

# Comhairle Contae Chorcaí Cork County Council

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An Bord Pleanála,  
64 Marlborough Street,  
Dublin 1,  
D01 V902.

31<sup>st</sup> December 2024

**Re: Strategic Infrastructure Development (SID) Planning Application under the provisions of Section 37E of the Planning and Development Act 2000 (as amended)**

**Case Number ABP – 321029-24**

**Strategic Infrastructure Development (SID) Planning Application** for development comprising the construction of a wind farm (17 Wind Turbines with a total tip height in the range of 199.5m minimum to 200m maximum inclusive, a permanent meteorological met mast with a height of 110m (AGL)) and associated infrastructure including hardstandings, cabling and access roads. The proposed development also consists of a 110kv grid connection to Ballyvouskill and related works in the townlands of Cummeennabuddoge (Coimín na Bodóige) (County Kerry), Clydaghroe (An Chlaoideach Rua) (County Kerry), Glashacormick (Glaise Chormaic) (County Kerry), Cummeenavrick (Coimín an Bhroic) (County Kerry), Caherdowney (Cathair Dhúnaigh) (County Cork).

Dear Sir/Madam,

Please find attached Cork County Council's Report in relation to the proposed Strategic Infrastructure Development (SID) for the construction of 17 wind turbines and associated infrastructure including hardstandings, cabling and access roads and a 110kv grid connection to Ballyvouskill Substation.

The Strategic Infrastructure Development application was referred to relevant internal departments within Cork County Council and a copy of each of the internal department reports are attached in Appendix C. Cork County Council considers that based on the information submitted and the detailed assessment carried out, that further information should be sought by An Bord Pleanála, particularly to issues raised in the Ecology Report.

In the event that An Bord Pleanála considers that further information is required for this development, then the Planning Authority respectfully requests that further information be requested as set out in Appendix B.

|                  |                          |
|------------------|--------------------------|
| AN BORD PLEANALA |                          |
| LDG-             | _____                    |
| ABP-             | _____                    |
| 06 JAN 2025      |                          |
| Fee: €           | 1 _____ Type: _____      |
| Time:            | 9.34 By: <i>Reag Bst</i> |



In the event that An Bord Pleanála intends to grant permission for this development, the Planning Authority requests that the conditions as set out in Appendix A be included within any decision.

Finally, I attach herewith the Meeting Administrator's record of the views expressed by the Members on the proposed development, at the Council Meeting of the 9<sup>th</sup> December 2024.

Yours faithfully,



NIALL HEALY

DEPUTY CHIEF EXECUTIVE

CORK COUNTY COUNCIL

Designated Public Official under the Regulation of Lobbying Act 2015

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

7/12-1

The Planning 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 – Cummeennabuddoge Wind Designated Activity Company (DAC) for the construction of up to 17 No. Wind Turbines.

Division Manager, Michael Lynch outline the following from the report:

- The nearest settlements are Ballyvourney (approximately 5km south of the subject site) and Millstreet (approximately 7km northeast of the subject site). The proposed development is located within the Derrynasaggart mountain range. It is largely under commercial forestry.
- The majority of the area is under the remit of Kerry County Council.
- Kerry County Council has recommended a refusal to An Bórd Pleanála.
- An Bórd Pleanála are the decision maker and Cork County Council are the prescribed authority.
- Report is due to An Bórd Pleanála by 7<sup>th</sup> of January 2025.
- If members wish to attach comments they can do so by resolution.

**During the discussion members made the following points:**

- What is the next step?
- The report is only for information purposes and that members can make submissions.

Division Manager, Michael Lynch responded as follows:

- An Bórd Pleanála are obliged to consider our report.
- Members can make submissions.
- The obligations of Local Authorities are set out in legislation.

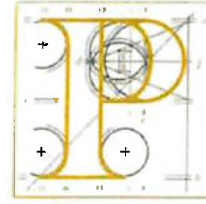
*I certify the foregoing to be a true extract from Minutes of proceedings at Council Meeting held on 9th December 2024*

*K. Cremin*

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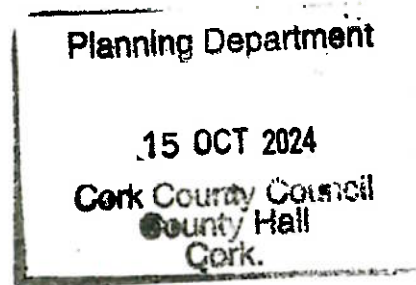
**KARINA CREMIN  
SENIOR EXECUTIVE OFFICER  
DATED: 19<sup>th</sup> December 2024**

**Our Case Number:** ABP-321029-24



**An  
Bord  
Pleanála**

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



**Date:** 10 October 2024

**Re:** 10 year planning permission for wind energy development consisting of 17 no. wind turbines and related works  
Located on land at Cummeennabuddoge (County Kerry), Clydaghrone (County Kerry), Glashacormick (County Kerry), Cummeenavrick (County Kerry), and Caherdowney (County Cork).  
(cummeennabuddogeplanning.ie)

Dear Sir / Madam,

An Bord Pleanála has received an application for permission under section 37E of the Planning and Development Act 2000, as amended.

It is noted that a copy of the application relating to the proposed development has been sent to the offices of the planning authority.

Please be advised that you are requested to make the application documentation available for public inspection/purchase at your offices in accordance with the terms of the public notice. The pre-application consultation file already sent to you must be associated with the application file documentation. It is the Board's intention that all of the application documentation will remain available for public inspection during the currency of the application.

Written submissions in relation to the proposed development should be made directly to An Bord Pleanála. Two copies of any written submissions received in relation to the application will be forwarded by the Board to your offices. You are requested to make available for public inspection a copy of the submissions. Please be advised that a fee of €50 is payable to the Board in order to make a submission on this application.

Section 37E(4) of the Planning and Development Act 2000, as amended, requires you to submit to the Board a report setting out the views of the authority on the effects of the proposed development on the environment and the proper planning and sustainable development of the area of the authority within a period of 10 weeks from the making of the application to the Board. The application was made to the Board on the **10th October 2024** and I can confirm that the deadline for the submission of the report is therefore **5:30p.m. on 7th January 2025**.

**Teil**  
**Glaao Áitiúil**  
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**Láithreán Gréasáin**  
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In addition to the information required to be submitted with this report by the provisions of section 37E(4-7) please note that the Board requests that the report address, where relevant, all of the issues identified at section 7 of the attached "Guidelines for Planning Authorities" in respect of section 37A of the Act (these guidelines are available on the Board's website at [www.pleanala.ie](http://www.pleanala.ie)).

A copy of the planning authority report should also be placed on the public file at the planning authority office.

Thank you for your co-operation in this matter. 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,



---

Ellen Moss  
Executive Officer  
Direct Line: 01-8737285

PA02

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**Cork County Council**  
**Planning and Development Act 2000 (as amended)**  
**Planning and Development (Strategic Infrastructure) Act 2006**

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| An Bord Pleanála Ref. No: | ABP-321029-24                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Applicant:                | Cummeennabuddoge Wind Designated Activity Company (DAC).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Agents:                   | Atmos Consulting Ltd.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Site Location:            | <p>Within the townlands of Cummeennabuddoge (County Kerry), Clydaghroe (County Kerry), Glashacormick (County Kerry), Cummeenavrick (County Kerry), and Caherdowney (County Cork).</p> <p><u>Note:</u> The Proposed Development is located on land almost entirely within County Kerry, although a grid connection route is proposed within County Cork.</p>                                                                                                                                                                                                                           |
| Proposed Development:     | <p>The Proposed Development consists of 17 turbines with a tip height between 199.5m and 200m above ground level (AGL), a permanent meteorological met mast with a height of 110m (AGL) and associated infrastructure. The associated infrastructure includes to the following:</p> <ul style="list-style-type: none"> <li>• One 110kV permanent electrical substation including a control building with welfare facilities, electrical plant and equipment, security fencing, underground cabling, wastewater holding tank and ancillary structures and associated works;</li> </ul> |

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <ul style="list-style-type: none"> <li>• Underground electrical and communication cabling connecting the wind turbines to the proposed on site substation and associated ancillary works;</li> <li>• 110kV Underground cabling from the new 110kV permanent electrical substation to the existing 220/110kV Ballyvouskill Substation to facilitate export of electricity to the National Electricity Grid;</li> <li>• Erection of 1 no. Meteorological Mast of 110 metres above existing ground level for the measuring of meteorological conditions, including a lightning rod which will extent above the mast;</li> <li>• New permanent access tracks and permanent upgrades to existing tracks and site access; • Four borrow pits;</li> <li>• Six permanent peat repository areas;</li> <li>• Permanent placement of peat along sections of site access roads within the restrictions outlined in Technical Appendix 10-3 peat management plan for the site;</li> <li>• Construction of 3 no. temporary construction compounds and associated ancillary infrastructure including temporary site offices, staff facilities and car-parking areas, all to be removed at the end of the construction phase;</li> <li>• Permanent and temporary Site drainage;</li> </ul> |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <ul style="list-style-type: none"> <li>• Keyhole forestry felling to accommodate the construction and operation of the proposed development;</li> <li>• Upgrading of existing site entrance at the local access road adjacent to the N22, Healthy and safety signage, information signage, and direction signage;</li> <li>• All other associated site development works including necessary earthworks to facilitate the construction and operation of the Proposed Development;</li> </ul> <p>A 10-year planning permission and 35-year operational life from the date of commissioning of the entire wind farm is being sought.</p> |
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## Contents

|                                                                          |    |
|--------------------------------------------------------------------------|----|
| 1) Summary .....                                                         | 6  |
| 2) The Purpose of This Report.....                                       | 8  |
| 3) Development Description .....                                         | 9  |
| i. Pre-Planning Consultation.....                                        | 12 |
| ii. Justification for the Proposal .....                                 | 12 |
| iii. EIAR .....                                                          | 12 |
| iv. Site Location and Description .....                                  | 12 |
| v. Planning History .....                                                | 14 |
| 4) Technical Reports (See also Appendix C) .....                         | 16 |
| i. Area Engineer .....                                                   | 16 |
| ii. Ecology Section .....                                                | 17 |
| iii. Cork NRO .....                                                      | 17 |
| iv. Environment (Air, Noise and Vibration).....                          | 17 |
| v. Archaeology .....                                                     | 17 |
| 5) Planning Policy and Context.....                                      | 18 |
| i. EU Directives and Policies .....                                      | 18 |
| ii. National Policy.....                                                 | 18 |
| iii. Regional Level .....                                                | 18 |
| iv. Cork County Development Plan 2022 .....                              | 18 |
| 6) Assessment.....                                                       | 21 |
| i. Chapter 1 – Introduction and Background.....                          | 21 |
| ii. Chapter 2 – EIA Approach and Methodology .....                       | 21 |
| iii. Chapter 3 – Design Evolution and Consideration of Alternatives..... | 22 |
| iv. Chapter 4 – Description of Development .....                         | 23 |
| v. Chapter 5 – Population and Human Health .....                         | 25 |
| vi. Chapter 6 – Landscape and Visual Impact Assessment .....             | 26 |
| vii. Chapter 7 – Traffic and Transport .....                             | 29 |
| viii. Chapter 8 – Biodiversity and Chapter 9 – Ornithology .....         | 30 |
| ix. Chapter 10 – Soils, Geology and Hydrogeology .....                   | 32 |
| x. Chapter 11 – Hydrology, Water Quality and Flood Risk.....             | 33 |
| xi. Chapter 12 – Air and Climate .....                                   | 33 |
| xii. Chapter 13 – Noise .....                                            | 34 |
| xiii. Chapter 14 – Cultural Heritage .....                               | 36 |

|        |                                                          |    |
|--------|----------------------------------------------------------|----|
| xiv.   | Chapter 15 – Shadow Flicker.....                         | 38 |
| xv.    | Chapter 16 - Material Assets.....                        | 38 |
| xvi.   | Chapter 17 – Risks of Major Accidents.....               | 39 |
| xvii.  | Chapter 18 - Interactions of the Foregoing.....          | 40 |
| xviii. | Chapter 19 – Mitigation Measures .....                   | 41 |
| 7)     | Natura Impact Statement (NIS).....                       | 41 |
| 8)     | Conclusion.....                                          | 41 |
| 9)     | Conditions .....                                         | 41 |
| 10)    | Community Gain .....                                     | 42 |
| 11)    | General Development Contributions.....                   | 42 |
| 12)    | Appendix A: Suggested Conditions .....                   | 43 |
| i.     | Area Engineer .....                                      | 43 |
| ii.    | Ecology Section .....                                    | 43 |
| iii.   | Environment (Air, Noise and Vibration).....              | 44 |
| iv.    | Archaeology .....                                        | 46 |
| 13)    | Appendix B: Suggested items of Further Information ..... | 49 |
| i.     | Ecology Section .....                                    | 49 |
| ii.    | Environment (Air, Noise and Vibration).....              | 50 |
| 14)    | Appendix C- Internal Reports.....                        | 51 |
| i.     | Area Engineer.....                                       | 51 |
| ii.    | Ecology Section .....                                    | 53 |
| iii.   | Environment (Air, Noise and Vibration).....              | 64 |
| iv.    | Cork NRDO .....                                          | 70 |
| v.     | Archaeology .....                                        | 71 |

**Planning Authority report to An Bord Pleanála in accordance with Section 37E  
(4) of the Planning and Development Acts (as amended).**

**4<sup>th</sup> December 2024**

**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.

The Proposed Development is contained within the townlands of Cummeennabuddoge (County Kerry), Clydaghroe (County Kerry), Glashacormick (County Kerry), Cummeenavrick (County Kerry), and Caherdowney (County Cork).

The Proposed Development consists of 17 wind turbines with a tip height of between 199.5 to 200 metres (m), and associated infrastructure including hardstandings, cabling and access roads. The Proposed Development also consists of a 110kv grid connection to Ballyvouskill.

The wind turbines and majority of infrastructure is contained in County Kerry. In relation to the functional area of County Cork, is proposed to connect to the national electricity grid via a 110kV underground cable from the proposed onsite substation to the existing Ballyvouskill 220/110kV substation. The grid connection cabling route from the proposed on-site substation will measure approximately 3.5km in length. The grid connection cabling route forms part of the proposed development, the subject of the planning application, and is assessed in the EIAR.

Access to the site, for construction and operation (including Heavy Goods Vehicles (HGV) and abnormal loads (such as turbine blades)) will be via the existing Coillte CGA site entrance currently used for forestry operations, in the west of the site (County Kerry), off a local access road which in turn is accessed from the National Road N22. The proposed turbine delivery route is from Ringaskiddy Port, County Cork, onto the N28, N40, N22, and then onto the local road to the site entrance.

This report relates to proposals for the installation of a grid connection which will occur in Cork County Council functional area and considers potential for the proposal in County Kerry to have a cross boundary impact, having regard to information which has been provided in the Environmental Impact Assessment Report (EIAR). The report also considers the potential for the proposed 17 turbines and associated works to give rise to impacts to European sites which occur within Cork County bounds, in terms of ex-situ occurrence of qualifying species, having regard to information which has been provided in the EIAR and the Natura Impact Statement (NIS).

It is the considered view of Cork County Council that based on the information submitted and the detailed assessment provided that **further information** should be sought by An Bord. 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.

Of particular note is the report of the Ecology Section of Cork County Council which highlights that the following information is required:

- It is considered that there is insufficient information available to complete Appropriate Assessment in respect of the Mullaghanish to Musheramore Mountains Special Protection Area and that additional information is required to complete the assessment in respect of Hen Harrier. As such, an Bord Pleanála may wish to consider requesting additional information in relation to Hen Harrier usage of the site and surrounding area and the likely impacts of the proposed development on Hen Harrier. This information should include up-to-date survey data on all bird species targeted in the NIS and EIAR Chapter 9. As such, a revised NIS and EIAR Chapter 9 may be required.
- There are concerns in relation to the information provided regarding a number of species recorded in the EIAR, particularly avian species. It is considered that the data provided, at over three years old, should not be considered as a reliable component of the ecological assessment of the proposed site. This is especially important when considering the proximity of the site to the Mullaghanish to Musheramore Mountains SPA to the site and the potential for hen harrier (special conservation interest of the SPA) to utilise the site, especially considering the recent clear felling of forestry. As such, the following would be required:
  - Bird surveys for the proposed site, in line with recommended guidelines (e.g. NatureScot/SNH), to reflect the current usage of the proposed site and hinterland by species considered to be key ecological receptors.
  - Revised Natura Impact Statement and Ornithology Chapters to reflect the updated survey information.
- Regarding the grid connection route (GCR), a section of the eastern end of the proposed GCR is through wet heath habitat, which the EIAR deemed to be National value IEF. Per Chapter 8 of the EIAR, the proposed cable will result in the direct loss of 0.9ha of HH3 Wet Heath. This comprises a permanent moderate significant adverse effect on a National value IEF. It is noted that a general site wide description of the habitat has been provided but no specific description of the section to be removed to accommodate the GCR has been given. It is also noted that the applicants have not included a specific methodology for the reinstatement of the wet heath that will be removed, stating that the methodology would be agreed with the planning authority prior to works. It is considered that mitigation hierarchy be followed, whereby avoidance of impacts is principal. With this in mind, An Bord Pleanála may wish to consider requesting that the proposed grid

connection route be along the existing track only, thus avoiding the removal of an approximately 1km strip of wet heath.

## **2) The Purpose of This Report**

In accordance with the requirements of Section 37E (4) 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. 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, 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

### **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 Proposed Development consists of 17 turbines with a tip height between 199.5m and 200m above ground level (AGL), a permanent meteorological met mast with a height of 110m (AGL) and associated infrastructure. The associated infrastructure includes the following:

- One 110kV permanent electrical substation including a control building with welfare facilities, electrical plant and equipment, security fencing, underground cabling, wastewater holding tank and ancillary structures and associated works;
- Underground electrical and communication cabling connecting the wind turbines to the proposed site substation and associated ancillary works;
- 110kV Underground cabling from the new 110kV permanent electrical substation to the existing 220/110kV Ballyvouskill Substation to facilitate export of electricity to the National Electricity Grid;
- Erection of 1 no. Meteorological Mast of 110 metres above existing ground level for the measuring of meteorological conditions, including a lightning rod which will extend above the mast;
- New permanent access tracks and permanent upgrades to existing tracks and site access;
- Four borrow pits;
- Six permanent peat repository areas;
- Permanent placement of peat along sections of site access roads within the restrictions outlined in Technical Appendix 10-3 peat management plan for the site;
- Construction of 3 no. temporary construction compounds and associated ancillary infrastructure including temporary site offices, staff facilities and car-parking areas, all to be removed at the end of the construction phase;
- Permanent and temporary Site drainage;
- Keyhole forestry felling to accommodate the construction and operation of the proposed development;
- Upgrading of existing site entrance at the local access road adjacent to the N22, Healthy and safety signage, information signage, and direction signage;
- All other associated site development works including necessary earthworks to facilitate the construction and operation of the Proposed 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 parameters within which the turbine specification will fall are as follows:

- A total tip height in the range of 199.5m minimum to 200m maximum inclusive;
- Hub height in the range of 118m minimum to 125.5m maximum inclusive; and
- Rotor diameter in the range of 149m minimum to 163m maximum inclusive.

