



Contact Us

We welcome conversation, engagement and interaction with you on any aspect of how we propose to progress the Coumnagappul Wind Farm project and particularly on how we communicate project information to you. If you would like to chat about this proposed project further please contact us via any of the below means.

To supplement this project's information process, we have compiled a dedicated online Community Consultation Exhibition. This is available to view at www.innovision.ie/Coumnagappul and includes much more project design detail including an interactive visual representation of how the project would look if built out from numerous vantage points surrounding the proposed projects Study Area.

Website : www.coumnagappulwindfarm.ie

Email : coumnagappul@emp.group

Phone : 01 588 0178

Write : EMPower, Portview House, Fifth Floor, Thorncastle St., Dublin 4, D04 V9Y9.

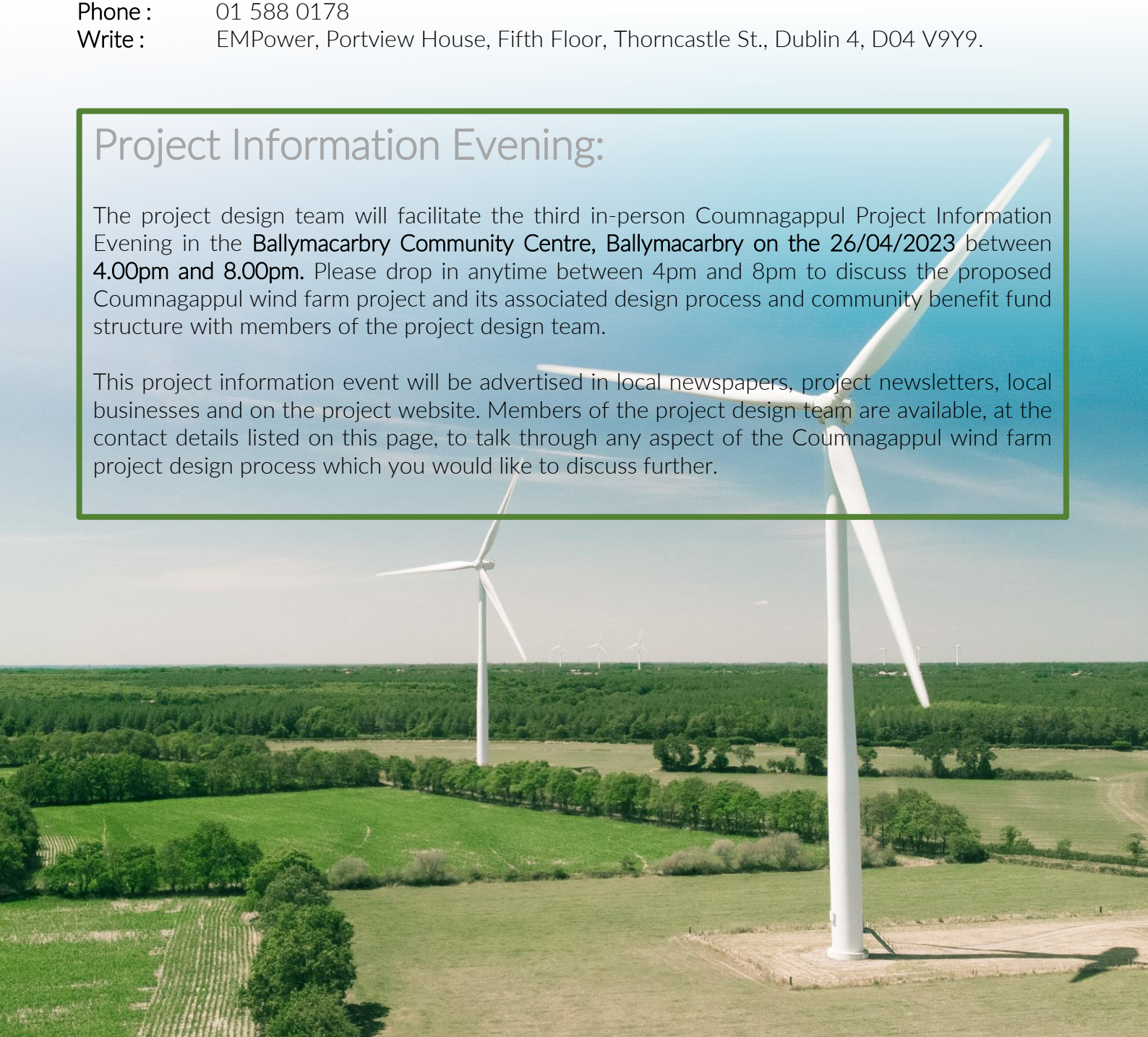
Project Information Evening:

The project design team will facilitate the third in-person Coumnagappul Project Information Evening in the **Ballymacarbry Community Centre, Ballymacarbry** on the **26/04/2023** between **4.00pm and 8.00pm**. Please drop in anytime between 4pm and 8pm to discuss the proposed Coumnagappul wind farm project and its associated design process and community benefit fund structure with members of the project design team.

