

**DIRECTOR GENERAL'S REPORT
SECTION 37 E (4) OF THE PLANNING AND
DEVELOPMENT ACT 2000 (as amended).**

**Carrow Renewable Energy Ltd, subsidiary of
Atlantic Infrastructure Renewables Ltd. (AIR)**

**Strategic Infrastructure Development to An Coimisiún
Pleanála**

An Coimisiún Pleanála Case Reference – ACP-324164-26

Limerick City & County Council – 26/324164

Development Address – Counties of Tipperary and Limerick.

Development Description – The construction of 14 no. wind turbines: a 10-year permission and an operational period of 35 years from the date of commissioning of the proposed development is being sought with subsequent decommissioning

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1. Introduction

This report has been prepared in accordance with the requirements of Section 37E (4) and (5) of the Planning and Development Act, 2000, as amended, following on from the submission of a Strategic Infrastructure Development (SID) to An Coimisiún Pleanála (ACP) for a proposed wind farm in County Tipperary. The purpose of this report is to set out the views of the planning authority on the potential effects of the proposed development on the environment and the proper planning and sustainable development of the authority's area, having regard to the considerations set out under Section 34(2) of the Planning and Development Act 2000, as amended. Section 37E (5) of the Act requires that before this report is submitted to An Coimisiún Pleanála, the Director General shall submit the report to the members of the authority and seek the views of the members on the proposed development. The members may, by resolution, decide to attach recommendations to the report (Section 37E (6) of the 2000 Act refers).

2. Proposed Development

This application relates to a 14 no. turbine wind farm and associated infrastructure in County Tipperary, including underground cabling to connect the proposed development to the Killonnan substation in County Limerick.

Proposed Development Components in County Limerick

Within County Limerick, the project footprint is confined to the proposed grid connection route. No wind turbines are proposed in County Limerick. The relevant components of the proposed development are noted below:

- The provision of underground electrical (110kV) and communications cabling from the proposed on-site 110kV electrical substation to the existing Killonnan 110kV electrical substation to facilitate the connection to the national grid;
- Provision of 58 no. joint bays, communication chambers and earth sheath links along the proposed underground electrical cabling route; and
- Reinstatement of land, road and track surface above the proposed cabling trench.

Joint bays are typically pre-cast concrete chambers where lengths of cable will be joined to form one continuous cable. They will be located at various points along the ducting route generally between 500 to 800 metres intervals. Joint Bays are 2.5m x 6m x 1.75m pre-cast concrete structures installed below finished ground level.

Earth Sheath Links are used for earthing and bonding cable sheaths of underground power cables, installed in a flat formation, so that the circulating currents and induced voltages are eliminated or reduced. Earth Sheath Link Chambers and Communication Chambers are located in close proximity to Joint Bays. Earth Sheath Link Chambers and Communication Chambers will be precast concrete structures with an access cover at finished surface level.

The applicant notes that the grid connection route is proposed to be laid entirely within a combination of existing road infrastructure and agricultural fields. The proposed grid connection underground cabling route contains 23 no. watercourse crossings. There are various construction methodologies employed for watercourse crossings i.e. horizontal directional drilling. An additional 12 no. drainage crossing points were identified during surveys of the underground cable route. There is also a requirement to cross the railway line.

A road closure would be required at the point of construction on any given day during the construction phase. The exception to this is the short 3.1km section of the N24 where it is proposed that a Stop & Go traffic management system will be implemented in order to maintain 2-way traffic flow. With respect to the traffic volumes that will be generated during the construction of the underground electrical cabling route, it is estimated that there will be approximately 14 daily return trips made by a truck transporting materials, and 4 made by a car to transport 10 construction staff to and from the site. The applicant states that the construction methodology of providing a proposed grid connection under and along local road networks is well established and accepted nationwide. They note that there are in excess of 300 wind farms currently operational in Ireland and the majority of these are connected to the national grid via underground cable connections predominantly along the public road networks. It is stated that details for the Traffic Management Plan for the proposed development will be agreed with Transport Infrastructure Ireland and the Road Sections of Tipperary County Council and Limerick City and County Council prior to construction and contact will be maintained with the Road and Traffic Section throughout the construction phase.

In relation to Uisce Éireann services, it is stated that these traverse the proposed grid connection route from County Tipperary to the existing Killonan 110kV substation. The applicant states that there will be no impact on the Uisce Éireann services from the proposed development.

3. Site Location

The wind turbines are proposed to be located 2.4km south of the village of Hollyford and 4.7km north of the village of Dundrum in County Tipperary. The proposed grid connection route includes for underground 110kV grid connection cabling from the proposed onsite 110kV substation, to the existing Killonan 110kV substation in the townland of Milltown, County Limerick. The proposed grid connection route to Milltown, County Limerick measuring approximately 37km in length, is primarily located within the public road corridor. Approximately 3.2km is proposed within National Roads, 15.5km proposed within Regional Roads, 16.2km proposed within Local Roads, 870 meters proposed within the Proposed Wind Farm internal road network and approximately 1.1km proposed within agricultural lands in Brittas, Cloghnadromin and Kishyquirk, County Limerick.

