Honor Caird Marren

From: Elaine O'Reilly <elaine.oreilly@kilkennycoco.ie>
Sent: Monday 23 February 2026 15:30
To: SIDS
Subject: ACP-323958-25 (Grid Connection) - Ballyfasy Wind farm
Attachments: PA Comments 23958 Ballyfasy Grid Connection.pdf

Categories: Honor

Hello,

Please find attached the Kilkenny County Council Planning Authority comments relating to the above SID.

Kind Regards,
Elaine

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KILKENNY COUNTY COUNCIL

Planning and Development Act 2000 (as amended)

Planning and Development (Strategic Infrastructure) Act 2006

Planning Authority report in accordance with the requirements of

Section 182(A) of the Planning and Development Act 2000 (as amended)

An Coimisiúin Pleanála Ref. No.:	**323958**
Applicant:	**Manogate Limited,**
Agents:	**Tobin**
Description of Development	**Proposed development of a 110kV Grid Connection for Ballyfasy Wind Farm**
Site location:	**Townlands of Ballywairy, Bishopsmountain, Knockbrack, Ballymartin, and Ballyfasy Upper, Co. Kilkenny**

The proposed development:
The proposed development will comprise a 10-year permission for the following:-
One of the following Grid Connection Options (GCOs):

- Grid Connection Option One: Grid Connection to the consented Castlebanny Wind Farm substation:
- Circa 12 km long 110 kV underground cable grid connection(Cable will be within 8.4 km of public road and 3.5 km of third party lands) to consented Castlebanny Wind Farm (ACP Ref. PA10.309306) substation consisting of 6 No. ducts in an excavated trench to accommodate 3 No. power cables, 1 No. fibre communications cable , 1 No. spare fibre communications cable and 1 No. earth continuity duct where required, Joint Bays, Communications Chambers, and Earthing Link Boxes;
- 1 No. Temporary Construction Compound;
- 1 No. Temporary Spoil Deposition Area;
- All related site work, horizontal directional drilling under watercourses and bridges, road and grid crossings, drainage and ancillary works.
- Proposed GCO One 12 km in length and follows the public road network northwards via local roads L7499 and L3417, before crossing at the junction at Three Friars Cross

(regional road R704), continuing north along the L3418 local road, before travelling west over agricultural grassland and conifer plantation and terminating at the consented Castlebanny 110 kV substation. Roads have c.3.5m-4.5m wide carriageways

- Grid Connection Option 2 Two: Proposed loop-in grid connection to existing Great Island-Kilkenny 110 kV overhead line:
- Decommissioning of a portion of an existing 110 kV overhead line and pole set on the Great Island- Kilkenny overhead line.
- 2 No. New 110 kV Overhead Line Cable Interface towers.
- Two 110 kV underground cable circuits, comprising approximately 4.6 km of cabling (two circuits of 2.3 km each), will be installed from the line–cable interface mast to the proposed Ballyfasy 110 kV substation (not part of this application). Each Circuit will consist of:
- 6 No. ducts in excavated trench to accommodate 3 no. power cables, 1 no. fibre communications cable, 1 no. spare fibre communications cable and 1 no. earth continuity duct where required, joint bays, communications chambers, and earthing lnk boxes;
- An access road will be provided to facilitate permanent access to underground cable route between line - cable interface mast and proposed onsite 110kV Ballyfasy substation;
- All related site work, horizontal directional drilling under 1 no. watercourse, drainage and ancillary works.

Proposed GCO Two (c. 2.3 km) to connect to existing 110 kV Great Island Kilkenny overhead line which passes over east of wind farm site. Grid connection option travels from proposed onsite substation, along proposed site access roads between turbines T3 and T4 heading east towards turbine T6 before connecting to existing overhead lines.

A single grid connection will be constructed for the proposed project

The 110 kV cables will be installed mainly within an internal access road in proposed wind farm site, within public roads and across third party lands. Where required cable ducts will be placed within a trench with a typical depth of 1315 mm and width of 825 mm. A service/maintenance access road will be put in place over the entire cable option. It is noted that works within the public road corridor will also be subject to further consents/agreements with local authorities, for example a Road Opening Licence.

Once fixed into position, the internal site cabling (between turbines and the substation), substation electrical grid connection will all be commissioned. They will remain powered off until turbines are being commissioned and wind farm enters into service.

There will be a temporary construction stage compound located adjacent to the L3418 road within Coillte lands, using an existing forestry entrance, to enable GCO One grid works. Grid connection construction methodology reports for each option provided in EIAR. Cables will be laid in trenches as per EirGrid Specification. There will be 6 no. watercourse crossings along GCO One and 1 no. watercourse crossing along GCO Two. No instream works are proposed for any natural watercourse.

Pre-Planning

Pre-application consultation meetings were held with An Coimisiún Pleanála on the 24th of February 2025 and 26th of May 2025. The initial meeting was held on the 24th of February 2025. The design flexibility meeting was held on the 26th of May.

An Coimisiún Pleanála issued their SID determination for grid connection on the 12th of November 2025, confirming this application constitutes strategic infrastructure development and that planning application should be made directly to An Coimisiún Pleanála.

Design flexibility also been sought from An Coimisiún Pleanála for grid connection (see Section 1.10.1 and Appendix 1-3). 2 no. options for grid connection considered to connect proposed project to national grid. Subject to receiving a grid connection offer from Eirgrid/ESB Networks.

The 110 kV cables will be installed mainly within internal access road in proposed wind farm site, within public roads and across some third-party lands. Cable ducts will be placed within trench with typical depth of 1315 mm and width of 825 mm. A service/maintenance access road will be put in place over entire cable option. Noted that works within public road corridor will also be subject to further consents/agreements with local authorities, for example Road Opening Licence.

Requirement for EIAR

An EIA is required for grid connection as it is an integral element of proposed project which requires an EIA (i.e. an Installation for the harnessing of wind power for energy production (wind farms) with more than 5 turbines or having a total output greater than 5 megawatts). Stated this EIAR has been prepared in accordance with the requirements of the codified Directive 2011/92/EU as amended by Directive 2014/52/EU (hereafter referred to as the 'amended EIA Directive').

An Coimisiún Pleanála has also confirmed, in closing the pre-application consultation process under Section 182E of the Planning and Development Act 2000, as amended, proposed grid connection: "would be strategic infrastructure within the meaning of transmission as per the definitions provided in the Planning and Development Act 2000.

Construction

Proposed project has construction period of approximately 24 months envisaged to commence in 2028.

It is highly likely that the substation will continue to operate indefinitely following the decommissioning of the BallyfasyWind Farm.

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PART I – SITE LOCATION AND DEVELOPMENT DESCRIPTION

Site Location And Description

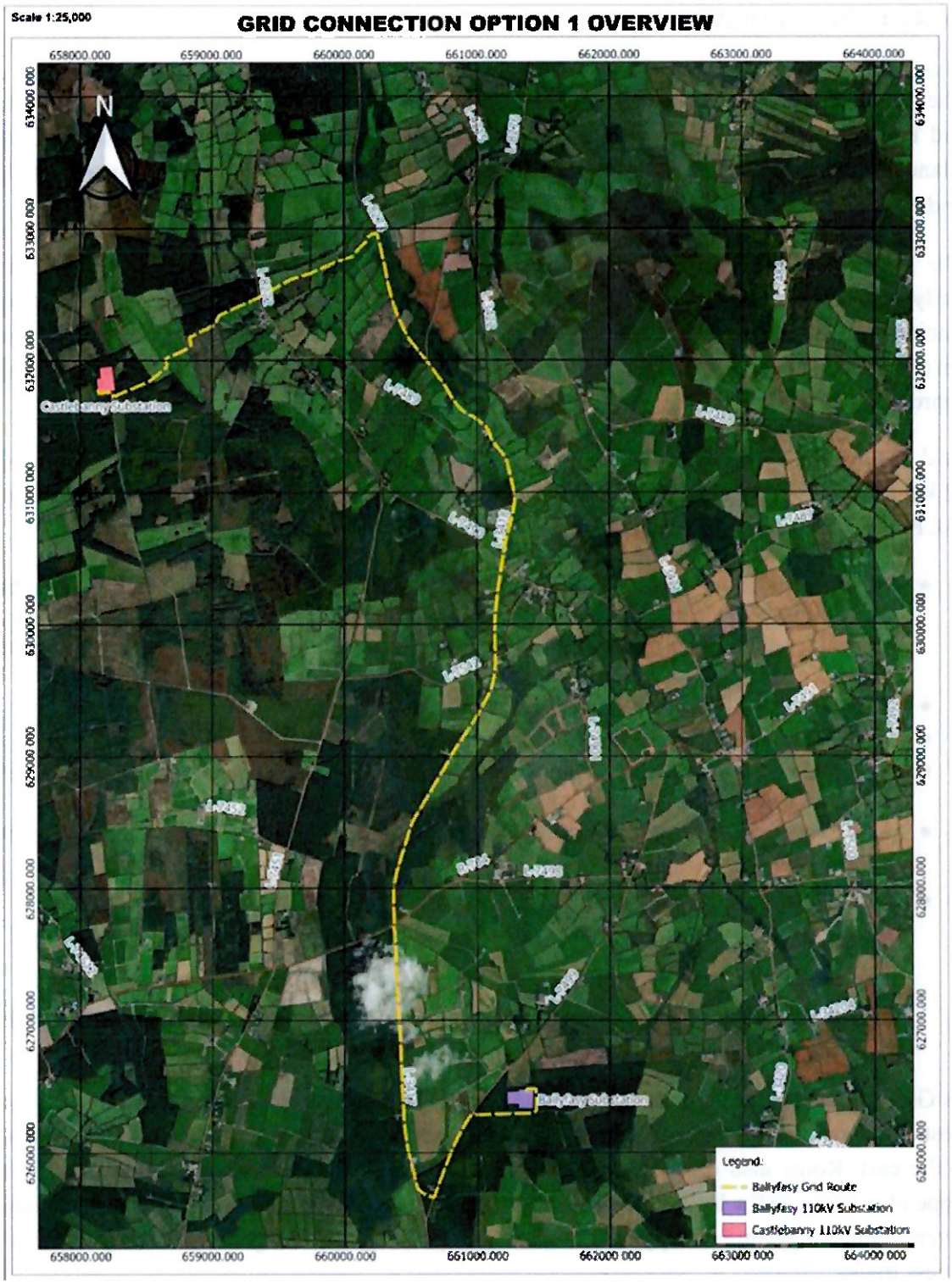
The proposed development comprises 2 no. proposed Grid Connection Options, (GCO) One and Two, to connect the proposed Ballyfasy Wind Farm, in Co. Kilkenny to the existing Great Island-Kilkenny 110 kV overhead line. Grid connection cables are proposed to be underground.

The grid connection options are within the townlands of Ballyfasy Upper, Ballywairy, Ballymartin,Bishopsmountain, Smithstown, Ballymackillagill, Glenpipe, Mullennakill, Coolnahau, Cappagh and Castlebanny, Co. Kilkenny. GCO One laid within approximately 8.45 km of public road and approximately 3.55 km of third party lands. GCO Two will be laid within approximately 2.3 km of third party lands.

Grid Connection One extends to the consented Castlebanny Wind Farm substation. The circa 12 km long 110 kV underground cable grid connection to consented Castlebanny Wind Farm (ACP Ref. PA10.309306) substation and consists of:

- 6 No. ducts in an excavated trench to accommodate 3 no. power cables, 1 no. fibre communications cable, 1 no. spare fibre communications cable and 1 no. earth continuity duct where required, joint bays, communications chambers, and earthing link boxes;
- 1 No. Temporary Construction Compound;
- 1 No. Temporary Spoil Deposition Area;
- All related site work, horizontal directional drilling under watercourses and bridges, road and grid crossings, drainage and ancillary works;
- 6 no. watercourse crossings on proposed grid connection option one. 1 no. watercourse crossing on grid connection two.
- Horizontal Directional Drilling (HDD) is the likely method to be selected for these crossings (method allows for cable installation with minimal impact on the surrounding environment). 1.5m beneath the watercourses and bridge foundations.Depth may increase subject to geotechnical investigations and IFI Requirements. Drilling will take place from the road roadway.

As GCO2 route leaves the public road to approach Castlebanny substation, the route will turn west-southwest across a greenfield area. Route crosses four fields of scrubby pasture that slopes to the east. Route also crosses an area of commercial forestry recently felled (Plate 15-19, Appendix 15-6) and a local road. From this point, cable route runs west-northwest through several fields of pasture occupying west facing slope before reaching commercial forestry and access tracks.



GCO Two will be located across the townlands of Ballymartin, Ballyfasy Upper and Ballywairy, Co Kilkenny, within the proposed Ballyfasy Wind Farm site (not part of this application). It involves a proposed loop-in grid connection to existing Great Island-Kilkenny 110 kV overhead line comprising the following:

- Decommissioning of a portion of an existing 110 kV overhead line and pole set on the Great Island-Kilkenny overhead line.
- 2 No. New 110 kV Overhead Line Cable Interface towers.
- Two 110 kV underground cable circuits, comprising approximately 4.6 km of cabling (two circuits of 2.3 km each), will be installed from the line–cable interface mast to the proposed Ballyfasy 110 kV substation (not part of this application). Each Circuit will consist of: 6 no. ducts in excavated trench to accommodate 3 no. power cables, 1 no. fibre communications cable, 1 No. spare fibre communications cable and 1 No. earth continuity duct where required, joint bays, communications chambers, and earthing link boxes.
- An access road will be provided to facilitate permanent access to the underground cable route between the line - cable interface mast and the proposed onsite 110kV Ballyfasy substation.
- All related site work, horizontal directional drilling under 1 no. watercourse, drainage and ancillary works.
- 1 no. watercourse crossing on grid connection two;
- Horizontal Directional Drilling (HDD) is the likely method to be selected for these crossings (method allows for cable installation with minimal impact on the surrounding environment)

Option Two is a shorter route and runs from the proposed substation along access tracks proposed as part of the proposed wind farm site, before crossing a short section of pasture to the south of Turbine 6.

Overall, it is is noted that works within the public road corridor will also be subject to further consents/agreements with local authorities, for example a Road Opening Licence as appropriate.

Onsite substation and 110kV grid connection will not be removed at the end of useful life of the wind farm project as it will form part of the national electricity network. The substation will be retained as a permanent structure also.

Onsite Substation
It is proposed to construct one on-site 110 kV Air Insulated Switchgear (AIS) substation as part of concurrent wind farm application. This onsite substation will provide a connection point between the proposed wind farm and the proposed grid connection point at either the consented 110 kV Castlebanny Wind Farm Ballyfasy Wind Farm (via GCO One) or via a loop in connection to the Great-Island to Kilkenny 110 kV overhead line which passes over the east of the proposed wind farm site (via GCO Two)

Purpose
Electrical grid connection infrastructure will supply power from proposed wind farm to the electricity network via one of the two 110 kV connection options presented. Single grid connection to be constructed for the proposed project and will become a permanent component of the Irish national grid network This element of proposed project is subject of application under section 182A of Planning and Development Act 2000 as amended. Correspondence from An Coimisiún Pleanála confirming SID status of application and design flexibility included.