Depending on which turbine within the range is installed; each turbine will be capable of generating 6.0 MegaWatts (MW) to 7.2MW, with an overall anticipated installed capacity of between 102MW and 122.4MW inclusive.



**Figure 1: Site Boundary and location.**

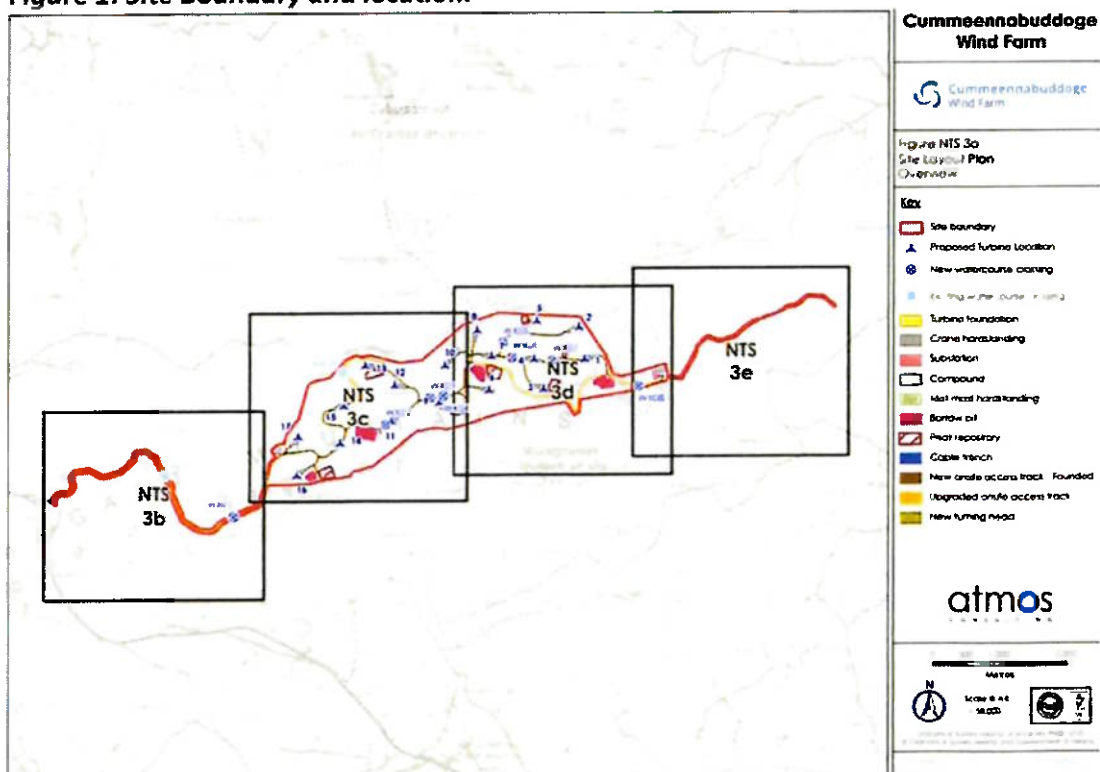


**Figure 2: Overview of Proposed Development**

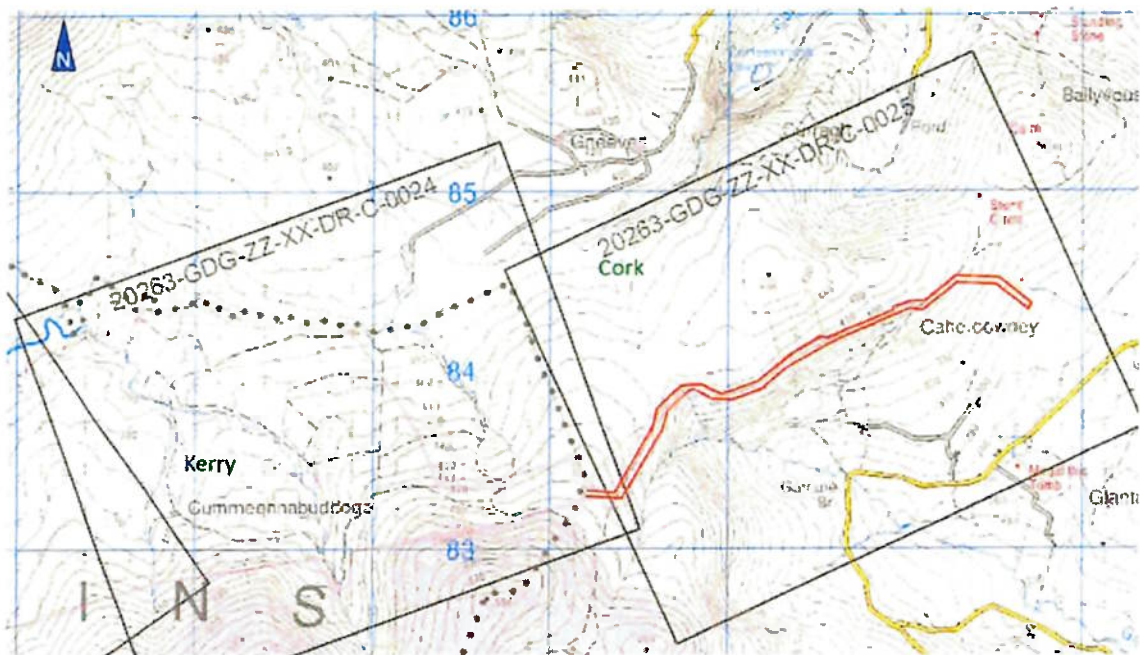


**Figure 3: Proposed cable route extending from Cork/Kerry border to Caherdowney.**

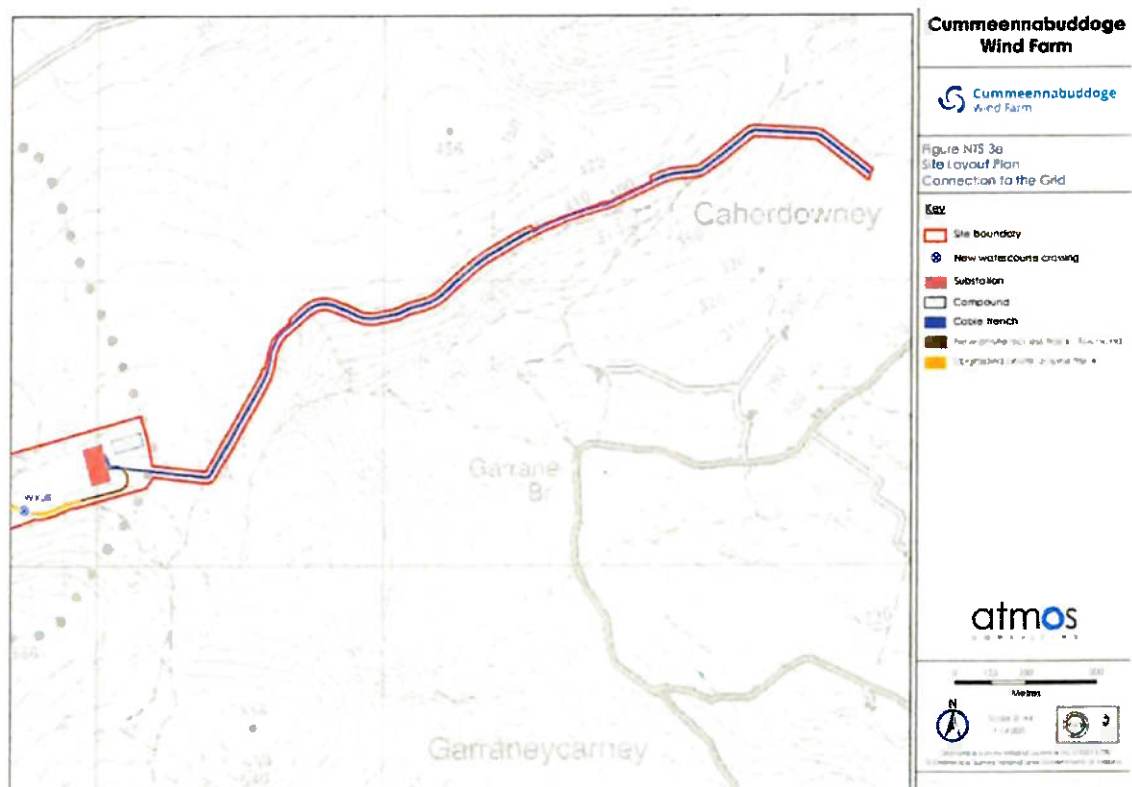


**Figure 4: Site layout plan for proposed grid connection in Cork County**

#### **i. Pre-Planning Consultation**

This Planning Application follows on from the submission of a pre-application request to An Bord Pleanála by Cummeennabuddoge Wind Designated Activity Company, which confirmed that the development constitutes an SID (ABP 319219-24).

The Bord concluded that the proposed development does constitute Strategic Infrastructure Development under the meaning of Section 37A of the Planning and Development Act, 2000 as amended.

#### **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 and states that the Proposed Development offers the potential to:

- Diversify Ireland's energy sources, to achieve national renewable energy targets;
- Reduce Ireland's dependency on fossil fuels resulting in lower carbon dioxide (CO<sub>2</sub>) emissions;
- Increase Ireland's national energy security;
- Increase Ireland's contribution to wider EU renewable energy goals;
- Increase energy price stability in Ireland by reducing an over-reliance on imported gas and exposure to international market price and supply fluctuations.

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 nearest settlements are Ballyvourney and Millstreet (both in County Cork) located approximately 5km south of and 7km northeast of the site respectively. The proposed development is located within the Derrynasaggart mountain range. It is largely under commercial forestry.

The wind turbines and majority of infrastructure is contained in County Kerry. In relation to the functional area of County Cork, is proposed to connect to the national electricity grid via a 110kV underground cable from the proposed onsite substation to the existing Ballyvouskill 220/110kV substation. The grid connection cabling route from the proposed on-site

substation will measure approximately 3.5km in length. The grid connection cabling route forms part of the proposed development, the subject of the planning application, and is assessed in the EIAR.

The proposed grid connection route is along existing roads constructed for previous windfarm developments and existing tracks that may require upgrading. The two ends of the proposed GCR, within the Cork County bounds, will require further works as no tracks or roadways currently exist. Aerial imagery would suggest that the proposed grid connection route that would cross county bounds is comprised of a section of forestry that has either been recently felled or recently planted. Per the submitted documentation, the eastern end of the proposed grid connection route will go through wet heath (HH3), dry meadows and grassy verges (GS2) and terminates in an area of buildings and artificial surfaces (BL3, Ballyvouskill Substation). At its closest, the track will be approximately 180m from Mullaghanish to Musheramore Mountains SPA (site code: 4162) . The proposed windfarm site proper is approximately 500m from the SPA. The main body of proposed site adjoins Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC (site code: 0365) and is approximately 75m from Mullaghanish Bog SAC (site code: 1890).

The grid connection route goes though both an area that is "Open to Consideration" and "Normally Discouraged" for wind turbines. As no turbines are proposed in the functional area of Cork, it is considered that these provisions do not apply and the proposed cabling route can be considered for development.

The proposed site forms part of the "Structurally Weaker Rural Area" as set out in the Cork County Development Plan 2022. The landscape character designation is Ridged and Peaked Upland.

A total of seven European sites were considered within the potential Zone of Influence (ZOI) of the proposed development, namely:

1. Mullaghanish to Musheramore Mountains SPA (Site Code: 004162)
2. Blackwater River (Cork/Waterford) SAC (002170)
3. The Gearagh SPA (004109)
4. Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC (000365)
5. Mullaghanish Bog SAC (001890)
6. St. Gobnet's Wood SAC (000106)
7. Killarney National Park SPA (004038)

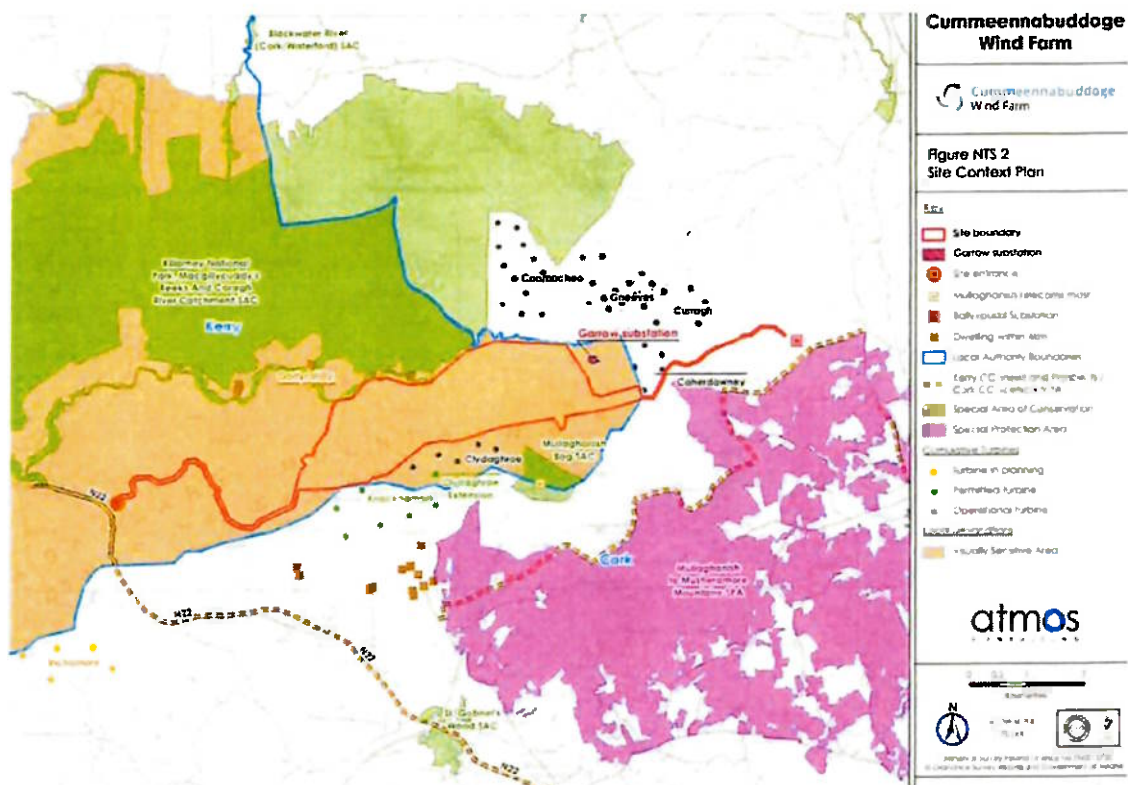


**Figure 5: Site Context**

Access to the site, for construction and operation (including Heavy Goods Vehicles (HGV) and abnormal loads (such as turbine blades)) will be via the existing Coillte CGA site entrance currently used for forestry operations, in the west of the site (County Kerry), off a local access road which in turn is accessed from the National Road N22. The proposed turbine delivery route is from Ringaskiddy Port, County Cork, onto the N28, N40, N22, and then onto the local road to the site entrance.

#### **v. Planning History**

*99/0616 and ABP-111211 – Gillian Kelly*

The following permissions all relate to Gneevs Wind Farm: 99/0616, 03/6585, 04/0188, 04/1355, 08/5636, 13/4566 and 13/5717. Following withdrawal of the appeal, permission was granted by the Planning Authority for a 15.6 MW wind farm incorporating 13 turbines and a control building at Gneevs, Co. Cork.

*03/6585 – SWS Energy Services*

Permission was granted for modifications to wind farm permitted under 99/0616 to include increasing the turbine height from 44m to 65m, at Gneevs, Millstreet, Co. Cork

*04/188 – SWS Group*

Permission was granted for an extension to wind farm (permitted under 99/0616) to consist of four wind turbines (hub height 65m, blade tip 91m) at Gneeves, Millstreet, Co. Cork.

*04/1355 – SWS Energy Services*

Permission was granted for a change in access route for wind farm permitted under N/99/0616 at Gneeves, Caherdowney, Co. Cork.

*08/5636 – SWS Natural Resources Ltd*

An extension of duration of permission was granted for the 13-turbine wind farm permitted under no. N/99/0616 and modified under 03/6585.

*13/4566 – SWS Energy Ltd*

A further extension of duration of permission was granted for the 13-turbine wind farm permitted under no. 99/0616 and modified under 03/6585, which duration had previously been extended under 08/5636.

*13/5717 – SWS Energy Ltd*

Permission was granted for a 3-turbine extension to the existing Gneeves Wind Farm (permitted under 99/0616, 03/6585, 04/0188, 04/1355, 08/5636, 13/4566). The proposed turbines having a maximum tip height of 91m. A borrow pit and ancillary development were also included. All at Gneeves, near Millstreet, Co. Cork.

*07/4177 – Airtricity*

Permission was granted for three borrow pits for the provision of stone for site road construction within the adjoining Coomacheo wind farm, at Curracahill, Caherdowney, Adrivale, Co. Cork.

*19/4972 – Knocknamork Renewable Energy Development*

Permission was granted for 7 wind turbines, a solar array, 38 kV substation, and battery storage. Visual impact from the proposed Macroom Bypass was queried.

*22/5791 – Knocknamork*

Permission granted for modifications to Knocknamork Wind Farm and Solar Array.

*03/1997 – Coomacheo Wind Farm*

This permission was granted to Airtricity Development Ltd & Coillte Teo for 13 turbines and a 110 kV substation. Related applications include:

- 06/10251 – alterations to substation – Coillte Teo & Airtricity Developments Ireland Ltd – granted
- 07/4177 – borrow pits – Airtricity Ltd – granted
- 08/5636 – Extension of Duration of Permission – SWS Natural Resources
- 10/4887 – Enerco Energy Ltd – 90 MW pumped hydro energy storage – refused

*06/10251 – Airtricity Developments Ireland Ltd and Coillte Teo*

Permission granted for alterations to 110 kV substation at Coomacheo, Millstreet, Co. Cork.