The route enters County Limerick from County Tipperary to the east. It travels west/ north west to Killonan. The proposed route traverses a series of regional and local roads, including sections of the N24, R497, R505 and local roads L1156, L1155 and L1154. Overview provided below in relation to the relevant villages:

- Doon to Cappamore via R505
- Cappamore to 'Brittas' via R505
- Onwards towards Killinure National School
- Onwards to St Patricks Church, Boher
- Crosses south over railway line
- Moves southwards from here to N24 at junction with L5102 'Clooncunna'
- Continues west along N24 to Killonan Substation (termination point)



Route Overview – County border identified in 'yellow' for context

4. Policy

Limerick Development Plan 2022 – 2028

The following objective is relevant to the proposed development:

Objective IN015 – Electricity Grid Development:

It is an objective of the Council to support the Eirgrid Grid Development Strategy – Your Grid, Your Tomorrow (2017) (ENCL1), to serve the future electricity needs of Limerick. This includes the delivery, integration and connection of renewable energy proposals to the grid in a sustainable and timely manner, subject to appropriate environmental assessment and the planning process.

Other relevant policies are noted below:

- Policy CAF P1, Climate Action
- Policy CAF P2 ,Transition to a Low Carbon Economy
- Policy CAF P6, Renewable Energy
- Objective CAF O8, Renewable Energy Objective
- Objective CAF O27, Renewable Energy Production
- Objective CAF O31, Wind Energy supporting Infrastructure
- Objective CAF O28, Assessment of Renewable Energy Projects
- Objective EH O50, Work to Protected Structures
- Objective EH O36, Preservation of the Archaeological Heritage

- Objective EH O37, Preservation of unrecorded/newly discovered Archaeological Heritage
- Objective EH O40, Proper procedures during the planning process
- Objective TR O37, Land Uses and Access Standards
- Objective TR O38, Improvements to Regional and Local Roads
- Policy TR P12, Safeguard the Capacity of National Road
- Objective TR O39, National Roads
- Objective TR O40, National Road Network Drainage Regime
- Policy TR P13, Strategic Regional Road Network
- Objective TR O41, Strategic Regional Roads
- Objective HO O3, Protection of Existing Residential Amenity
- Policy EH P1, Protection of Natural Heritage and Biodiversity
- Policy CAF P5, Managing Flood Risk
- Objective EH O31, Views and Prospects

5. Environmental Impact Assessment / Appropriate Assessment

The proposed development is strategic in nature, and the application has been made directly to An Coimisiún Pleanála. Therefore, An Coimisiún Pleanála is the Competent Authority in respect to appropriate assessment of the project. A Natura Impact Statement has been submitted in relation to the project and accompanies the application.

An Environmental Impact Assessment Report ‘EIAR’ has been submitted with the application. Relevant items of the EIAR are considered below.

6. Planning and Environmental Issues

Principle of Development

As per the requirements of S37E (4) of the Act, this report deals specifically with the requirements set out in S34(2) of the Act. It is noted that the physical works within Limerick relate to the grid connection route and final connection to the existing Killonan 110kV substation in the townland of Milltown. The route will be underground. The main impact for County Limerick is likely to relate to the construction stage and works associated with laying of the cabling.

The proposed grid connection route seeks to utilise the Killonan 110kV substation, facilitating the proposed Wind Farm’s connection to the national grid. The LDP recognises Killonan 110kV Substation as an ‘important node’ for the supply of electricity to Limerick City and the Mid-West Region. The LDP also states it’s support for EirGrid’s ‘Transmission Development Plan 2020-2029’ which includes the redevelopment of Killonan Station.

The majority of the grid connection route is located in ‘Preferred Areas’ for Wind Energy Locations in the LDP. It is noted that a section of the grid connection route lies within an area designated as being ‘unsuitable for new wind energy development’. Objective CAF O30 clearly prohibits the location of wind farms and wind energy infrastructure within such areas.

However, the grid connection route essentially provides for the transmission of electricity from the wind farm site and could be considered as electricity transmission infrastructure rather than wind energy infrastructure. In this regard, while it is noted the grid connection route is part of the overall windfarm development, the designation “unsuitable for new wind energy development” does not preclude the development of electricity transmission development and therefore the provision of a grid connection through such lands as proposed could be acceptable. As above, it is also noted that the grid connection route is underground.

Traffic, Access and Road Safety

- The Mid-West National Road Design Office have no observations to make in relation to the proposed development.
- Transport Infrastructure Ireland – ACP advise that there is no report on file at this stage.

The wind turbine delivery route commences in Ringaskiddy in County Cork and does not travel through County Limerick.

The Councils Roads department have reviewed the submitted documentation. In general terms, they consider the proposal to be premature and incapable of proper assessment and cannot support the development as currently presented. The Roads section considers that the planning application, as submitted, is materially deficient in critical information required to adequately assess the potential impacts of the proposed development on the capacity, safety, and operational efficiency of the National, Regional, and local road network along the proposed route.

In particular, the information submitted in relation to the proposed underground grid connection cabling is generic in nature and fails to provide the necessary site-specific detail required to properly assess the proposal. They state that the application does not demonstrate, by way of appropriate supporting documentation or technical assessment, that the proposed underground cabling and associated joint bay infrastructure can be accommodated within the existing public road corridor without conflict with existing utilities or adverse impact on the structural integrity and safe operation of the road network.

The proposed cabling route traverses a section of regional road in the village of Cappamore, which has recently been subject to significant infrastructure works, including underground cabling associated with a solar farm development, the installation of services by Uisce Éireann, and the presence of existing legacy utilities. Having regard to the extent and density of existing and recently installed services, the available corridor within the carriageway and adjacent footpaths is now significantly constrained. Based on the information submitted, there are concerns regarding the amount of physical space available to accommodate the proposed cabling, particularly in the village of Cappamore.