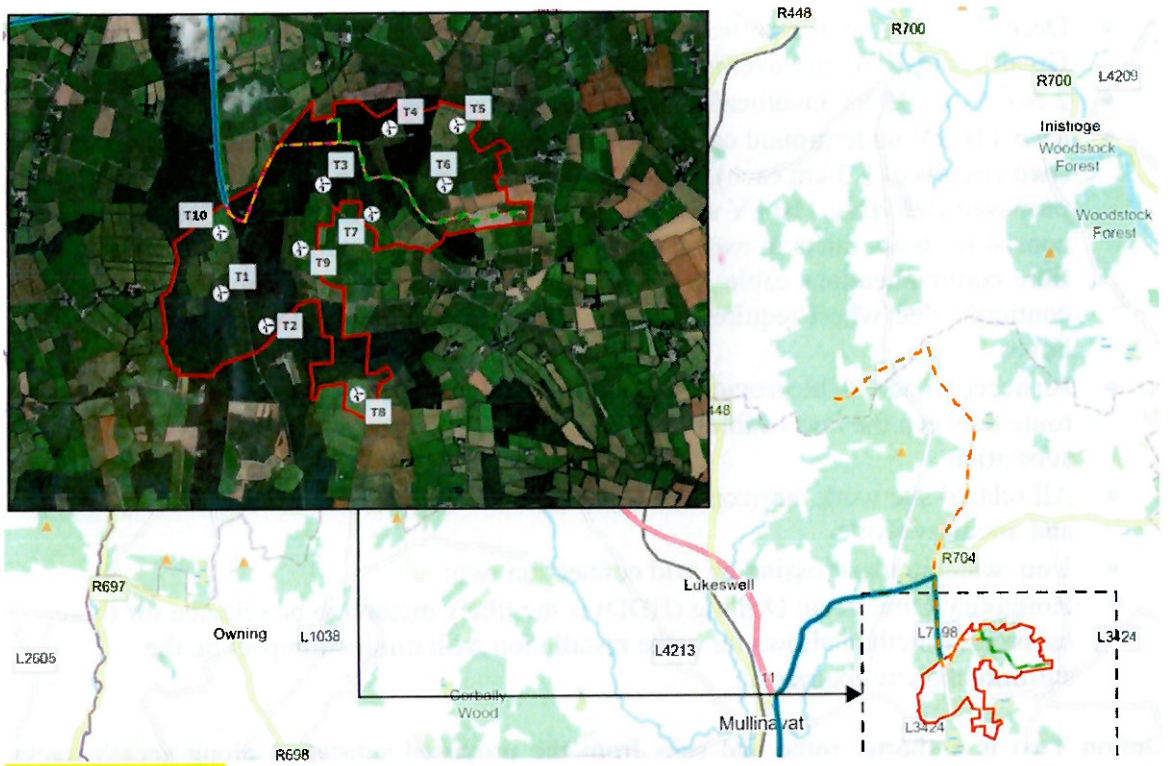


Fig: Site Location

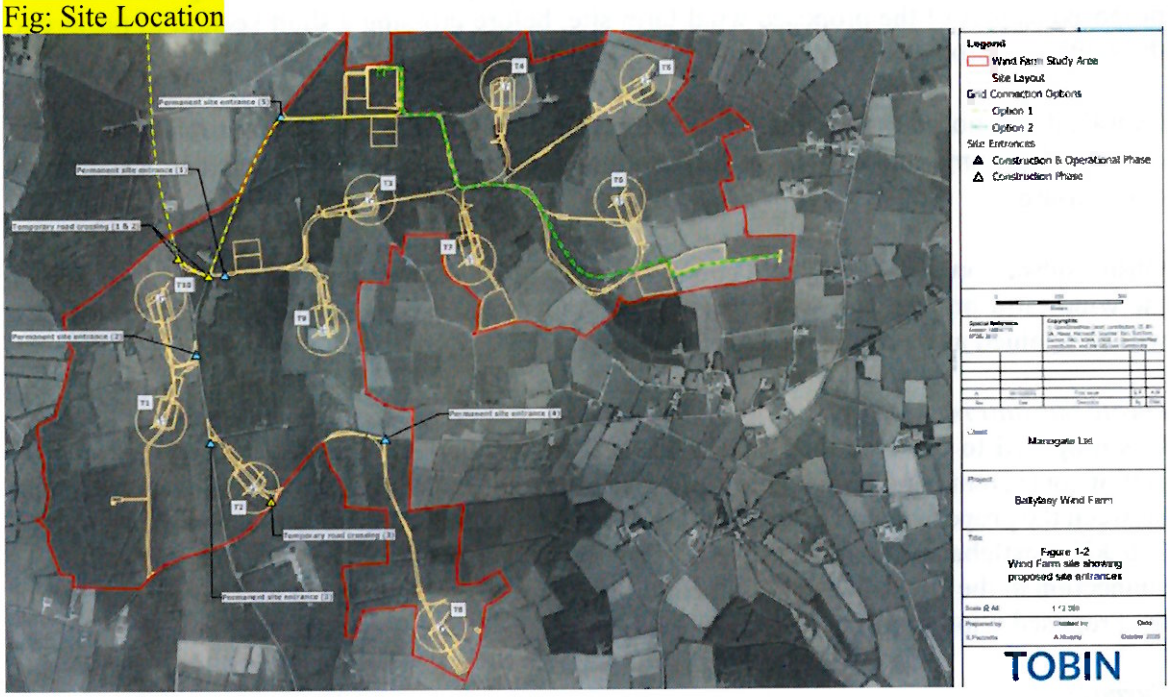


Fig: Aerial Photo of Site Plan

PART II INTERNAL REFERRALS

Environment Section

The following recommendations / observations were made by the Environment section of Kilkenny County Council. It is noted that a combined report for wind farm application

PAX10.323957 & grid connection application VA10.323958. The parts relevant to grid connection application VA10.323958 are set out below:

CEMP:

- Suggested adherence by all staff to CEMP will require proper induction training and should be inclusive of the CEMP framework.
- Dewatering measures generic in description and not site specific. Dewatering at proposed borrow pits and several of the turbine excavations needs to be site specific and explicitly detail silt and turbidity management strategies as the risk in the area is predominantly to surface waters.
- Applicant has offered schedule of works inclusive of potential works for 110kv connector ducting. This is potentially viable over two routes. One route is referred to as option-1 (110KV ducting route) which is alongside a river and flood plain.
- A more inclusive schedule of works required that covers both ducting options and in particular set out how option 1 avoids seasonal flood risk periods applicable to the river. As such the applicant need to provide details and confirmation that schedule of works was compatible with any flood/work-zone avoidance strategy that would in essence see works in this areas limited to times at which flooding is not expected;
- Groundwater monitoring mitigation measures in documentation states that "where dewatering is to take place it will be monitored once per day". This is inadequate level of scrutiny. Additionally level of inspection and observation unknown regarding suggested turbidity alarms as means of the alert (siren/alarm or sms alerts) ? How will these be monitored and how often will they be calibrated?
- The CEMP makes no inclusion of blasting? Will this be required for borrow pits?
- The CEMP doesn't provide specifications on silt fencing, nor does it provide details on settlement tanks as might be applicable based on appropriate sizing should be commensurate with size and scale of relevant area to be dewatered or drained. E.g. borrow pits vs swale vs turbine excavations;
- Regarding Re-fueling of plant and the use of spill kits. The applicant should be requested to detail how spill kits are effective on unsealed pavement such as compacted 6F2 or SR21 or similar and what alternative measures might be appropriate to protect and preserve the Q5 streams in the area as identified in catchment study;
- How will the constructed swales and open channel drains along access roads and turbine hardstand areas be secured from erosion, especially over steep ground.
- Proposed buffer zones to protect aquatic zones should be clearly marked in advance of works commencing to preserve their integrity. Machines should not enter these zones, except where it is unavoidable. Nor should material stockpiles, spoil heaps or settlement ponds be permitted within this zone. Buffer zones should not be removed until after construction phase of project has ended. Site compounds or any area designated to maintenance, cleaning, refueling and repair work of vehicles and machinery must be located at least 50m of the nearest aquatic zone. Buffer zones and methodology to install and manage same should be included in CEMP
- Collected silt laden runoff and clean water are discharged in close proximity close streams or within buffer zones. Applicant should offer potential mitigation measure to address concerns.
- Provide a RAMS (Method statement) for removal of contaminated material in event of a hydrocarbon spill during construction phase.
- Finished CEMP needs to fully detail directional drilling mitigation measures and reclamation process and disposal for bentonite slurry.

- Refueling details are not site specific and development offers no hard standing area where spills can be routinely trapped and contained in a bespoke hydrocarbon interceptor, there is a reliance instead on drip trays and good practices. Applicant should be requested to discuss options to address this omission where possible;
  Refueling: Site equipment with suitable mobility should be brought to refueling hub with large plant/machinary having to be refueled at workface by either mobile diesel bowser with full-time staff member being a trained operator or alternatively by fuel delivery agent under supervision of a full-time staff member being a trained operator. The applicant should include elaborate site-specific RAMS to cover these activities;
- Extent of the forestry clearance and risk of suspended solids need to be considered. A cumulative effect to be considered in tandem with general wind farm works.

Storm Water:

- Decommissioning plans suggest site drainage works will be upgraded during decommission works however the nature of upgrading works is unclear. Applicant would need to provide clarity on same;
- Discharge points from linear interceptor drains and collector drains limited with effect that any diffuse discharges will be substantial, and concern is drawn to the final discharge points at receiving waters or streams within site area, wherein potential exists for this final portion of infrastructure to be overwhelmed and fail. Applicant should be requested to qualify the robustness of design.
- Stream crossings- silt fencing specifications are not provided for the silt fences utilised along the stream crossing points.
- Details on the diffuse drainage termination points have not been located in the suite of drawings – The applicant should provide these details.
- Termination points for combined on-site drains and interceptor drains need to robust to manage excess of water. Details and calculations should be provided that demonstrate design is sufficiently robust to cater for expected flows;
- Drainage swales serving steep areas should ideally be surface dressed in hessian cloth or similar to prevent erosion whilst not preventing foliage form becoming established in the swale.

Soil & Soil Types:

- Excavated tarmac or other waste material which is to be stockpiled prior to being sent off site for processing can only be stored (and processed or recycled) under a waste transfer licence, where it is not directly transferred to the appropriate waste facility.
- Soils are varied across the site with distinct delineation between west and east: The west comprises of till derived from Devonian sandstones while the east consists of till derived from Lower Palaeozoic shales but are overtopped with acidic type surface soils. The applicant would need to provide a concise determination on soil chemistry with the various areas and demonstrate that the areas for placement of excavated material aligns with the in-situ soils.
- The applicant needs to detail management of run off from spoil heaps and show how run off will be directed to settlement ponds

Miscellaneous:

- A separate planning application for the grid connection is not practical as one application does not function without the other therefore they must be considered together;

- The temporary storage of waste will require an appropriate waste permit;
- It is deemed that this the development is somewhat premature in so far as the 110KV connector route not yet been established;
- The Connector Route is not yet determined/selected and it is noted that the road network along the proposed option 1 route is insufficiently wide to permit a general stop go arrangement thus option 1 would require road closures affecting area for an estimated 20 weeks if joint bays installation was to occur simultaneously with trenching-work at the rate of 200m per day;
- Hydrology report suggests no private well is within 750m of any turbine. There are 2 no. eircodes that are both with 400m of T10 namely, X91 K7R7 & X91 P6K8. Regardless of any future plans for these houses there still exists a water supply herein which in the absence of a public water supply, is assumed to be a well

Roads Section

The comments of Kilkenny County Council's Road Design section are as follows:
Grid Connection

- Appropriate to demonstrate clearly 'optimal solution' in accordance with CAP 24 requirements is proposed in subject application.
- Applicant has indicated grid connection ducting to be undertaken by a statutory undertaker having a right or interest to provide services in connection with proposed development to facilitate connection to national grid.
- Applicant not provided details of undertakings or guidance in respect of any arrangements for management and operation of facility in public road asset to permit local authority to carry out statutory duties in relation to the maintenance and operation of public roads;
- Public road network of limited capacity and grid connection installations risk restricting or sterilising road network for future development. Impacts Road Authority in terms of ability to carry out functions in respect of maintenance works and future services provision;
- On review of submitted documentation, following is noted:
  - GCO Two is located within development lands and has no interface with public road network as proposed grid connection from substation to 110Kv overhead lines is contained within development site as part of loop in-loop out arrangement. This is considered by the Road Design Section the *"optimal solution"* from a road infrastructure perspective.
  - GCO One extends from proposed Ballyfasy substation to proposed Castlebanny Wind Farm 110Kv substation. Castlebanny Windfarm also includes for grid connection to existing Great Island-Kilkenny 110 kV overhead line. Option will impact c. 8.5km of public road with number of road crossings, 4 no. watercourse crossings and four culvert crossings. Substantial traffic management and road closures required during nstallation phase which is projected to take 4 months based on a daily installation rate of 100m of ducting. Furthermore 11 joint bays with associated communication chambers and link-boxes are indicated in the public road. It is noted that these are sizeable structures and Technical Acceptance Reports

are required to be prepared in accordance with TII Standard: 'Technical Approval of Road Structures on Motorways and Other National Roads for structures' (TII Publication Number DN-STR-03001).

- With respect to joint pit chambers, noted that Kilkenny County Council's preference for the chambers to be located in third party lands. In event chambers are located in the public road, vertical clearance distance from finished road/verge level to the top of the pit walls/lid shall be reassessed to ensure adequate space for maintenance of the pavement structure and shall be no less than 600mm below finished road level.
- With respect to watercourse structures and culverts, noted that Kilkenny County Council's preference in first instance that cabling should not be installed within bridge structure envelope and should be constructed offline to preserve existing structures and to facilitate un-restricted access for maintenance in the future in line with the "Interim Guidance to Road Authorities regarding the proposed placement of Medium or High Voltage electricity assets, including ducts, cables, and associated infrastructure under public roads" provided by the Department of Transport (Ref: Circular RW 07 of 2025 dated 14 March 2025).
- Section 6.4 of guidance notes that high/medium voltage transmission underground cables should not be sited on or attached to existing roads structures, masonry bridges/ culverts and the like. Such structures require more complex maintenance intervention and upgrading that would be compromised by proximate presence of live high/ medium voltage systems;
- Noted that whilst details of GCO One and GCO Two were described, an assessment of merits/demerits of 2 no. preferred options was not provided to allow a full comparative assessment of the five options.

On review of the submitted documentation the following is noted:

- GCO Two is located within the development lands and has no interface with the public road network as the proposed grid connection from the substation to the 110Kv overhead lines is contained within the development site as part of a loop in-loop out arrangement. Considered by Road Design Section to be *"optimal solution"* from a road infrastructure perspective.
- GCO One extends from proposed Ballyfasy substation to proposed Castlebanny Wind Farm 110Kv substation. The Castlebanny Windfarm also includes for grid connection to existing Great Island-Kilkenny 110 kV overhead line. Option will impact c. 8.5km of public road with number of road crossings, four watercourse crossings and four culvert crossings. Substantial traffic management and road closures required during the installation phase projected to take 4 months based on a daily installation rate of 100m of ducting. Furthermore 11 joint bays with associated communication chambers and link-boxes indicated in the public road. Noted that these are sizeable structures and Technical Acceptance Reports are required to be prepared in accordance with TII Standard: 'Technical Approval of Road Structures on Motorways and Other National Roads for structures' (TII Publication Number DN-STR-03001);
- With respect to the joint pit chambers, noted that Kilkenny County Council's preference for chambers to be located in third party lands. In the event chambers are located in the public road, the vertical clearance distance from the finished road/verge level to the top of the pit walls/lid shall be reassessed to ensure adequate space for maintenance of the pavement structure and shall be no less than 600mm below finished road level;

- With respect to watercourse structures and culverts, it is noted that it is Kilkenny County Council's preference in the first instance that cabling should not be installed within a bridge structure envelope and should be constructed offline to preserve existing structures and to facilitate un-restricted access for maintenance in the future in line with the "Interim Guidance to Road Authorities regarding the proposed placement of Medium or High Voltage electricity assets, including ducts, cables, and associated infrastructure under public roads" provided by Department of Transport (Ref: Circular RW 07 of 2025 dated 14 March 2025). Section 6.4 of guidance notes high/medium voltage transmission underground cables should not be sited on or attached to existing roads structures, masonry bridges/ culverts and like. Such structures require more complex maintenance intervention and upgrading that would be compromised by the proximate presence of live high/ medium voltage systems
- With respect to Grid Connection Options GCO Three, Four and Five, noted similar concerns arise to those for GCO One;
- Observed preliminary review of GCO Four, in absence of supporting information, suggest it may be more suitable than indicated Option GCO One.
- GCO Four connects proposed Ballyfasy Wind Farm substation to consented Castlebanny Wind Farm substation via Castlebanny Wind Farm site entrance road and internal wind farm roads (see Figure 3-6) and it notes as follows:
- Option would have reduced the public road footprint required for grid cables on GCO One by approximately 5.8 km. When considered, this route was deemed to have several technical challenges and potential for increased environmental impacts:
  - The consented Castlebanny Wind Farm cables to be positioned within middle of internal access roads which is stated preference of Coillte Land Solutions within site's design. Limits potential space available for installation of Ballyfasy Wind Farm cables. EirGrid also prefer cables to be placed within a road. New internal access roads/an expanded road footprint would be required within the Castlebanny Wind Farm project area to accommodate the proposed Ballyfasy Wind Farm grid connection. This new land take to enable Ballyfasy Wind Farm grid cables involve additional tree felling, potentially impacting Coillte forestry operations or leading to future wind throw damage for remaining forestry, ecological habitat disturbance/removal (e.g. passing through broadleaved woodland, conifer/ wet heath habitats etc.), soil disturbance, increase risk of water siltation etc;
  - The Castlebanny Wind Farm includes 21 turbines which develops technical complexities as these cables approach the onsite substation site. This presents technical limitations to including Ballyfasy Wind Farm cables on site;
  - Entering site via Castlebanny Wind Farm site entrance would also increase traffic and general disturbance working area for both Castlebanny Wind Farm project works and also local traffic on the regional R704 road;
  - Potential health and safety risks to workers onsite through increased staff and machinery from both working projects being developed and operated on site concurrently.