This project information event will be advertised in local newspapers, project newsletters, local businesses and on the project website. Members of the project design team are available, at the contact details listed on this page, to talk through any aspect of the Coumnagappul wind farm project design process which you would like to discuss further.

Proposed Coumnagappul Wind Farm Project

Project Newsletter No. 4 – April 2023



Looking south east from the northside of the Coumnagappul Project Study Area

Introduction

This is the fourth Newsletter distributed for the proposed Coumnagappul wind farm project. The proposed project is now at a stage where most of the environmental assessment survey data has been collated in order to inform the Environmental Impact Assessment Report (EIAR). The project’s EIAR will accompany the planning application to the consenting authority. This Newsletter gives an overview of the proposed project at Design Iteration Stage 3b.

Our community engagement approach has highlighted different opinions and generated conversation which has helped to inform this fourth project newsletter and the projects design. This process of engagement is designed to ensure that accurate project information is circulated and that local residents and interested stakeholders have an opportunity to address queries directly with the project design team as the project design develops.

To supplement the proposed project’s design process, we have also compiled a dedicated online Community Consultation Exhibition. This online Community Consultation Exhibition is available to view at www.innovision.ie/Coumnagappul and includes added design detail on topics such as landscape and visuals, transport and delivery routes and layout maps with added functionality. There is also a very useful Photomontage viewer available in this online Community Consultation Exhibition where you will be able to see images of the proposed project as it would look if built out.

If there are any areas of the proposed project, you wish to discuss further please contact the project team using the contact details on the back page of this Newsletter or from the contact form on the project website www.coumnagappulwindfarm.ie

All the previous community project newsletters, including design webinar material and questions posed, are available to view and download from the dedicated project website www.coumnagappulwindfarm.ie

The project team will host the third in-person Coumnagappul Project Design Consultation Event in the Ballymacarbry Community Centre, Ballymacarbry, in order to engage with stakeholders that have an interest in the proposed project. Please stop by the Ballymacarbry Community Centre, Ballymacarbry, on the 26/04/2023 anytime between 4.00pm and 8.00pm to discuss, and learn more about, the proposed Coumnagappul wind farm project and its associated design process from members of the project’s design team.

The Proposed Project

The Coumnagappul wind farm project proposal comprises of the following at this the Design Iteration 3b stage:

- 10 individual wind turbines with a blade tip height of 185 meters, a hub height of 104 meters and a rotor diameter of 162 meters as well as all associated foundations and hard standing areas;
- An onsite 110kV substation as well as all associated works connecting the proposed wind farm to the national electricity grid network at the existing 110kV substation near Kiladangan, just north of Dungarvan;
- All underground cabling required to connect the on-site substation to each wind turbine;
- Upgrading of existing site access tracks and construction of new site access tracks and entrance as required;
- Habitat and Biodiversity Enhancement measures;
- On-site borrow pits;
- 1 on-site permanent met mast;
- A temporary construction compound;
- Component delivery route assessment from Waterford Port via the N29, N25, N72, R672 and L5119.

Project Consultation

The project team have hosted Coumnagappul project interactive design webinars as well as project information open evenings during our public consultation program to date. Our project webinars detailed different elements of the project’s design at each important milestone of the design process. You can view recordings of these webinars as well as information discussed at our project open evenings on the project website www.coumnagappulwindfarm.ie

All the previous project newsletters, communications and FAQs are available to view and download from the dedicated project's website. The projects online Community Consultation Exhibition is also accessible from the project website at www.coumnagappulwindfarm.ie

Proposed Project Schedule

Proposed Coumnagappul Project Schedule	2019				2020				2021				2022				2023				2024				2025				2026				2027				2028			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Ornithology Studies																																								
Planning Consultant (EIAR)																																								
Stakeholder Consultation																																								
Wind Measurement (Met Mast)																																								
Planning Judgement																																								
Grid Connection Application																																								
Detailed Project Design																																								
Project Construction																																								
Project Operational																																								