Furthermore, it is stated that the proposed joint bay infrastructure is of a significant scale, with units measuring approximately 4.5 metres in length and 2.0 metres in width, together with associated ducting and a C2 communications precast chamber located externally to this footprint, with an approximate depth of 1.4 metres. The scale and depth of this infrastructure represent a substantial encroachment into the limited-service corridor. When considered

cumulatively with existing infrastructure, this would effectively sterilise sections of the public roadway and footpath corridor.

The Roads department consider that such sterilisation would prejudice the ability of The Council to undertake essential future works within the public road, including drainage upgrades, water services infrastructure, service connections, and general maintenance and renewal of road and utility infrastructure.

Notwithstanding these constraints, it is stated that the applicant has not submitted a site-specific utilities constraints assessment, detailed topographical survey, coordinated services layout, or evidence of trial hole investigations to verify existing service locations and depths. This is stated as representing a significant omission and a failure to demonstrate that the proposed development is feasible within the available corridor.

In addition to the above, the following critical information is states as having not been submitted as part of the application, further preventing a proper technical assessment:

(a) Construction Traffic Route

Details of the construction traffic management route, including concrete delivery routes, have not been submitted. No information has been provided in respect of the routing of construction traffic from the Limerick side, thereby preventing a full assessment of potential impacts on the receiving road network.

(b) Directional Drilling at Bridges & Culvert Installation Restriction

Details identifying existing bridges and culverts that may be affected by the proposed underground grid connection cabling are required. Furthermore, no detailed structural surveys have been submitted in respect of bridges where directional drilling is proposed. In the absence of such information, it is not possible to assess the potential impacts of the development on the structural integrity and safety of existing structures.

It should also be noted that ducting installations over culverts within the public road will not be permitted by the Council. The application fails to demonstrate how this critical constraint has been addressed in the design of the proposed cabling route, and no alternative solution has been put forward to avoid conflict with existing culvert infrastructure.

Having regard to the above, particularly in the context of the identified spatial constraints within the public road corridor, this lack of information constitutes a fundamental failure in the applicant's due diligence and significantly undermines the credibility and feasibility of the proposed development.

In the absence of sufficient and robust supporting information, the Roads Section cannot be satisfied that:

- The proposed development is technically feasible as designed;
- Existing infrastructure can be protected and maintained without conflict;

- The carrying out of the works will not give rise to significant disruption, safety hazards, or structural impacts; and
- The long-term functionality and maintainability of the public road corridor will not be prejudiced.

(d) Construction Management and Delivery Plan

The Applicant has failed to submit, a detailed Construction Management and Delivery Plan (CMDP). A condition regarding the same has been provided in the Conclusion section of this report.

Visual Impact

In relation to visual impact, turbines would be visible from a viewpoint in Pallasgreen in views to the east. There are existing windfarms in this view, and the proposed wind farm is unlikely to result in a significant negative impact from this view point.

The grid connection route is to be laid underground. Operational impacts from a visual perspective are therefore not considered significant. However, ACP is requested to consider any potential visual impact on the Slieve Felim Mountains and have regard to the Slieve Felim Scenic Drive.

Archaeology

In relation to archaeology, it is noted that the proposed grid connection route traverses a substantial length of County Limerick, including areas of established rural settlement and agricultural landscapes which may contain recorded and potential subsurface archaeological remains. The Council Archaeologist notes that there is a greenfield 'stretch' along the proposed grid connection route and has noted conditions in relation to monitoring of works on any greenfield parcels.

Conservation

The Conservation Officer has reviewed the submitted documentation and note that the grid connection route includes Cappamore, which is an Architectural Conservation Area and that this has not been identified in Chapter 13 of the EIAR. They also note that Chapter 13 of the EIAR utilised a 50m corridor study area for the proposed grid connection route. They state that this may not be sufficient in all cases, as Protected Structures may be set back further from the road/grid connection route however have boundary walls, gates, or other features within their curtilage located along the roadside. It is also states that Protected Structures and other assets that appear to have been omitted from the assessment in Chapter 13 of the EIAR include:

- R.P.S. Reg. No. 726 – Toomaline House (however associated designed landscape has been identified)
- R.P.S. Reg. No. 1054 – McCarthy's, Cappamore
- R.P.S. Reg. No. 1060 – Coffey's, Cappamore
- R.P.S. Reg. No. 1062 – Dillon's Warehouse, Cappamore
- R.P.S. Reg. No. 1064 – Convent of Mercy, Cappamore

- R.P.S. Reg. No. 1065 – National School, Cappamore
- R.P.S. Reg. No. 1069 – Blackwell’s House, Cappamore
- R.P.S. Reg. No. 188 – Brittas Castle
- R.P.S. Reg. No. 495 – Hickey’s
- R.P.S. Reg. No. 685 – Thatched Building
- R.P.S. Reg. No. 185 – O’Meara’s
- R.P.S. Reg. No. 6009 – Ahabeg House
- R.P.S. Reg. No. 519 – Kishiquirk School (however associated NIAH no. identified)
- N.I.A.H. 21901509 – Eyon House
- N.I.A.H. Garden Site ID – 1575 – Ahabeg

In relation to planning conditions, in the event of a grant of permission, the Conservation Officer states that any works relating to the grid connection route and associated joint bays located within the Cappamore ACA or adjacent to other built heritage assets, as identified above, should be overseen by a conservation accredited professional so as to ensure that no damage to the historic fabric or setting of these assets will occur.

7. Natura Impact Statement

The report assesses the potential for the proposed Carrow Wind Farm (14 turbines, associated infrastructure, and a c.37.6 km 110kV underground grid connection to Killonan Substation) to impact European (Natura 2000) sites under Article 6 of the Habitats Directive.