Preliminary observations by the Road Design Section would note:

- Option GCO Four will reduce the public road footprint required for grid cables on GCO One by c.5.8 km and the remove necessity for installation of 8 joint bays with associated communication chambers and link-boxes in public road. Four watercourse and four

culvert crossings in the public road would be avoided. Only a residual c.2.8km of public road would remain affected.

- Grid connection would be located in approximately 7km of access track associated with Castlebanny windfarm development, the first 3.5km located in approach access track from the R704 Regional Road which does not appear to be reserved for grid connection or turbine cabling. Remaining section could be amended/locally widened to cater for the grid connection and the internal turbine cabling, as these works have not been undertaken to date.
- Impact on the R704 would be limited as the affected section is approximately 300m in length and grid connection works would be anticipated to be substantially completed within a week, giving a significantly reduced impact on the public road network and infrastructure, traffic management, road closure and delays to road users during the construction phase.
- This would consequently eliminate the requirement for Ballyfasy grid connection to overlap with Castlebanny Windfarm grid connection from Castlebanny Windfarm substation to intersection with L8273 local road over a 2.6km length with reduced requirement for joint bays and associated infrastructure and watercourse crossings.
- Whilst preferred option is GCO Two from roads perspective, Option GCO 4 could have additional potential, subject to more detailed assessment by applicant, to provide design flexibility for an alternative grid connection for Castlebanny Windfarm to connect to Ballyfasy substation with onwards loop in loop out connection to the Great Island-Kilkenny 110 kV overhead line with potential technical and environmental benefits to optimise and rationalise grid infrastructure for both these developments.

Recommendations

- The public road network is of limited capacity and grid connection installations risk restricting or sterilising the road network for future development. Impacts the Road Authority in terms of its ability to carry out its functions in respect of maintenance works and future services provision.
- Recommendation of Road Design Section that Grid Connection Option (GCO) Two be designated as the permitted option for the proposed development as GCO Two is located within the development lands and no interface with public road network, as proposed grid connection from the substation to the 110Kv overhead lines is contained within the development site as part of a loop in-loop out arrangement Considered by Road Design Section to be *"optimal solution"* from road infrastructure perspective.
- Should an alternative option be approved it is recommended that GCO Four is further developed to minimise impact on public road network in lieu of proposed Option GCO One.
- In event that grid connection option is approved which directly impacts the public road, the following conditions shall apply as minimum requirement:
- Prior to commencement of construction works, the applicant shall be conditioned to submit a detailed construction programme for the grid connection development which shall comprise a detailed traffic impact assessment for the construction phase including details of anticipated traffic types and volumes for development which should be provided broken down in daily, weekly, and monthly figures. Details should also include expected peak site traffic, day to day hours and duration;
- Applicant shall be conditioned to conduct Pre and Post construction condition surveys of roads affected by works and construction haul routes in accordance with the "Pavement Survey Standard for Regional and Local Roads" in consultation with

Municipal District Office. Proposals to upgrade a road or structure shall be provided where it is shown to be structurally unsuitable and/or where excessive damage to public road(s) is identified based on the Pre and Post surveys.

- Applicant shall be conditioned to develop Construction and Traffic Management Plan for duration of the project for construction phase as part of Construction Environmental Management Plan CEMP. This is a live working document, and the applicant will be required to prepare an updated environmental, construction and traffic management plan for the construction phase which shall be submitted to the Municipal District Office prior to commencement of development works for agreement. The Construction Traffic Management Plan is also considered a live working document and shall be amended where required as project progresses and shall reflect any changes to construction and staffing traffic patterns during work phases or arising from Health and Safety Audits.
- The applicant shall be conditioned to comply with the guidelines as set out in the "*Interim Guidance to Road Authorities regarding the proposed placement of Medium or High Voltage electricity assets, including ducts, cables, and associated infrastructure under public roads*" and in particular the requirements set out in Section 7 and Section 8, unless where modified by the following:
- With respect to trenching detail for cable installation, concerns regarding vertical clearance from road surface to proposed ducting. Proposed construction detail potentially limits the vertical clearance for the installation of other services, drainage improvement and maintenance. Applicant shall be conditioned to submit revised typical trenching details following consultation with Municipal District Office, which shall address the appropriate clearances to facilitate future maintenance works. Detail of the backfill arrangements and materials shall also be reviewed to ensure that significant lengths of linear hard strips of concrete backfill do not adversely affect pavement substructure lateral drainage paths.
- Principles of the duct installation in verges, wheel track or road centres and the associated road restoration requirements, particularly in protected roads shall be developed and agreed in principle in consultation with the Municipal District Offices.
- Interim Guidance to Road Authorities regarding proposed placement of Medium or High Voltage electricity assets, including ducts, cables, and associated infrastructure under public roads has been provided by the Department of Transport (Ref: Circular RW 07 of 2025 dated 14 March 2025). Kilkenny County Council notes guidance indicates depth of cover to the Transmission HV cable duct(s) should be no less than 950mm to top of cable unless agreed otherwise in specific circumstances;
- Having regard to interim guidance, further particular requirement of Kilkenny County Council that minimum depth requirement of 950mm shall apply to all associated grid connection service ducting including telecommunications and ECC (Earth Continuity Conductor) ducts unless otherwise agreed with the Local Authority.
- Applicant shall be advised that due to width of the proposed trench and the existing local road widths that full road reconstruction may be required over the full local road carriageway. Applicant shall be conditioned to carry out full assessment of existing road drainage network to ensure that proposed works do not adversely impact drainage. Works to maintain or improve drainage networks shall be agreed with relevant Municipal District Office;
- With respect to the joint pit chambers, noted that Kilkenny County Council's preference for chambers to be located in third party lands. In the event chambers are located in public road, the vertical clearance distance from the finished road/verge level to the top

of the pit walls shall be reassessed to ensure adequate space for maintenance of the pavement structure and no less than 600mm below finished road level. Technical Acceptance of joint bay structures beneath regional and/or local roads and which do not interface with national roads should be carried out in accordance with DOT Circular RW 10/2021. Integral to the Technical Acceptance procedure is the:

- Technical Acceptance Report (TAR) which records the agreed basis and criteria for detailed design of joint bay structure; and;
- Certification by Design/Assessor/Checker confirming that the design, assessment, specification or construction works complies with the TAR.

- Where structures including culverts are located within public road, applicant shall be conditioned to carry out a structure/bridge specific design report on structural condition at each of identified bridges/structures and determine how cable installation will impact the structure and to assess how directional drilling, where approved, will affect the individual bridge or structure, due to the unique ground conditions under it. Shall be carried out by Chartered Engineer with bridge and geotechnical experience. Clearance depth of any thrust-bores, where approved, under structures/watercourse beds shall be such as to ensure that there is no adverse impact or settlement of structure or watercourse bed. Each design shall be submitted to the Local Authority for consideration and approval. Applicant shall be required to consult with the Bridge Maintenance Engineer of Kilkenny County Council in relation to all affected structures on road network having regard to Kilkenny County Council's preference in the first instance that cabling should not be installed within the bridge structure envelope and should be constructed offline to preserve existing structures and to facilitate un-restricted access for maintenance in the future. Costs of any design review requiring independent assessment by Local Authority shall be recouped from applicant. The design review shall inform whether any bridge remedial works, structural or otherwise, are required in advance of cable installation works.

Road Opening Licences

- This application notes that the installation of the grid connection will be subject to Road Opening Licence process which is managed by Local Authority;
- It is noted that, subject to approval, applicant shall be required to enter into individual Licence Agreement with Kilkenny County Council for facilitation of the laying, installation and maintenance of conduits or cable for the conveyance of services within structures and public road as Kilkenny County Council will not be responsible for costs associated with future relocation or protection of cable routing and infrastructure arising from the carrying out of its duties and functions in respect of the maintenance and operation of public roads;
- Furthermore, the risk of being unable to obtain a Road Opening Licence, arising from a lack of capacity in road network due to other potential grid connection installations, or where the local authority is not in a position to grant structure agreement licences for construction methodologies in envelope of structures, is noted;
- As previously noted, applicant shall take into consideration particular requirements of Kilkenny County Council in respect of duct and trench installation, backfill and

reinstatement details and minimum depth of cover to all service ducts when applying for Road Opening Licence.

- A Road Opening Licence shall be required in respect of works affecting the public road.

Recommended that the above observations and requirements are satisfactorily addressed prior to issue of a planning decision.

PART III National/Regional/Local Policy context

National

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

• At least 40% cuts in greenhouse gas emissions (from 1990 levels)

• At least 32% share for renewable energy

• At least 32.5% improvement in energy efficiency

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

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

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

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

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

[1] Department of Communications, Climate Action and Environment website

The National Energy Security Framework 2022 was prepared and adopted specifically in response to the situation in Ukraine and the implications for security of the EU and Irelands national energy security. The Framework notes that the level of dispatchable electricity generation capacity (i.e. capacity that does not rely on wind or solar energy) needs to increase significantly over the coming years due to reduced reliability of existing plants, anticipated new power stations not being developed as planned, expected strong growth in demand for electricity, and the closure of existing generation.

Wind Energy Development Guidelines 2006

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

Interim Guidelines on Statutory Plans etc 2017

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

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

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

Draft Revised Wind Energy Guidelines 2019

The Draft Guidelines address a number of key aspects such as

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

Which are the main differences from the 2006 guidelines.

Regional Planning Policy (RSES)

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

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

Local Planning Policy

The Kilkenny City and County Development Plan 2021 - 2027

Wind Energy Strategy

In relation to the Kilkenny City and County Development Plan, on 15th October 2021, the Minister of State at the Department of Housing, Local Government and Heritage, consequent to a recommendation made to him by the Office of the Planning Regulator under section 31AM(8) of the Planning and Development Act 2000 (as amended), notified Kilkenny County Council of his intention to issue a Direction to the Kilkenny City and County Development Plan 2021-2027.

In accordance with Section 31(4) of the Planning and Development Act 2000, those parts of the Kilkenny City and County Development Plan 2021 – 2027 Plan referred to in the notice shall be taken to have not come into effect, been made or amended; namely;

Chapter 11 Renewable Energy:
Section 11.4 Kilkenny Targets
Section 11.5.1 Current status and targets
Figure 11.4 Wind Strategy areas.
Appendix K: Wind Energy Strategy

The Planning Authority is awaiting a further direction from the Minister in this regard. Consequently, the Renewable Energy policies and Wind Strategy areas as previously set out in the Kilkenny City and County Development Plan 2021 – 2027, cannot be taken into account at this time.

For your information, the following is a summary of the Wind Energy policy of the Kilkenny City and County Development Plan 2021 – 2027, which is deemed not to have come into effect:

Chapter 11 of the 2021 - 2027 Kilkenny City and County Development Plan contained the renewable energy strategy for the County.**of the Coil: "To promote and facilitate all forms oe**

Current Status and Targets

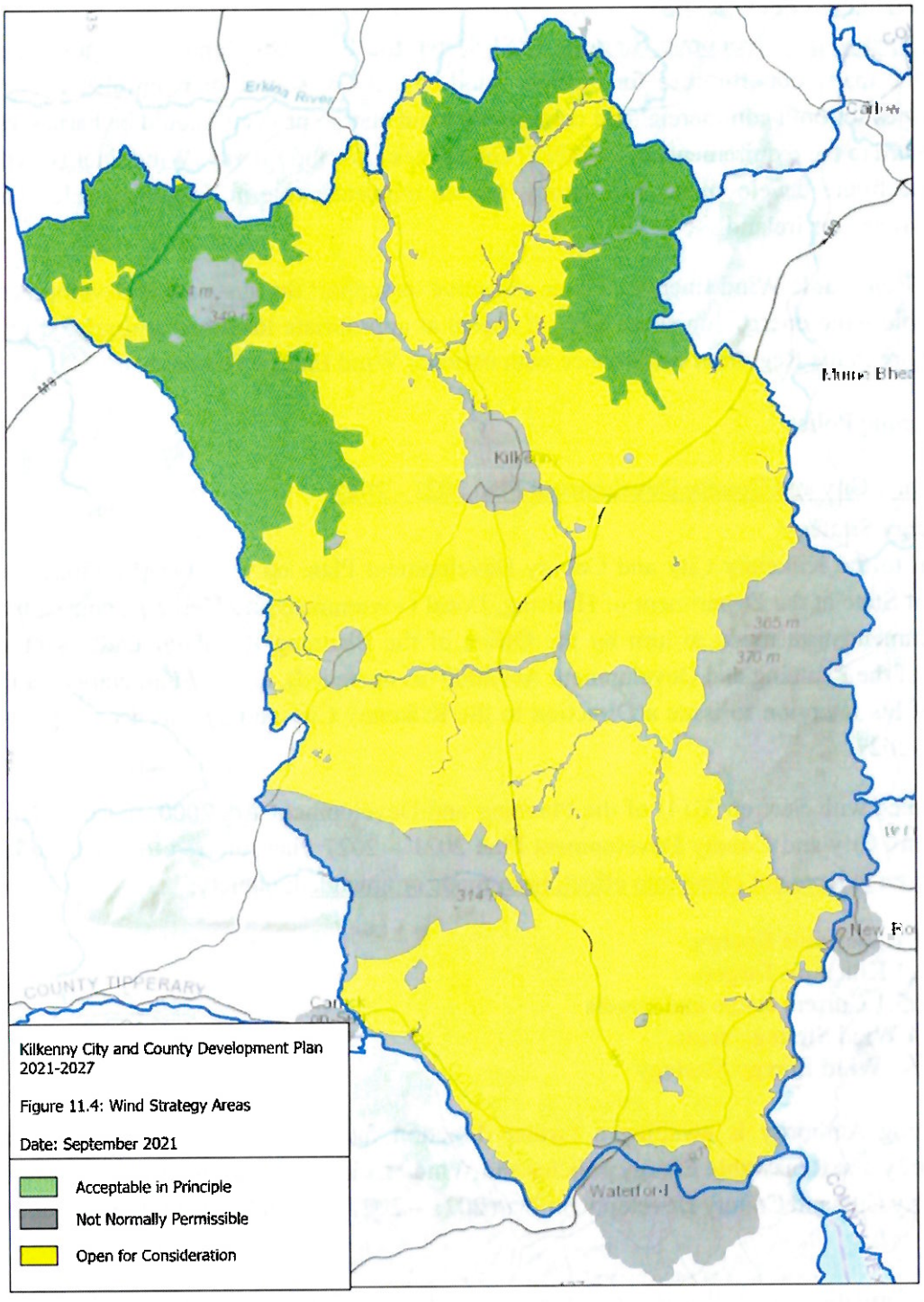


Figure 2 – Extract from Kilkenny City and County Development Plan 2021 – 2027 (Note map is deemed NOT to have been adopted due to a Minterial Direction)

The Council's policy in the County Development Plan 2021- 2027 stated that all wind farm applications be assessed in accordance with Wind Energy Development Guidelines and the Wind Energy Development Strategy, as outlined in Appendix K.

Accordingly, the county has been divided into three policy areas for the development of wind farms, based on an assessment of viability against other considerations; "Acceptable in principle", "Open for Consideration" and "Not normally permissible". A matrix is set out below outlining which of the various category scales will be considered in each Wind Strategy area. Figure 11.4 shows a map of County Kilkenny with areas designated in accordance with their suitability for wind energy development.

Wind Energy Policy Areas:
Wind energy developments can be divided into five categories depending on their scale, as follows:

(a) Individual wind turbines
(b) Auto producer
(c) Small scale wind developments/Community Schemes (Compliant with the RED II Directive definition of community)
(d) Large scale wind developments

The Plan provides policy areas for a wide range of wind energy developments. The plan considers the potential for the landscape to absorb a variety of projects, ranging from large scale wind farm projects to relatively small-scale wind energy developments within urban and industrial areas, and for small community-based proposals outside the key areas that are identified as being appropriate for wind energy development. Community ownership of wind energy projects enables local communities to benefit directly from local wind energy resources being developed in their local areas, ensuring long-term income for rural communities and community benefit funds being mandatory for projects built post 2021 (Contact www.3cea.ie for further information).