Note: Q1, Q2, Q3 and Q4 in the above schedule represent yearly quarters. For example, Q1 represent the first quarter of that year

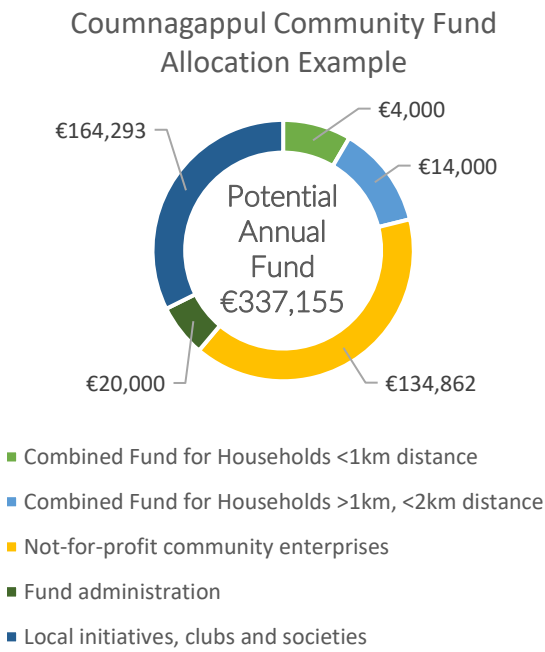
Community Benefit

If consented the proposed Coumnagappul wind farm will require an investment of approximately €88 million¹ euro and will provide sustainable, low carbon energy generation infrastructure to meet Ireland's growing demand. The development benefits to the local community would include significant investment in local infrastructure and electrical systems, local job creation, and a contribution of approximately €21 million² in Waterford City & County Council rates over the proposed project's lifetime. The project could also generate enough green electricity to power over 40,137³ average Irish homes.

If consented the Coumnagappul wind farm will also provide a community fund calculated in accordance with the Renewable Electricity Support Scheme (RESS) Terms and Conditions, €2 per Mega Watt hour of electricity produced by the project. This is to be made available to the local community for the duration of the RESS (15 years). The average capacity factor of wind energy projects in Ireland is 28.3% (SEAI, 2019). Assuming this efficiency, and an estimated project capacity of 68 Mega Watts, a community benefit fund would amount to an average of €337,155 per annum. The actual fund will vary around this average from year to year, depending on each year's wind conditions. Wind measurements at the Study Area suggest that the proposed Coumnagappul project could be capable of achieving an above average capacity factor, and therefore a larger community fund.

EMPower strongly believe that the communities in which we propose our projects should benefit most from any associated fund. We welcome any suggestions from the Coumnagappul community on how this fund could best be allocated or ideas for suitable local projects that could be supported under this initiative.

This fund is proposed to be divided as per the illustration below. An annual minimum payment of €1,000 will be provided to each household within 1 kilometer of any proposed Coumnagappul wind turbine. An annual minimum payment of €500 will be provided to each household located between 1 kilometer and 2 kilometers of any final turbine position. 40% of the fund, amounting to approximately €134,862 per year would be allocated to not-for-profit community enterprises, with an emphasis on low-carbon initiatives. The remainder of the fund would be directed towards local clubs, societies, admin and other initiatives. We welcome any suggestions from the community on how a community fund could best be allocated or ideas for suitable local projects that could be supported under this initiative.



€ 88 million¹

Investment in Irish infrastructure

€ 5 million

Total Community Fund Contribution

€ 21 million²

Project Lifetime Approximate Contribution In County Council Rates

1 – Example for 10 Turbine project with a capacity factor of 68 MW
2 – Estimated €8,000 per mega watt installed for 40 year project lifespan
3 – Commission for Regulation of Utilities – 4,200 Kw/h of electricity per average household

The Planning Process

The projects Environmental Impact Assessment Report (EIAR) will accompany the planning submission. All the planning documents and the EIAR will be available for public comment during the planning review process prior to An Bord Pleanála making a judgement on the application. Cork based consultants Fehily Timoney and Co. are compiling the Coumnagappul EIAR with input from expert specialist consultants.