A Stage 1 Screening concluded that likely significant effects could not be excluded for a number of Special Area of Conservations ‘SAC’ and Special Protection Areas ‘SPA’, necessitating a full Natura Impact Statement (Stage 2 AA).

The project area spans both the River Suir and River Shannon catchments, with the grid connection forming the principal linkage to County Limerick via the Mulkear and Groody catchments. The underground cable extends into Limerick and directly overlaps or connects hydrologically with Natura sites.

The route traverses:

- Mulkear catchment
- Groody catchment

And includes:

- 23 mapped watercourse crossings
- Additional drainage crossings

Key areas for concern in relation to County Limerick would be risk of sedimentation and pollution during trenching and crossing works and potential downstream pathway to:

- The Lower River Shannon SAC
- The River Shannon & Fergus Estuaries SPA

This represents the most critical issue within County Limerick, particularly given the scale and length of cabling works along road corridors and across catchments.

The proposed grid connection route encroaches the Lower River Shannon SAC along R505 Cappamore and another two points on the R505. This is a source of potential direct effects. There is no encroachment to the River Shannon & River Fergus Estuaries SPA or the Slievefelim to Silvermines Mountains SPA however there is a hydrological connection to the River Shannon & River Fergus Estuaries SPA via the Groody water courses. There is also potential for direct effects on the Slievefelim to Silvermines Mountains SPA with regard to the Hen Harrier.

There is a risk that pollutants and sediment laden surface water run-off could discharge into the crossing sites along the proposed grid connection route. In terms of mitigation, and specifically with regard to watercourse crossing, the report states that specific crossing techniques are proposed.

It is noted that a Construction Environmental Management Plan (CEMP) is a core mitigation measure. It is proposed to outline controls for pollution prevention, drainage, waste handling, and site management and monitoring and compliance procedures during works. A CEMP has been submitted and would be updated in the event of a grant of permission.

The NIS concludes that no adverse effects on European Sites will occur, subject to full and strict implementation of mitigation measures.

The Ecologist has reviewed the NIS, they consider that main possibility of effects on SAC sites and SPA sites will be through release of pollutants, invasives or pathogens, in the absence of mitigation measures, during construction of the grid connection and note that mitigation measures should be implemented in full and wish to emphasise biosecurity measures to prevent the spread of invasive species and pathogens such as cray fish plague. In addition, they note that there are no in-stream works proposed to facilitate the proposed grid connection route, with clear span and Horizontal Directional Drilling (HDD) methods to be used to cross these watercourses. They state that there should be no deviation from this practice and this should be included in a condition in the event of a grant of permission.

8. Conclusion

This report sets out the views of the Planning Authority on the effects of the proposed development on the environment and the proper planning and sustainable development of the area. Whilst the level of physical works proposed within County Limerick during the operational phase is limited in the overall context of the proposal, there are a number of concerns regarding the proposed grid connection route. The Roads Section are not satisfied with the level of information submitted with the application in relation to the grid connection route which is predominately located in County Limerick.

It is noted that this is a multi-jurisdictional proposal. In the event of a grant of permission, ACP should consider conditions (listed below) that would be location focused to allow the Planning Authority to accurately monitor the same and ensure compliance is focused.

Recommended Conditions

Construction Management

A Construction Management and Delivery Plan (CMDP) is also required in the event of a grant of permission as follows:

Prior to the commencement of development, the developer shall submit for the written agreement of the Planning Authority a detailed Construction Management and Delivery Plan (CMDP). The CMDP shall include, but not be limited to, the following:

A site-specific Temporary Traffic Management Plan (TTMP), provided in both report and drawing format, detailing all proposed traffic management measures associated with the construction phase, including provisions for vehicular traffic, pedestrians, and vulnerable road users;

Details of construction access routes, delivery routes (including concrete deliveries where applicable), and measures to minimise disruption to the public road network;

A pre-condition survey of all roads and associated infrastructure along the proposed construction routes, to be carried out prior to the commencement of development, for the purpose of recording the existing condition of the road network.

The agreed Construction Management and Delivery Plan shall be fully implemented for the duration of the construction phase.

Conservation

The Conservation Officer also has concerns regarding omissions in relation to cultural heritage. The following is requested to be included regarding conservation matters (in the event of a grant of permission):

Any works relating to the Grid Connection Route and associated joint bays located within the Cappamore A.C.A. or adjacent to other built heritage assets, as identified above, should be overseen by a conservation accredited professional so as to ensure that no damage to the historic fabric or setting of these assets will occur.

Construction and Environmental Management

The grid connection mitigation strategy is centred on strict water quality protection measures, including trenchless watercourse crossings, sediment control, invasive species management and adherence to a Construction Environmental Management Plan, with the conclusion of no adverse effects being contingent on the full and effective implementation of these measures. It is noted that there is a heavy reliance on construction stage controls and so there are some concerns regarding cumulative risk of minor failures. The effectiveness of the AA conclusion is explicitly dependent on full implementation of the CEMP. ACP are requested to take this dependency into consideration and in addition include for a CEMP for the grid connection route in the event of a grant of permission.

Archaeology

The developer shall preserve, protect or otherwise record archaeological materials or features that may exist within the site by ensuring that all greenfield ground disturbance associated with the site development is archaeologically monitored under licence from the National Monuments Service.