Table 11.3: Wind Energy Strategy Areas – policy approach

Strategy area / **Project category**	**Acceptable in Principle**	**Open for consideration**	**Not normally permissible**
Individual turbine	✓	✓	✓
Auto producer	✓	✓	✓
Small scale wind farm/Community led initiative	✓	✓	X
Large scale wind farm	✓	X	X

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

Sensitive land-use categories include areas which are open and exposed with sparse or low growing vegetation cover which is insufficient to provide screening. Even if planting is introduced, the exposed nature of these areas will not support any significant tall vegetation. Due to this, any development would be visible over a wide area. The exceptions to this are broadleaved, mixed forest and transitional woodland scrub areas which do support tall vegetation with potential to screen development. However, these categories area sensitive due

to their natural character and their longevity in the landscape; any loss to their structure (for example, through felling) would have a visual impact over a wide area.

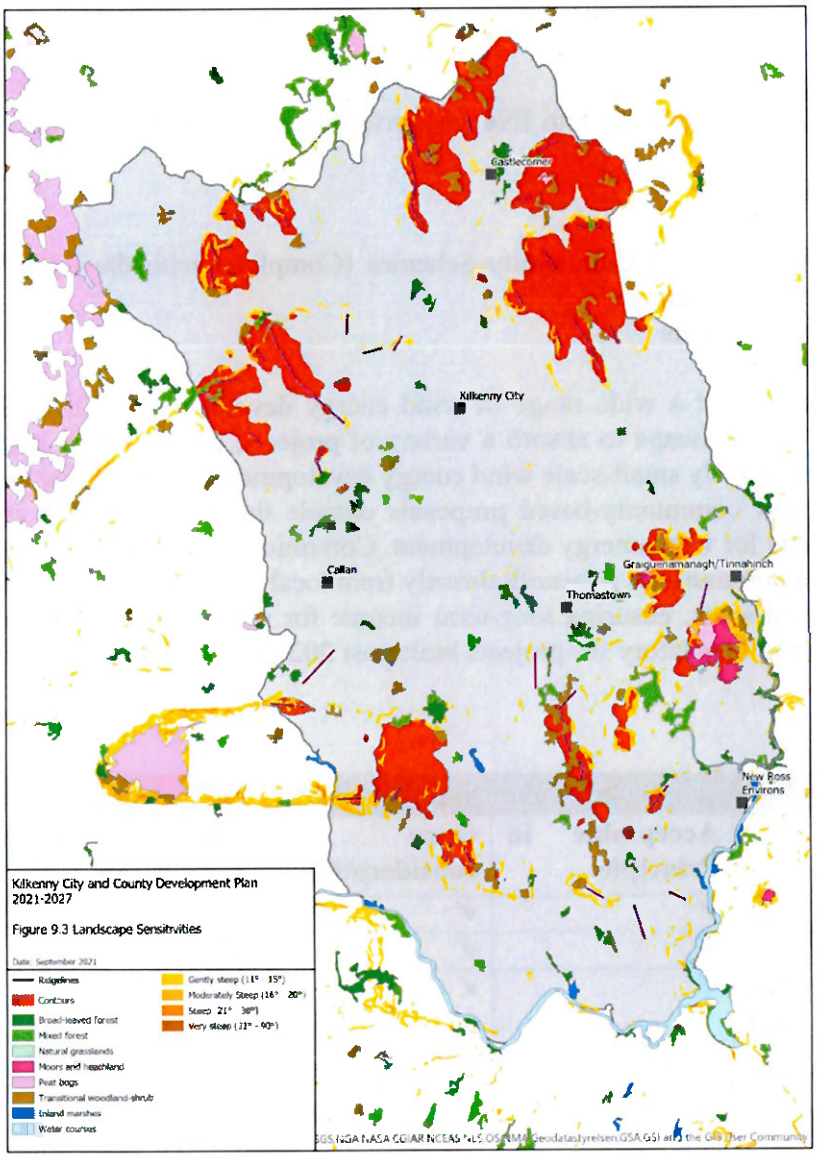


Figure 3 – Extract from Kilkenny City and County Development Plan 2021 – 2027

Relevant Planning History

There are no recent planning applications on the site of the proposed grid connection.

PART IV ENVIRONMENTAL REPORTS

An Environmental Impact Assessment Report (EIAR) and Natura Impact Statement (NIS) have been prepared in relation to the project and accompanies this planning application.

Natura Impact Statement

Stated in the NIS that the total area of direct and permanent habitat loss (i.e., hardstands, access roads and clear-span bridges) will be 31.47 ha of which 20 ha is low ecological value conifer plantation and 8.26 ha is improved agricultural grassland. Stated vegetation clearance that is required during construction works will commence outside the breeding birds season, which runs from the 1st of March to the 31st of August. Stated that due to the abundance of this habitat type surrounding, potential for this loss of habitat to impact upon QI/SCI species. Further stated that proposed GCO's works areas will result in the temporary loss of habitat, namely, hedgerow (430.25 m) and treeline (448.35 m) including GCO mosaic habitats. Stated that all habitat which will be lost as a result of the proposed project will be outside the boundaries of European sites. Stated no Annex I habitat or habitat within the boundary of a European site will be lost as a result (desktop and field surveys carried out, Aquatic survey undertaken in response to IFI concerns expressed in 2023), bird survey, collision risk modelling, breeding bird survey, nocturnal survey, fresh pearl mussel survey all carried out.
It is stated and shown in associated mapping, that there are four river waterbodies which are present within or crossed by the proposed project that lead downstream to European sites, namely;

- The Lower River Suir SAC (site code: 002137) which is connected to the Proposed Project via the Blackwater (Kilmacow)_020 River (WFD waterbody code: IE_SE_16B020091) (EPA river waterbody: Ballyknockbeg [16_1485]) and the Smartscastle Stream_010 (IE_SE_16S070500) (EPA river waterbody: Smartscastle [Stream] [16_3474]); and
- The River Barrow and River Nore SAC (002162) which is connected to the Proposed Project via the Arrigle_010 River (IE_SE_15A020100) (EPA river waterbody: Smithstown 15 [15_1470]) and Arrigle_020 River (IE_SE_15A020250) (EPA river waterbody: Mullenhakill [15_637]).

Pending proper application and management of appropriate detailed mitigation measures during construction (appointed Environmental Manager, Ecological Clerk of Works and Construction Manager to monitor etc., surface water protection measures, surface water monitoring, flood risk attenuation, erosion control, pollution control and construction best practice, Surface Water Mangement Plan (SWMP), Construction Environmental Management Plan (CEMP), Traffic Mangement Plan, reinstatement and other measures during decommissioning, and, emergency response plans throughout in event of, it can be reasonably concluded there will be no adverse impacts on any qualifying interests/habitats of any hydrologically connected European site (Natura 2000 site: Lower River Suir SAC or River Barrow Nore SAC) either as a result of wind farm alone or in combination with other existing and proposed projects including the existing windfarms proximate such as Ballymartin-Smithstown and Rahora, and, consented 21 turbine Castlebanny Wind Farm further due north. An Coimisiúin should satisfy itself that adequate detail has been given, in terms of various method statements, design details in order to determine if the development is likely to have direct, indirect or 'in combination' impacts on the habitats and/or species for which the nearest Natura 2000 sites are designated

EIAR

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

The main report is set out as follows:

Chapter 1 Introduction

Chapter	2	Description of Proposed Project
Chapter	3	Consideration of Reasonable Alternatives
Chapter	4	Planning Policy and Development Context
Chapter	5	Population and Human Health
Chapter	6	Biodiversity
Chapter	7	Ornithology
Chapter	8	Land Soils and Geology
Chapter	9	Hydrology and Hydrogeology
Chapter	10	Shadow Flicker
Chapter	11	Material Assets
Chapter	12	Noise and Vibration
Chapter	13	Landscape and Visual Impact Assessment
Chapter	14	Air Quality and Climate
Chapter	15	Archaeology and Cultural Heritage
Chapter	16	Traffic and Transportation
Chapter	17	Major Accidents and Natural Disasters

Summary of EIAR

Chapter 1 Introduction

Introduction sets out a summary description of the applicant, the project including need for, the location, the EIAR content, outlines the planning context including design flexibility, grid connection, legislative context and a brief background to the project and describes the consultation process.

Chapter 2 Description of Proposed Project

This chapter provides a detailed description of the various components of the proposed development including the construction (including delivery routes) and environmental management during, the operational phase.

Chapter 3 Consideration of Reasonable Alternatives

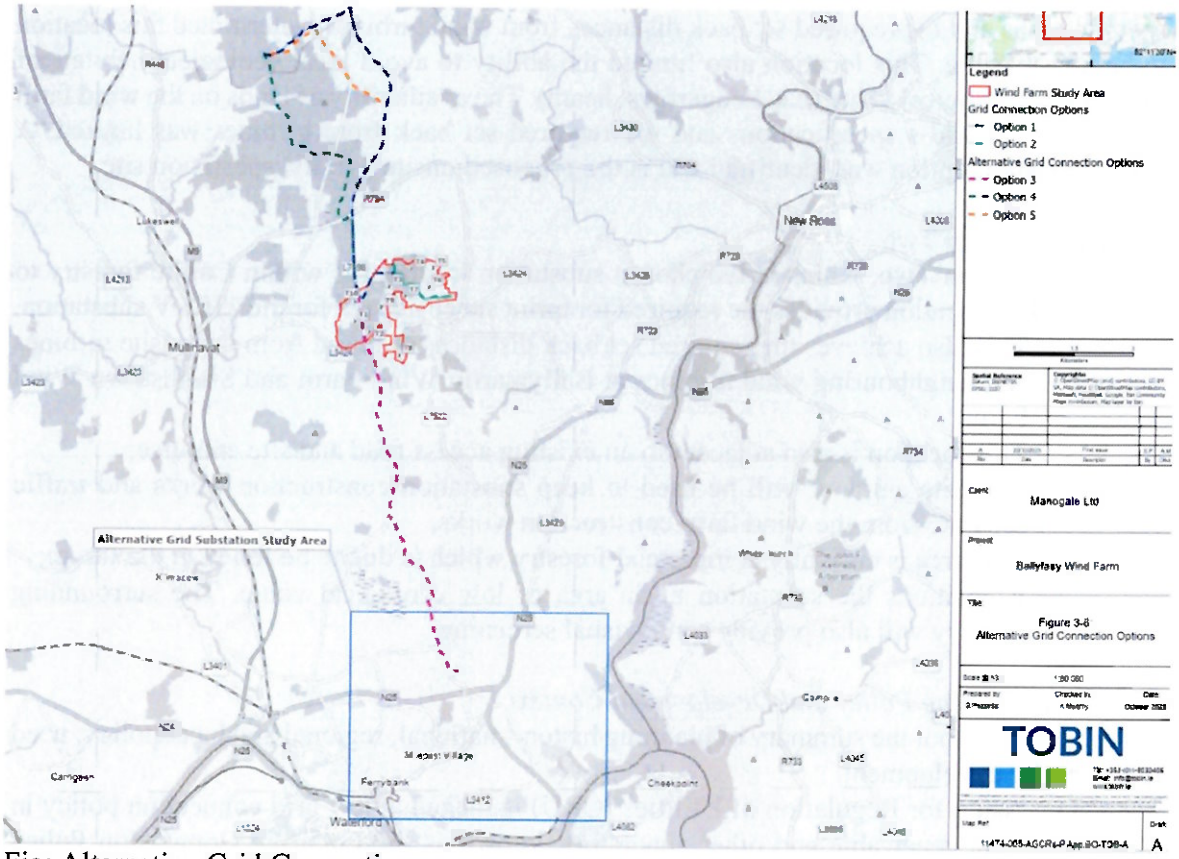


Fig: Alternative Grid Connections

Chapter sets out reasonable alternatives that were studied relevant to proposed project and specific characteristics and provides indication of the main reasons for the option chosen, considering the effects of the proposed project on the environment.

Alternative to Grid Connection Option is GCO Five would connect the proposed project using the L7499, L3417 road, R704 road, L3418 road, L7490 road and L8272 road.

Following consideration this option was not progressed as it would bring construction works immediately adjacent to a greater number of residential properties than the chosen two options.

- Cable laying works and road closures would also be required on five roads within the local area;
- This connection option utilises the public road directly opposite of St Moling's Well, which is an archaeological recorded ritual site - holy well, and is visited by the public. Construction works would inevitably interfere with anyone wishing to visit the site. The road is also narrow in this area and considered a pinch point for the required works.

Grid Connection Options 3 and 4 were also ruled out for a variety of reasons.

The decision was therefore taken to progress substations one and two were chosen for the following reasons.

Substation Option One
Substation Option One involved the substation being placed within several agricultural fields. In this location, land availability for the required 110 kV substation footprint to meet EirGrid

specifications and the required set back distances from wind turbines, determined this location to be non-feasible. This location also limited the ability to avoid local ecological habitats of high to low ecological value (e.g. hedgerows, heath). The availability of lands on the wind farm site to suit EirGrid's specifications and the required set back from turbines was limited. A second location option was identified and is the proposed onsite 110 kV substation site.

Substation Option Two
Substation Option Two, which is the chosen substation location, is within Coillte forestry to the north. This location provides the required footprint space needed for the 110 kV substation.

- This also achieves the required set back distances required from the onsite turbines and neighbouring wind turbines at Ballymartin Wind Farm and Smithstown Wind Farm;
- This location is also adjacent to an existing access road and site entrance;
- This site entrance will be used to keep substation construction works and traffic separate from the wind farm construction works;
- This area is currently commercial forestry which is due to be felled in the future;
- It positions the substation in an area of low ecological value. The surrounding forestry will also provide some visual screening.

Chapter 4 Planning Policy and Development Context
This chapter sets out the summary of planning history; national, regional and local policy; need for proposed development.
The Commission for Regulation of Utilities (CRU) launched a new grid connection policy in March 2018 for renewable and other generators, known as the Enduring Connection Policy (ECP-1), which sought to allow "shovel ready" projects, that already have a valid planning permission, connect to the electricity networks.
The revised NPF also emphasized the need for grid development and expansion, recognizing that meeting regional capacity targets will require coordinated upgrades to the electricity grid at both national and local levels. National Policy Objectives (NPOs) 71 and 72 specifically support the development and interconnection of onshore grid infrastructure, while NPO 55 promotes sustainable international grid connectivity enhancements.
In summary, there is strong policy support to accellerate the grid connection for advanced projects such as renewable energy projects (particularly via the ECP2 which prioritised large reneable enrgy projects).

Chapter 5 Population and Human Health
The assessment on population and human health primarily considers property receptors and residential amenity, as well as current land use and activities, occurring within the vicinity of proposed wind farm site, as this is where any likely effects on population and human health receptors may mainly to occur.

In relation to overall renewable energy generation targets for Co. Kilkenny, based on the Kilkenny City and County Draft Development Plan 2021-2027, the Council has established a target to generate 253MW of renewable energy by 2030. This is however is not considered a ceiling given the evolving climate emergency.

Stated that the surrounding landscape comprises of the following:

- Mixture of agricultural land and forestry, with existing wind farms.

Stated in relation to existing surrounding wind farm developments/grid connection:

- Current land use for both proposed GCO predominantly pastoral agriculture with some areas of forestry cover;
- GCO One will install a 110 kV underground cable from proposed project site substation to the consented Castlebanny Wind Farm 110 kV substation approximately 12 km to north;
- GCO Two will connect into existing 110 kV Great Island. Kilkenny overhead line which crosses over the east of the proposed wind farm site;
- Temporary works at proposed TDR works areas on lands required to facilitate turbine component deliveries currently comprise boundary walls, hedgerows, forestry, as well as transport (road corridors);

Stated in relation to residents:

- For this assessment, properties within a 2 km distance identified and reviewed through available aerial mapping, GeoDirectory and ground-truthing;
- Examination of existing population in study area carried out to identify population trends, density, to define the properties/receptors surrounding the proposed wind farm site (generally sparser population in the area);

Stated in relation to construction impacts:

- Best practice construction methodology and measures to minimise impacts from excavation works, as described in Chapter 8 (Land, Soils and Geology), keep project area to a minimum and reduce land use changes;
- Short-term to temporary negative effects on noise (not overly significant – also discussed in Chapter 12 Noise and Vibration);
- Noise and vibration effects in terms of the construction phase activities at the wind farm site (including general construction of turbines and hardstand areas, construction of site roads, borrow pits, substation construction, onsite cabling, onsite grid connection, and construction traffic) will be negative, short-term to temporary, and not significant.
- Short-term, direct, negative, imperceptible effect on air quality;
- Any incidents related to accidental release, mobilisation, spillage or leakage of substances likely be localised, contained, and managed in line with mitigation set out within Chapter 9 (Hydrology and Hydrogeology) and CEMP. Significant adverse effects on human health due to water quality effects associated with proposed project unlikely. Any likely effects related to water quality impacting on human health, from polluting incident negative, indirect or direct depending on incident, temporary to short-term, and not significant to slight;
- Significant adverse effects on road users human health related to construction phase traffic considered unlikely. Any likely effects associated with construction phase traffic on sensitive receptors negative, not significant, and temporary to short-term.
- The temporary, negative residual effect on, tourism and recreation amenity as result of traffic delays associated with construction works, vehicle movements, and associated traffic management measures;
- A short-term, negative and not significant residual effect likely as result of construction phase traffic (primarily associated with noise and dust) on residential amenity and sensitive receptors. Short-term, slight residual effects are predicted on residential amenity and property values and neutral imperceptible effects on local population and land use;

- With adherence to proper health and safety guidelines throughout construction phase of the proposed project, significant adverse effects in terms of health and safety related to construction phase considered unlikely.