*07/10105 – Curragh Mountain Wind Farm*

Permission was granted for 8 turbines and a substation.

*D/205/15 and ABP-RL3346 – SSE Renewables*

A question was referred to the Planning Authority and the Board, as to whether or not the carrying out of remedial works to 15 wind turbines at Coomacheo Wind Farm Coomacheo, Curracahill and Ardrivale, Millstreet, Co. Cork, is or is not development or exempted development. An Bord Pleanála found that repair works would come within the scope of exempted development under section 4(1)(h) of the Planning and Development Act, 2000. Other ancillary works came under the provisions of the exemptions provided at Classes 16 and 17 of Part 1 and Class 3 of Part 3 of Schedule 2 to the Planning and Development Regulations, 2001.

#### **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**

The proposed main entrance to the site is located off the National Primary Road N22 in Co. Kerry. The applicant has stated that this entrance will be used for the delivery of material and personnel to the site.

In Chapter 7 of the EIA Report, the applicant has stated that they have identified a number of quarries to supply material to the proposed development. Given the proximity of one of these suppliers to an existing forestry/Wind farm entrance located in Caherdowney, Cork County Council would have concerns that the L-5226 would be used as a short cut to access the site

through existing tracks through Coillte own land. Therefore, the Area Engineer will require confirmation from the applicant that this route will not be used for the delivery of materials to the site.

## **ii. Ecology Section**

The Ecology Section has concerns in relation to the information provided regarding a number of species recorded in the EIAR, particularly avian species. It is considered that the data provided, at over three years old, should not be considered as a reliable component of the ecological assessment of the proposed site. This is especially important when considering the proximity of the site to the Mullaghanish to Musheramore Mountains SPA to the site and the potential for hen harrier (special conservation interest of the SPA) to utilise the site, especially considering the recent clear felling of forestry. As such, the following would be required:

- Bird surveys for the proposed site, in line with recommended guidelines (e.g. NatureScot/SNH), to reflect the current usage of the proposed site and hinterland by species considered to be key ecological receptors.
- Revised Natura Impact Statement and Ornithology Chapters to reflect the updated survey information.

Furthermore, in keeping with the principles of the mitigation hierarchy, retaining the wet heath habitat that was recorded along the proposed grid connection route should be the preferred approach. As per Chapter 8 of the EIAR, the proposed cable will result in the direct loss of 0.9ha of HH3 Wet Heath. This comprises a permanent moderate significant adverse effect on a National value IEF. As such, the following would be required:

- A revised plan to provide for the GCR avoid wet heath and to run along the existing access track to Ballyvouskill substation.

## **iii. Cork NRO**

This report concludes that there is no overall objection to the proposal.

## **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 County Archaeologist recommends that planning conditions be attached to any grant of planning permission that may issue to ensure that any impacts to sub-surface archaeological

features can be dealt with appropriately. (These planning conditions pertain to the section within County Cork only, i.e., the Grid Connection Cable Route)

## **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 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 proactive 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.

### **i. Chapter 1 – Introduction and Background**

Chapter 1 of the EIAR introduces the proposed wind farm and provides details of the EIA project team and the structure of the report. The EIA was undertaken by Atmos Consulting with assistance from specialist consultants.

The Proposed Development Site is located entirely within County Kerry except for part of the grid connection between the Wind Farm and Ballyvouskill Substation which is within County Cork.

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 – EIA Approach and Methodology**

This Chapter of the EIAR presents the approach taken to the EIA for the Proposed Development.

All assessments include an assessment of the three phases of the Proposed Development as each phase has the potential to give rise to different effects:

- Construction - generally temporary/short-term effects that occur during the construction of the Proposed Development;
- Operation - Effects resulting from operation of the Proposed Development; and
- Decommissioning - Effects arising from the removal of infrastructure and restoration of the site.

An informal EIA consultation was undertaken in 2021 to obtain input on the scope of the EIA. Cork County Council provided a response which can be summarised as follows:

- Confirmed approach as submitted was acceptable.
- Preference for grid connection to be underground.
- Suggested reference is made to Judicial Review overturning permission for Derryadd Windfarm (SID - APB) [2020 No. 5571

In response the applicant states that the proposed grid connection route is entirely underground (See Chapter 4 – Description of Development). The Derryadd judicial review has been considered and a limited project envelope has been proposed.

The project Community Liaison Officer's initial engagement with the public commenced in December 2020 and included introductory letters and direct engagement by calling to all the houses within 2 km of the proposed study area.

Between 2021 and 2023, three newsletters were distributed to the local community. Newsletter 1 was also sent to local newspaper journalists, political representatives and community groups. A meeting was held between the project's lead project manager, Community Liaison Officer, local TDs and local councillors.

In March 2023, a project update letter was distributed to households within 4km of the proposed project study area.

A virtual tour and information webinar can be found on the project website. The applicant held Public Information Days (PIDs) for the Proposed Development on September 20th and 21st 2023 at the Abbey Hotel, Ballyvourney, Co. Cork, P12 FW30.

### **iii. Chapter 3 – Design Evolution and Consideration of Alternatives**

The basis of the selection of the site for the Proposed Development was to use land under the stewardship of Coillte. A three-stage selection process was then followed:

1. Screening sites to exclude those that are protected (such as those within National Parks or carrying statutory or biodiversity protection), or have low windspeed (below an average of 7m/s at 80m above ground level);
2. Screening out sites that don't have a feasible grid connection in terms of distance to a suitable connection point and the capacity of that connection point to accommodate the electricity generated by the Proposed Development; and
3. Screening out sites that have other constraints or sensitivity (such as land ownership issues, the presence of other windfarms or significant ecology or landscape sensitivity).

This resulted in the Proposed Development Site being selected as the optimum location.

Consideration was given to connecting to the Garrow Substation. However, it was understood that Garrow Substation did not have capacity nor have plans to increase capacity to facilitate the Proposed Development. The nearest substation with capacity to facilitate the Proposed Development was Ballyvouskill Substation and was therefore selected as the preferred option.

It was anticipated that the initial grid connection corridor would likely exit the eastern portion of the site via an existing track and continue along this track north towards the townland of Caherdowney. The underground cable would then traverse agricultural fields before connecting to Ballyvouskill Substation. Underground cabling was proposed instead of overhead lines as although overhead lines are cheaper to build and maintain, the visual impact is greater.

The layout of the underground cable was designed to achieve the following objectives:

- Follow existing roads as much as possible;
- Maintain minimum distance from existing cables to avoid de-rating of cables; and
- To minimise cable crossing points with existing cables.

A description of the reasonable alternatives in terms of project design, technology, and location has been studied by the applicant are relevant to the Proposed Development and its specific characteristics (17 wind turbines with a maximum tip height of 200 metres (m) and a maximum export capacity of 122.4 Mega Watts (MW)).

#### **iv. Chapter 4 – Description of Development**

##### *Grid Connection*

The turbines will be connected to an on-site substation using underground cabling, to be laid within the footprint of the existing and proposed access track (located in County Kerry). The underground cable connection from the on-site substation to the electricity grid network will be made from the onsite substation to the existing Ballyvouskill substation into the National Grid (located in County Cork).

Export of electricity from the Proposed Development to the national electricity grid will be via a permanent 110kV 3.6km long underground cable from the onsite substation to the existing Ballyvouskill 220/110kV substation. The grid connection cabling route serves and forms part of the Proposed Development, the subject of the planning application, and has been assessed as part of the EIA.

The underground cabling (UGC) will comprise 3no. power cables, 2no. fibre communication cables and 1no. earth continuity conductor, within 6no. ducts. The UGC route initially begins within the townland of Caherdowney, Co. Cork where from Ballyvouskill 220kV substation compound, the UGC departs the substation on the southwestern boundary, converging onto an existing access track within agricultural lands and traverses on an upward trajectory for 1050m prior to entering into forested plantations propertyed by Coillte.

The majority of the UGC is within an existing forestry/agricultural access tracks and will traverse adjacent to existing ESB utility infrastructure that reside within these forestry tracks. The UGC crosses the existing existing 110kV UGC infrastructure at an existing track crossing location. The watercourse crossing on the proposed grid connection route will require no in-channel works are proposed and the cable is to be laid under or over and existing culvert at that location.

1.27km of the cable length is within existing trackway traversing mapped blanket peat deposits, however peat probing has shown that peat is very thin/largely absent along the route. To facilitate placement of the UGC, a trench 1315mm deep and 825mm wide is required. The 6 no. ducts will be placed at between 750mm and 1250mm depth.

At the existing Ballyvouskill 220kV substation, the cable will be connected to the existing infrastructure within the confines of the substation and its compound. The 110kV gas insulated switchgear building which has a spare bay and sufficient space internally for the Proposed Development connection. The grid connection will be constructed to requirements and specifications of EirGrid.

Details of the UGC works are included in Appendix 4-3: Construction Methodology - 110kV Underground Cable Connection.

Once the Proposed Development ceases operation after the period of generation, all major equipment and structures will be removed from the Site or may be replaced with a new set of turbines subject to planning permission being obtained. However, the onsite substation and 110kV grid connection will remain in place as they will be under the ownership of the ESB and will form a permanent part of the national electricity grid. A permanent permission is therefore required for the substation and 110kV grid connection.

#### *Delivery Route*

The port of entry for large turbine components will be Ringaskiddy Port. The route is provided in Figure 1-3. Vehicles delivering large turbine components and other abnormal loads to the Proposed Development will depart from here and travel along the N28 before continuing on the N40 to the N22. From here, the turbine delivery route will follow the Macroom Bypass which ends northwest of Ballyvourney. The delivery vehicles will continue on the N22 and use the local road which leads to the existing Coillte Site entrance. Works will be required to facilitate the delivery of turbine components along the proposed turbine delivery route at 6 locations (Table 4-4 in Chapter 4 of the EIAR as shown below):

**Table 4-4: Junctions Along the Turbine Delivery Route for Works**

| Junction ID* | Townland(s)               | Temporary street furniture dismantling | Vegetation clearance | Temporary stone placement on splitter island/verge | Road Surface Upgrade |
|--------------|---------------------------|----------------------------------------|----------------------|----------------------------------------------------|----------------------|
| 1            | Loughbeg                  | X                                      | X                    | X                                                  |                      |
| 18           | Barnahely                 | X                                      |                      | X                                                  |                      |
| 2            | Ballintaggart & Barnahely | X                                      | X                    | X                                                  | X                    |
| 5            | Shanbally                 | X                                      | X                    | X                                                  |                      |
| 13           | Hilltown & Shannonpark    | X                                      | X                    | X                                                  |                      |
| 38           | Cummeenavrick             |                                        | X                    | X                                                  |                      |

Some of these will be relatively minor in nature, for example, temporary removal of street furniture and signage while other works will be more extensive, such as upgrading the road surface at one location as it currently serves as a bicycle path. None of these works extend beyond the confines of the existing road corridors, or into private land.

The construction of the Proposed Development is anticipated to take 24 months. Construction of the wind farm will take place in accordance with a Construction Environmental Management Plan.

Delivery during the construction phase is considered further in Chapter 7 Traffic Impact and Access Route Assessment

#### **v. Chapter 5 – Population and Human Health**

Chapter 5 of the EIAR presents the findings of the assessment of the Proposed Development on the population and human health. The chapter assesses the likelihood of significant socio-economic effects of the Proposed Development on the surrounding area, with regards to local residents, tourism, and recreation.

The surrounding area is rural in nature, it contains a mixture of agricultural grassland, commercial forestry plantations, private and public roads. Isolated dwellings and farmsteads are scattered throughout the Local Study Area (LSA). There are no community settlements with a population greater than 2,000 within the Local Study Area. The nearest settlement with data available as part of the CSO 2016 census, is Baile Mhic Íre, Co. Cork located approximately 6km southeast of the Proposed Development with a total population of approximately 477. Millstreet, Co. Cork, is the largest settlement within the LSA with a population of approximately 1,555.

The chapter takes into consideration the results of other assessments in the EIA Report which have relevance to health, namely: soils; water; air quality; noise; shadow flicker; and landscape. The findings of these assessments are reported under the associated chapter. On

this basis, the potential for negative health effects associated with the Proposed Development is negligible.

The provision of underground electric cables of the capacity proposed is common practice throughout the country and installation to the required specification does not give rise to any specific health concerns.

In relation to the turbine delivery route, additional safety measures will be employed when large loads are being transported, for instance, Garda escort will be requested for turbine delivery and a comprehensive turbine delivery plan will be utilised to avoid potential impact to human safety for road users and pedestrians.

#### **vi. Chapter 6 – Landscape and Visual Impact Assessment**

Chapter 6 of the EIAR presents the findings of a Landscape and Visual Impact Assessment of the Proposed Development. The Proposed Development Site is located within the Kerry County Council Landscape Character Type 27: Clydagh River, The Paps and Derrynasaggart Mountains and Cork County Council Landscape Character Type 15b: Ridged and Peaked Upland, which are identified as medium sensitivity to the type of development proposed.

To focus the assessment on landscape and visual receptors that were considered to have potential experience significant effects, a study area was defined. This included people and protected landscapes located within 20km of the proposed turbines. The assessment considered effects on landscape character and designations, visual effects on settlements and roads and scenic routes as well as views and visual amenity as experienced from 27 representative viewpoints.

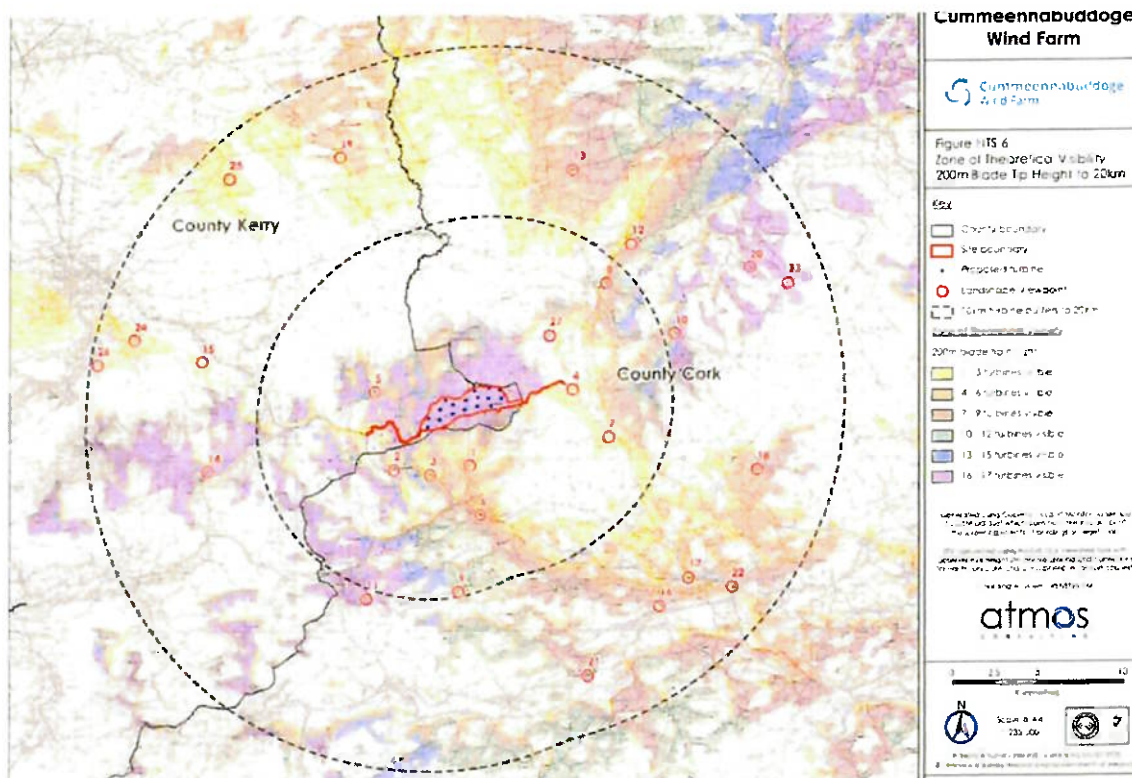


**Figure 6: Zone of Theoretical Visibility 200 m Blade Tip Height to 20 km**

Receptors beyond this study area were considered unlikely to experience significant effects due to limited predicted visibility of the proposed turbines. Where visibility was predicted it was considered that the Proposed Development was unlikely to be prominent within views.

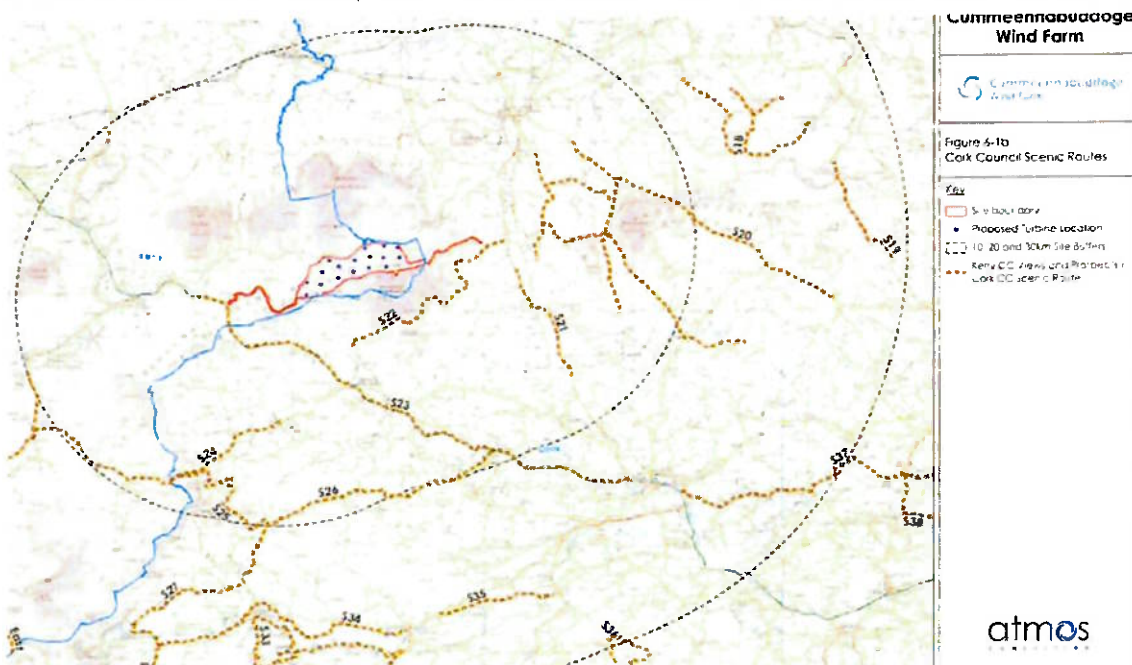


**Figure 7: Scenic Routes in County Cork**

A number of existing operational windfarms lie within 30km of the Proposed Development Site (see Figures 6-4 of EIAR as shown below). Clydaghroe wind farm (south), Coomacheo wind farm(north), Gneeves wind farm (north-east), Curragh wind farm (east) and Caherdowney wind farm (east) all lie adjacent to the Proposed Development Site.