Condition 1:

- a) *Notify the Planning Authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development.*
- b) *Employ a suitably qualified archaeologist who shall apply for a licence to monitor all site investigations, excavation works and all ground disturbance associated with the development.*
- c) *Submit the name of the suitably qualified archaeologist to the Planning Authority four weeks in advance of the commencement of any site works (including site investigations) accompanied by a site specific letter from the archaeologist certifying that they have applied for a licence.*

Condition 2

The requirement for archaeological monitoring shall be included in the CEMP and the archaeologist shall be kept fully informed of the schedule of works.

Condition 3:

- a) *Submit on completion of the ground works a report detailing the results of the licensed archaeological monitoring works to the Department of Housing, Local Government & Heritage and the Planning Authority. The report shall contain a drawing showing the exact extent of the area that was archaeologically monitored certified by the archaeologist. Excavators should include a catalogue of excavated features with 12 figure ITM coordinates for the centre point of each feature. In the event that the development is phased, interim reports shall be submitted at each stage showing the area monitored and giving preliminary results.*
- b) *Should archaeological material be found during the course of monitoring, the archaeologist may have work on the site stopped, pending a decision as to how best to deal with the archaeology. The Development Applications Unit, National Monuments Service, Department of Housing, Local Government & Heritage and the Planning Authority Archaeologist shall be informed immediately. The developer shall be prepared to be advised by the National Monuments Service, Department of Housing, Local Government & Heritage and the Planning Authority with regard to any necessary mitigating action.*
- c) *Should an archaeological excavation be required then the following shall apply: the developer shall provide satisfactory arrangements for the recording and excavation of any archaeological material that may be considered appropriate to excavate and shall undertake to complete all post excavation analysis up to and including final report stage. Excavators should include a catalogue of excavated features with 12 figure ITM coordinates for the centre point of each feature. Within twelve months of the completion of the excavation a final report (in the format recommended in the Guidelines for Authors of Reports on Archaeological Excavations 2006 National Monuments Service) shall be submitted to the Planning Authority*

Ecology

Matters to be taken into account in conditions have been provided by the Council Ecologist in relation to the proposed grid connection route and this are noted below for incorporation to any grant of planning permission:

- Very clear measures need to be employed in order prevent any spread of invasive alien species including Giant Hogweed and Japanese Knotweed species along linear elements of infrastructure.
- Preconstruction surveys for both badger and otter should take place immediately prior to construction to inform any measures required to reduce disturbance to these species.
- Where culverts and bridges suitable for bats will be part of the connection, these should be checked immediately prior to works and suitable mitigation measures introduced into these structures.
- Dippers and other bird species such as wagtails might also be found where the watercourses are crossed during the connection construction. Pre work surveys could also take this into account and where possible dipper ledges might be incorporated into suitable structures.
- The mitigation measures mentioned in Section 6.2 of the Natura Impact Statement, particularly as they relate to the grid connection should be implemented in full. It would also be important emphasise biosecurity measures to prevent the spread of invasive species and pathogens such as cray fish plague.

The Council Ecologist also notes that opportunity exists to provide some woodcrete bat boxes in suitable locations along the grid connection route.

Concluding Comments

In general terms, in the event of a grant of permission appropriate conditions should be attached for a windfarm development (with specific regard to the grid connection route) of this scale including residential amenity, construction management and oversight, road network, protection of trees, ecology, water quality, archaeology and built heritage. Finally, a substantial part of the proposed development infrastructure is located in County Limerick and therefore it is considered appropriate that communities in County Limerick would benefit from payments to the community fund.



Joe Delaney,
Deputy Director General,
Limerick City & County Council.
22nd May 2026

Appendix 1: Comments from Internal Departments

Roads



Comhairle Cathrach
& Contae **Luimnigh**

Limerick City
& County Council

Planning Application Internal Report

Planning Ref: 26324164

Applicant: Carrow Wind Farm

Development Address: Toomaline Lower, Toomaline Upper, Doon South, Lisgaugh, Cooga Upper, Kilmoylan Lower, Cooga Lower, Darkisland, Ballycoshown, Gortavalla North, Knocknacarriga, Gortnascarry, Cappamore, Portnard, Turagh, Dromsallagh, Dromcluher, Eyon, Brittas, Boher, Cloghnadromin, Lismullane, Kishyquirk, Clooncunna South, Clooncunna North, Ahabeg, Cunnihee, Whitehall, Gorteennaskagh, Killinure, Bohergar, Sandylane, Coolyhenan, Milltown and Killonan, Co. Limerick.

Development Description: a 10-year permission and an operational period of 35 years from the date of commissioning of the proposed development is being sought with subsequent decommissioning. i. The construction of 14 no. wind turbines with an overall turbine tip height of 185 metres; a rotor blade diameter of 163 metres; and hub height of 103.5 metres, and associated foundations and hard standing areas; ii. A permanent 110kV substation compound (2 no. control buildings with welfare facilities, all associated electrical plant and equipment, security fencing, entrance on to existing track, all associated underground cabling, wastewater holding tank, site drainage and all ancillary works; iii. Underground internal wind farm electrical cabling and communications cabling connecting the wind turbines to the proposed on-site 110kV electrical substation and associated ancillary works; iv. A meteorological mast of 103.5m in height, and associated foundation and hard-standing area; v. All works associated with the upgrade of the existing agricultural access off the L1154 local road (including the installation of fencing and steel gates) to serve as the main site entrance for the wind farm; vi. The provision of 4 no. new access/egress points along the L1154; vii. The provision of 4 no. new access/egress points along the L-5117; viii. The provision of 5 no. new access/egress point along the L-5206; ix. The provision of 2 no. new access/egress points along the L-52061; x. Upgrade of existing tracks/ roads and junctions and provision of new site access roads and junctions; xi. 3 no. temporary construction compounds with temporary offices and staff welfare facilities; xii. Accommodation works along the public road network in the townlands of Camus, Ballynahinch, Kilshenane, Dundrum, Gortarush Lower, Carrow, Scarrough, and Moheragh, Co. Tipperary to facilitate the delivery of turbine components and other abnormal loads; xiii. 2 no. Borrow Pits; xiv. Spoil Management; xv. Site Drainage; xvi. Tree Felling and hedgerow removal; xvii. Biodiversity Management and Enhancement Measures; xviii. Operational stage site signage; xix. Battery Energy Storage System and