Stated in relation to operational impacts:

- Anticipated incidents related to accidental release, mobilisation, spillage or leakage of substances localisedand managed in line with mitigation set out within Chapter 8 (Land, Soils and Geology);
- Significant adverse effects on water quality associated with operational phase unlikely.
- Any likely effects related to water quality resulting from a polluting incident, are considered indirect or direct depending on incident, negative, temporary to short-term, and not significant
- Following the implementation of mitigation measures prescribed in relevant chapters of EIAR;
- Proposed project unlikely to have significant negative residual effects on local or wider population.
- Establishment of a Community Benefit Fund long-term positive contribution to local community in general;
- Based on RESS, for each megawatt hour (MWh) of electricity produced by the wind farm, the project will contribute €2 into a community fund for the RESS period i.e. 15 years of operation. Project could provide more than €360,000 per annum to the Community Benefit Fund for the first 15 years of operational life. Over the expected lifetime, the Community Benefit Fund will be in the order of €5.4 million.
- Based on the published literature reviewed, no reliable evidence to link wind

Employment and circular economy

- Estimated proposed project overall will create approximately 75 jobs during construction phase and 20 - 26 long-term technical jobs during operational and maintenance phases;
- The construction of proposed wind farm and associated CGO will have estimated capital cost in the region of up to €93.6 million (has the potential to support local contractors and suppliers);
- Should overall project be constructed and operated as designed, annual rates will be paid to local authority of approximately €570,000 annually.

Overall

- Potential for negative and positive effects. Negative cumulative effects primarily relate to traffic (road safety and dust), presence of additional work machinery being active if construction phase of proposed project and other planned renewable energy/grid upgrade projects coincide. Positive cumulative effects relate to long term improvements in air quality from decarbonising national grid and contributions to climate targets;
- Significant environmental benefits associated with suitable replacement of fossil fuel combustion with the associated release of a range of pollutants including particulate matter, oxides of nitrogen, sulphur dioxide, carbon dioxide;
- Phasing out of electricity generation from burning fuels in Ireland is a key step in achieving Ireland's 2030 decarbonisation ambition as set out in the Ireland's Climate Action Plan 2025 and placement of fossil fuels in electricity generation by

clean renewable wind energy will significant benefits for air quality and slowing down global warming.

- Overall, considered likely there will be a long-term, slight, positive residual effect on the local population and human health as a result;
- Currently no credible evidence to link wind turbines to adverse health impacts. Emission limits, such as for noise or dust set to protect those within a community;
- Compliance with limits set out in best practice guidelines will ensure individuals and communities are protected;
- Design stage considerations, such as mitigation measures outlined in relevant technical chapters put in place to ensure emissions and effects from proposed project in compliance with standards to ensure there will be no significant adverse effects on health, even amongst most vulnerable;
- Following consideration of residual effects, proposed project will not result in a negative effect on population and human health in local and regional area;

Stated in relation to decommissioning:

- Electricity substation and grid connection unlikely to be decommissioned fully should wind turbines be decommissioned at end of 35 year life.

Mitigation

- As set out, public health impacts as set out with respect to construction, operation, decommissioning with particular regard to noise during operation can be made within acceptable levels.

Chapter 6 Biodiversity

Zone of Influence:

ZoI for water quality impacts confined to waterbodies present within downstream of proposed project not considered effective once first waterbody of depositional nature is reached (i.e., lake water body; transitional water body). The ZoI for hydrological impacts for proposed project defined as waterbodies within, adjacent to, or downstream of proposed project until Nore Estuary (Water Framework Directive [WFD] waterbody code: IE_SE_100_0400) and Middle Suir Estuary (IE_SE_100_0550) are reached;

The ZoI for groundwater impacts is confined to same ground waterbody as proposed project, which in this case is Inistioge (IE_SE_G_076) and Mullinavat (IE_SE_G_155);

The ZoI for disturbance to terrestrial mammals was defined with regard to NRA guidance related to badger (NRA, 2005) and guidance related to otter (NRA, 2006) which state that noise impacts from construction works can impact breeding badger setts/otter holts within 150 m of a noise source (i.e., proposed infrastructure). Other protected mammal species potentially present at locality (e.g., hedgehog [Erinaceus europaeus], fallow deer [Dama dama]) likely to have a smaller ZoI, as impacts are predominantly associated with habitat damage and therefore captured within the 150 m survey buffer;

European Sites:

All European sites (i.e., SAC and SPA) with a source-pathway-receptor link to proposed project were considered. Proposed project does not overlap with any European site. It is, however, hydrologically connected downstream to three European sites; a hydrological connection from the Blackwater (Kilmacow)_020 River and Smartscastle Stream_010 Lower River Suir SAC (site code: 002137) and a hydrological connection from both the Arrigle_010

and Arrigle_020 River to the River Barrow and River Nore SAC (002162) and the River Nore SPA (004233). Direct sourcepathway-receptor links via hydrological pathways identified from the proposed project to European sites.

Additional SPAs (i.e., Wexford Harbour and Slobs SPA [004076], Saltee Islands SPA [004002], Poulaphouca Reservoir SPA [004063], Ballycotton Bay SPA [004022] and Cork Harbour SPA [004030]) were considered based on assessment of SCI species core foraging and disturbance ranges (SNH, 2016; Goodship and Furness 2022). All SPAs are considered in further detail in Chapter 7 (Ornithology) within project Natura Impact Statement (NIS).

Biological Water Quality:
An assessment of biological river quality (i.e., kick sampling) was undertaken on 3no. river waterbodies, a total of 13 aquatic survey sites (aquatic sites 1-4, 7-11 and 13, 15, 17 and 18). 2 no. of the waterbodies traverse the proposed project site; Smartscastle Stream_010 and Arrigle_010 River, while the Blackwater (Kilmacow)_020 River runs along the western boundary. Visual assessment carried out at aquatic sites 5, 6, 14 and 16; an unmapped/unnamed waterbody at GCO One, the Arrigle_010 along GCO One and two sites on the Smartscastle Stream_010 (see Figure 6-5 and Figure 6-6). Kick sampling, semi-quantitative method for sampling benthic (or bottom dwelling) macroinvertebrates, also undertaken within and downstream of the proposed wind farm site following methods outlined in Toner et al., 2005. Macroinvertebrates (e.g., larvae and adult insects, crustaceans, snails) examined from kick samples, with type of species present and relative abundance providing indication on the baseline ecological health of the waterbody (i.e., biotic index Q-value).

A desktop review of NPWS (NPWS, 2025a), NBDC (NBDC, 2025) and IFI carried out to collate information on aquatic species and to identify features of aquatic ecological importance within study area.

Following was stated in relation to European sites:
- Important ecological features include River Barrow and River Nore SAC [002162] (international), Lower River Suir SAC [002137] (international), Lough Cullin pNHA [000406] (international), Grannyferry pNHA [000833] (international); and local features are listed in Chapter 5;
- Proposed project does not overlap with any European site;
- Hydrologically connected downstream to 3 no. European sites;
- Hydrological connection from the Blackwater (Kilmacow)_020 River and Smartscastle Stream_010 to Lower River Suir Special Area of Conservation (SAC) (site code: 002137). Hydrological connection from both the Arrigle_010 and Arrigle_020 River to the River Barrow and River Nore SAC (002162) and River Nore Special Protection Area (SPA) (004233);
- No Natural Heritage Areas (NHAs), (basic wildlife designation in Ireland, identified within project study area and/or within the source-pathway-receptor link.

The following was stated in relation to habitats:
- Tobin have undertaken a full suite of aquatic surveys (in 2023, 2024 and 2025), both within and downstream of proposed project, in order to inform the planning application. Stringent mitigation measures implemented (outlined in EIAR and NIS);

- A range of ecological field surveys were undertaken within the study area in September 2022, September 2023, August 2024, April and August 2025 in order to inform the impact assessment of the proposed project;
- Construction works to be undertaken directly adjacent to all waterbodies during construction of clear-span bridges and installation of grid connection. In absence of mitigation measures, construction works have potential to result in runoff of pollution and sediment into watercourses which would result in likely, short-term, negative, significant effects at local geographic scale in absence of mitigation measures;

Following was stated in relation to species:

- Downstream of Arrigle_010 River and sections of Smartscastle Stream_010 and a tributary of Arrigle_020 River noted to have commuting and foraging potential for otter;
- No evidence of otter recorded within proposed project. Potential otter use connected streams and rivers hydrologically connected proposed project for foraging and commuting, due to suitable habitat present and availability of prey. Construction works associated with proposed project potential to result in water quality impacts which would result in degradation in otter's feeding resources, resulting in likely, short-term, negative significant effects at a local to international geographical scale;
- Due to availability of alternative habitat in the surrounding area, and mobile nature of the species, the loss/fragmentation of suitable resting and/or foraging sites for badger, and disturbance/displacement effects, will not result in significant effects on the conservation status of local badger population at any geographical scale;
- Pine marten likely to rarely use the area due to lack of evidence recorded during surveys. Considering significant effects on conservation status of pine marten population at any geographical scale.
- Fallow Deer During field surveys, fallow deer droppings recorded within the conifer plantation south of access road between Turbine 4 and Turbine 7 and within recently-felled woodland at proposed GCO One. No live sightings of deer observed. Considering availability of alternative suitable habitat in surrounding area, no significant effects on conservation status of local fallow deer population at any geographical scale.
- Common frog observed on 3 no. occasions within proposed wind farm site at areas of wet grassland and ponded water in conifer plantations. Considering availability of alternative suitable habitat in surrounding area, no significant effects on the conservation status of the local common frog population at any geographical scale.
- A suite of aquatic surveys were carried out within streams and rivers present within and downstream of proposed project. No freshwater pearl mussel, white-clawed crayfish, Atlantic salmon or European eel were recorded within study area. Suitable habitat for white-clawed crayfish, Atlantic salmon and European eel were noted at sections of Arrigle_010, Smartscastle Stream_010 and Blackwater (Kilmacow)_020 Rivers. Two immature lamprey (ammocoetes)were recorded at a survey location (aquatic site 4) along Arrigle_010. Construction works associated with proposed project have the potential to result in a degradation of water quality if not managed. Runoff of sediment or pollutant laden runoff to suitable habitat will result in likely, short-term, negative, significant effects at local to international level

Arrigle_010 (Nore_SC_130 sub-catchment) FWPM surveys conducted by Ecofact concluded no suitable habitat present within the Arrigle_010 River, both within and downstream of the proposed project. Locations at River Barrow and River Nore SAC boundary also examined

which concluded no presence of FWPM. Moorkens et. al., (1992) reported no live mussels within tributary of the River Nore (this includes the Arrigle_010); the Arrigle_010 was included in the FWPM survey and the survey extended over 4 km along the river (which was estimated to be around 90% of the suitable habitat in the river). Based on current survey and absence of any records from Nore_SC_130 sub-catchment, presence of FWPM in the Arrigle_010 and Nore_SC_130 ruled out.

Smartscastle Stream_010 and Blackwater (Kilmacow)_020 (Blackwater[Kilmacow]_SC_010 sub-catchment) No suitable habitat for FWPM was recorded within Smartscastle Stream_010 and Blackwater (Kilmacow)_020 Rivers. Watercourses deemed to be too small with unsuitable gradient and water quality to support species, and catchment overall is highly modified. Based on the current survey and absence of any records from the Blackwater[Kilmacow]_SC_010 sub-catchment the presence of FWPM in Smartscastle Stream_010 and Blackwater (Kilmacow)_020 Rivers is ruled out.

Nore_SC_140 sub-catchment A small area (ca. 539.42 m2) of the proposed project is present within the Nore_SC_140 subcatchment. No watercourses from this sub-catchment are present within or adjacent to the proposed project. No records of FWPM have been recorded within this sub-catchment, and this species was confirmed as absent during surveys of the Oaklands_010 River. Based on current survey and absence of records from the Nore_SC_140 sub-catchment presence of FWPM in the ZoI of the proposed project is ruled out. The FWPM surveys concluded absence of species within sub-catchments and associated watercourses draining the proposed wind farm site and as such FWPM is not present within ZoI of the proposed project. For this reason, FWPM will not be considered further in this assessment.

Stated in relation to construction

- Construction phase will result in habitat loss/disturbance to facilitate construction of infrastructure including excavation of cabling trenches during the installation of the underground grid connection.

Mitigation measures during construction

- Pre-construction confirmatory surveys prior to commencement of works to be carried out by competent ecologist to identify changes in otter activity or holt/couch locations within proposed project (see Section 6.12.8.1.2.1). Otter surveys will be undertaken no more than 10—12 months in advance of construction works as per the advice in the NRA Guidelines for the Treatment of Otters during the Construction of National Road Schemes (NRA, 2008a);
- Twilight working hours (i.e., time between dawn and sunrise and dusk and sunset), especially at clear span bridge locations, will be restricted. Otter are crepuscular species and disturbance will be reduced by restricting amount of twilight working hours;
- All construction lighting will be reviewed by the ECoW and will be directed away from watercourses to ensure a dark corridor is maintained;
- Mitigation measures to prevent the degradation of water quality is outlined in Chapter 9 (Hydrology and Hydrogeology) also applicable to prevent disturbance/displacement of species (e.g., displacement of species due to unfavourable water quality as result of construction impacts).
- Following implementation of the mitigation measures, proposed project will not result in significant residual effects on European or National sites.

- Due to availability of suitable habitat in wider area, displacement of individuals and populations during construction phase will not result in significant effects on conservation status of local bat population;
- Where possible trees, scrub and hedgerows will be retained, notably in areas adjacent to access tracks and other associated infrastructure with exception of those within 100 m bat buffer around turbines. All retained habitat will be demarcated by the ECoW.
- Mitigation measures outlined in Section 6.12.2.3.1.2.1 relating to retention of hedgerow and treeline habitat is applicable. Pre-felling inspections be carried out by an ECoW of all trees to be felled, to confirm the presence/absence of bats no more than 48 hours prior to trees being felled.
- Habitats: clearance will be kept to a minimum to prevent unnecessary habitat loss where works are to be carried out, and areas which are to be retained clearly marked. Mitigation measures to prevent the degradation of water quality included in a Surface Water Management Plan (SWMP) implemented during the construction and decommissioning phase which will ensure no impact on watercourses.
- Otter Mitigation: Measures to prevent degradation of water quality will be implemented during the construction and decommissioning phase;
- Trees, scrub and hedgerows will be retained where possible during the construction phase and all trees to be felled will be inspected by Ecological Clerk of Works (ECoW).
- Aquatic Species: Mitigation measures to prevent degradation of water quality to be implemented during the construction and decommissioning phases. Measures are outlined within the EIAR.
- Compensation Measures: A total of 1,022.936 m of hedgerow will be planted surrounding proposed onsite substation and along access road to Turbine 2 to compensate for loss of same.
- Enhancement Measures: To enhance existing habitat within proposed wind farm site following measures will be carried out:
  - Woodland planting of native trees (2.39 ha);
  - Creation of pond within area of wet grassland east of Turbine 8;
  - Protection of area of wet heath adjacent to Turbine 3 utilising deer fencing; and;
  - Retention of land for purposes of enhancement
- Woodland planting of native broadleaved woodland (e.g., species including alder, rowan, oak, hazel) at temporary construction compounds and deposition areas within proposed wind farm site to be carried out;
- Seasonal pond (i.e., changeable water levels) will be created in area of wet grassland east to Turbine 8. This pond will be rainwater fed and will provide habitat for array of species within locality including common frog and a water source for birds and mammals;
- Area of wet heath north of Turbine 3 was considered to be of county importance will be protected from overgrazing and trampling by deer species through erection of a deer fence;
- Ecological Clerk of Works to be provided if permission granted by An Coimisiúin Pleanála, and this should be condition of any grant

Chapter 7 Ornithology

Key issues identified for the assessment of potential ornithological effects relating to proposed grid connection area are:

- Direct loss of breeding, foraging and/or roosting habitat;

- Displacement of birds as a result of disturbance including barrier effects;
- Cumulative effects on species and / or designated sites.