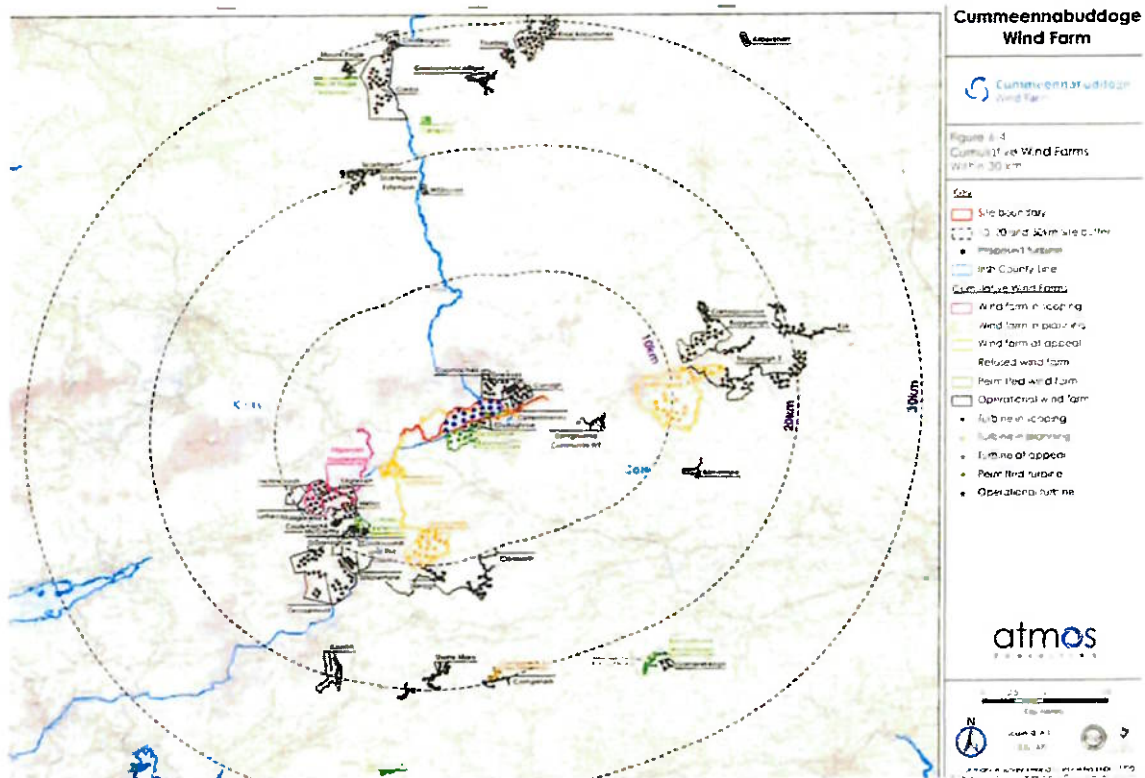


**Figure 8: Cumulative Windfarms within 30 km**

With reference to the EPA Impact Assessment of Significance Classification (EPA, 2022), no receptors were anticipated to experience profound or very significant effects as a result of the Proposed Development. It can be concluded that the landscape could accommodate the Proposed Development without leading to unacceptable levels of adverse effects on the overall landscape setting or visual amenity experienced across the study area.

Viewpoints 1-3 photomontages and wireframes (as part of the LVIA) in County Cork to the south of the PDS have been assessed by the County Archaeologist to gain an understanding as to the significance or otherwise of views in the vicinity of Recorded Monuments towards the PDS. It is considered that limited views are possible due to topography and vegetation, forestry etc. Viewpoint 27 is located to the east of the PDS in County Cork and no views are possible from this location and also in accordance with the ZTV. Viewpoint 4 immediately east of Caherdowney Td in County Cork has been assessed and again limited views are possible of turbines.

Visual impacts will occur but are considered to be moderate based on the ZTV (worse case scenario) and slightly reduced when taking existing vegetation, topography and screening into

consideration. It seems that the Paps Archaeological Landscape will be impacted (visually) and we defer to Kerry County Council to comment on same. Intervisibility between monuments within County Cork and the Paps has been addressed and no significant effects were identified.

**vii. Chapter 7 – Traffic and Transport**

The proposed main entrance to the site is located off the National Primary Road N22 in Co. Kerry. The applicant has stated that this entrance will be used for the delivery of material and personnel to the site.

The Area Engineer has assessed Chapter 7 of the EIA Report. The applicant has stated that they have identified a number of quarries to supply material to the proposed development. Given the proximity of one of these suppliers to an existing forestry/Wind farm entrance located in Caherdowney, Cork County Council would have concerns that the L-5226 would be used as a short cut to access the site through existing tracks through Coillte own land. Therefore, we will require confirmation from the applicant that this route will not be used for the delivery of materials to the site.

The Cork NRO have prepared a report and note that the planned route for abnormal loads includes the N22, N40 and N28 national roads. The construction commencement year for the proposed development is 2028, with the 24-month schedule indicating that all abnormal load trips will happen in mid-2029.

As construction of the of the M28 Cork to Ringaskiddy Motorway is anticipated to be completed by such time it is not foreseen that there will be any issues arising from the abnormal load trips generated by the proposed development and construction works of the M28 project.

Notwithstanding that, the abnormal loads arising from the proposed development will require an Abnormal Load Permit issued by the local authority as per Section 13 of the Road Traffic Act 1961 and the Road Traffic (Special Permits for Particular Vehicles) Regulations 2007 (S.I. 283 of 2007). When the applications are made in the future, the CNRO and Cork County Council will have a better understanding of any issues that may arise from the M28 and the N40 and N22. Any issues can be dealt with through this process. As such CNRO has no objection to a grant of permission.

#### viii. Chapter 8 – Biodiversity and Chapter 9 – Ornithology

The Ecology Section of Cork County Council have assessed both Chapter 8 and 9.

Desktop survey and field survey methods are described and the results of data gathering, and survey work are provided within Chapter 8 (Biodiversity) and Chapter 9 (Ornithology) of the EIAR. The chapter includes 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 on habitats of high natural value. Particular focus is given to sites, species and features identified to be key ecological receptors. Per Chapter 8 of the EIAR and the relevant Technical Appendices, field surveys were conducted at the following timelines:

- Bats: April-September 2020 and May to September 2021.
- Kerry Slug: August to September 2021.
- Aquatic ecology and fish surveys: August and September 2021.
- Freshwater Pearl Mussel: September 2021
- Habitat Survey: July 2021 with Habitat Review conducted in 2024.
- Bird Surveys: Chapter 9 of the EIAR states that VP surveys were conducted in 2023. The technical appendix for the Chapter outlines that surveys were undertaken between the dates of 22/10/2018 and 30/03/2021.

Potential negative impacts on European designated sites due to their connectivity have been addressed in the submitted NIS. No NHAs have been identified within a 15km radius. Prohus Wood Proposed Natural Heritage Area is located 9.6km southeast of Proposed Development. Given the distance, it was not considered further.

As per Chapter 8, the proposed cable will result in the direct loss of 0.9ha of HH3 Wet Heath. This comprises a **permanent moderate significant adverse effect on a National value IEF**.

Per the Ornithology Chapter, bird surveys completed at the site followed SNH/NatureScot guidance. Section 9.2.4 of the Chapter states that VP surveys were undertaken between 30 March 2021 and October 2023. According to Section 9.3.2 and outlined in detail in the Technical Appendix the field survey results were conducted no later than 2021.

Of concern to Cork County Council were Chapter 9's assessment of the following:

- *Mullaghanish to Musheramore Mountains SPA*: The submitted NIS assessed the potential for the proposed development to impact on the SPA. Per the EIAR, the Proposed Development lies 500m from the SPA; at that distance there will be no significant effects upon the habitats present within the SPA and no adverse effects on the SPA itself.
- *Hen harrier*: eight individual Hen harrier were recorded during winter roost surveys (seven during the 2018/19 surveys and one during the 2019/2020 surveys). Per Chapter 9, there were no winter roosts identified within the 2 km search area around the Proposed Development or within the Proposed Development in either survey period. Breeding raptor surveys were conducted in 2019 and 2020. Hen harriers were recorded twice. Per the EIAR, only one flight was recorded over the Proposed

Development Site, with all others in the vicinity of the Site. Given this, and the low habitat suitability across much of the Site, but also the possible presence of internationally important individuals, the Site would be assessed as being of **county** importance.

**Construction impacts:** The EIAR deems that since hen harrier made no use of the Proposed Development during the breeding season, it would have a negligible effect on the habitat quality for the species which would not be considered significant. The report goes on to state that while there could be some disturbance as a result of the increased human activity in connection with the Proposed Development the low level of bird activity recorded and the short-term nature of the disturbance where it would extend across two non-breeding seasons at the most would mean the effect would be considered minor and not significant. Mitigation has been proposed to protect individual birds.

**Operational impacts:** The EIAR deemed that as hen harrier did not make use of the proposed development during the breeding season, there cannot be a displacement effect if the resource is not used or is not used in a way which is measurable. The EIAR further states that displacement effects, where they have been identified during the breeding season, have been on a very small scale which if they were to occur during the winter months would not be considered significant to a species with large winter ranges and which was recorded with only a low level of usage. Due to the flight activity recorded, the report calculated that over the 35 year lifetime of the wind farm, less than one Hen harrier would be expected to collide.

The NIS and EIAR have deemed that as the proposed windfarm site was rarely, if at all, used by ex-situ species for which The Gearagh SPA, Killarney National Park SPA, and Mullaghanish to Musheramore Mountains SPA are designated, there would be no adverse effects to the integrity of these SPA in view of their respective conservation objectives. However, it is noted that the survey data are from over three years prior to the submission of the SID application.

Despite what is stated in Chapter 9 in the EIAR (VP surveys were conducted in 2023), the latest survey date recorded in Technical Appendix 9-1 is 30/03/2021. Per CIEEM advice note (April 2019), data over three years old is 'unlikely to still be valid and most, if not all, of the surveys are likely to need to be updated'. Furthermore, the EIAR outlines that the 'most common habitat on the Proposed Development Site – mature plantation forestry – has low suitability for foraging and breeding Hen harrier and this is likely reflected in the recorded low usage by the species.' However, upon viewing Google Earth images of the proposed site, it appears that clear felling (over 150ha) within the proposed site has since occurred. This may encourage more use of the area by hen harrier ex-situ of the Mullaghanish to Musheramore Mountains SPA.

It is considered that there is insufficient information available to complete Appropriate Assessment in respect of the Mullaghanish to Musheramore Mountains Special Protection Area and that additional information is required to complete the assessment in respect of Hen Harrier. As such, an Bord Pleanála may wish to consider requesting additional information in relation to Hen Harrier usage of the site and surrounding area and the likely

impacts of the proposed development on Hen Harrier. This information should include up-to-date survey data on all bird species targeted in the NIS and EIAR Chapter 9. As such, a revised NIS and EIAR Chapter 9 may be required.

With regard to the grid connection route, a section of the eastern end of the proposed GCR is through wet heath habitat, which the EIAR deemed to be **National value IEF**. A general site wide description of the habitat has been provided but no specific description of the section to be removed to accommodate the GCR has been given. The applicants have not included a specific methodology for the reinstatement of the wet heath that will be removed, stating that the methodology would be agreed with the planning authority prior to works. Mitigation hierarchy should be followed, whereby avoidance of impacts is principal. With this in mind, An Bord Pleanála may wish to consider requesting that the proposed grid connection route be along the existing track only, thus avoiding the removal of an approximately 1km strip of wet heath.

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#### **ix. Chapter 10 – Soils, Geology and Hydrogeology**

Chapter 10 of the EIAR provides an assessment of the potential effects of the Proposed Development on soils, geology and hydrogeology.

The Proposed Development Site consists largely of sandstone overlain by blanket peat. The majority of the Site overlies the Cahersiveen Groundwater Body with the grid route overlying the Ballinghassig West Groundwater Bodies. Both the Cohesive and the Ballinghassig West Groundwater Bodies have “Good” environmental status and neither are not considered “At Risk” under the Water Framework Directive.

Peat is present across large parts of the Site, generally between 1-2m deep but with localized deeper pockets. A peat landslide hazard risk assessment has been undertaken and found that landslide risk to be low but with areas where construction traffic and material stockpiling will need to be prohibited to avoid creating a risk.

Reducing the potential impacts has been considered throughout the design process particularly in terms of the siting of infrastructure. Mitigation measures to avoid impacts consist of the application and monitoring of control measures detailed in the Construction Environment Management Plan during the construction period.

Regarding the grid connection route, a section of the eastern end of the proposed GCR is through wet heath habitat, which the EIAR deemed to be **National value IEF**. The proposed cable will result in the direct loss of 0.9ha of HH3 Wet Heath. This comprises a permanent moderate significant adverse effect on a National value IEF. As per comments made in relation to Chapter 9 in this report, An Bord Pleanála may wish to consider requesting that the proposed grid connection route be along the existing track only, thus avoiding the removal of an approximately 1km strip of wet heath.

#### **x. Chapter 11 – Hydrology, Water Quality and Flood Risk**

Chapter 11 of the EIAR presents the findings of the assessment of the impact of the Proposed Development on the surface water environment including on hydrology (movement of surface water), water quality, the potential for pollution of watercourses, and risk of flooding.

None of the Proposed Development infrastructure is located in areas identified as being at risk of flooding with the exception of watercourse crossings and their approaches. The crossings will be designed to ensure flood resilience.

Following implementation of specified mitigation it is stated that the Proposed Development would have no significant residual effects to the receiving water environment including the River Clydagh, River Flesk, Lough Leane and designated Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC. An assessment of cumulative impacts was also undertaken, and it was concluded that there are no predicted significant effects on the water environment arising from the Proposed Development in conjunction with any other pre-existing or consented developments.

#### **xi. Chapter 12 – Air and Climate**

Chapter 12 and associated appendices assesses the potential impact on air quality as a result of the construction, operation and decommissioning of the proposed development. The Environment Office of Cork County Council has reviewed this chapter.

Section 12.2 outlines the methodology and approach adopted in relation to the assessment as well as the relevant legislation, planning policy and guidance. It is submitted that the proposed development is located within Air quality Zone D of the 4 Environment Protection Agency designated Air Quality Zones for Ireland. This is due to its rural location away from population centres.

A dust impact assessment is conducted as per Section 12.4. with the overall risk of dust impacts from the effects of dust soiling and PM<sub>10</sub> on the sensitive receptors without mitigation, as a result of the proposed development, presented as per Table 12.16 of the submission.

It is submitted as per Section 12.6.2, that 3 dust emitting activities will occur during the construction phase of the proposed development. These are construction activities, earthworks and dust emissions from construction phase associated trackout from vehicles. It is further submitted that the highest overall risk of impacts upon sensitive receptors from construction, earthworks and trackout activities has been assessed as medium risk. This risk was centred on the ecological receptor Killarney National Park with risk assessed as low on the human sensitive receptor, Dwelling 1.

In relation to the operational phase, it is submitted that the operational phase will have a negligible impact. In respect of the decommissioning phase it is submitted that two dust

emitting activities will occur during the decommissioning phase of the proposed development. These are decommissioning activities and dust emissions from decommissioning phase associated trackout. The highest overall risk of impacts upon sensitive receptors from decommissioning and trackout has been assessed as medium risk. This risk is centred on the ecological receptor Killarney National Park, with risk assessed as low on the human sensitive receptors. It is submitted that dust emissions will be lower during the decommissioning phase than during the construction phase due to the limited nature of the works involved.

Mitigation measures are detailed as per Section 12.7 and it is submitted that such will ensure that any potential impacts during all phases of the proposed development are minimized and ensure there will be no adverse impact on the receiving environment. It is also submitted that after the implementation of the mitigation measures, there will be non-significant short-term negative impact on Killarney National Park during the construction phase and imperceptible impacts upon Dwelling 1.

It is further submitted as per Section 12.9 that there will be a negligible impact in terms of cumulative impact as there are no other developments which are located close enough to the sensitive receptors identified within the dust assessment to contribute cumulatively to the overall risk of dust soiling and PM<sub>10</sub>.

## **xii. Chapter 13 – Noise**

Chapter 13 of the submitted Environmental Impact Assessment (EIS) and associated appendices assesses the potential impact of noise and vibration as a result of the construction, operation and decommissioning of the proposed development.

Section 13.2 outlines the legislation, planning policy and guidance. Section 13.3 describes the noise sources where it is stated that noise is generated by wind turbines as they generate power which only occurs above the 'cut-in' wind speed and below the 'cut-out' wind speed. The cut in speed at proposed turbine hub height is detailed as approximately 3 metres per second with the cut out wind speed approximately 25 m/s. The principal sources of noise is described as the blades rotating in the air, internal machinery, normally in the gearbox, and, to a lesser extent, the generator (mechanical noise).

The assessment methodology is detailed as per section 13.5 with Section 13.5.1 referring to the assessment guidance with respect to the construction and decommissioning phase and Section 13.5.2 referring to the operational phase. It is submitted as per section 13.5.2 that predictions have been carried out for a range of turbine types to identify a worst case candidate turbine where noise emissions are highest. It is also submitted that 4 candidate turbines were assessed and the Nordex N163 5.6MW was found to have the highest noise emissions and emissions at all receptor locations and for all wind speeds so provides the most conservative candidate for the noise assessment.

Section 13.6 and Appendix 13.3 details the noise survey conducted to determine the existing noise environment where monitoring was conducted at 4 measurement locations. Table 13-7 details the prevailing background noise (dB LA90 ) at each location for night and daytime respectively.

Section 13.7 outlines the assessment of effects and mitigation in respect of the construction and operational phases.