all associated electrical plant and equipment, security fencing, 2 no. static water storage tanks and a firewater retention tank, and all associated infrastructure and apparatus; xx. The provision of underground electrical (110kV) and communications cabling from the proposed on-site 110kV electrical substation to the existing Killonan 110kV electrical substation to facilitate the connection to the national grid (RPS S018); xxi. Provision of 58 no. joint bays, communication chambers and earth sheath links along the proposed underground electrical cabling route; xxii. Reinstatement of land, road and track surface above the proposed cabling trench; and xxiii. All related site works and ancillary development considered necessary to facilitate the proposed development, including landscaping and the reinstatement of land.

Report Prepared By: Tony Carmody

Date: 18.05.2026

Comments:

1. Grid Connection Route

(a) Site-Specific Infrastructure Drawings

The Roads Section considers that the planning application, as submitted, is materially deficient in critical information required to adequately assess the potential impacts of the proposed development on the capacity, safety, and operational efficiency of the National, Regional, and local road network along the proposed route.

In particular, the information submitted in relation to the proposed underground grid connection cabling is generic in nature and fails to provide the necessary site-specific detail required to properly assess the proposal. The application does not demonstrate, by way of appropriate supporting documentation or technical assessment, that the proposed underground cabling and associated joint bay infrastructure can be accommodated within the existing public road corridor without conflict with existing utilities or adverse impact on the structural integrity and safe operation of the road network.

The proposed cabling route traverses a section of Regional Road in Cappamore, which has recently been subject to significant infrastructure works, including underground cabling associated with a solar farm development, the installation of services by Uisce Éireann, and the presence of existing legacy utilities. Having regard to the extent and density of existing and recently installed services, the available corridor within the carriageway and adjacent footpaths is now significantly constrained. Based on the information submitted, it is considered that there is insufficient physical space to accommodate the proposed development without giving rise to service clashes, repeated disturbance of recently constructed infrastructure, and an increased risk to the integrity and safe operation of the public road.

Furthermore, the proposed joint bay infrastructure is of a significant scale, with units measuring approximately 4.5 metres in length and 2.0 metres in width,

together with associated ducting and a C2 communications precast chamber located externally to this footprint, with an approximate depth of 1.4 metres. The scale and depth of this infrastructure represent a substantial encroachment into the limited-service corridor. When considered cumulatively with existing infrastructure, this would effectively sterilise sections of the public roadway and footpath corridor.

Such sterilisation would prejudice the ability of Limerick City and County Council to undertake essential future works within the public road, including drainage upgrades, water services infrastructure, service connections, and general maintenance and renewal of road and utility infrastructure.

Notwithstanding these constraints, the applicant has not submitted a site-specific utilities constraints assessment, detailed topographical survey, coordinated services layout, or evidence of trial hole investigations to verify existing service locations and depths. This represents a significant omission and a failure to demonstrate that the proposed development is feasible within the available corridor.

In addition to the above, the following critical information has **not been submitted** as part of the application, further preventing a proper technical assessment:

2. Additional Information Not Submitted

(a) Construction Traffic Route

Details of the construction traffic management route, including concrete delivery routes, have not been submitted. No information has been provided in respect of the routing of construction traffic from the Limerick side, thereby preventing a full assessment of potential impacts on the receiving road network.

(b) Directional Drilling at Bridges & Culvert Installation Restriction

No details have been provided identifying existing bridges and culverts that may be affected by the proposed underground grid connection cabling. Furthermore, no detailed structural surveys have been submitted in respect of bridges where directional drilling is proposed. In the absence of such information, it is not possible to assess the potential impacts of the development on the structural integrity and safety of existing structures.

It should also be noted that ducting installations over culverts within the public road will not be permitted by Limerick City and County Council. The application fails to demonstrate how this critical constraint has been addressed in the design of the proposed cabling route, and no alternative solution has been put forward to avoid conflict with existing culvert infrastructure.

(c) Road Opening Licence (ROL) Requirement and Road Closure

The applicant has indicated that most of the proposed grid connection works will necessitate road closures at the point of construction on a day-by-day basis, with the exception of a 3.1 km section of the N24 where a Stop/Go traffic management system is proposed. However, the application fails to adequately address the implications of these significant interventions on the public road network.

In particular, the application does not demonstrate that the necessary statutory and operational requirements associated with works within the public road have been properly considered. No confirmation has been if trial hole investigations will be undertaken under a Road Opening Licence (ROL) to verify the proposed cable route.

Furthermore, no details have been submitted in respect of a separate ROL application and associated road closure requirements for the main construction works. The absence of a coordinated and robust strategy for managing road closures, traffic disruption, and construction impacts represents a significant omission.

Having regard to the above, particularly in the context of the identified spatial constraints within the public road corridor, this lack of information constitutes a fundamental failure in the applicant's due diligence and significantly undermines the credibility and feasibility of the proposed development.