Every project’s EIAR is tailored to suit each project’s particular aspects but the content of the Coumnagappul EIAR largely aligns with the following chapter structure:

- Chapter 1 Introduction;
- Chapter 2 Description of Proposed Development;
- Chapter 3 Site Selection and Alternatives;
- Chapter 4 Policy;
- Chapter 5 EIA Scoping, Consultation and Key Issues;
- Chapter 6 Air and Climate Change;
- Chapter 7 Noise and Vibration;
- Chapter 8 Biodiversity and Ornithology;
- Chapter 9 Land, Soils and Geology;
- Chapter 10 Hydrology and Water Quality;
- Chapter 11 Population & Human Health & Material Assets;
- Chapter 12 Shadow Flicker;
- Chapter 13 Traffic and Transportation;
- Chapter 14 Archaeology, Architectural and Cultural Heritage;
- Chapter 15 Landscape and Visual Impact;
- Chapter 16 Telecommunications and Aviation;
- Chapter 17 Interactions of the Foregoing.

During the project design and environmental assessment, consultation is carried out with Waterford City and County Council as well as numerous other statutory and non-statutory consultees, to discuss the project proposal during its design process. The planning application will be supported by the above-mentioned Environmental Impact Assessment Report (EIAR) and a Natura Impact Statement (NIS).

Engagement with local residents and interested stakeholders will continue after the project is submitted to An Bord Pleanála. Our dedicated online Community Consultation Exhibition is currently available at www.innovision.ie/Coumnagappul and our dedicated project website will also be continuously updated with relevant project information.

The project is nearing the point where it will be submitted to An Bord Pleanála for assessment. It is anticipated that the planning application will be submitted in Summer 2023.

The Coumnagappul wind farm planning application will include the following;

- Cover Letter to An Bord Pleanála;
- Planning Application Form;
- Letter(s) of Consent;
- Site Notice;
- Newspaper Notices;
- Pre-Application Consultation;
- Planning drawings and drawing schedule;
- EIA Portal Confirmation Notice;
- Natura Impact Statement.

Notification of the intention to submit a planning application supported by an EIAR will also be sent to the Department of Housing, Planning and Local Government’s EIAR portal and once the application is validated by the Department, this confirmation will also be included with the planning submission.

All documents and drawings will be available for public viewing from the Coumnagappul project website at www.coumnagappulwindfarm.ie once they have been validated by An Bord Pleanála.

Details on how to make a public submission or observation on a strategic infrastructure development application (SID) under An Bord Pleanála may be found at <https://www.pleanala.ie/en-ie/strategic-infrastructure-development-guide/sid-applications>

Who Are EMPower

EMPower is an Irish renewable energy developer with over 800 MW in development in Europe and Africa. Our senior management team comprises five Irish professionals with a combined 95 years' experience delivering projects from conception to operation across five continents. EMPower’s headquarters is in Dublin.

EMPower is owned by GGE Ireland Limited, Wind Power Invest A/S and EMP Holdings Limited.

Our vision is to provide low carbon, ecologically non-invasive, affordable energy to facilitate Ireland’s expanding economy and sustainable energy targets.

Our Commitment

Our commitment is to engage meaningfully with our project stakeholders on decisions that concern them. We aim to do this in a timely manner, and we commit to building relationships and conversing on what aspects of this proposed Coumnagappul renewable energy project could work best for this local area. We feel that designing any proposed project in this manner makes better social and business sense.

95 Years

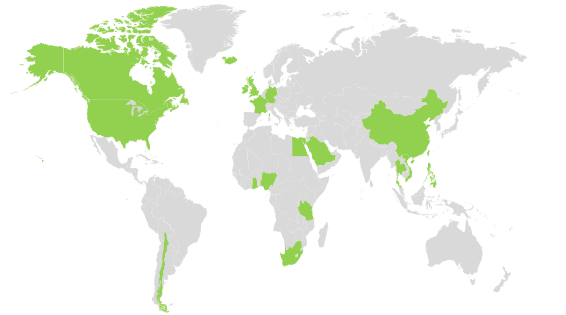
Combined Experience of EMPower Management Team in Renewable Energy

800 MW+

Wind Energy Capacity Currently Under Development by EMPower

5 Continents

Combined Geographical Experience of EMPower Team in Renewable Energy





How a Wind Turbine Works

Each wind turbine comprises, a tower which is topped by an enclosure called a nacelle, an electrical generator, a hub and 3 rotor blades. A wind turbine converts kinetic energy (energy produced by the wind moving the blades straight from the wind) into electricity. The blades of each wind turbine are connected to the hub and the nacelle. The nacelle houses an electrical generator, power control equipment and mechanical equipment connected to the rotor blades. The wind moves the blades and causes the rotor to spin. When the wind is strong enough, the rotational energy in the rotor is converted to electrical energy within the generator. The voltage of the electricity produced by the wind turbine is then increased by a transformer and a substation to enable it to be fed into the electricity grid. (WEI)