In relation to the construction effects, it is noted that noise during the construction period will arise from the construction of the turbine foundations, the erection of the turbines, the excavation of trenches for cables, and the construction of associated hard standings and access tracks. Noise from vehicles on local roads and access tracks will also arise resulting from the delivery of the turbine components and construction materials, notably aggregates, concrete and steel reinforcement. An assessment of each such construction effect is then undertaken as per section 13.7.2 and the following conclusions arising from same are submitted in respect of the following;

- Increase in Traffic - It is submitted that the contribution to the overall noise environment would be negligible and non-significant.
- Access Track Construction - It is submitted that the short duration of exposure results in an impact which is negligible and not significant to the overall construction duration, and therefore this is not considered further.
- Turbine construction - It is submitted that this aspect of the proposed development is considered not significant with noise barriers not considered necessary.
- Blasting at borrow pits - It is submitted that including the identified factors including blast monitoring, design, etc, in the noise management plan for the construction works and a combination of minimising blasting activities and ensuring nearby residents are fully warned should mitigate any adverse impact.
- Grid connection Construction - It is submitted that the closest property to the grid connection route is located at 525463 583614, which is approximately 700 m from the grid connection construction site at its closest point. At this distance it is further submitted that the predicted noise from the construction plant is 36dB which is well below the 65dB LAeq construction noise limits given in BS5228.

In relation to the operational effects, this is addressed under Section 13.7.3 of the Environmental Impact assessment report. It is submitted that the noise limits stated at Table 13-11, take into account the existing noise levels from all other wind farms in the area and, thereby, show the noise limits that apply to the proposed development acting in isolation. Table 13.15 shows the downwind predicted noise levels associated with the proposed development acting in isolation. Figure 13-1 shows the predicted noise contours for the proposed development at 7m/s where it is submitted that the maximum noise emissions occur for the candidate turbine. Figure 13-2 shows the predicted noise contours for the proposed development acting cumulatively with the other sites in the area at 7m/s. It is also stated and submitted that the predicted noise levels are presented for downwind propagation conditions, and that for conditions other than downwind, operational noise levels would be lower.

A comparison of noise limits and predictions is presented as per Table 13-16 and 13-17. It is submitted that during the daytime, predicted operational noise limits comply with the noise limits at all properties, except R153 where noise limits are exceeded at wind speeds greater than or equal to 6m/s and by up to 4.2 dB. During the night-time, predicted operational exceedances occur for wind speeds greater than or equal to 5m/s at R153 and at 7-9m/s at R65. Exceedances at R153 are up to 7dB. Mitigation is submitted as detailed per Section 13.8.2 by use of noise reduced operation modes. It is noted and submitted that the curtailment strategy is specific to the model of turbine. If a different candidate turbine is built, a different curtailment strategy would need to be derived.

It is further submitted that the noise limits against which the operation noise is assessed have been derived taking into account the operational noise from other windfarms. This means that the cumulative operational noise impact assessment is inherent in the assessment with accordingly no significant cumulative noise impacts anticipated.

#### xiii. Chapter 14 – Cultural Heritage

This chapter of the EIAR considers the archaeological, architectural and cultural heritage effects that need to be addressed in respect of the construction and operation of 17 wind turbines and associated infrastructure (the Proposed Development).

The County Archaeologist has assessed this Chapter. Cork County Council does not contain designated archaeological Landscapes in their County Development Plan. Kerry County Development Plan however, contains many such designations including The Paps Archaeological Landscape located immediately adjacent to the PDS at the West/NW. Although the Paps archaeological landscape is located wholly within County Kerry, impacts to Recorded Monuments, within County Cork which may have a connection to the Paps landscape requires assessment. The Planning Statement submitted with the Planning Application has noted the following: *'The EIA has determined that, following the implementation measures, the only significant residual effects relate to landscape effects on the KCC Visually Sensitive Area in the area partially overlapping with the **Paps Archaeological Landscape**'.*

Impacts to existing key views and intervisibility between the Paps designated landscape and other Recorded Monuments (within County Cork) cannot be ruled out. Chapter 14 has used the ZTV model to scope out those monuments with no visibility in the direction of the proposed development site (turbines) and noted the following although it doesn't distinguish which ones are in County Cork/Kerry.

The archaeological consultant has noted the following in relation to intervisibility. *'However, no turbine effects the intervisibility between RMPs within the defined archaeological landscape area, and as such respects the character and integrity of the archaeological landscape. Any visual impact will be with regard to setting, particularly as the landscape is viewed from the east and southeast, and views from the landscape to the east and southeast. The archaeologist has noted that **CH023-CH036 (which are located in County Cork and to the northeast of the PDS)** are located to the east of the Proposed Development. Of these 14 RMPs,*

*six will not be within the ZTV of any turbine, with the remaining eight recorded monuments being within the ZTV of 1-3 turbines’.*

This somewhat reduces concerns regarding setting of the monuments in County Cork. The topographical and geographical position of this cluster of monuments in County Cork is such that some effects to setting may occur but reduced by the lack of visibility in many locations. Furthermore, the proposed turbines are not positioned in-between the Paps Archaeological Landscape and the cluster of monuments thereby allowing continuity of an existing views from these locations.

The EIAR report (and on Figure 14.1d and e) also addresses the monuments (within Co Cork) to the south and southwest of the development site. CH037-CH046 are located to the south and southwest of the Proposed Development Site. CH041, CH042 and CH043 will be with the ZTV of 10-12 turbines, with the remaining eight CH sites being within the ZTV of 16-17 turbines.

In general, Figure 14.3 shows the Recorded Monuments and other Cultural Heritage sites overlaid on the ZTV which assists in scoping out those with no visibility of turbines. The areas to the north-east and southeast of the proposed development site (within County Cork) have no visibility on the ZTV. The other areas that contain Recorded Monuments to the south show visibility of between 1-9 turbines. Since this is a worse case scenario and based on a bare landscape model, the views in reality are likely to be reduced in severity.

In the LVIA chapter, although the viewpoints were selected based on Scenic Views, the results can also be useful in ascertaining the significance of effects on setting on RMPs in the vicinity.

Viewpoints 1-3 photomontages and wireframes (as part of the LVIA) in County Cork to the south of the PDS have been assessed by the County Archaeologist in order to gain an understanding as to the significance or otherwise of views in the vicinity of Recorded Monuments towards the PDS. It is considered that limited views are possible due to topography and vegetation, forestry etc. Viewpoint 27 is located to the east of the PDS in County Cork and no views are possible from this location and also in accordance with the ZTV. Viewpoint 4 immediately east of Caherdowney Td in County Cork has been assessed and again limited views are possible of turbines.

The County Archaeologist concludes that the findings of Chapter 14 are such that no direct effects to known Cultural Heritage constraints will occur. Visual impacts will occur but are considered to be moderate based on the ZTV (worse case scenario) and slightly reduced when taking existing vegetation, topography and screening into consideration. It seems that the Paps Archaeological Landscape will be impacted (visually) and we defer to Kerry County Council to comment on same. Intervisibility between monuments within County Cork and the Paps has been addressed and no significant effects were identified. The Grid connection cable route in County Cork traverses a green field portion, where it leaves the existing access track and joins the Ballyvouskill Substation to the east. Concerns regarding sub-surface archaeology can be dealt with by advance archaeological testing and prior to construction.

#### **xiv. Chapter 15 – Shadow Flicker**

This Chapter considers the potential effects of shadow flicker on all properties within the shadow flicker study area of the Proposed Development.

Shadow flicker can arise from the passing of the moving shadow of a wind turbine rotor-blade over a narrow opening such as the window of a nearby residence. A similar effect can also occur when the gloss blades of a rotating turbine reflect the sun causing a flashing light. Shadow flicker happens only when a certain combination of conditions coincide at particular times of the day and year, mainly in the winter months when the sun is low in the sky (DECC, 2011).

The location of all properties within the study area was identified using OSI data, a detailed planning registry search and a physical survey of the area. A total of two receptors within the study area were identified as being at risk of shadow flicker effect both of which are in County Kerry.

There are two additional dwellings to the south of the Proposed Development which are within the largest study area of the maximum rotor diameter (1,630m) and both are in County Cork. These two dwellings are not at any risk of experiencing shadow flicker effects from the Proposed Development. This is due to their location relative to the Proposed Development, these two dwellings are located to the south and therefore the sun will at no point throughout the year be positioned behind the Proposed Development relative to the dwellings, as such no shadow flicker is possible.

Technological mitigation is available, and widely implemented, on wind farm developments where shadow flicker is predicted. These mitigation measures effectively limit (curtail) the operation of turbines during the infrequent and rare periods when shadow flicker occurs.

The wind turbines will each be fitted with shadow flicker curtailment software, inherent to their design, to facilitate their shut down as required. If shadow flicker is predicted to occur based on the prediction model, the software will safely shut down the turbines at the predetermined times based on the prediction model. This approach will be implemented, as necessary, to ensure that the levels of shadow flicker do not exceed the 2006 or 2019 Guideline values once the turbines have completed their safe shutdown cycle. The Applicant has committed to zero shadow flicker subject to the time needed for safe shutdown during community consultations and will curtail on this basis.

#### **xv. Chapter 16 - Material Assets**

This chapter of the EIAR assesses the potential for significant effects of the Proposed Development on Material Assets. While other factor is discussed in other EIAR chapters, this chapter assesses the potential effects on other human original material assets with the potential to be affected by the Proposed Development. Specifically:

- Aviation

The assessment states that no significant effects from the Proposed Development on Aviation receptors. Notwithstanding, proposed mitigation is embedded into the design of the Proposed Development in the form of aviation safety lighting. This will be sufficient to remove the potential for significant impacts and will satisfy the requirements of the Department of Defence.

- Telecommunications

Mitigation measures were undertaken in the design phase through mitigation by avoidance i.e., the known routes of the telecommunication links were plotted and a buffer was applied to them, outside of which the proposed turbines were located. Compliance with the EMC Directive 2014/30/EU will mean that the electromagnetic emissions from devices used will not cause interference to other equipment.

Ai Bridges undertook a telecommunications impact assessment into the potential effects the Proposed Development may have on nearby telecommunications links which cross the Proposed Development boundary (Technical Appendix 16-1 Telecommunications Impact Study). Ai Bridges found sufficient clearance between all turbines and all telecommunication links during consultation therefore no impacts have been determined and as such there will be no significant effects as a result of the Project.

- Resources and Utility Infrastructure (including electricity, gas, water, waste and quarries)

The Proposed Development consists of a 3.3km underground grid connection route to Ballyyou skill 220/110kV substation. The nearest overhead electricity line is the Clonkeen to Clashavoon 110kV line which runs northwest - southeast on the opposite side of the N22 from the proposed Site entrance. No underground electricity lines have been identified with the potential to be affected by the Proposed Development.

## **xvi. Chapter 17 – Risks of Major Accidents**

This chapter of the EIA Report assesses the likelihood of significant effects on the environment arising from the vulnerability of the Proposed Development to risks of major accidents and/or natural disasters.

This assessment determines:

- The relevant major accidents and/or natural disasters, if any, that the Proposed Development could be vulnerable to
- The potential for these major accidents and/or natural disasters to result in likely significant adverse environmental effect(s)
- The measures that are in place, or will be in place, to prevent or mitigate the likely significant adverse effects of such events on the environment.

The potential risks posed by the Proposed Development are:

- Increased risk of flooding through alteration of the natural drainage patterns. The Proposed Development will require the removal of forestry, however, this would not be dissimilar to the current felling patterns and would not alter the Site drainage significantly. No impermeable surfaces are proposed that would increase the rainfall run off rates;
- Peat Landslide caused by the installation of the Proposed Development infrastructure. This is considered as part of the soils and geology assessment (see Section 10 above). The Proposed Development Site poses a low peat landslide risk and measures will be taken to ensure that risk is not increased during construction;
- Contamination and ecological harm caused by the discharge of polluting liquids. The construction of the Proposed Development will require the temporary storage of a small amount of fuel and other chemicals. These will be safely stored away from sensitive receptors;
- Traffic collisions caused by the increase in traffic as a result of the Proposed Development. A review of accident statistics. Assuming a linear relationship between traffic collisions and traffic volumes and taking into account the predicted increase in traffic as a result of the Proposed Development, it has been determined that the Proposed Development would not result in a single additional collision over the construction period;
- Fire or uncontrolled explosion. Taking in account the required controls in terms of storage and handling, there is minimal risk of fire or uncontrolled explosion as a result of any material stored or used on the Proposed Development Site during construction. Fires on operational wind turbines are rare and have resulted in damage to the hub of the turbine only; and
- Industrial Accidents. A review of available statistics of incidents related to the construction and operation of onshore windfarms indicates that the likelihood of an incident occurring is less than one for any given year.

The EIAR states that the Proposed Development has been designed in accordance with the best practice measures set out in the EIA Report and, as such, mitigation against the risk of major accidents and/or disasters is embedded through the design. The assessment concludes that the risk of the Proposed Development to major accidents/natural disasters is low and not significant in every category assessed. No significant cumulative risks have been identified.

#### **xvii. Chapter 18 - Interactions of the Foregoing**

Chapter 18 of the EIA Report assesses the potential for interaction between the significant effects and the measures to mitigate those effects identified in Chapters 5-17 of the EIAR.

The interaction of the effects of the Proposed Development during the operational phase on the Kerry County Council Visually Sensitive Area Visually Sensitive Area partially overlapping with the Paps Archaeological Landscape is considered to be a significant effect. This pertains to the functional area of County Kerry.

**xviii. Chapter 19 – Mitigation Measures**

Mitigation measures to reduce impacts have been identified and included in the relevant Chapters of the EIAR. The implementation of these mitigation measures will reduce or remove the potential for these effects.

**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). Concerns have been raised and further information sought by the Ecology Section as outlined earlier in this report.

**8) Conclusion**

It is the considered view of Cork County Council that based on the information submitted and the detailed assessment provided above that **further information** should be sought by An Bord, particularly in relation to issues raised in the Ecology Report.

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.

**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**

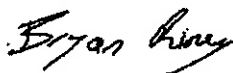
Section 37G of the 2006 Planning and Development (Strategic Infrastructure) Act allows An Bord Pleanála to attach conditions requiring the “construction of financing, in whole or in part of the construction of a facility, or the provision or the financing, in whole or in part, of the provision of a service...” 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.

The submitted Community Report outlines the community engagement programme undertaken by the Cummeennabuddoge Wind Farm team prior to this planning application. It also highlights the main issues raised during this process and how community feedback informed the final proposal, alongside the steps taken to ensure the proposed development will be of long-term economic benefit to the local community through a Community Benefit 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 contributions do not in respect of the proposed development in the functional area of County Cork.



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Bryan Riney  
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Director Planning and Development



Kevin Morey  
Divisional Manager (South)

## 12) Appendix A: Suggested Conditions

### i. Area Engineer

| Condition                                                                                                                                                | Reason                                                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| The L-5226 from the junction of R582 to the existing forestry entrance at Garrane Bridge shall not be used as a haulage route for materials to the site. | In the interests of road safety and orderly development |

### ii. Ecology Section

| Condition                                                                                                                                                                                                                                                                                                                                                     | Reason                                                                                                                                                                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The applicants shall conduct two years of bird surveys of the proposed site and hinterland, prior to the commencement of works.<br>Revised Natura Impact Statement and Ornithology Chapters may be required to reflect the updated survey information.                                                                                                        | To reflect the most current usage of the proposed site and hinterland by species considered to be key ecological receptors, including hen harrier which is a Special Conservation Interest of Mullaghanish to Musheramore Mountains SPA. |
| The grid connection route (GCR) shall be rerouted to run along existing access tracks.<br>Should the GCR be allowed to run through wet heath habitat, appropriate mitigation and a method statement should be agreed upon with planning authority prior to the commencement of works.                                                                         | To avoid impacts to natural and semi-natural habitats.                                                                                                                                                                                   |
| Prior to any construction works being carried out between mid-March and mid-August, a survey for breeding hen harriers shall be carried out by a competent, experienced ornithologist between mid-March and the end of May. The survey shall cover the area within a boundary of 500m of the works to be carried out during the above period. It shall be the | To avoid disturbance to breeding Hen Harrier, a species listed in Annex I of the EU Birds Directive.                                                                                                                                     |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| responsibility of the ornithologist to ensure that the survey methodology (location of vantage points, length of timing of observations, etc.) is sufficient to ensure that a hen harrier breeding site will not be overlooked. Taking into account the results of this survey no construction works shall be carried out during the above period within 500 metre of a pre nesting breeding site and/or nest, except with the written approval of the National Parks and Wildlife Service, but also no deliberate disturbance by surveyors of a hen harrier on or near a nest containing eggs or unflown young shall be considered lawful as a consequence of this grant of planning permission. |                                                                                                                             |
| After commencement of operation of the wind farm, a bird and bat corpse survey shall be conducted annually under the operational turbines by a competent ecological surveyor and according to up-to-date best practice using trained search dogs. Full details of the bird and bat corpse survey programme, including timescales for submission of the survey data and results to the Planning Authority, shall be submitted in writing and agreed with the Planning Authority prior to the commencement of development.                                                                                                                                                                          | To assess incidental mortality of a bird species listed in Annex 1 of the EU Birds Directive and strictly protected species |