In the absence of sufficient and robust supporting information, the Roads Section cannot be satisfied that:

- The proposed development is technically feasible as designed;
- Existing infrastructure can be protected and maintained without conflict;
- The carrying out of the works will not give rise to significant disruption, safety hazards, or structural impacts; and
- The long-term functionality and maintainability of the public road corridor will not be prejudiced.

(d) Construction Management and Delivery Plan

The Applicant has failed to submit, a detailed Construction Management and Delivery Plan (CMDP).

The CMDP shall include, but not be limited to, the following:

- A **site-specific Temporary Traffic Management Plan (TTMP)**, provided in both report and drawing format, detailing all proposed traffic management measures associated with the construction phase, including provisions for vehicular traffic, pedestrians, and vulnerable road users;
- Details of construction access routes, delivery routes (including concrete deliveries where applicable), and measures to minimise disruption to the public road network;
- A **pre-condition survey of all roads and associated infrastructure** along the proposed construction routes, to be carried out prior to the commencement of development, for the purpose of recording the existing condition of the road network.
- The agreed Construction Management and Delivery Plan shall be fully implemented for the duration of the construction phase.

Accordingly, the Roads Section considers the proposal to be premature and incapable of proper assessment and cannot support the development as currently presented.

Signed

Date: 18.05.2026



Tony Carmody

Ecology



Planning Application Internal Report

Planning Ref: 324164 Carrow Wind farm.

Applicant: Carrow wind farm.

Development Description: Wind turbine application, grid connection in Limerick.

Report Prepared By: T O Neill Heritage Officer.

Comments: while the wind farm application is in Tipperary, the grid connection stretches from Doon to Killonan, a distance of almost 20 miles. The comments in this report are confined to the grid connection with Limerick.

EIA biodiversity chapter: Proposed Grid Connection underground cabling route mostly follows existing roads which are classified as Buildings and artificial surfaces (BL3). The underground cabling route will also cross fields classified as Improved agricultural grassland (GA1) on occasion. Habitats recorded close to the Grid Connection Route included typical verge habitats such as Dry meadows and grassy verges (GS2), Hedgerows (WL1), Treelines (WL2), Improved agricultural grassland (GA1), Stonewalls and other stonework (BL1), Mixed broadleaved woodland (WD1) and Buildings and artificial surfaces (BL3). The Proposed Grid Connection underground cabling route is composed of 23 crossing sites located across two hydrological catchments and six hydrological sub-catchments. These included Depositing/ lowland rivers (FW2) and Eroding/ upland rivers (FW1). Smaller watercourses were typically highly vegetated banks, comprised of scrub and treeline species such as bramble, willow, sycamore, and alder. By and large these are common habitats in their localities.

Noted that 4 invasive alien species including Giant Hogweed and Japanese Knotweed were found in four locations along or close to the grid connection route. As the route itself could provide a conduit for such species through vehicle movement and through cable laying, very clear measures need to be employed in order prevent any spread of these species along linear elements of infrastructure which have the potential to act as vectors for the spread of these species particularly during the construction phase.

While no evidence of badger was found along the grid connection route (p. 6-57) it would become necessary to walk the route immediately prior to construction to check that no

mammals badgers or otters would have established themselves nearby. Noted that otter prints were found at one location though this is likely to be an underrepresentation (p.6-61). This should be included as a condition. This is mentioned on pa 6-82 though it is stated that it might 10-12 months in advance of works, this is too long an interval between survey and construction. Similarly, where culverts and bridges suitable for bats will be part of the connection, these should be checked immediately prior to works and suitable mitigation measures introduced into these structures. Regardless of the presence of bats the opportunity exists to provide some woodcrete bat boxes in suitable locations along the grid connection route. Where possible these should be put in place as it is a form of ecological gain resulting from the project. Dippers and other bird species such as wagtails might also be found where the watercourses are crossed during the connection construction. Pre work surveys could also take this into account and where possible dipper ledges might be incorporated into suitable structures. Derogation licences would be required of bats or otters were found in preconstruction surveys.

Some of the bridges may be protected structures and advice should be sought from the Architectural Conservation Officers in Limerick. It is noted that no birds of conservation concern were found along the grid connection.

Proposed Grid Connection Route - The Proposed Grid Connection underground cabling route has 35 watercourse crossing locations not all of which are in Limerick. The watercourses are hydrologically connected to downstream European and Nationally designated sites. Noted that there are no in-stream works proposed to facilitate the Proposed Grid Connection Route, with clear span and Horizontal Directional Drilling (HDD) methods to be used to cross these watercourses. There should be no deviation from this practice and this should be included in a condition. As noted above the connection route could be a conduit for IAS and pathogen such as cray fish plague, works closest to watercourses in particular should reflect best practice in preventing their spread.

Noted that there will be a loss of 100m of hedgerows along the grid connection route, though not all of this will be in Limerick. This is compensated for elsewhere, though by woodland creation.

NIS: From the point of view of Limerick as noted above I consider that main possibility of effects on SAC sites and SPA sites will be through release of pollutants, invasives or pathogens, in the absence of mitigation measures, during construction of the grid connection. I would think that works being inland would not have direct disturbance effects in bird species which would be of conservation interests, due to distance from the SPA and the fact that's should some species such as Geese or Ducks be grazing or foraging inland on agricultural habitats there is sufficient alternatives for them to move to while works are ongoing. This would be a temporary effect in any event. The mitigation measures mentioned in S.6.2, particularly as they relate to the grid connection should be implemented in full. It would also be important emphasise biosecurity measures to prevent the spread of invasive species and pathogens such as cray fish plague.