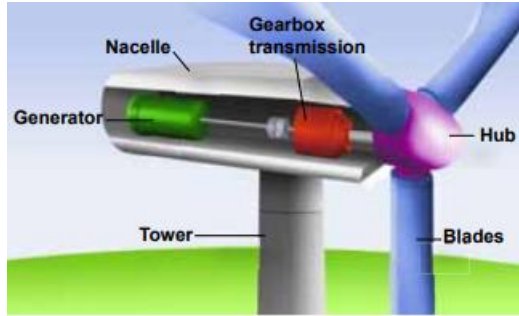


Figure 1. A wind turbine



Figure 2. How wind turbines transfer power to the electricity grid

- 1 Rotating generator converts wind energy to electricity
- 2 Transformer and substation increases voltage for transmission over long distances to the grid



Grid Connection

The proposed projects grid connection studies are nearing their final stages of design after several connection configurations and through liaison with bodies like Eirgrid, the roads authority and Waterford City and County Council. The preferred connection strategy if the proposed Coumnagappul project is consented, could conceivably connect to the Dungarvan 110kv substation. This route has emerged as the most feasible option and is approximately 14km of underground cable which runs south to Dungarvan substation just north of Dungarvan town near Kiladangan. Consultation with ESB and Eirgrid will dictate the final grid connection methodology.

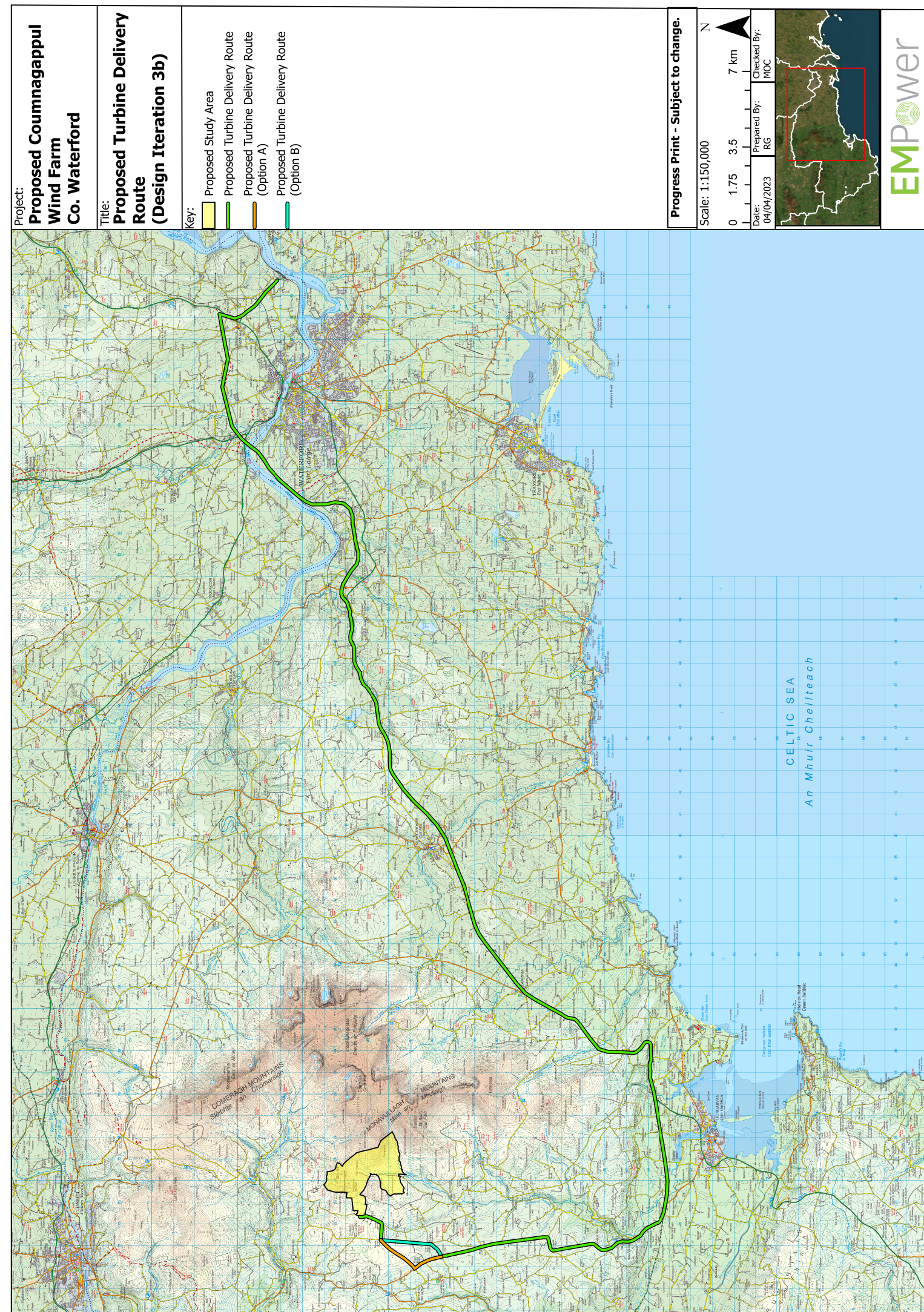
This potential route can be seen in greater detail on the grid map shown on page 8 of this newsletter. For additional location context this route is proposed to exit the project study area to the west onto the local road and then travel 1.1km south, turning west at Sweeps Cross Roads, Continuing on west from there for 800m to Bryons Cross roads and turning south onto the L5111 for approximately 2.2km to Forge Cross roads. From there the underground cables will turn east to Murphy's Cross roads and then south to Beery's Cross, crossing over the R672 onto the local 1041 road for another 1km. At this point the proposed route turns south and heads back onto the R672 via Garryduff and the local 5068 road. Here the proposed route continues south again on the R672 for 4km before reaching the N72 at the Master McGrath monument. The cable will then run east for 1.3km before entering the Dungarvan substation at Kiladangan.