**iii. Environment (Air, Noise and Vibration)**

| <b>Condition</b>                                                                                               | <b>Reason</b>                           |
|----------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| Wind turbine noise arising from the proposed development, by itself or in combination with any other permitted | In the interest of residential amenity. |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <p>wind energy development in the vicinity, shall not exceed the greater of;:</p> <p>(i) 5dB (A) above background noise levels or</p> <p>(ii) 43 dB(A) L<sub>90</sub> 10 mins</p> <p>when measured externally at noise sensitive locations.</p>                                                                                                                                                                                                                  |                                                                                     |
| <p>A noise compliance monitoring programme shall be submitted for agreement with the planning authority within 3 months of the commissioning of the 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.</p>                                              | <p>In the interest of residential amenity.</p>                                      |
| <p>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.</p> | <p>In the interest of residential amenity.</p>                                      |
| <p>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 development. In relation to air and noise, this plan shall provide details of the construction practice for the development including;</p>                                                                                    | <p>In order to protect the Environment and Local amenities during construction.</p> |

|                                                                                                                                                                                                                                                                                                                                                                                        |  |
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| <p>(a) Proposals for the suppression of on-site noise</p> <p>(b) Proposals for the suppression of dust on site</p> <p>(c) Proposals for the suppression of vibration</p> <p>(d) Proposals to minimise any odours.</p> <p>This plan shall include a comprehensive monitoring plan to include inter alia noise, vibration and dust with regular reporting to the planning authority.</p> |  |
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#### iv. Archaeology

| Condition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Reason                                                                                                                                                   |
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| <p>The developer shall engage a suitably qualified archaeologist to carry out an updated Archaeological Impact Assessment (AIA) in advance of any site preparation works and groundworks, including site investigation works/topsoil stripping/site clearance and/or construction works. The updated AIA shall involve an examination of all development layout/design drawings, completion of documentary/cartographic/photographic research and archaeological testing in off-road locations along the proposed grid connection cable route (consent/licensed as required under the National Monuments Acts), the methods of which shall be agreed with the NMS and the</p> | <p>To ensure the continued preservation [either in situ or by record] of places, caves, sites, features or other objects of archaeological interest.</p> |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                          |
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| <p>County Archaeologist. The archaeologist shall prepare a comprehensive report, including an updated archaeological impact statement and mitigation strategy, to be submitted for the written agreement of the planning authority in advance of any site preparation works, groundworks and/or construction works. Where significant archaeological remains are shown to be present, preservation in-situ will be required and establishment of further 'buffer zones', preservation by record (archaeological excavation) or archaeological monitoring may be required and mitigatory measures to ensure the preservation and/or recording of archaeological remains shall be included in the AIA. Any further archaeological mitigation requirements specified by the planning authority, following consultation with the National Monuments Service, shall be complied with by the developer. The planning authority and the National Monuments Service shall be furnished with a final archaeological report describing the results of any subsequent archaeological investigative works following the completion of all archaeological work on site and the completion of any necessary post-excavation work. All resulting and associated archaeological costs shall be borne by the developer.</p> |                                                                                                                                                          |
| <p>The Construction Environmental Management Plan (CEMP) shall include the location of any and all archaeological or cultural heritage constraints relevant to the proposed development as set out in the updated Archaeological, Architectural and Cultural Heritage Impact Assessment Report (Chapter 14 of the EIAR) following consultation with NMS. The CEMP shall clearly describe all identified likely</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <p>To ensure the continued preservation [either in situ or by record] of places, caves, sites, features or other objects of archaeological interest.</p> |

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| <p>archaeological impacts, both direct and indirect, and all mitigation measures to be employed to protect the archaeological or cultural heritage environment during all phases of site preparation and construction activity. The CEMP shall be submitted to the County Archaeologist / Local Authority for written agreement prior to the commencement of any site preparation works and groundworks, including site investigation works/topsoil stripping/site clearance and/or construction works.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                          |
| <p>The developer shall engage a suitably qualified archaeologist to monitor (licensed under the National Monuments Acts) all site clearance works, topsoil stripping, groundworks and/or the implementation of any agreed preservation in-situ measures associated with the development. The use of appropriate machinery to ensure the preservation and recording of any surviving archaeological remains shall be necessary. Should archaeological remains be identified during the course of archaeological monitoring, all works shall cease in the area of archaeological interest pending a decision of the planning authority, in consultation with the National Monuments Service, regarding appropriate mitigation [preservation in-situ/excavation]. The developer shall facilitate the archaeologist in recording any remains identified. Any further archaeological mitigation requirements specified by the planning authority, following consultation with the National Monuments Service, shall be complied with by the developer.</p> | <p>To ensure the continued preservation [either in situ or by record] of places, caves, sites, features or other objects of archaeological interest.</p> |

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| <p>Following the completion of all archaeological work on site and any necessary post-excavation specialist analysis, the planning authority and the National Monuments Service shall be furnished with a final archaeological report describing the results of the monitoring and any subsequent required archaeological investigative work/excavation required. All resulting and associated archaeological costs shall be borne by the developer.</p> |  |
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### 13) **Appendix B: Suggested items of Further Information**

#### i. **Ecology Section**

- 1) It is considered that there is insufficient information available to complete Appropriate Assessment in respect of the Mullaghanish to Musheramore Mountains Special Protection Area and that additional information is required to complete the assessment in respect of Hen Harrier. As such, an Bord Pleanála may wish to consider requesting additional information in relation to Hen Harrier usage of the site and surrounding area and the likely impacts of the proposed development on Hen Harrier. This information should include up-to-date survey data on all bird species targeted in the NIS and EIAR Chapter 9. As such, a revised NIS and EIAR Chapter 9 may be required.
- 2) There are concerns in relation to the information provided regarding a number of species recorded in the EIAR, particularly avian species. It is considered that the data provided, at over three years old, should not be considered as a reliable component of the ecological assessment of the proposed site. This is especially important when considering the proximity of the site to the Mullaghanish to Musheramore Mountains SPA to the site and the potential for hen harrier (special conservation interest of the SPA) to utilise the site, especially considering the recent clear felling of forestry. As such, the following would be required:

- Bird surveys for the proposed site, in line with recommended guidelines (e.g. NatureScot/SNH), to reflect the current usage of the proposed site and hinterland by species considered to be key ecological receptors.
  - Revised Natura Impact Statement and Ornithology Chapters to reflect the updated survey information.
- 3) Regarding the grid connection route, a section of the eastern end of the proposed GCR is through wet heath habitat, which the EIAR deemed to be National value IEF. As per Chapter 8, the proposed cable will result in the direct loss of 0.9ha of HH3 Wet Heath. This comprises a permanent moderate significant adverse effect on a National value IEF. It is noted that a general site wide description of the habitat has been provided but no specific description of the section to be removed to accommodate the GCR has been given. It is also noted that the applicants have not included a specific methodology for the reinstatement of the wet heath that will be removed, stating that the methodology would be agreed with the planning authority prior to works. It is considered that mitigation hierarchy be followed, whereby avoidance of impacts is principal. With this in mind, An Bord Pleanála may wish to consider requesting that the proposed grid connection route be along the existing track only, thus avoiding the removal of an approximately 1km strip of wet heath.

## **ii. Environment (Air, Noise and Vibration)**

- 1) For the purpose of clarity, the respective number and distances of all noise sensitive receptors within 500m, 1000m, 1500m and 2000m of the turbines should be presented and quantified in tabular form.
- 2) For the purpose of clarity and ease of reference, the referenced noise sensitive receptors that each background noise monitoring location is considered to be representative of should be quantified in sequential order. These should also be shown on a suitably scaled map along with the locations where the noise monitoring has been conducted to determine the existing noise environment.

## **14) Appendix C- Internal Reports**

### **i. Area Engineer**

#### **General Information**

The main site is located over the county bounds in Co. Kerry with the connection to the electrical grid located in the townlands of Caherdowney, Co. Cork. The applicant's have made a Strategic Infrastructure Development Application to An Bord Pleanala to construct a Wind Farm consisting of 17 turbines and underground transmission lines.

#### **Roads**

The proposed main entrance to the site is located off the National Primary Road N22 in Co. Kerry. The applicant has stated that this entrance will be used for the delivery of material and personnel to the site.

In Chapter 7 of the EIA Report, the applicant has stated that they have identified a number of quarries to supply material to the proposed development. Given the proximity of one of these suppliers to an existing forestry/Wind farm entrance located in Caherdowney, Cork County Council would have concerns that the L-5226 would be used as a short cut to access the site through existing tracks through Coillte own land. Therefore, we will require confirmation from the applicant that this route will not be used for the delivery of materials to the site.

#### **Sewerage Disposal**

The proposed substation and associated sanitary facilities are located on the Kerry side of the project.

#### **Drinking Water**

The proposed substation and associated sanitary facilities are located on the Kerry side of the project.

#### **Surface Water**

The proposed works should not have an impact on surface water runoff onto public roads within Cork County

#### **Site Notice**

The site was inspected on 20<sup>th</sup> November 2012 and the site notice was on display in Caherdowney, although the notice was located a long way back from the public road.

### Recommendation

If the Bord are minded to request additional information from the applicant, the following point should be raised?

*The applicant is to confirm in writing that the L-5226 from the junction of R582 to the existing forestry entrance at Garrane Bridge will not be used as a haulage route for materials to the site.*

If the Bord proposed to grant planning, the following condition should be imposed.

|   |                                                                                                                                                          |                                                         |
|---|----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| 1 | The L-5226 from the junction of R582 to the existing forestry entrance at Garrane Bridge shall not be used as a haulage route for materials to the site. | In the interests of road safety and orderly development |
|---|----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|

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Pat O'Sullivan  
Executive Engineer  
Macroom Municipal District  
Millstreet Office  
25<sup>th</sup> November 2024

## **ii. Ecology Section**

**Cummeennabuddoge Windfarm Strategic Infrastructure Development - An Bord Pleanála  
Ref No ABP-321029**

**Cork County Council Ecology Office Report on Cummeennabuddoge Windfarm.**

**Brief Project Description of relevance to Cork County Council's ecology office**

*Project Elements:* The proposed project development comprises the following:

- 17 turbines with a tip height between 199.5m and 200m above ground level (AGL).
- 110kV Underground cabling from the new 110kV permanent electrical substation to the existing 220/110kV Ballyvouskill Substation to facilitate export of electricity to the National Electricity Grid.
  - The UGC works will consist of the installation of 6 No. ducts in an excavated trench to accommodate 3 No. power cables, 2 No. fibre communications cable to allow communications between the Cummeennabuddoge Wind Farm Substation and Ballyvouskill 220kV substation and 1 No. earth continuity conductor.
  - The UGC route is approximately 3.6km in length and traverses in a west to north westerly direction from the existing Ballyvouskill 220kV substation to the Cummeennabuddoge Wind Farm substation location utilising existing agricultural grassland pasture, existing access tracks and private forestry access tracks.
  - The proposed UGC runs in parallel with existing UGC for a section of the route. Where running in parallel with the existing 110kV and 38kV Garrow-Ballyvouskill underground circuits, all ESB safety procedures, as outlined within the HSA "Code of Practice for Avoiding Danger from Underground Services", will be adhered to throughout the duration of construction. Given the conduction properties of the existing underground cables and the proposed grid connection cables for Cummeennabuddoge, there will be a requirement to maintain a separation between circuits, so far as these are thermally independent of each other, typically with an offset of 2m to 3m.
- New permanent access tracks and permanent upgrades to existing tracks and site access.

### **Assessment:**

This report relates to proposals for the installation of a grid connection which will occur in Cork County Council operational area 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). The report also considers the potential

for the proposed 17 turbines and associated works to give rise to impacts to European sites which occur within Cork County bounds, in terms of ex-situ occurrence of qualifying 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. 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 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.

All impacts / potential impacts of the proposal on habitats and species to be considered of particular concern to this office are within the boundaries of County Cork and are discussed further below.

#### **Site Location and Description:**

The majority of the proposed site is situated in County Kerry, bar the grid connection route to the Ballyvouskill Substation in Caherdowney which is in County Cork, approximately 6km south-southwest of Millstreet Town. The proposed grid connection route (GCR) is along existing roads constructed for previous windfarm developments and existing tracks that may require upgrading. The two ends of the proposed GCR, within the Cork County bounds, will require further works as no tracks or roadways currently exist. Aerial imagery would suggest that the proposed GCR that would cross county bounds is comprised of a section of forestry that has either been recently felled or recently planted. Per the submitted documentation, the eastern end of the proposed GRC will go through wet heath (HH3), dry meadows and grassy verges (GS2) and terminates in an area of buildings and artificial surfaces (BL3, Ballyvouskill Substation). At its closest, the track will be approximately 180m from Mullaghanish to Musheramore Mountains SPA (site code: 4162) (Figure 2). The proposed windfarm site proper is approximately 500m from the SPA. The main body of proposed site adjoins Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC (site code: 0365) and is approximately 75m from Mullaghanish Bog SAC (site code: 1890).

**Natura Impact Statement:**

A total of seven European sites were considered within the potential Zone of Influence (ZOI) of the proposed development, namely:

8. Mullaghanish to Musheramore Mountains SPA (Site Code: 004162)
9. Blackwater River (Cork/Waterford) SAC (002170)
10. The Gearagh SPA (004109)
11. Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC (000365)
12. Mullaghanish Bog SAC (001890)
13. St. Gobnet's Wood SAC (000106)
14. Killarney National Park SPA (004038)

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 Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC due to the proposed windfarm's hydrological connection to the Clydagh River, which is in the SAC. All potential impacts were deemed to occur in County Kerry only.

Mullaghanish Bog SAC was screened out due to its elevation relative to the windfarm. Blackwater River (Cork/Waterford) SAC and St. Gobnet's Wood SAC was screened out due to absence of hydrological connectivity and distance, respectively. Mullaghanish to Musheramore Mountains SPA, The Gearagh SPA, and Killarney National Park SPA were all screened out due to the low numbers or absences of certain special conservation interest species of the respective SPAs, namely hen harrier (Mullaghanish to Musheramore Mountains SPA), mallard (The Gearagh SPA), and Greenland white-fronted goose and merlin (Killarney National Park SPA). This is based on the ornithological surveys conducted between 2018 and 2021.

The NIS outlines that potential impacts to Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC may arise from water borne pollution during construction and disturbance during construction.

The document 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 have been detailed in the CEMP and its associated management plans.

The NIS concluded that appropriate assessment was carried out on the likely significant effects identified on the Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC. Taking account of mitigation identified, the Proposed Development would not have any adverse impacts on the conservation interests of the SAC which would mean

the conservation objective would be maintained. As such if the Proposed Development were to go ahead, there would not be an adverse effect on the integrity of the SAC.

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**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 8 (Biodiversity) and Chapter 9 (Ornithology) of the EIAR. The chapter includes 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 on habitats of high natural value. Particular focus is given to sites, species and features identified to be key ecological receptors. Per Chapter 8 of the EIAR and the relevant Technical Appendices, field surveys were conducted at the following timelines:

- Bats: April-September 2020 and May to September 2021.
- Kerry Slug: August to September 2021.
- Aquatic ecology and fish surveys: August and September 2021.
- Freshwater Pearl Mussel: September 2021
- Habitat Survey: July 2021 with Habitat Review conducted in 2024.
- Bird Surveys: Chapter 9 of the EIAR states that VP surveys were conducted in 2023. The technical appendix for the Chapter outlines that surveys were undertaken between the dates of 22/10/2018 and 30/03/2021.

Potential negative impacts on European designated sites due to their connectivity have been addressed in the submitted NIS. No NHAs have been identified within a 15km radius. Prohus Wood Proposed Natural Heritage Area is located 9.6km southeast of Proposed Development. Given the distance, it was not considered further.

Per Chapter 8, the proposed cable will result in the direct loss of 0.9ha of HH3 Wet Heath. This comprises **a permanent moderate significant adverse effect on a National value IEF.**

Per the Ornithology Chapter, bird surveys completed at the site followed SNH/NatureScot guidance. Section 9.2.4 of the Chapter states that VP surveys were undertaken between 30 March 2021 and October 2023. According to Section 9.3.2 and outlined in detail in the Technical Appendix the field survey results were conducted no later than 2021.

Of concern to Cork County Council were Chapter 9's assessment of the following:

- *Mullaghanish to Musheramore Mountains SPA*: The submitted NIS assessed the potential for the proposed development to impact on the SPA. Per the EIAR, the Proposed Development lies 500m from the SPA; at that distance there will be no significant effects upon the habitats present within the SPA and no adverse effects on the SPA itself.

- *Hen harrier*: eight individual Hen harrier were recorded during winter roost surveys (seven during the 2018/19 surveys and one during the 2019/2020 surveys). Per Chapter 9, there were no winter roosts identified within the 2 km search area around the Proposed Development or within the Proposed Development in either survey period. Breeding raptor surveys were conducted in 2019 and 2020. Hen harriers were recorded twice. Per the EIAR, only one flight was recorded over the Proposed Development Site, with all others in the vicinity of the Site. Given this, and the low habitat suitability across much of the Site, but also the possible presence of internationally important individuals, the Site would be assessed as being of **county** importance.

**Construction impacts:** The EIAR deems that since hen harrier made no use of the Proposed Development during the breeding season, it would have a negligible effect on the habitat quality for the species which would not be considered significant. The report goes on to state that while there could be some disturbance as a result of the increased human activity in connection with the Proposed Development the low level of bird activity recorded and the short term nature of the disturbance where it would extend across two non-breeding seasons at the most would mean the effect would be considered minor and not significant. Mitigation has been proposed to protect individual birds.

**Operational impacts:** The EIAR deemed that as hen harrier did not make use of the proposed development during the breeding season, there cannot be a displacement effect if the resource is not used or is not used in a way which is measurable. The EIAR further states that displacement effects, where they have been identified during the breeding season, have been on a very small scale which if they were to occur during the winter months would not be considered significant to a species with large winter ranges and which was recorded with only a low level of usage. Due to the flight activity recorded, the report calculated that over the 35 year lifetime of the wind farm, less than one Hen harrier would be expected to collide.

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**Mitigation:** Mitigation measures as proposed within the EIAR & CEMP to manage identified impacts include the following:

### Chapter 8

Works will be overseen by an Ecological Clerk of Works (ECow) who will be responsible for undertaking regular Site inspections and overseeing all sensitive habitat removal and works at watercourse crossings, ensuring implementation of biodiversity /habitat mitigation measures, as per the HMP, among other responsibilities. Reinstatement of habitats will be undertaken after each stage of the project is completed and in accordance with planning condition requirements within the Habitat Management Plan. Reinstatement will include reusing peat removed for the cable route on adjacent verges to prevent mitigate indirect drying effects and will employ stump-flipping to rewet ground and avoid the removal for some brash off-Site. The methodology used for reinstatement will be agreed with the *Planning Authority* and implemented by measures outlined in detail within the HMP.

Habitats, including areas of restored wet heath, peat, and watercourses will be monitored during the operational stage.

#### **Chapter 9**

- Construction: Removal of vegetation will occur outside for bird breeding season, where possible. Nest protection measures will be put in place should any be identified as part of ongoing surveys and buffers, according to published guidelines, will be established.
- Monitoring: During construction, surveys and pre-construction checks will be carried out to enable any protected or sensitive breeding or roosting locations to be identified within the Proposed Development and measures detailed below put in place to protect them. Breeding raptor surveys will be carried out to monitor for the presence of Hen harrier in the vicinity of the Proposed Development in the breeding season before construction commences. Targeted woodcock surveys, to update the baseline data prior to carrying out a targeted programme of monitoring with a view to comparing levels of breeding woodcock activity pre and post construction to see if there is any spatial change in use of the Site pre and post construction, both in relation to the wind farm but also forestry use of the Site. will be conducted prior to works commencing.