Standard good practice measures will also be implemented during construction through adherence to A Bird Protection Plan to be produced prior to construction to ensure compliance with relevant legislation protecting all breeding wild birds.
In order to confirm how IOF species are affected by the proposed project and how this compares to predicted effects, ornithological monitoring will take place during and post-construction. This will include year-round collision monitoring through carcass searches

Grid Connection Options One and Two which will connect the proposed wind farm to the national grid will be via underground cables. As these are buried cables impacts would be short-term and are not likely to be significantly more disturbing than baseline conditions, and therefore the potential for significant effects on ornithological receptors is negligible during construction, and there would be no impacts during the operational phase. An ECoW would be present to ensure that works are completed in compliance with relevant legislation and best practice.

Chapter 8 Land, Soils and Geology
Assessment of land, soils and geology undertaken in accordance with EPA (2022) 'Guidelines on the Information to be contained in Environmental Impact Assessment Reports'.
Available desktop information and geotechnical site investigations undertaken for proposed project used to establish baseline conditions for Land, Soils and Geology

Baseline environment of the proposed project, including the proposed wind farm site, the proposed grid connection options and works areas of proposed TDR thoroughly investigated through extensive desk studies and field inspections. Methodology for this chapter involved a combination of desk research, site walkovers, intrusive investigations, such as trial pits, boreholes, gouge augers and peat probes.

According to Geological Survey of Ireland (GSI) spatial datasets, there are no geological heritage sites or designated Natural Heritage Areas (NHAs) within study area, which includes the proposed wind farm site, the Grid Connection Option (GCO), and Turbine Delivery Route (TDR) work areas.

GCO(Grid connection option 1) One extends northward from proposed substation location and located mainly with public road.

GCO Two remains entirely within proposed wind farm site boundary. TDR work areas to west identified as rolling ice-moulded glacial sediments, while to the south are classified as flat to gently undulating glacial sediments.

No effects anticipated on mineral/aggregate resources along proposed grid connection routes or proposed TDR. Construction phase activities of proposed project will require earthworks, resulting in removal of vegetation cover, topsoil and mineral subsoil.

During operational phase, machinery will access proposed wind farm for maintenance of substation. Presence of machinery on proposed wind farm site has potential to result in minor accidental leaks or spills of fuels/oils contaminating soils and subsoils.

Environment Concens: Soil & Soil Types:

- Excavated tarmac or other waste material is to be stockpiled prior to being sent off site for processing. Can only be stored (and processed or recycled) under waste transfer licence, where it is not directly transferred to appropriate waste facility;
- Soils varied across site with distinct delineation between west and east: The west comprises of till derived from Devonian sandstones while east consists of till derived from Lower Palaeozoic shales but overtopped with acidic type surface soils. Applicant would need to provide concise determination on soil chemistry with various areas and demonstrate areas for placement of excavated material aligns with in-situ soils;
- Applicant needs to detail management of run off from spoil heaps and show how run off will be directed to settlement ponds

Chapter 9 Hydrology and Hydrogeology

Proposed Grid Connection Option (GCO) One positioned within public road immediately adjacent to River Barrow and River Nore SAC boundary. The Arrigle River and the Smartcastle Stream both cross the proposed wind farm site. Hydrologically connected to River Barrow and River Nore SAC and Lower River Suir SAC. Project commitment that no instream works will be undertaken on watercourses. Within the wind farm site, clear span bridges will be included where required in project layout design for crossing watercourses. Should watercourses require crossing for grid connection, will be done using horizontal directional drilling (HDD) ensuring no instream works required.
A 50m buffer set from main infrastructure (turbines, substation, borrow pits, compounds) and the Arrigle River and the Smartcastle Stream on site and from watercourses crossing along the GCOsSee table below.

Watercourse Crossing No.	Project detail	Proposed crossing methodology	In Stream works required?
1	Grid Connection Option One	Horizontal Directional Drilling	No
2	Grid Connection Option One	Horizontal Directional Drilling	No
3	Grid Connection Option One	Horizontal Directional Drilling	No
4	Grid Connection Option One	Horizontal Directional Drilling	No
5	Grid Connection Option One	Horizontal Directional Drilling	No
6	Grid Connection Option One	Horizontal Directional Drilling	No
7	Grid Connection Option Two (and construction access into T6, borrow pit and deposition area)	Horizontal Directional Drilling	No

Fig: Watercourse crossing including methodology

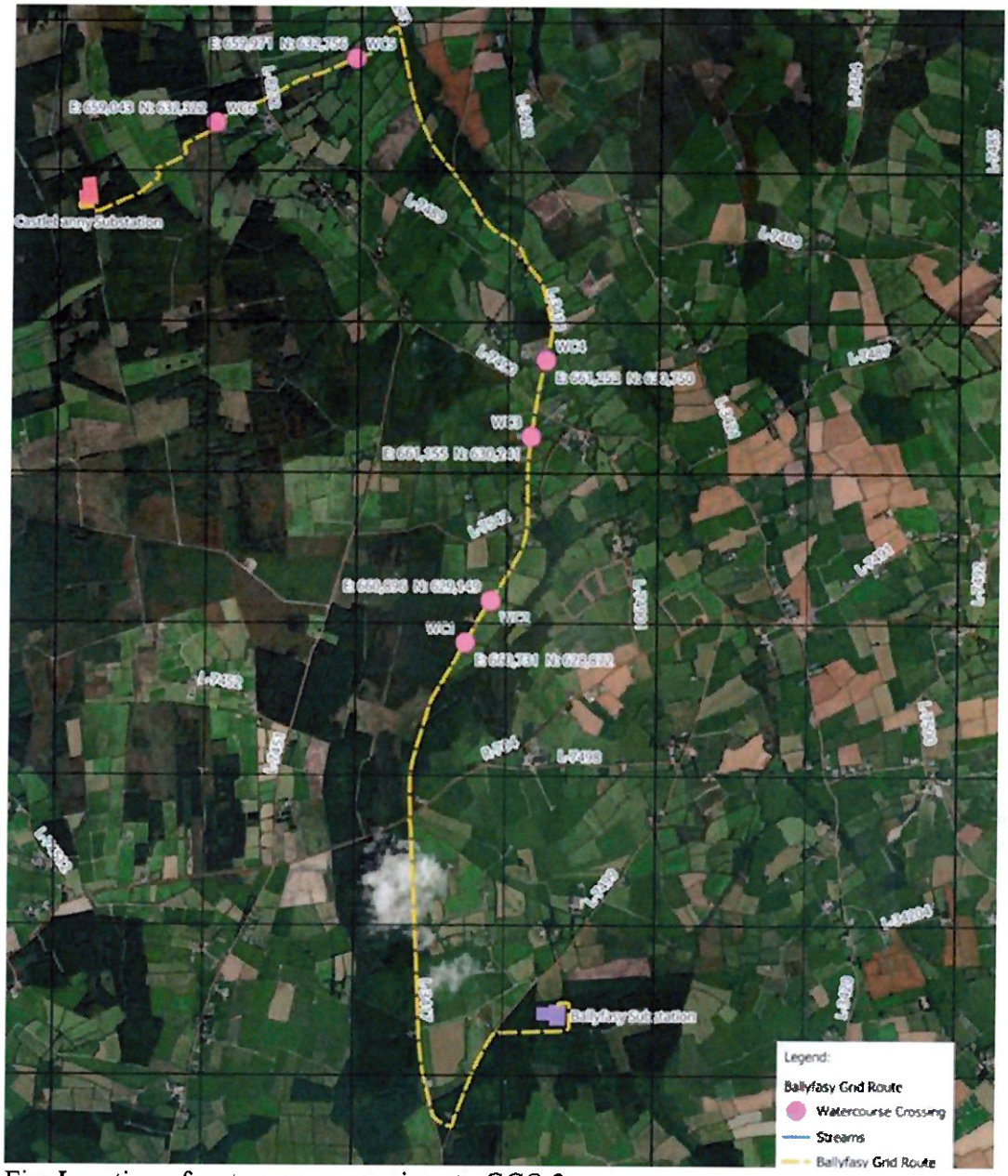


Fig: Location of watercourse crossings to GCO 2

Proposed overall wind farm site located on boundary of two catchments, River Suir and the River Nore. Within proposed wind farm site, two primary streams identified: Smithstown Stream, flows northward into River Nore catchment, and Smartscastle Stream, flows southward into the River Suir catchment

Exposed and disturbed ground during construction works may increase risk of erosion and subsequent sediment laden surface water runoff.

Release of suspended solids is primarily a consequence of physical disturbance of ground during construction phase, if not correctly compacted.

Both Grid Connection Options (GCOs) are situated within the Inistioge and Mullinavat Groundwater Bodies (GWBs). GCO One crosses a more geologically varied sequence. It starts in the Ballylane Formation (Poor Aquifer), then crosses the Maulin Formation, Brownsford Member, and Carrigmaclea Formation, all of which are Locally Important Aquifers (moderately productive only in local zones). Route also crosses granite intrusion (Poor Aquifer) and several mapped fault lines, which may influence both groundwater movement and structural stability. GCO Two lies entirely within the proposed wind farm boundary and shares the same geological and hydrogeological conditions. Underlain by Ballylane Formation, classified as a Poor Aquifer (bedrock generally unproductive except in local zones

Proposed grid connection site not located with designated drinking water supply zone (WSZ). The majority of water in surrounding area is supplied by private abstractions with exception of Listerlin and Mullinavat. No registered group/public drinking water supplies within 1 km downgradient of proposed wind farm site. Limited number of private wells

There are two areas at risk of fluvial flooding along GCO One, therefore, it is recommended that construction works for grid connection not undertaken during a flood event

No flood-prone areas are identified along the GCO Two route.

Given underground design and routing of grid connections, overall flood risk associated with both GCOs considered minimal, as the underground cable are compatible as detailed in the Flood Risk Area.

Localised drainage features such as verge ditches, swales and drainage channels along the route. No surface water sewer network present along grid route. Envisaged grid connection route will interact with roadside drainage and field drains in number of locations.

Surface water arising at developed areas to be managed by dedicated stormwater drainage system

Residual effects on surrounding water quality, hydrology, hydrogeology and existing drainage regime not considered significant and will be primarily short term in nature

Dewatering operations inspected once each day when dewatering taking place to ensure that dewatering treatment controls are working correctly and to evaluate whether there are observable indicators of sediment discharges.

Regular monitoring of groundwater (levels and quality) will take place using existing monitoring boreholes during construction phase.

Inspections of silt control measures critical after prolonged or intense rainfall, while maintenance will ensure maximum effectiveness of proposed mitigation measures.

Residual effects on surrounding water quality, hydrology, hydrogeology and existing drainage regime are considered not significant and primarily short term in nature. Existing on-site drainage system will remain active during the construction and operation and will be complemented by drainage plan designed for proposed project.

Sensitive hydrological features are unlikely to be impacted on by excavations / drains or other any general construction works given the setback distances. Significant long-term effects not predicted.

Environment Response
Storm Water:

- Decommission plans suggest site drainage works upgraded during decommission works however the nature of this upgrading works is unclear. Clarity on same necessary;
- Discharge points from linear interceptor drains and collector drains limited with effect that diffuse discharges will be substantial, concern is drawn to final discharge points at receiving waters or streams within site area, wherein potential exists for final portion of infrastructure to be overwhelmed and fail;
- Applicant should be requested to qualify robustness of design;
- Stream crossings. Silt fencing specifications not provided for silt fences utilised along stream crossing points;
- Details on diffuse drainage termination points (where collected surface or sub-surface water is safely released, dispersed, or managed to prevent erosion, flooding, and water pollution); do not appear to be located in suite of drawings. Applicant should provide these details.
- Termination points for combined on-site drains and interceptor drains need to robust to manage excess of water. Details and calculations should be provided that demonstrate the design is sufficiently robust to cater for expected flows;
- Drainage swales serving steep areas should ideally be surface dressed in hessian cloth or similar to prevent erosion whilst not preventing foliage from becoming established in swale.

Hydrology:

- Hydrology report suggest no private well within 750m of any turbine however there are 2 no. listed eircodes that are both with 400m of T10 namely, Eircode's: X91 K7R7 & X91 P6K8: Regardless of future plans for these, still exists a water supply herein which in the absence of a public water supply, is assumed to be a well;
- Well needs to be shown in relevant drawings and documentation with impacts (if any) to be clarified.

Watercourse Crossings

Watercourse Crossing No.	Project detail	Proposed crossing methodology	In Stream works required?
1	Grid Connection Option One	Horizontal Directional Drilling	No
2	Grid Connection Option One	Horizontal Directional Drilling	No
3	Grid Connection Option One	Horizontal Directional Drilling	No
4	Grid Connection Option One	Horizontal Directional Drilling	No
5	Grid Connection Option One	Horizontal Directional Drilling	No
6	Grid Connection Option One	Horizontal Directional Drilling	No
7	Grid Connection Option Two (and construction access into T6, borrow pit and deposition area)	Horizontal Directional Drilling	No
8	Internal access road south west of T5	Clear Span Bridge	No
9	Internal access road between T9 and Site Entrance 1	Clear Span Bridge	No
10	Internal access road between T8 and Site Entrance 4	Clear Span Bridge	No
11	Internal access road from T6 into main site for operational maintenance	Clear Span Bridge	No

Fig: Details of watercourse crossings to GCO 1 and 2

Chapter 10 Shadow Flicker

There will be no impacts from shadow flicker resultant of the grid connection aspect(Options One and Two) of the proposed overall development.

Chapter 11 Material Assets

Context

A 110 kV high voltage ESB (HV) overhead line (OHL) (that includes a wooden pole set) crosses through east of proposed wind farm site at location of proposed GCO Two connection. OHL is the Great-Island to Kilkenny line which links to Great Island 220 kV power station approximately 11 km south east (Campile, Co. Wexford). Series of low voltage (LV) and medium voltage (MV) OHLs accompanied with electricity poles within 50 m of the proposed GCO One. One of the MV OHLs can be observed to north of the site location. Remainder LV and MV OHLs run along proposed GCO One. Proposed GCO One crosses under a MV OHL at Castlebanny.

No water network infrastructure (i.e., sewer or watermains) identified within or immediately along GCO One.

No gas network infrastructure were identified within or immediately or along GCO One.

No telecoms infrastructure was identified within or immediately along GCO One.

Operation of either of proposed GCOs s will have no potential for direct significant effects to other material assets infrastructure (i.e., utility services) or resources (i.e., minerals/aggregates/quarries)

Construction Phase

No residual effect on telecommunications following mitigation by avoidance through design, and communication with telecoms operators during construction phase. Agreement 2RN has been signed by applicant.

No significant effect related to utilities during construction phase.

Should any existing underground services be encountered during construction, particularly GCO One, or at locations of TDR works areas, standard measures / practices in relation to underground services will be undertaken

A short-term, imperceptible, neutral, residual effect is predicted with regard to waste services, with this being permanent with regard to any waste generated which requires disposal at landfill.

Operational Phase

No significant impacts anticipated on material assets during construction phase.

Decommissioning Phase

No significant effects are anticipated during decommissioning phase and no specific mitigation measures proposed.

May be the case in relation to grid connection ducting and pipework this may remain in place for use by electricity service providers thereafter.

Mitigation Measures

Standard measures / practices to avoid or otherwise minimise impacts to existing utility assets and/or services provision will be undertaken:

- Should any existing underground services be encountered during constructionstandard measures / practices discussed in relation to underground services will be undertaken to reduce potential residual effects to unlikely, brief, negative, not significant effect. These will include the following:
    - Prior to the commencement of the construction phase, the applicant will engage with all utility asset owners / service providers;
    - A confirmatory survey of all existing services (electrical/ESB, water/Uisce Éireann, gas/Gas Networks Ireland (GNI), telecoms cables etc.) carried out prior to construction to verify assumptions in report and identify precise locations of services. Where assets / services are identified, the applicant will liaise with the service provider;
    - Utility assets / services (underground and overhead) e identified and clearly marked prior to pre-construction (site clearance) / construction / demolition activity occurring; #
    - No excavations to take place without prior consultation with relevant utility asset owners / service providers;
    - Digging around existing services, will be carried out as per best practice/guidances by hand to minimise potential for accidental damage;
    - Prior to mechanical excavation taking place ESBN will be consulted with the exact locations of all underground electricity cables established and verified;
- All works undertaken vicinity of underground assets carried out in accordance with current HSA guidance, namely HSA 'Code of Practice for Avoiding Danger from Underground Services';
- All works will be undertaken with in accordance with exclusion and safe operating distances around electricity infrastructure as set out in ESB Code of Practice, as well as HSA guidance including 'Code of Practice for Avoiding Danger from Overhead Electricity Lines';
- Any proposed works will require a minimum clearance distance of 11 m either side of electrical cables;
- Liaison with asset owners / service providers will continue as required throughout construction phase.