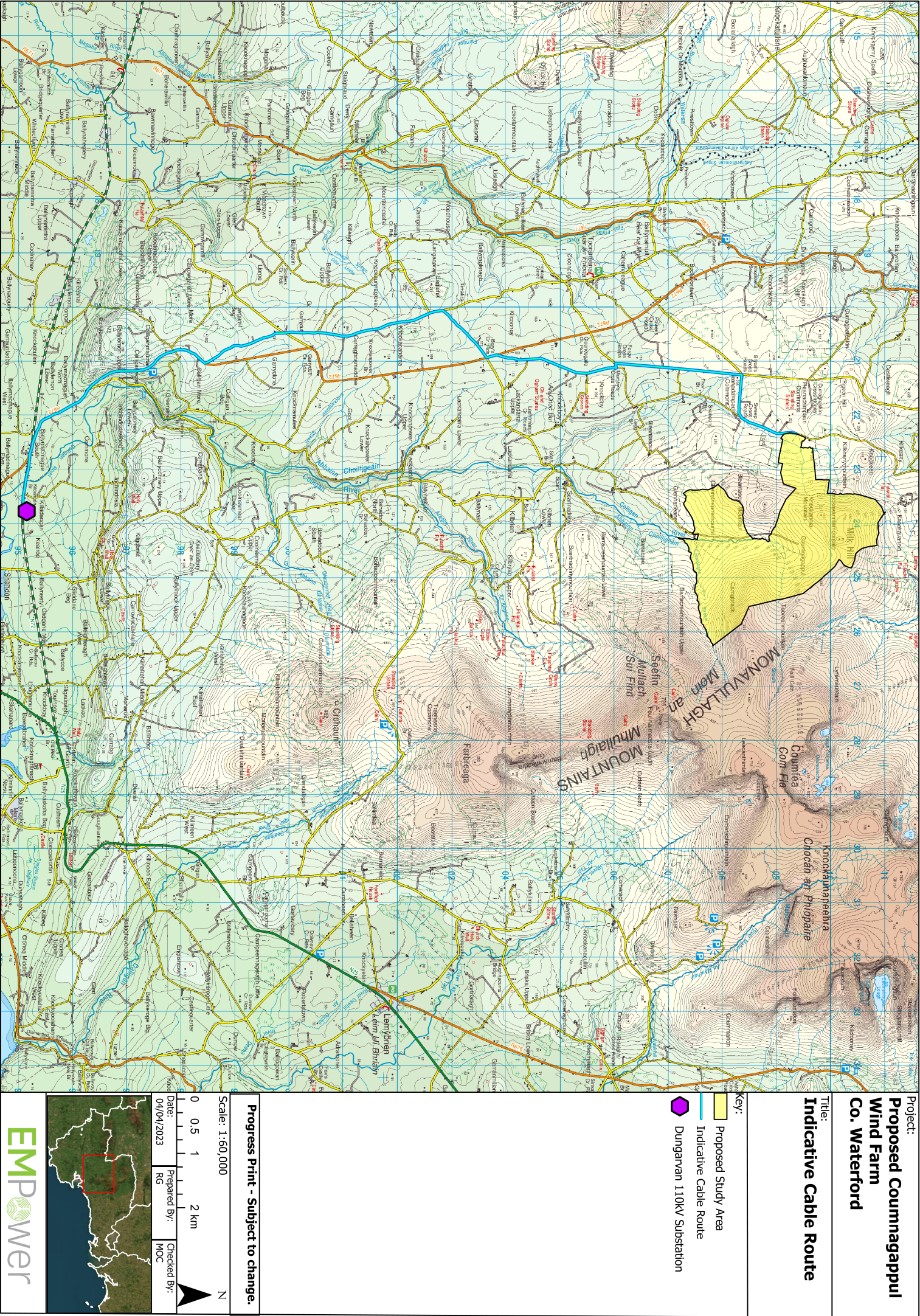


Turbine Component Transport Delivery

The turbine component delivery route option for the proposed Coumnagappul wind farm project can be seen on the drawing on page 9 of this newsletter. At this stage of assessment, the most likely port of entry for the turbine components for this project is Waterford City Port (Bellview). Transport vehicles would exit Waterford City port and travel along the N29 and then onto the N25 at the Luffany roundabout, travelling west. Transport will continue west onto the N72 and northbound on the R672, departing the R672 near Touraneena and onto the L5119. Continuing north-east on the L5119, there are two options to the proposed site entrance from the L5119 which are being assessed, as highlighted routes A and B on the map on page 9 .

The delivery of turbine components will be carried out during off-peak times by a specialist heavy haulage transport company to minimise impacts on existing road networks. There will be the need for some temporary roadway enhancement and removal of street furniture if the project is granted a consent, but all this will be done in conjunction with Waterford City and County Council, Transport Infrastructure Ireland and An Garda Síochána during times of heavy goods movements.





Archaeology

The proposed Coumnagappul wind farm project layout was initially informed by archaeological desktop studies and fieldwork undertaken during the initial design and assessment phases of the project. This process included the identification of any significant archaeological, architectural or cultural heritage sites within the Study Area and surrounding wider area. These areas were assessed in terms of historic landscape, existing land use and tree cover. Consideration was also given to the potential for the presence and survival of unrecorded archaeological and undesignated architectural heritage sites and features.

The potential will always exist for the presence of unrecorded archaeological features within the project's Study Area. If the project is consented all ground works, during the construction phase, will be subject to archaeological monitoring by a suitably qualified archaeologist.

If this project is consented and any sub-surface archaeological features are identified during archaeological monitoring of the construction phase they will be securely cordoned off, cleaned and recorded *in situ*. The National Monuments Service will then be notified and consulted to determine further appropriate mitigation measures, which may include preservation *in situ* (by avoidance) or preservation by record (archaeological excavation).

A report describing the findings of the archaeological surveys and possible impact from the proposed wind farm project will be produced as part of this assessment and will be available for review by the public along with all project planning documents.