#### **Assessment:**

The following assessment is based on the potential impacts, that may arise as a result of the proposed windfarm and its associated works and infrastructure, to sites designated for nature conservation and/or habitats and species considered key ecological receptors within Cork County Council's operational area. The assessment is made based on a review of aerial photography, National Landcover Mapping and all information provided in the EIAR, NIS and other relevant planning documentation. Regard has been had to County Development Plan policies including ET 13-4, ET-13-5, ET 13-6, ET-13-7, BE 15-2 and BE 15-6.

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

Regarding designated sites considered within the zone of influence of the proposal and their associated aquatic environments, I note the conclusions of the NIS and the EIAR. I note that the majority of the proposed development will be within County Kerry and note the measures outlined to mitigate against adverse effects to Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC.

The NIS and EIAR have deemed that as the proposed windfarm site was rarely, if at all, used by ex-situ species for which The Gearagh SPA, Killarney National Park SPA, and Mullaghanish to Musheramore Mountains SPA are designated, there would be no adverse effects to the integrity of these SPA in view of their respective conservation objectives. However, it is noted that the survey data are from over three years prior to the submission of the SID application. Despite what is stated in Chapter 9 in the EIAR (VP surveys were conducted in 2023), the latest survey date recorded in Technical Appendix 9-1 is 30/03/2021. Per CIEEM advice note (April 2019), data over three years old is 'unlikely to still be valid and most, if not all, of the surveys are likely to need to be updated'. Furthermore, the EIAR outlines that the 'most common habitat on the Proposed Development Site – mature plantation forestry – has low suitability for foraging and breeding Hen harrier and this is likely reflected in the recorded low usage by the species.' However, upon viewing Google Earth images (Figure 3) of the proposed site, it appears that clear felling (over 150ha) within the proposed site has since occurred. This may encourage more use of the area by hen harrier ex-situ of the Mullaghanish to Musheramore Mountains SPA.

I am of the opinion that there is insufficient information available to complete Appropriate Assessment in respect of the Mullaghanish to Musheramore Mountains Special Protection Area and that additional information is required to complete the assessment in respect of Hen Harrier. As such, an Bord Pleanála may wish to consider requesting additional information in relation to Hen Harrier usage of the site and surrounding area and the likely impacts of the proposed development on Hen Harrier. This information should include up-to-date survey data on all bird species targeted in the NIS and EIAR Chapter 9. As such, a revised NIS and EIAR Chapter 9 may be required.

With regard to the grid connection route, a section of the eastern end of the proposed GCR is through wet heath habitat, which the EIAR deemed to be **National value IEF**. I note that a general site wide description of the habitat has been provided but no specific description of the section to be removed to accommodate the GCR has been given. I also note that the applicants have not included a specific methodology for the reinstatement of the wet heath that will be removed, stating that the methodology would be agreed with the planning authority prior to works. Notwithstanding this, I would consider that the mitigation hierarchy be followed, whereby avoidance of impacts is principal. With this in mind, An Bord Pleanála may wish to consider requesting that the proposed grid connection route be along the existing track only, thus avoiding the removal of an approximately 1km strip of wet heath.

#### **Conclusion:**

I have concerns in relation to the information provided regarding a number of species recorded in the EIAR, particularly avian species. I consider that the data provided, at over three years old, should not be considered as a reliable component of the ecological assessment of the proposed site. This is especially important when considering the proximity of the site to the Mullaghanish to Musheramore Mountains SPA to the site and the potential for hen harrier (special conservation interest of the SPA) to utilise the site,

especially considering the recent clear felling of forestry. As such, the following would be required:

- Bird surveys for the proposed site, in line with recommended guidelines (e.g. NatureScot/SNH), to reflect the current usage of the proposed site and hinterland by species considered to be key ecological receptors.
- Revised Natura Impact Statement and Ornithology Chapters to reflect the updated survey information.

Furthermore, in keeping with the principles of the mitigation hierarchy, retaining the wet heath habitat that was recorded along the proposed grid connection route should be the preferred approach. As such, the following would be required:

- A revised plan to provide for the GCR avoid wet heath and to run along the existing access track to Ballyvouskill substation.

Should An Bord Pleanála be minded to seek further information, the following is recommended:

- 1) It is considered that there is insufficient information available to complete Appropriate Assessment in respect of the Mullaghanish to Musheramore Mountains Special Protection Area and that additional information is required to complete the assessment in respect of Hen Harrier. As such, an Bord Pleanála may wish to consider requesting additional information in relation to Hen Harrier usage of the site and surrounding area and the likely impacts of the proposed development on Hen Harrier. This information should include up-to-date survey data on all bird species targeted in the NIS and EIAR Chapter 9. As such, a revised NIS and EIAR Chapter 9 may be required.
- 2) There are concerns in relation to the information provided regarding a number of species recorded in the EIAR, particularly avian species. It is considered that the data provided, at over three years old, should not be considered as a reliable component of the ecological assessment of the proposed site. This is especially important when considering the proximity of the site to the Mullaghanish to Musheramore Mountains SPA to the site and the potential for hen harrier (special conservation interest of the SPA) to utilise the site, especially considering the recent clear felling of forestry. As such, the following would be required:
  - Bird surveys for the proposed site, in line with recommended guidelines (e.g. NatureScot/SNH), to reflect the current usage of the proposed site and hinterland by species considered to be key ecological receptors.
  - Revised Natura Impact Statement and Ornithology Chapters to reflect the updated survey information.
- 3) Regarding the grid connection route, a section of the eastern end of the proposed GCR is through wet heath habitat, which the EIAR deemed to be National value IEF. It

is noted that a general site wide description of the habitat has been provided but no specific description of the section to be removed to accommodate the GCR has been given. It is also noted that the applicants have not included a specific methodology for the reinstatement of the wet heath that will be removed, stating that the methodology would be agreed with the planning authority prior to works. It is considered that mitigation hierarchy be followed, whereby avoidance of impacts is principal. With this in mind, An Bord Pleanála may wish to consider requesting that the proposed grid connection route be along the existing track only, thus avoiding the removal of an approximately 1km strip of wet heath.

Should An Bord Pleanála be minded to grant permission, the following conditions should be attached:

| Condition                                                                                                                                                                                                                                                                                                                                                                                  | Reason                                                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>The applicants shall conduct two years of bird surveys of the proposed site and hinterland, prior to the commencement of works.</p> <p>Revised Natura Impact Statement and Ornithology Chapters may be required to reflect the updated survey information.</p>                                                                                                                          | <p>To reflect the most current usage of the proposed site and hinterland by species considered to be key ecological receptors, including hen harrier which is a Special Conservation Interest of Mullaghanish to Musheramore Mountains SPA.</p> |
| <p>The grid connection route (GCR) shall be rerouted to run along existing access tracks.</p> <p>Should the GCR be allowed to run through wet heath habitat, appropriate mitigation and a method statement should be agreed upon with planning authority prior to the commencement of works.</p>                                                                                           | <p>To avoid impacts to natural and semi-natural habitats.</p>                                                                                                                                                                                   |
| <p>Prior to any construction works being carried out between mid-March and mid-August, a survey for breeding hen harriers shall be carried out by a competent, experienced ornithologist between mid-March and the end of May. The survey shall cover the area within a boundary of 500m of the works to be carried out during the above period. It shall be the responsibility of the</p> | <p>To avoid disturbance to breeding Hen Harrier, a species listed in Annex I of the EU Birds Directive.</p>                                                                                                                                     |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| <p>ornithologist to ensure that the survey methodology (location of vantage points, length of timing of observations, etc.) is sufficient to ensure that a hen harrier breeding site will not be overlooked. Taking into account the results of this survey no construction works shall be carried out during the above period within 500 metre of a pre nesting breeding site and/or nest, except with the written approval of the National Parks and Wildlife Service, but also no deliberate disturbance by surveyors of a hen harrier on or near a nest containing eggs or unflown young shall be considered lawful as a consequence of this grant of planning permission.</p> |                                                                                                                                    |
| <p>After commencement of operation of the wind farm, a bird and bat corpse survey shall be conducted annually under the operational turbines by a competent ecological surveyor and according to up-to-date best practice using trained search dogs. Full details of the bird and bat corpse survey programme, including timescales for submission of the survey data and results to the Planning Authority, shall be submitted in writing and agreed with the Planning Authority prior to the commencement of development.</p>                                                                                                                                                    | <p>To assess incidental mortality of a bird species listed in Annex 1 of the EU Birds Directive and strictly protected species</p> |

[illegible]

The map displays the Mullaghinish Bog SAC, which is a large area of blue hatched land. To its east is the Mullaghinish to Musheramore Mountains SPA, shown as a purple dotted area. Further east is the St. Gobnet's Wood SAC, a green area. The River Glass is shown flowing into the bog from the west. The map also indicates the location of Bogg Mountain and the Cork region.

63



### iii. Environment (Air, Noise and Vibration)

**Environmental Report Prepared For** : Proposed development of Cummeennabuddoge Wind Farm (Ref. No. ABP. 321029),

in the townlands of Cummeennabuddoge (County Kerry), Clydaghroe (County Kerry), Glashacormick (County Kerry), Cummeenavrick (County Kerry), and Caherdowney (County Cork).

The proposed development consists of 17 wind turbines with a maximum ground to blade tip height of between 199.5 metres(m) and 200m and a hub height between 118m and 125m. The proposed development also includes access tracks, an on-site substation, meteorological mast, and a 110 kilo volt (Kv) underground electrical connection route to Ballyvouskill substation to the east of the wind farm to allow the export of electricity.

Each turbine will have an installed electrical generation capacity of between 6 and 7.2 Mega Watts giving the proposed development a total maximum electricity export capacity of between 102MW and 122.4MW.

### **AIR**

Chapter 12 and associated appendices assesses the potential impact on air quality as a result of the construction, operation and decommissioning of the proposed development.

Section 12.2 outlines the methodology and approach adopted in relation to the assessment as well as the relevant legislation, planning policy and guidance. It is submitted that the proposed development is located within Air quality Zone D of the 4 Environment Protection

Agency designated Air Quality Zones for Ireland. This is due to its rural location away from population centres.

A dust impact assessment is conducted as per Section 12.4. with the overall risk of dust impacts from the effects of dust soiling and PM<sub>10</sub> on the sensitive receptors without mitigation, as a result of the proposed development, presented as per Table 12.16 of the submission.

It is submitted as per Section 12.6.2, that 3 dust emitting activities will occur during the construction phase of the proposed development. These are construction activities, earthworks and dust emissions from construction phase associated trackout from vehicles. It is further submitted that the highest overall risk of impacts upon sensitive receptors from construction, earthworks and trackout activities has been assessed as medium risk. This risk was centred on the ecological receptor Killarney National Park with risk assessed as low on the human sensitive receptor, Dwelling 1. In relation to the operational phase, it is submitted that the operational phase will have a negligible impact. In respect of the decommissioning phase it is submitted that two dust emitting activities will occur during the decommissioning phase of the proposed development. These are decommissioning activities and dust emissions from decommissioning phase associated trackout. The highest overall risk of impacts upon sensitive receptors from decommissioning and trackout has been assessed as medium risk. This risk is centred on the ecological receptor Killarney National Park, with risk assessed as low on the human sensitive receptors. It is submitted that dust emissions will be lower during the decommissioning phase than during the construction phase due to the limited nature of the works involved.

Mitigation measures are detailed as per Section 12.7 and it is submitted that such will ensure that any potential impacts during all phases of the proposed development are minimized and ensure there will be no adverse impact on the receiving environment. It is also submitted that after the implementation of the mitigation measures, there will be non-significant short-term negative impact on Killarney National Park during the construction phase and imperceptible impacts upon Dwelling 1.

It is further submitted as per Section 12.9 that there will be a negligible impact in terms of cumulative impact as there are no other developments which are located close enough to the sensitive receptors identified within the dust assessment to contribute cumulatively to the overall risk of dust soiling and PM<sub>10</sub>.

#### **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, modelling, etc, 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 13 of the submitted Environmental Impact Assessment (EIS) and associated appendices assesses the potential impact of noise and vibration as a result of the construction, operation and decommissioning of the proposed development.

Section 13.2 outlines the legislation, planning policy and guidance. Section 13.3 describes the noise sources where it is stated that noise is generated by wind turbines as they generate power which only occurs above the 'cut-in' wind speed and below the 'cut-out' wind speed. The cut in speed at proposed turbine hub height is detailed as approximately 3 metres per second with the cut out wind speed approximately 25 m/s. The principal sources of noise is described as the blades rotating in the air, internal machinery, normally in the gearbox, and, to a lesser extent, the generator (mechanical noise).

The assessment methodology is detailed as per section 13.5 with Section 13.5.1 referring to the assessment guidance with respect to the construction and decommissioning phase and Section 13.5.2 referring to the operational phase. It is submitted as per section 13.5.2 that predictions have been carried out for a range of turbine types to identify a worst case candidate turbine where noise emissions are highest. It is also submitted that 4 candidate turbines were assessed and the Nordex N163 5.6MW was found to have the highest noise emissions and emissions at all receptor locations and for all wind speeds so provides the most conservative candidate for the noise assessment.

Section 13.6 and Appendix 13.3 details the noise survey conducted to determine the existing noise environment where monitoring was conducted at 4 measurement locations. Table 13-7 details the prevailing background noise (dB LA90 ) at each location for night and daytime respectively.

Section 13.7 outlines the assessment of effects and mitigation in respect of the construction and operational phases.

In relation to the construction effects, it is noted that noise during the construction period will arise from the construction of the turbine foundations, the erection of the turbines, the excavation of trenches for cables, and the construction of associated hard standings and access tracks. Noise from vehicles on local roads and access tracks will also arise resulting from the delivery of the turbine components and construction materials, notably aggregates, concrete and steel reinforcement. An assessment of each such construction effect is then undertaken as per section 13.7.2 and the following conclusions arising from same are submitted in respect of the following;

\* Increase in Traffic -It is submitted that the contribution to the overall noise environment would be negligible and non-significant.

\* Access Track Construction -It is submitted that the short duration of exposure results in an impact which is negligible and not significant to the overall construction duration, and therefore this is not considered further.

\*Turbine construction -It is submitted that this aspect of the proposed development is considered not significant with noise barriers not considered necessary.

\* Blasting at borrow pits -It is submitted that including the identified factors including blast monitoring, design, etc, in the noise management plan for the construction works and a combination of minimising blasting activities and ensuring nearby residents are fully warned should mitigate any adverse impact.

\*Grid connection Construction- It is submitted that the closest property to the grid connection route is located at 525463 583614, which is approximately 700 m from the grid connection construction site at its closest point. At this distance it is further submitted that the predicted noise from the construction plant is 36dB which is well below the 65dB  $L_{Aeq}$  construction noise limits given in BS5228.

In relation to the operational effects, this is addressed under Section 13.7.3 of the Environmental Impact assessment report. It is submitted that the noise limits stated at Table 13-11, take into account the existing noise levels from all other wind farms in the area and, thereby, show the noise limits that apply to the proposed development acting in isolation. Table 13.15 shows the downwind predicted noise levels associated with the proposed development acting in isolation. Figure 13-1 shows the predicted noise contours for the proposed development at 7m/s where it is submitted that the maximum noise emissions occur for the candidate turbine. Figure 13-2 shows the predicted noise contours for the proposed development acting cumulatively with the other sites in the area at 7m/s. It is also stated and submitted that the predicted noise levels are presented for downwind propagation conditions, and that for conditions other than downwind, operational noise levels would be lower. A comparison of noise limits and predictions is presented as per Table 13-16 and 13-17. It is submitted that during the daytime, predicted operational noise limits comply with the noise limits at all properties, except R153 where noise limits are exceeded at wind speeds greater than or equal to 6m/s and by up to 4.2 dB. During the night-time, predicted operational exceedances occur for wind speeds greater than or equal to 5m/s at R153 and at 7-9m/s at R65. Exceedances at R153 are up to 7dB. Mitigation is submitted as detailed per Section 13.8.2 by use of noise reduced operation modes. It is noted and submitted that the curtailment strategy is specific to the model of turbine. If a different candidate turbine is built, a different curtailment strategy would need to be derived.

It is further submitted that the noise limits against which the operation noise is assessed have been derived taking into account the operational noise from other windfarms. This

means that the cumulative operational noise impact assessment is inherent in the assessment with accordingly no significant cumulative noise impacts anticipated.

**Items the Bord may request or wish to seek further information on:**

**Noise & Vibration**

- 1.) For the purpose of clarity the respective number and distances of all noise sensitive receptors within 500m, 1000m, 1500m and 2000m of the turbines should be presented and quantified in tabular form.
- 2.) For the purpose of clarity and ease of reference, the referenced noise sensitive receptors that each background noise monitoring location is considered to be representative of should be quantified in sequential order. These should also be shown on a suitably scaled map along with the locations where the noise monitoring has been conducted to determine the existing noise environment.

**Suggested Conditions the Bord may wish to consider:**

- 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<sub>90</sub> 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 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 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 protect the Environment and Local amenities during construction.

Report By: Andrw Mc Donnell,

Date: 25<sup>th</sup> November, 2024.

Executive Scientist,

Environment Directorate,

Cork County Council.

iv. Cork NRDO

## Comhairle Contae Chorcaí Cork County Council

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Date: 07.11.2024

Our Ref:

|                     |                                                                                                                                                        |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Applicant:</b>   | <b>Cummeennabuddoge Wind Designated Activity Company</b>                                                                                               |
| <b>ABP Ref:</b>     | <b>PA08.321029</b>                                                                                                                                     |
| <b>Location:</b>    | Cummeennabuddoge (County Kerry), Clydaghroe (County Kerry), Glashacormick (County Kerry), Cummeenavrlick (County Kerry), and Caherdowney (County Cork) |
| <b>Description:</b> | <b>10-year planning permission for wind energy development consisting of 17 no. wind turbines and related works</b>                                    |

The Cork NRO notes that the planned route for abnormal loads includes the N22, N40 and N28 national roads.

The construction commencement year for the proposed development is 2028, with the 24-month schedule indicating that all abnormal load trips will happen in mid-2029. As construction of the of the M28 Cork to Ringaskiddy Motorway is anticipated to be completed by such time it is not foreseen that there will be any issues arising from the abnormal load trips generated by the proposed development and construction works of the M28 project

Notwithstanding that, the abnormal loads arising from the proposed development will require an Abnormal Load Permit issued by the local authority as per Section 13 of the Road Traffic Act 1961 and the Road Traffic (Special Permits for Particular Vehicles) Regulations 2007 (S.I. 283 of 2007). When the applications are made in the future, the CNRO and Cork County Council will have a better understanding of any issues that may arise from the M28 and the N40 and N22. Any issues can be dealt with through this process.