Chapter 12 Noise and Vibration

Stated to inform noise impact assessment, environmental noise survey conducted to establish existing baseline and background noise levels in receiving environment. Achieved through simultaneous wind measurements and noise monitoring over several weeks, capturing noise levels across a representative set of wind speeds and directions.

Three stages: Short-term construction and decommissioning phases, and long-term operational phase.

Transport Infrastructure Ireland (TII) (formerly National Roads Authority (NRA)) document Guidelines for the Treatment of Noise and Vibration in National Road Schemes (NRA, 2004) proposes daytime period (Monday to Friday 0700 – 1900 hrs) construction noise limits of 70 dB LAeq,1hr. Considering above guidance, construction noise limit of 70 dB LAeq,1hr is proposed for linear construction activities (i.e. access road and, cabling and grid connection route). Noise levels above 70 dB LAeq,1hr would indicate significant impact depending on duration and frequency of occurrence.

Nearest NSL to any point along proposed GCO One is H285 which is approximately at 76 m. Nearest NSL to any point along proposed GCO Two is H360, located approximately at 220 m. Table below shows that at these distances, predicted construction noise levels at the nearest NSLs are below adopted significance threshold outlined in Section 12.1.7.1 of EIAR and no specific mitigation measures are required.

Impacts at various distances to GCO tabulated below.

Item (BS 5228 Ref.)	Plant Noise Level at 10m Distance (dB $L_{Aeq,12hr}$)	Assumed % on-time	Calculated Construction Noise Level dB $L_{Aeq,T}$ at distance from works (m)			
			20 m	25 m	50 m	100 m
Tracked Excavator (C.2.7)	70	45%	61	55	48	40
Vibratory Plate (C.2.41)	80	25%	68	61	54	46
Dump Truck (C.2.32)	76	30%	63	59	52	44
Wheeled Loader (C.2.8)	68	25%	56	53	46	38
HDD (Directional drilling - C.4.96)	77	30%	66	64	58	52
HGV (C.6.19)	76	45%	67	58	51	43
Total Construction Noise	--	--	73	68	61	54

Fig: Indicative Noise Levels for Typical Construction Plant at Distances from Grid Connection Works

Stated noise from construction activity at nearest Noise Sensitive Locations (NSLs) are expected to be below recommended threshold values. Associated construction noise and vibration not expected to cause significant effects conducted in accordance with best practice guidance contained in BS 5228-1:2009+A1:2014 Code of Practice for Noise and Vibration Control on Construction and Open Sites – Noise and BS 5228- 2:2009+A1:2014 Code of Practice for Noise and Vibration Control on Construction and Open Sites – Vibration. Subject to good working practices.

No significant noise or vibration effects associated with potential impacts from operation of proposed grid connection.

Environment Section Response

Environment have stated following in their consultation response:

- Noise guidance documents ETSU-R-97 and the IOA GPG should be principal documents used to assess noise with WEDG 2006 and Draft WEDG 2019 used to supplement.
- Mitigation measures for AM noise must be provided prior to construction. Post construction testing must be carried out to determine if AM Noise likely to be problem with site. Mitigation measures must be shown before granting of permission to determine if mitigation measures possible;
- Activities such as blasting if required would void noise modelling data and trigger the requirement for remodelling. Should be confirmed in advance;

- Applicant has suggested in baseline noise assessment that agricultural noise, road noise and other anthropogenic sources were observed. Applicant would need to elaborate on anthropogenic noise sources and verify if assessment made allowances for existing wind turbines in locality and removal from baseline assessment.

Chapter 13 Landscape and Visual

In relation to other features of proposed project, such as Grid Connection Options (GCO) One and Two and works areas, their study area relates to their immediate context and a 50m corridor either side of these linear features.

With regard to landscape context, in the current Kilkenny County Development Plan, the proposed development is situated in the LCT – Uplands and straddles LCA 'C – Southwestern Hills' and 'E – South Eastern Hills'.

Construction Visual Effects

Stated visual effects at the construction stage are deemed 'Not Significant'. In agreement with. The topography and land cover of the proposed wind farm site will remain largely unaltered with construction being limited to tracks, areas of hard standing for the turbines, the on-site substation compound, a telecoms mast, two temporary site construction compounds, two borrow pits, three onsite clear-span bridges, a met mast.

Excavations will tie into existing ground levels and will be the minimum required for efficient working. Any temporary excavations or stockpiles of material will be re-graded to marry into existing site levels and reseeded appropriately in conjunction with advice from

It is important to note that both GCOs One and Two and TDR works areas will result in very minor and localised landscape effects (Electricity cables between individual turbines and the substation, and the grid connection infrastructure, will be placed underground). It is also important to note, with regard to both GCOs One and Two and TDR works areas, that any areas of disturbed ground or removed vegetation will be fully reinstated post-construction completion. It is important to note that both GCOs One and Two works areas will result in very minor effects.

Operational Visual Effects

Much of the GCO One route is consistent with landform of central study area, that being a locally elevated plateau of hills and ridges. GCO One route passes just west of River Arrigle, before heading west towards a locally elevated ridge oriented in a north-south direction in the townland of Castlebanny.

The GCO One passes along third class roads and some sections of private land. The surrounding landscape is predominately comprised pastoral farmland and areas of commercial conifer forestry. Areas of forestry are more notable in more elevated lands at either end of GCO One.

GCO Two route is entirely contained within immediate study area and passes across pastoral lands and adjacent to existing areas of commercial conifer forestry within site boundary.

Electricity lines between individual turbines and substation, and grid connection infrastructure, placed underground (aside from the pylon structures constructed to loop in to overhead line for GCO two);

Decommission Visual Effects

Stated visual effects at decommission stage are deemed 'Not Significant'. In agreement with. No decommissioning resultant of proposed GCOs.

Chapter 14: Air Quality and Climate
Renewable energy is required to ensure targets set out in CAP25 are met. Such targets include up to 80% of national grid being generated from renewable sources including 9 GW onshore wind by 2030. CAP25 aims to phase out and end the use of fossil fuels in electricity generation by 2030.

Beneficial impacts to air quality from generation of renewable electricity from proposed project. NOX emission savings which may otherwise have been generated from fossil fuels. Impact to air quality has been assessed as beneficial, long-term, slight and not significant.

The potential for dust generating activities is considered for the wind farm site, the grid connection area and the turbine delivery route.

With regard to construction works, there are between 1 and 10 highly sensitive residential properties within 20 m of the grid connection area. Dust protection measures detailed in CEMP (dust suppressing and monitoring). This shall be adhered to in event of GOPP.

The grid connection cable will be buried underground so protected from extreme weather

Chapter 15 Cultural Heritage

Study Area
Study area for two proposed Grid Connection Options (GCOs) smaller as footprint of these works are small-scale and proposed GCO be buried beneath existing road network (for the most part) (50m to either side).
As GCO Two is located within study area of proposed wind farm site and follows route of proposed site roads. Included in assessment of proposed wind farm site. As such, an individual study not defined for GCO Two.
The proposed GCO One follows the existing L3417 and L3418 roads, both established roads with exception of c. 2.5 km section which passes through pasture fields to south of a stream. No previous excavations taken place within 50 m of proposed GCO One.

AH NO.	RMP NO.	LOCATION	CLASSIFICATION	DISTANCE FROM PROJECT
Proposed Grid Connection Option One				
AH02	KK036-014----; KK036-014001-; KK036-014002-; KK036-014003-	Mullennakill	Redundant record; Church; Graveyard; Mill - unclassified	Immediately east of proposed GCO One

Fig: Recorded Archaeological Sites within the Study Area.

Context
Proposed wind farm site primarily comprised of coniferous forestry plantation and surrounding pasture fields. 30 no. previously unrecorded sites of cultural heritage significance identified within 2 km study area of proposed wind farm site as part of assessment.

1 no. recorded monument is located within 50 m of proposed GCO One (AH02). The 3 no. unrecorded monuments previously unrecorded monuments of cultural heritage significance have been identified within 50 m of proposed GCO One. A small number of vernacular structures are depicted along the proposed GCO One.

A group of archaeological sites (AH99), including a redundant record, is located within 50 m of proposed GCO One. Additionally, ZoN of an enclosure (AH04) is within 50 m of the proposed GCO One.

Review of the Excavations Bulletin (1970-2025) has confirmed no previous archaeological investigations have taken place within proposed wind farm site or along the GCOs. 3 no. cultural heritage sites are within the proposed wind farm site. Comprises buildings depicted on 1842 OS map, have upstanding remains (CH01), a lime kiln with upstanding remains (CH35) and site of two vernacular buildings (CH36). In addition, two unnamed road bridges (CH32 and CH37 – stone bridges) not recorded as protected structures nor listed in NIAH, are located along path of proposed GCO One.

Construction
No archaeological, architectural or cultural heritage sites subject to statutory protection located within proposed wind farm site, GCO areas. As such no predicted direct effects on any such sites within footprint of development requires excavations and groundworks.

Grid Connection Options
Construction of proposed GCO One will involve excavation of trench through ZoN for 7 no. group of recorded monuments: AH02 (a church, graveyard, mill and redundant record). Whilst construction of current road (L3418) through these areas, within cable will be laid, likely to have impacted on potential archaeological resource, remains possible excavation activities may have direct and negative (permanent) effects on currently unknown associated archaeological remains. Prior to application of mitigation these effects have potential to range from moderate to very significant negative, depending on the sensitivity of any such archaeological features.

Proposed GCO One also passes through location of two unnamed bridges (CH32 and CH37). Proposed GCO One carried beneath bridges by Horizontal Directional Drilling (HDD). HDD method will avoid direct effects to bridges CH32 and CH37. In addition, the the ruinous remains of a National School (CH05), a vernacular farmyard complex
Groundworks are proposed at Location 10, within ZoN of site of a castle (AH43). No upstanding remains of castle, although sub-surface remains of building or related features may survive. Groundworks are proposed at Location 14, at small area of grass at where L7498 meets R704. Effects have potential to range from moderate to significant negative, depending on sensitivity.

CH NO	TOWNLAND	DESCRIPTION	DISTANCE FROM DEVELOPMENT

CH32	Glenpipe	An unnamed bridge marked on the 1842 OS map. It appears to have been modernised, although the historic structure may survive.	Within proposed GCO One
CH37	Glenpipe	An unnamed bridge marked on the 1842 OS map. It appears to have been modernised, although the historic structure may survive.	Within proposed GCO One
CH05	Mullennakill	1842 OS map, labelled 'National School Ho.' One building has been removed by the time of the 1903 OS map. Aerial imagery shows the ruinous remains of at least one building.	Immediately west of proposed GCO One
CH06	Mullennakill	Farmyard buildings are depicted on the 1842 OS map and replaced/enlarged by the time of the 1903 OS map. Aerial imagery shows that upstanding remains survive.	Immediately west of proposed GCO One

Fig: Cultural Heritage Sites within the Receiving Environment.

Operation
All sites of archaeological, architectural and cultural heritage significance identified within 2 km and 5 km study area of proposed wind farm site listed in EIAR Appendix 15-4 of this EIAR. Assessment of all sites within the relevant study areas included in EIAR Appendix 15-4. Moderate indirect (medium term) effects predicted in relation to CH01 (vernacular structures), CH35 (Lime kiln), AH19 (ringfort), AH45 (ringfort), AH52 (ringfort) and AH69 (megalithic). No effects predicted upon archaeological, architectural or cultural heritage resource as result of operation of either of proposed GCOs, proposed TDR or proposed operations.

Mitigation
Stated that prior to commencement of construction, programme of archaeological test trenching will be carried out at greenfield locations and cable route.

All stripping of topsoil across proposed project, including excavations as part of proposed GCO One will be monitored by a suitably qualified archaeologist.

Stated should any features of archaeological potential be discovered during the course of works further mitigation will be implemented as required and agreed with the National Monuments Service.

Stated project archaeologist and geologist to be appointed.

As per referral to Kilkenny County Council Architectural Conservation Officer, recommended all groundworks shall be monitored under archaeology licence and supervision with condition reference no. 3 within archaeology section of October 2022 OPR Practice Note PN03 Planning Conditions to be adhered to.

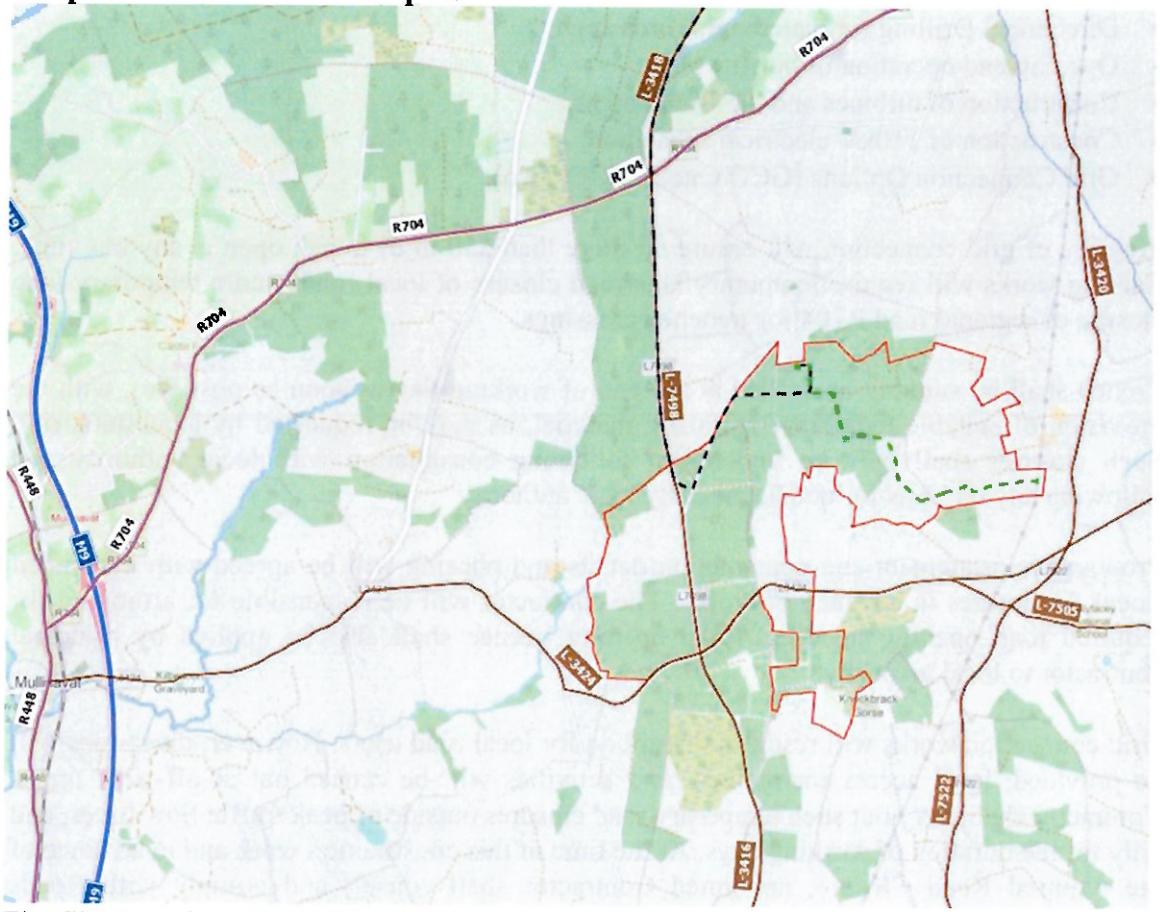


Fig: Site Location at Local Level

Context - Road Network

Immediate surroundings of proposed wind farm site comprise a network of local roads, nearest of which include L-3417, L-3424, and L-7499. R704 runs east–west approximately 2 km to the north of the nearest turbine and is the closest major route to the proposed wind farm site.