Ornithology

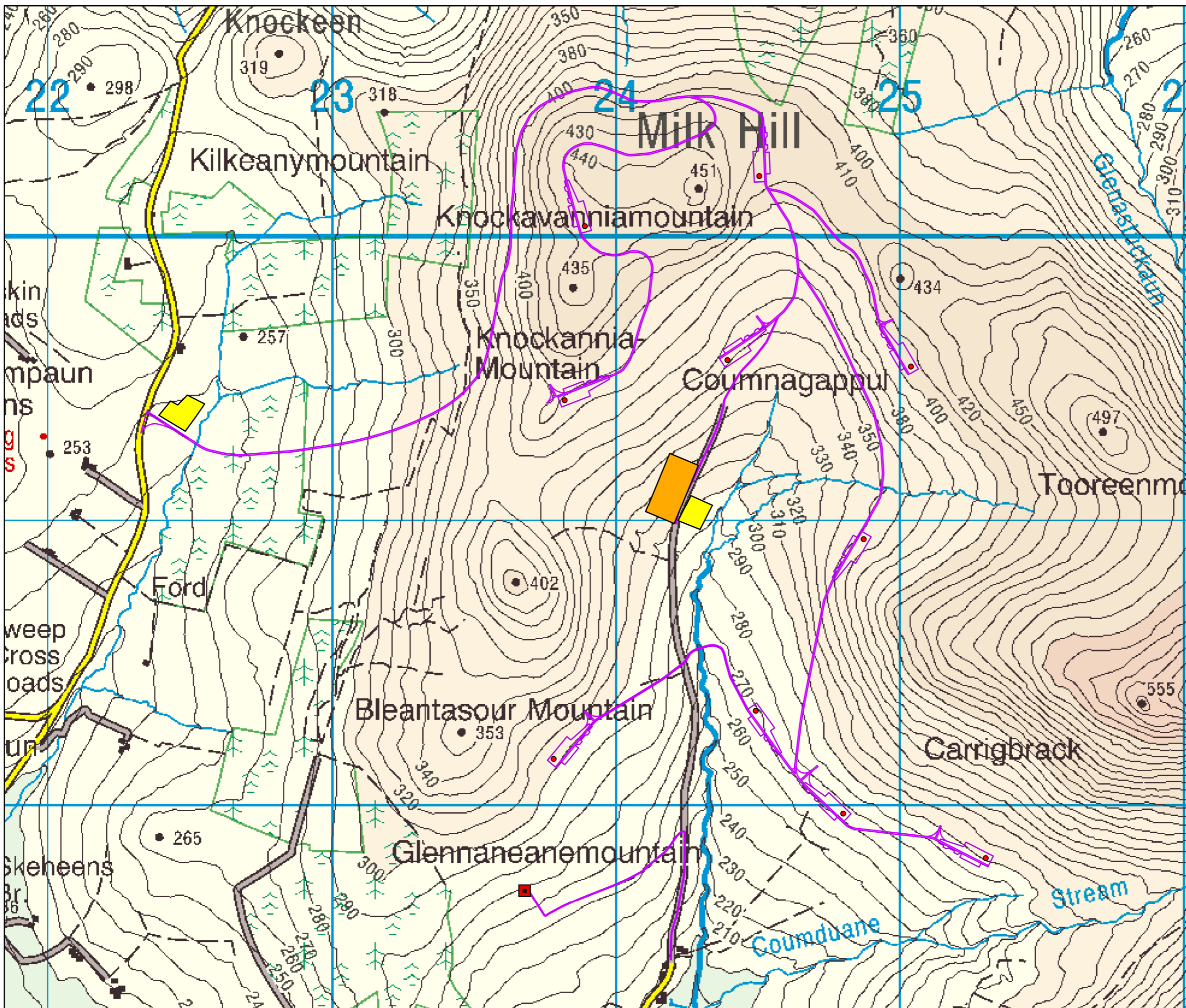
The ornithological assessments for the proposed Coumnagappul wind farm project extended over three years and are still continuing, focused on the main project Study Area as well as the surrounding habitats. A desk-top study was conducted prior to the commencement of bird survey work, to gain an understanding of the bird populations using the area through present habitats and previous species records. Following the review of this ornithological data, several bird surveys were carried out including; Vantage Point Surveys, Transect surveys during both winter and summer season and Hinterland Surveys.

Some of the species recorded in the wider Study Area include:

- Kestrel
- Hen Harrier
- Lesser black-backed gull
- Buzzard
- Peregrine
- Sparrowhawk



The key objectives of the Coumnagappul ornithology surveys are to provide baseline data and gain a better understanding of bird species in the Study Area, to identify habitats and territory used and to establish flight paths and foraging behaviour. Every possible measure to mitigate potentially negative effects and minimise impact on bird species will be employed during all phases of this proposed project. EMPower are committed to ensuring that we design, develop, construct and operate our projects to the highest possible ecological standards.



Project:
**Proposed Coumnagappul
Wind Farm
Co. Waterford**

Title:
Design Iteration 3b

Key:

- Indicative Turbine Locations
- Indicative Civil Layout
- Indicative Substation Location
- Indicative Construction Compound Location
- Indicative Permanent Met Mast Location

Scale: 1:12,500

0 0.13 0.25 0.5 km

Date: 30/03/2023 Prepared By: RG Checked By: MOC

EMPower