As such CNRO has no objection to a grant of permission.

Handwritten signature of Christina Dring in black ink.

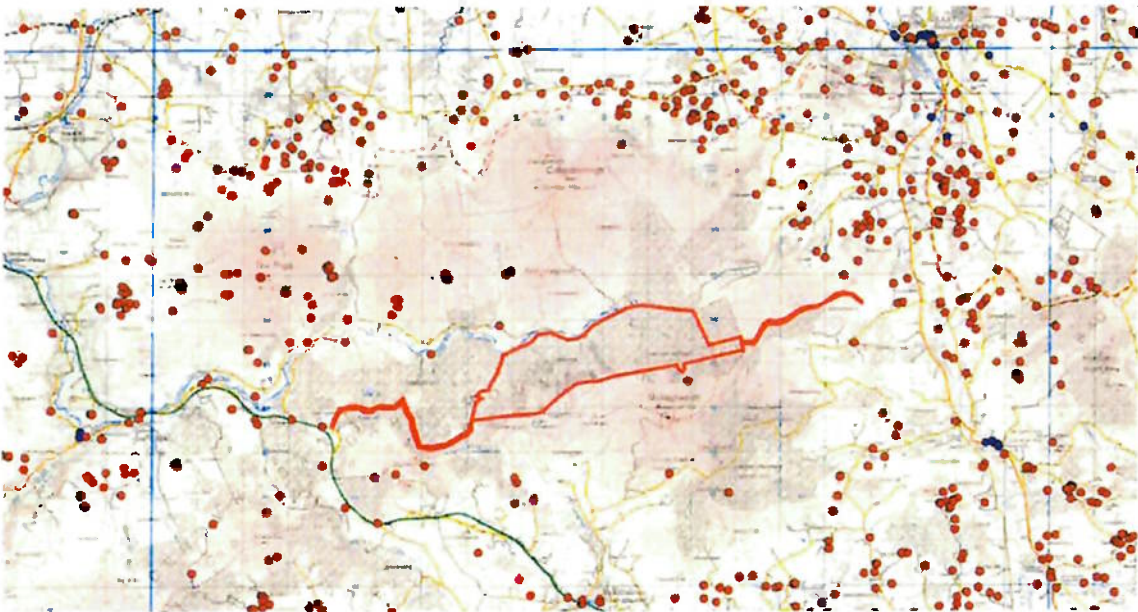
Christina Dring  
AE Cork NRO

## v. Archaeology

### Status

**Cummeennabuddoge Wind Designated Activity Company**, have given notice of their intention to make an application to An Bord Pleanála for permission for the development of Cummeennabuddoge Wind Farm in the townlands of Cummeennabuddoge (County Kerry), Clydaghrone (County Kerry), Glashacormick (County Kerry), Cummeenavrack (County Kerry), and Caherdowney (County Cork). Proposals include 17 wind turbines and 110kV electrical substation. Location is to the west of Millstreet.

A large number of SMR/RMP sites are located within the vicinity.



### County Development Plan 2022

#### 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](http://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 16-5:**

#### **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.

**Primary Report**

The proposed development is located within the Derrynasaggart mountain range and largely under commercial forestry. It is noted that 'the Paps', a designated archaeological landscape

(located in County Kerry) is located just to the northwest of the planning application boundary. The majority of the proposed development is located within County Kerry and the proposed development traverses the Cork/Kerry border at Caherdowney Td, to the east of the proposed development site. It is my understanding that a cable route is proposed within County Cork only and this is proposed to be located along an existing access track from the East.

I have read Chapter 14 of the EIAR undertaken by Rubicon Heritage Services Ltd.

A walkover survey of the Proposed Development Site was undertaken by Dr. Enda O'Flaherty and Ewelina Rondelez B.A. of Rubicon Heritage Services Ltd between the 10th and 13th of May 2021. An additional walkover survey of the delivery access track and proposed cabling route was undertaken by Dr. Enda O'Flaherty and Jonathan Millar B.A. of Rubicon Heritage on June 30th 2022. The Proposed Development Site topography typically falls from south to north and currently consists of coniferous plantation. Existing forestry tracks traverse the Proposed Development Site. Existing wind farms are present to the north, south and east of the Proposed Development Site. The River Clydaggh, a tributary of the River Flesk, is located along the northern boundary of the Proposed Development Site. Additionally, there are several minor watercourses throughout the Proposed Development Site. The Proposed Development site predominantly comprises commercial forestry lands with associated infrastructure, and as such, the area was already greatly disturbed when inspected. Some locations were inaccessible due to the level of disturbance.

#### **Grid Connection Cable route**

Report Extract '*The proposed grid connection cable route to Ballyvouskil substation is located to the east of the Proposed Development Site and traverses Cummeennabuddoge townland and part of the townland of Caherdowney. Part of this route follows an existing forestry road (to the west of the route), and a proportion of the route **comprises offsite underground grid connection through upland blanket peat.** A walkover survey of the connection cable route was undertaken by Enda O'Flaherty and Jonathan Millar of Rubicon Heritage on June 30th 2022. During this walkover survey, a possible hut site (CH081) that has not been previously identified was noted c.120m south of the proposed cable route (Plate 20). It comprised a site of unknown date located at the eastern terminus of a natural ridge; this possible circular structure measuring 1.8m in diameter comprised at most, three courses of dry-stone walling on its southern side, with the remainder of the structure having collapsed. the western end of the structure was formed by a rock outcrop.*

#### **Study Area Examined**

National Monuments within 10 km, Recorded archaeological monuments (RMPs) within 5 km, Protected Structures and/or their curtilage within approx. 5 km and Architectural Conservation Areas (ACAS) within approx. 5 km of the Proposed Development Site were assessed.

This is satisfactory.

### **RMPs within the EIAR Boundary**

There are 143 recorded archaeological monuments incorporated by the study area. Only one RMP CH001 (Hut Site; KE077-001) is located within the Proposed Development area. A site inspection of the marked location of KE077-001 could not identify any surface remains of the hut site within the present dense, mature forestry. The archaeologist has noted that the Proposed Development will have a long-term Negligible effect of no significance on extant recorded monuments. No other Recorded Archaeological Monuments are located within 250m the Proposed Development Site application area or any associated infrastructural works, with the closest being CH075 located 250m from the proposed site access entrance in County Kerry. As no direct effects to Recorded Archaeological Monuments were identified, mitigation measures are not required in accordance with the EIAR Chapter.

### **National Monuments in State Care**

There are no National Monuments incorporated by the study area as identified in the EIAR.

### **Undesignated Cultural Heritage Sites**

**Report Extract:** *'There are five undesignated cultural heritage sites that comprise extant remains present within the study area (Appendix 14-1–14-2; Figure 14-1 of the EIAR):*

- *CH060 represents a vernacular settlement and associated field system located beside the Clydagh River in the townland of Clydaghroe, and marked on all historic editions of the Ordnance Survey map. This settlement cluster includes six buildings marked on the 1st Edition Ordnance Survey sheet, at least two of which are still extant;*
- *CH061 represents another vernacular settlement and associated field system again located beside the Clydagh River in the townland of Cummeennabuddoge and also marked on all historic editions of the Ordnance Survey map. This settlement contains only one structure;*
- *CH078 represents a vernacular field system on the First Edition 6-inch Ordnance Survey sheet, with adjacent ruinous vernacular house and a nearby limekiln;*
- *CH080 represents a possible ford/bridge located at the southwestern end of the delivery access route; and*
- *CH081 represents a possible hut site that has not been previously identified was noted c.120m south of the proposed grid connection cable route'.*

All of the above identified structures are located in County Kerry (save the newly identified hut site 120m south of the Cable route). I defer to the Kerry County Archaeologist in this regard to ascertain the adequacy of the mitigation measures presented here. New Water Crossings

have been identified as Areas of Archaeological Potential (AAPs) and these are contained within County Kerry only.

### **Designated Archaeological Landscapes and Impacts on setting**

Cork County Council does not contain designated archaeological Landscapes in their County Development Plan. Kerry County Development Plan however, contains many such designations including The Paps Archaeological Landscape located immediately adjacent to the PDS at the West/NW. Although the Paps archaeological landscape is located wholly within County Kerry, impacts to Recorded Monuments, within County Cork which may have a connection to the Paps landscape requires assessment. The Planning Statement submitted with the Planning Application has noted the following: *'The EIA has determined that, following the implementation measures, the only significant residual effects relate to landscape effects on the KCC Visually Sensitive Area in the area partially overlapping with the **Paps Archaeological Landscape**'.*

This is a concern that I had raised in a previous report (prior to having read the EIAR). Impacts to existing key views and intervisibility between the Paps designated landscape and other Recorded Monuments (within County Cork) cannot be ruled out. Chapter 14 has used the ZTV model to scope out those monuments with no visibility in the direction of the proposed development site (turbines) and noted the following although it doesn't distinguish which ones are in County Cork/Kerry.

The archaeological consultant has noted the following in relation to intervisibility. *'However, no turbine effects the intervisibility between RMPs within the defined archaeological landscape area, and as such respects the character and integrity of the archaeological landscape. Any visual impact will be with regard to setting, particularly as the landscape is viewed from the east and southeast, and views from the landscape to the east and southeast. The archaeologist has noted that **CH023-CH036 (which are located in County Cork and to the northeast of the PDS)** are located to the east of the Proposed Development. Of these 14 RMPs, six will not be within the ZTV of any turbine, with the remaining eight recorded monuments being within the ZTV of 1-3 turbines'.* This somewhat reduces my concerns regarding setting of the monuments in County Cork. The topographical and geographical position of this cluster of monuments in County Cork is such that some effects to setting may occur, but reduced by the lack of visibility in many locations. Furthermore, the proposed turbines are not positioned in-between the Paps Archaeological Landscape and the cluster of monuments thereby allowing continuity of an existing views from these locations.

The EIAR report (and on Figure 14.1d and e) also addresses the monuments (within Co Cork) to the south and southwest of the development site. CH037-CH046 are located to the south and southwest of the Proposed Development Site. CH041, CH042 and CH043 will be with the ZTV of 10-12 turbines, with the remaining eight CH sites being within the ZTV of 16-17 turbines.

The archaeologist has noted that *'views to the south and southeast from The Paps archaeological landscape will include views of at least 1-6 turbines but most frequently turbines 16-17. However, extensive views towards any RMPs to the south and southeast beyond the Clydagh Valley are already largely obscured by topography, with the peaks of Cnoc an Choimín, Cnoc na Morc, and Mullach an Ois greatly obscuring the view in this direction.*

*Views from all directions toward the twin peaks of The Paps and the cairns situated there remain unaffected, with the exception of some views from the east, where the peaks will be set with the proposed turbines in the foreground at a linear distance of c.5 km from the peaks of The Paps at their closest turbine.*

*Given that many of the designated cultural heritage sites in the wider landscape are already obscured from view by the natural topography, the visual impact of the Proposed Development is lessened to some degree. It is also considered that this visual impact is reversible.*

*However overall impact on designated cultural heritage sites within 5km is considered to be Moderate, largely owing to the proximity of The Paps Archaeological Landscape and the impact to setting of this landscape as it is viewed from the east and southeast, and views from the landscape to the east and southeast'.*

In general, Figure 14.3 shows the Recorded Monuments and other Cultural Heritage sites overlaid on the ZTV which assists in scoping out those with no visibility of turbines. The areas to the north-east and southeast of the proposed development site (within County Cork) have no visibility on the ZTV. The other areas that contain Recorded Monuments to the south show visibility of between 1-9 turbines. Since this is a worse case scenario and based on a bare landscape model, the views in reality are likely to be reduced in severity.

In the LVIA chapter, although the viewpoints were selected based on Scenic Views, the results can also be useful in ascertaining the significance of effects on setting on RMPs in the vicinity.

I have consulted Viewpoints 1-3 photomontages and wireframes (as part of the LVIA) in County Cork to the south of the PDS in order to gain an understanding as to the significance or otherwise of views in the vicinity of Recorded Monuments towards the PDS. Fairly limited views are possible due to topography and vegetation, forestry etc.

View point 27 is located to the east of the PDS in County Cork and no views are possible from this location and also in accordance with the ZTV.

I also assessed viewpoint 4 immediately east of Caherdowney Td in County Cork and again limited views are possible of turbines.

#### **Cumulative Impacts (direct)**

It is accepted that direct cumulative effects will be neutral. The archaeologist has noted that, *'the implementation of mitigation measures for the Proposed Development will ensure that the cumulative effect is neutral'.*

#### **Cumulative Effects (indirect and operational)**

Existing, Proposed and permitted windfarm were assessed in Chapter 14 of the EIAR.

Report Extract:

*'The existing windfarms at Curragh/Coomacheo and Knocknamork and the proposed windfarm projects at Gortyrahilly and Inse Mhór were identified for specific consideration from the list of developments to be considered for possible cumulative impacts (Technical Appendix 2-3 Cumulative Sites), owing to their proximity to the Proposed Development. Curragh/Coomacheo Farm is visible from the eastern-most parts of The Paps Archaeological landscape, located to the northeast of the Proposed Development (Plate 27). The Knocknamork windfarm development comprises a small windfarm with five turbines located immediately to the south of the Proposed Development. The topography of the surrounding landscape which rises to the south, and the location of Knocknamork south of the summit of the hill, along with the current tree cover, largely obscures the view to the Knocknamork development, as viewed from the north. The proposed Inse Mhór windfarm is located approximately 7.5 km to the southwest of the subject site, and largely obscured from view by the natural topography. The proposed Gortyrahilly windfarm is located approximately 9.5 km to the south of the subject site, and is again largely obscured from view by the natural topography. These therefore ruled out from the possibility of cumulative impact.*

*When the location of the Proposed Development is taken into consideration the overall long-term, reversible, moderate, negative effect on the archaeological landscape will increase, specifically in the southern and eastern portions of The Paps archaeological landscape.*

*However, it is noted that the Proposed Development does not impact upon the intervisibility between archaeological monuments within the archaeological landscape but have a long-term, reversible, moderate, negative indirect impact to setting only. Outside of The Paps archaeological landscape, monuments are dispersed or at such a distance from the Proposed Development that there will be no impact on setting'.*

It is considered that the assessment has addressed my concerns regarding intervisibility of monuments (specifically in County Cork) from the Paps and vice versa.

The findings of Chapter 14 are such that no direct effects to known Cultural Heritage constraints will occur. Visual impacts will occur but are considered to be moderate based on the ZTV (worse case scenario) and slightly reduced when taking existing vegetation, topography and screening into consideration. It seems that the Paps Archaeological Landscape will be impacted (visually) and I defer to Kerry County Council to comment on same. Intervisibility between monuments within County Cork and the Paps has been addressed and no significant effects were identified. The Grid connection cable route in County Cork traverses a green field portion, where it leaves the existing access track and joins the Ballyvouskill Substation to the east. Concerns regarding sub-surface archaeology can be dealt with by advance archaeological testing and prior to construction.

**Suggested Planning Conditions**

I am recommending to the Board that the following planning conditions derived from the Office of the Planning Regulator (OPR) be attached to any grant of planning permission that

may issue to ensure that any impacts to sub-surface archaeological features can be dealt with appropriately. (These planning conditions pertain to the section within County Cork only, i.e, the Grid Connection Cable Route).

*1. The developer shall engage a suitably qualified archaeologist to carry out an updated Archaeological Impact Assessment (AIA) in advance of any site preparation works and groundworks, including site investigation works/topsoil stripping/site clearance and/or construction works. The updated AIA shall involve an examination of all development layout/design drawings, completion of documentary/cartographic/photographic research and archaeological testing in off-road locations along the proposed grid connection cable route (consent/licensed as required under the National Monuments Acts), the methods of which shall be agreed with the NMS and the County Archaeologist. The archaeologist shall prepare a comprehensive report, including an updated archaeological impact statement and mitigation strategy, to be submitted for the written agreement of the planning authority in advance of any site preparation works, groundworks and/or construction works. Where significant archaeological remains are shown to be present, preservation in-situ will be required and establishment of further 'buffer zones', preservation by record (archaeological excavation) or archaeological monitoring may be required and mitigatory measures to ensure the preservation and/or recording of archaeological remains shall be included in the AIA. Any further archaeological mitigation requirements specified by the planning authority, following consultation with the National Monuments Service, shall be complied with by the developer. The planning authority and the National Monuments Service shall be furnished with a final archaeological report describing the results of any subsequent archaeological investigative works following the completion of all archaeological work on site and the completion of any necessary post-excavation work. All resulting and associated archaeological costs shall be borne by the developer.*

**To ensure the continued preservation [either in situ or by record] of places, caves, sites, features or other objects of archaeological interest.**

*2. The Construction Environmental Management Plan (CEMP) shall include the location of any and all archaeological or cultural heritage constraints relevant to the proposed development as set out in the updated Archaeological, Architectural and Cultural Heritage Impact Assessment Report (Chapter 14 of the EIAR) following consultation with NMS. The CEMP shall clearly describe all identified likely archaeological impacts, both direct and indirect, and all mitigation measures to be employed to protect the archaeological or cultural heritage environment during all phases of site preparation and construction activity. The CEMP shall be submitted to the County Archaeologist / Local Authority for written agreement prior to the commencement of any site preparation works and groundworks, including site investigation works/topsoil stripping/site clearance and/or construction works.*

**To ensure the continued preservation [either in situ or by record] of places, caves, sites, features or other objects of archaeological interest.**

*3. The developer shall engage a suitably qualified archaeologist to monitor (licensed under the National Monuments Acts) all site clearance works, topsoil stripping, groundworks and/or the implementation of any agreed preservation in-situ measures associated with the development. The use of appropriate machinery to ensure the preservation and recording of any surviving archaeological remains shall be necessary. Should archaeological remains be identified during the course of archaeological monitoring, all works shall cease in the area of archaeological interest pending a decision of the planning authority, in consultation with the National Monuments Service, regarding appropriate mitigation [preservation in-situ/excavation]. The developer shall facilitate the archaeologist in recording any remains identified. Any further archaeological mitigation requirements specified by the planning authority, following consultation with the National Monuments Service, shall be complied with by the developer. Following the completion of all archaeological work on site and any necessary post-excavation specialist analysis, the planning authority and the National Monuments Service shall be furnished with a final archaeological report describing the results of the monitoring and any subsequent required archaeological investigative work/excavation required. All resulting and associated archaeological costs shall be borne by the developer.*

