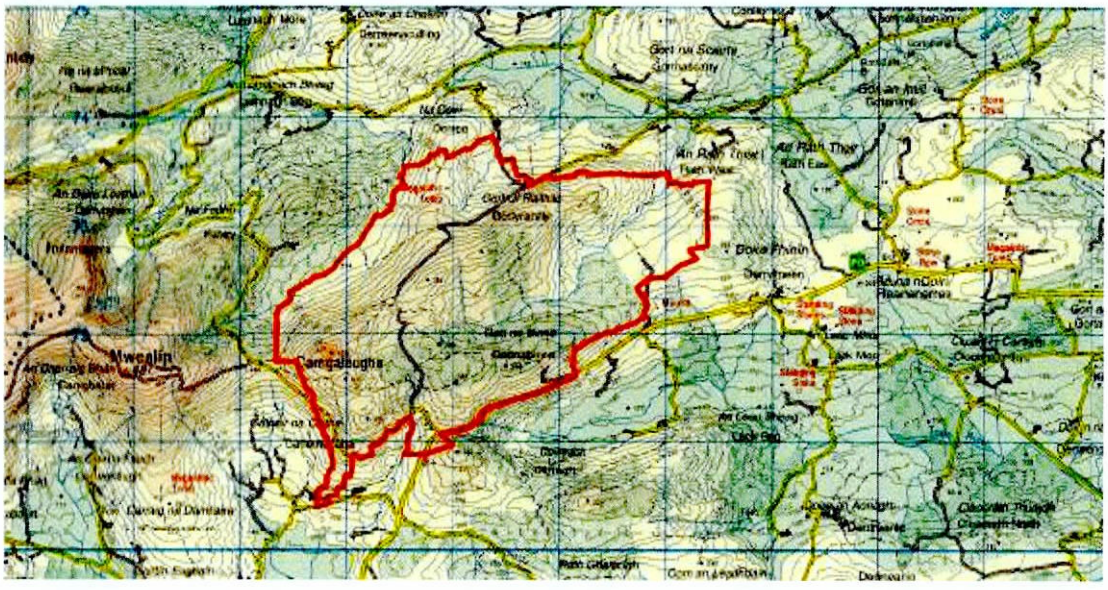
Per above comments and based on constraints mapping, it is recommended that development is avoided within areas identified as:

- 'blanket bog' in proximity to the developable area associated with turbine 8.

Joy Barry
Ecology Office Planner
03/02/2020

ii. Scoping Opinion

Scoping Opinion - Gortyrahilly Wind Farm, Ballingeary, Co. Cork



An EIAR Assessment Scoping report and consultation request has been received (13/11/20) for a proposed **SID** for the construction of approximately 16 no. wind turbines each typically of 4.5 – 6 megawatts (MW) with a combined output of approximately 80MW located between the villages of Ballyvourney and Ballingeary in the Múscraí Gaeltacht, Co. Cork.

The proposals will also include planning permission for the construction of an underground grid connection to Ballyvouskill 220kV substation, Co. Cork, located approximately 14km to the north east of the Development.

Purpose of scoping request is so that key environmental issues/concerns can be identified early and the development can be designed to avoid or minimise any potentially significant environmental effects, and that any remaining likely significant effects can be assessed appropriately.

The Proposed Development

The Developer intends to apply to An Bord Pleanála (ABP) as a Strategic Infrastructure Development (SID) project(subject to the outcome of a pre-application consultation process with ABP).

A pre-application letter was submitted to An Bord Pleanála on the 11th of September 2020 for a determination as to whether this project constitutes Strategic Infrastructure Development.

The 7th Schedule to the 2000 Act [as amended] lists the classes of infrastructure development which, if considered by the Board to be strategic infrastructure development, requires direct application to the board.

"An installation for the harnessing of wind power for energy production (a wind farm) with more than 25 turbines or having a total output greater than 50 megawatts."

Proposed development involves;

- 710 hectares of land
- 16 no. 4.5-6mw wind turbines
- Overall ground to blade tip height of up to 185m rotor diameter of up to 155m and a hub height in region of 11m,
- Site access roads, crane hardstand areas and turbine foundations,
- Development of a site drainage network
- On site borrow pit
- Internal wind farm undergound power and communications cabling
- On site 38kV substation and a 110kV grid connection
- Permanent met mast
- Temporary site compound
- Upgrade works on turbine delivery route from Foynes or Ringaskiddy port
- Recreational community and biodiversity improvements associated with development

Planning Dept. Feedback

The following should be noted:

- Site is within an area;
    - where wind farms are open to consideration
    - within landscape character types 12a – Rolling Marginal Middle ground, 15a - Ridged and Peaked Upland and 16c – glaciated cradle valleys
    - within Transitional rural area
    - where site boundary runs c.2km from the Kerry border
    - close to scenic routes – road between Lissacresig and mouth of the glen and winding road joining coolea – coom road to Lissacresig road.
    - Where Southern end of site is within natura 2000 screening zone for the gearagh SAC

- Information to be contained in EIAR – report submitted for scoping covers the various EIAR requirements already – follow all relevant guidelines including EIA guidelines, relevant Wind Energy Guidelines, EPA advice notes and relevant legislation.
- The EIAR and construction practice and methodology should take into account existing ground conditions onsite and best practise. Disposal or elimination of waste/surplus material from construction/site clearance, particularly significant for peatland sites.

- Reasonable alternatives to be considered (as per scoping doc) and must also indicate the main reasons for the option chosen taking into account the effects of the project on the environment.
- Grid connection needs to be finalised - Should the grid connection not form part of the planning application, the EIAR should indicate the most likely corridor of the grid connection, its width and route and the likely nature of the connection in terms of line voltage, whether it will be underground (preferred) or over ground (including details of pole type) and any ancillary equipment (e.g. substations).
- Cumulative impacts to be considered (as per scoping doc) - include an assessment of all the existing or approved wind farm developments in the area. In addition the EIAR should also take into account any existing or approved large scale developments in the area.
- Consider transboundary effects given proximity to Kerry Border (C.2km)
- Might be worthwhile including some vantage points from new Macroom bypass route in terms of visual impacts.

C.Stack,
Exec. Planner.
11/1/21