Deliveries

Majority of materials delivered to site will be delivered using maximum length articulated lorries or smaller vehicles. M9 motorway, primary major route within study area, traverses western extent of study area and lies approximately 3.5 km west of turbine array at its nearest point. In addition the N25, the N24, N29, and N30 national roads are located within the central study area. The N25 is the only national road that crosses the central study area, situated just over 4 km southeast of site at closest point

Traffic management of decommissioning phase advised by road conditions at time of decommissioning.

Construction

Proposed project has construction period of approximately 24 months envisaged to commence in 2028. Electrical grid connection/substation installation and commissioning are expected to take place during period of 9 months in timeframe.

Stages of construction may be as follows:

- Construction and upgrade of site entrances;

- Construction and upgrade of internal site roads including site entrances;
- Directional Drilling for watercourse crossings;
- Opening and operation of borrow pits;
- Construction of turbines and hardstand areas;
- Construction of 110kV electrical substation;
- Grid Connection Options (GCO One & GCO Two).

Progress of grid connection will ensure no more than 250 m of trench open at any one time. Cabling works will require temporary lane/road closure of local roads and a temporary lane closure of regional road R704 for trenched crossings.

Trench shall be suitably backfilled at the end of working day(as soon as possible), with the provision of suitable temporary surfacing material, as may be requested by local authority. Such closures shall only be undertaken following consultation with local authority and following any requests for notifications by local authority.

Proposed reinstatement and construction details and phasing will be agreed with associated Local Authorities in advance of works. The contractor will be responsible for arranging for required road opening licences. Road opening licence shall also be applied by principal contractor to local authority.

Grid connection works will result in disruption for local road users. However, diversions will be provided, local access maintained, and activities will be carried out at off-peak times. Contractor shall carry out such temporary road closures outside of peak traffic flow times, and only for the duration of working days. At the time of this construction work and in advance of the required Road Closure, appointed Contractor shall consult and comply with Roads Authority, An Garda Síochána and other Emergency services to agree suitable diversion route prior to implementing a road closure.

Stated to mitigate impact of cable laid within public road, reinstatement works will be backfilled and reinstated as soon as practicable. Reinstatement works will be undertaken in accordance with Purple Book" best guidance and practices. The proposed reinstatement and construction details and phasing will be agreed with associated local authorities in advance of the works. Contractor will be responsible for arranging required road opening licences. Stated grid connection route will be carried out at off-peak times

Traffic Management Plan by Tobin and Stage 1 Road Safety Audit (RSA) undertaken at proposed wind farm site access and at sections of Abnormal Indivisible Loads (AIL) haul routes where temporary works required.

A Road Safety Audit (RSA) was undertaken for this project. Entrance junctions have been designed in accordance with Transport Infrastructure Ireland (TII) document Geometric Design of Junctions (priority junctions, direct accesses, roundabouts, grade separated, and compact grade separated junctions) - DN-GEO-03060 May 2023.

Stated number of haul routes identified based on proximity to site and suitable road infrastructure. Stated mitigation measures on haul route include selection of viable route with lowest impact on the road network, avoidance where possible of sensitive receptors and urban setting, and to mitigate impact of delivery of wind turbines on road network - advanced works

will be undertaken (i.e., hardstanding, making signs demountable, utility diversions etc). The hardstanding works areas will be temporary in nature and removed once final turbine is delivered to site.

Stated other mitigation/precautionary measures include delivery programme to be submitted to Kilkenny County Council in advance of delivery of turbine components to the site, information to locals; residents in area will be informed of upcoming traffic related matters, e.g., temporary lane/road closures (if required) or night deliveries of turbine components, via posters in public places. Stated information will include contact details of developer's representative, who will be main point of contact for all queries from public or local authority during normal working hours. Stated an "out of hours" emergency number will also be provided

Stated that pre and post construction condition survey – a pre-construction survey of roads on approach to the site to be carried out prior to construction commencement to record condition of the road. A post construction survey will be carried out after the works are completed. The timing of these surveys will be agreed with Kilkenny County Council, including roads and transport section, through which the delivery route traverses, an Garda Siochána as may be required..

Minor improvements to sight lines in form of trimming and ongoing maintenance of existing foliage within lands of applicant shall be required upon completion of site access construction works on L3417, L7499, and L3424. Road sweeping to take place periodically.

Operational Phase
Grid connection advanced works will have moderate negative impact due to temporary lane and road closure for cabling works. Once advanced works are finished, the operational effects will be imperceptible over the 35 years of operation. GCO Two is within the proposed wind farm site and does not go onto public roads, therefore the effects will be Imperceptible.

Cumalative Impacts
Planning Application ABP-309306/21 approved to construct a 21- turbine windfarm and associated works at Castlebanny in County Kilkenny. The site is located north of the proposed project. Construction period is envisaged to be 24 months and Castlebanny wind farm is expected to generate an average of 60LVs and 18 HVs two-way movements per day. The haul routes are from the national road network (i.e. via M9 Exit 11 Mullinavat) to the R704 up to the site access. The grid connection connects the on-site substation at Castlebanny with the existing 110 kV overhead line at Ballyvool. The overall length of the grid connection between the proposed substation and the existing overhead line is approximately 4km, of which, 1km is within the site of Castlebanny wind farm, 2.7km is located off road and 0.3km is located along the public road corridor of the L3418. Operational traffic will be mainly for maintenance, with 2-3 individuals commuting to the site by LVs. Operational traffic is very low and will have an imperceptible effect.

Decommissioning
The on-site substation and 110 kV grid connection will not be removed at the end of the useful life of the proposed project as it will form part of the national electricity network. Therefore, the substation will be retained as a permanent structure and will not be decommissioned.

Stated the Traffic Management Plan is a living document and will be developed through the detailed design and construction phase with ongoing consultation with Kilkenny County Council, An Garda Síochána, Emergency Services and other stakeholders.

Chapter 17 Accidents and Natural Disasters

The study area for the major accidents and natural disasters assessment is proposed project extent, as shown in Figure 1-1 of Chapter 1 (Introduction). This incorporates proposed wind farm site, two electrical grid connection options and turbine delivery route works areas.

The potential risks include:

- Striking strategic infrastructure resulting in damage, disruption to services and / or fatalities / injuries;
- Contamination of ground or surface water. Associated with construction works;
- Major traffic accidents resulting from construction phase traffic or temporary construction traffic management measures;
- Movement of peat within the site during construction / Landslide;
- Flooding of site during construction, operational and decommissioning stage;
- Incident at nearby Seveso site (New Ross/Rosbercon) involving release of dangerous substances;
- Collapse / damage of structures/infrastructure;
- Risks related to climate change such as increased frequency and strength of storms, heightened flood risk, risk of extreme temperatures;

The following is noted:

- Although two areas prone to fluvial flooding along GCO One, underground cables along GCO One will be positioned predominantly within local road network or horizontally directional drilled under watercourses. No flood risk areas along GCO Two.
- No significant geological resources or geological heritage sites are known at GCO One and/or Two.;
- No COMAH establishments located in proximity to the proposed GCO One or Two. The above locations also closest in proximity to GCO One and Two. GCO One and Two are located approximately 9 km and 7 km from both COMAH establishments mentioned above, respectively;
- No underground telecommunications assets were found within or near proposed wind farm site. As such, proposed GCOs not expected to have potential to impact telecommunication links. Always potential there may be some localised underground telecoms cables / assets within the road network. Surveying to take place pre and during construction;
- No potential cumulative effects identified for any part of proposed project (including the route of the proposed GCOs

Following the screening and assessment phases and with all mitigation measures implemented, it is the local authority 'view there are no significant residual effects from the proposed project in relation to the risk of major accidents and/or natural disasters.

Chapter 18 Interactions of the Foregoing

With any development there is potential for interaction between effects of different environmental aspects. As part of requirements of EIAR, interaction of effects on surrounding environment has been addressed in Chapter 18 (Interaction of the Foregoing). A matrix is presented in Chapter 18 of the EIAR (Interaction of the Foregoing) that outlines the different environmental aspects which have potential to interact as a result of the proposed project. Interactions have been identified in early stages of project and where the potential exists for interaction between environmental impacts, EIAR specialists have taken the interactions into account when making their assessment. Potential interactions (both positive and negative) have been considered for construction, operation and decommissioning phases of each of different environmental aspects. All environmental factors are interrelated to some extent. Having assessed interaction of potential effects during the construction, operational and decommissioning phases determined that there are no additional interactions further to those described in the chapter. The detailed assessment of interactions has found they do not give rise to any significant effects. The proposed project will have some positive effects on an international, national, regional and local level, particularly in terms of helping to achieve renewable energy targets and domestic energy security and through the use of the community benefit scheme to support local initiatives.

The excavation / disturbance of ground where required (e.g. proposed GCO One and Two works areas) during construction, which if not properly managed or mitigated, has the potential to generate dust emissions to air and wastewater with suspended solids, potentially increasing run-off to surface waters and/or being transported off site by construction vehicles.

Proposed mitigation measures will reduce the potential direct and indirect effect on Population and Human Health from activities associated with the proposed project.

Construction Environmental Management Plan

The Construction Environmental Management Plan ('CEMP') including Environmental Risk Plan, Emergency Management Plan, Waste Management Plan (WMP) submitted with this application should be updated by the contractor, with detailed construction phase mitigation measures, including those listed in EIAR and NIS submitted. In the event An Comisiúin decide to grant permission a CEMP should be considered a 'live' document and as such will be reviewed on a regular basis to allow changes to construction programme, operations or unforeseen issues be incorporated at any stage throughout the project as deemed necessary by the applicant, agents or relevant authorities. CEMP will be subject to continual review to address any outstanding matters.

Specific Grid Connection Options 1 and 2 Construction Methodology Reports by Mable Consulting Engineers.

As per Appendix 1, Environment Section have responded to CEMP outlining following considerations be taken on board.

- Suggested adherence by all staff to CEMP will require proper induction training to beincorporated;

- Dewatering measures generic in description and not site specific(also stated in Hydrology and Hydrogeology);
- Applicant offered schedule of works inclusive of potential works for 110kv connector ducting. Potentially viable over 2 no. routes. One of proposed routes is referred to as option-1 (110KV ducting route) alongside river and flood plain;
- A more inclusive schedule of works is required that covers both ducting options;
- This should set out how
    - Option 1 avoids seasonal flood risk periods applicable to river;
    - The needs to provide details and confirmation that schedule of works compatible with flood/work-zone avoidance strategy that would see works in this area limited to times at flooding is not expected;
- Groundwater monitoring mitigation measures in documentation states "where dewatering is to take place it will be monitored once per day"
    - This is inadequate level of scrutiny;
    - Additionally, level of inspection and observation unknown regarding suggested turbidity alarms as it the means of the alert (siren/alarm or SMS alerts)? How will these be monitored and how often will they be calibrated?
- CEMP makes no inclusion of blasting? Environment query whether this is required for borrow pits?
- CEMP doesn't provide specifications on silt fencing, nor does it provide details on settlement tanks as may be applicable based on appropriate sizing which should be commensurate with size and scale of relevant area to be dewatered or drained.
- Regarding re-fueling of plant and the use of spill kits. Applicant should be requested to detail how spill kits are effective on unsealed pavement such as on compacted 6F2 or SR21 or similar and what alternative measures might be appropriate to protect and preserve Q5 streams in area as identified in catchment study;
- Question how will constructed swales and open channel drains along access roads be secured from erosion, especially over steep ground;
- Proposed buffer zones to protect aquatic zones should be clearly marked in advance of works commencing to preserve their integrity;
- Site compounds or any area designated to the maintenance, cleaning, refueling and repair work of vehicles and machinery must be located at least 50m of the nearest aquatic zone;
- Buffer zones and methodology to install and manage same should be included in the CEMP;
- Collected silt laden runoff and clean water to be discharged in close proximity to streams or within buffer zones. The applicant should clarify mitigation measure to address these concerns.
- Provide a RAMS (Risk Assessment Method Statement) for the removal of contaminated material in the event of a hydrocarbon spill during the construction phase;
- Details of the concrete lagoon required as conflicting information regarding concrete deliveries and chute washing-out protocols with duel proposals either suggesting bins/skips in some documentation and referencing lined lagoons elsewhere in the literature;
- Applicant would need confirm which system is to be implemented and how excessive truck volumes managed during large concrete pours;
- The finished CEMP needs to fully detail directional drilling mitigation measures and reclamation process and disposal for bentonite slurry;
- Refueling details not site specific and development offers no hardstanding area where spills can be routinely trapped and contained in bespoke hydrocarbon interceptor;

- There is a reliance on drip trays and good practices. Applicant should be requested to discuss options to address omission where possible;
- Refueling: Site equipment with suitable mobility should be brought to refueling hub with large plant/machinery having to be refueled at workface by either mobile diesel bowser with full-time staff member being trained operator or alternatively by fuel delivery agent under supervision of a full-time staff member being a trained operator;
- Applicant should include elaborate site-specific Risk Assessment Methodology Study (RAMS) to cover suchactivities.
- The temporary storage of waste will require an appropriate waste permit.

PART VI CONDITIONS, COMMUNITY GAIN AND BONDS

Should An Comisúin Pleanála consider that the issues raised in this report are addressable and ultimately decide to grant permission the following conditions should be considered for inclusion;

- ✓ 10 year permission;
- ✓ All mitigation and monitoring details within the EIAR and NIS to be fully implemented;
- ✓ Construction and Environmental Management Plan including but not limited to
  - Construction hours;
  - Maintenance of local road network;
- ✓ Requirement for an Ecologist Clerk of Works;
- ✓ Control of storage and stockpiling material;
- ✓ Surface water management plan with controls including silt management etc.;
- ✓ Dust suppression and monitoring;
- ✓ Consultation with District Engineer regarding pre and post condition survey, repair of damages at developers own cost and agreement for strengthening of haul routes;
- ✓ Traffic Management Plan;
- ✓ Advance notice for road closures and extra ordinary loads;
- ✓ Correct control of all fuels and chemicals on site;
- ✓ Protocol for maintenance of telecommunications;
- ✓ Surveying and Monitoring of Archaeology;
- ✓ Full details around reinstatement / decommissioning;
- ✓ Bond;
- ✓ Development Contribution condition;
- ✓ Community Benefit Fund;
- ✓ Appointed Community Liaison Officer for duration of construction works and initial period of commissioning/operation.

PART VII OVERALL CONSIDERED VIEW

In relation to the Kilkenny City and County Development Plan, on 15th October 2021, the Minister of State at the Department of Housing, Local Government and Heritage, notified Kilkenny County Council of this intention to issue Direction to the Kilkenny City and County Development Plan 2021-2027.

In accordance with Section 31(4) of the Planning and Development Act 2000, those parts of the Kilkenny City and County Development Plan 2021 – 2027 Plan referred to in the notice shall be taken to have not come into effect, been made or amended; namely;

Section 11.4 Kilkenny Targets
Section 11.5.1 Current status and targets
Figure 11.4 Wind Strategy areas.

The Planning Authority is awaiting a further direction from the Minister in this regard. Consequently, the sections of the Development Plan referenced in the Draft Direction cannot be taken into account for determination of application at this time.

Due to insufficient information in the Construction Environment Management Plan and associated documentation including clarification of a large number of matters Kilkenny County Council is recommending to An Coimisiúin Pleanála that they refuse the application.

The aforementioned matters include robustness of construction and engineering methods, measures to deal with seasonal flooding, measures to deal with potential run off from soil heaps functionality of tubtridy alarm system, dewatering methods, silt fencing methods, blasting methods, demarcation of buffer zones methods, refuelling, security and emergency measures with regard to soil erosion, traffic control measures, insufficient width to hosts road for stop go system s(thus hence requiring road closures(potentially lengthy)).

In addition to the above, it shall be noted that concurrent application ref. PAX10.323057 for windfarm comprising of 10 no. turbines and an anemeter mast following assessment by KCC is being recommended to be refused by An Coimisiúin Pleanála due to unacceptable visual and residential amenity impacts and insufficient information.

Kilkenny County Council are therefore not in a position to recommend that An Coimisiúin Pleanála request further information to address the above matters raised (including by the Council's Roads and Environment Sections) as this would constitute project splitting.

On the basis of the stated insufficient information, the proposed grid connecion is not acceptable and would have negative impacts on the environment and amenities of the immediate and wider area, and local traffic and transport.
It is the view of the Planning Authority that a grid connection cannot be granted in isolation from the wind farm as both form the basis of one intrinsict project.

The Planning authority is therefore recommending to An Coimisiúin Pleanála that permission be refused for the grid connection as it is currently proposed.

Niall Sheehan
23/02/2026
Niall Sheehan
Executive Planner

Denis Malone,
Senior Planner 23/02/26