Recommendation:

1 Invasive alien species including Giant Hogweed and Japanese Knotweed were found in four locations along or close to the grid connection route. As the route itself could provide a conduit for such species through vehicle movement and through cable laying , very clear measures need to be employed in order prevent any spread of these species along linear elements of infrastructure which have the potential to act as vectors for the spread of these species particularly during the construction phase. Conditions on any grant of permission should reflect this.

2 Preconstruction surveys for both badger and otter should take place immediately prior to construction to inform any measures required to reduce disturbance to these species. This should be included as a condition.

3 Where culverts and bridges suitable for bats will be part of the connection, these should be checked immediately prior to works and suitable mitigation measures introduced into these structures. Regardless of the presence of bats the opportunity exists to provide some woodcrete bat boxes in suitable locations along the grid connection route. Where possible these should be put in place as it is a form of ecological gain resulting from the project. Dippers and other bird species such as wagtails might also be found where the watercourses are crossed during the connection construction. Pre work surveys could also take this into account and where possible dipper ledges might be incorporated into suitable structures. This should be included as a condition.

4 The mitigation measures mentioned in S.6.2, particularly as they relate to the grid connection should be implemented in full. It would also be important emphasise biosecurity measures to prevent the spread of invasive species and pathogens such as cray fish plague. This should be included as a condition.

Signed T O Neill **Date:** 20/5/2026

Conservation



Planning Application Referral Report – RED III Architectural Conservation

Planning Ref: ACP: 324164

Applicant: Carrow Renewable Energy Limited

Development Description: *"A renewable energy development including 14 wind turbines, 110kV underground cabling connection, and all associated infrastructure and works"*

Location: In the townlands of Carrow, Moheragh, Gortaderry, Co. Tipperary; Toomaline Lower, Toomaline Upper, Doon South, Lisgaugh, Cooga Upper, Coolyhenan, Milltown and Killonan, Co. Limerick. .

Architectural Heritage Assets within the vicinity of the development, including along the Grid Connection Route:

	R.P.S.	A.C.A.	N.I.A.H.	N.I.A.H. Garden
Toomaline House	726	-	-	1621
Sisters of Mercy - Chapel	-	-	21809007	-
Sisters of Mercy - Convent	-	-	21809006	-
Patrick Ryan's	1150	-	21809008	-
N. Rainsford Grocer	1153	-	21809009	-
Hibernian House	1152	-	21809010	-
O'Dwyers	1151	-	21809011	-
House	-	-	21809014	-
House	-	-	21809015	-
House	-	-	21809016	-
House	-	-	21809020	-
T Hayes	-	-	21809018	-
House	-	-	21809019	-
Moore's Pub	1148	-	-	-
Casablanca and Doon Chipper	-	-	21809022	-
House	-	-	21809024	-
Whelan's	-	-	21809025	-
A.I.B.	1149	-	21809029	-
R. Martin	-	-	21809030	-
Garda Station	1154	-	21809031	-

Kilmoylan House	-	-	21809035 (gates)	1620
House	-	-	21809032	-
Glebe House	-	-	-	1616
Cappamore Bridge	-	-	21806002	-
CAPPAMORE A.C.A.	-	A.C.A. 19	-	-
Scoil na Ceapaige Moine	-	-	21806006	-
McCarthy's	1054	A.C.A. 19	-	-
W. Lynch	-	A.C.A. 19	21806008	-
Hayes	1055	A.C.A. 19	21806009	-
T. O'Dwyer's	1056	A.C.A. 19	21806010	-
Gleeson's	1057	A.C.A. 19	-	-
House	-	A.C.A. 19	21806012	-
Scruples Hair Salon	1058	A.C.A. 19	21806014	-
Garda Station	1059	A.C.A. 19	21806013	-
Coffey's	1060	A.C.A. 19	-	-
Jed O'Brien's	1061	A.C.A. 19	21806016	-
Dillon's Warehouse	1062	A.C.A. 19	-	-
St. Michael's R.C. Church	1063	A.C.A. 19	21806020	-
Sisters of Mercy - Convent	1064	A.C.A. 19	21806021	-
Convent School	1065	A.C.A. 19	21806022	-
Blackwell's House	1069	A.C.A. 19	-	-
J. McCarthy	-	-	21806026	-
Eyon House	-	-	21901509	-
Brittas Bridge	-	-	21901445	-
Brittas Castle	188	-	-	-
House	-	-	21901449	-
Bartley's	434	-	21901450	-
Carmody's	432	-	21901451	-
Hickey's	495	-	-	-
Bohergar House	-	-	-	1594
St. Patrick's R.C. Church	686	-	21901437	-
Thatched Building	685	-	-	-
O'Meara's	185	-	-	-
Thatched Building	-	-	21901436	-
Kishyquirk Schools	519	-	21901434	-
Ahabeg House	6009	-	21901411	1575

Report Prepared By: Shóna O'Keeffe, Executive Architectural Conservation Officer

Date: 15th May 2026

Definitions: In considering this report and its contents, the reader is advised to bear in mind at all times that, in S.2 of the Planning and Development Act, 2000, a Protected Structure is defined as follows:

A "structure" means any building, structure, excavation, or other thing constructed or made on, in or under any land, or any part of a structure so defined, and-

- (a) where the context so admits, includes the land on, in or under where the structure is situate, and
- (b) in relation to a protected structure or proposed protected structure, includes-
 - (i) the interior of the structure,
 - (ii) the land lying within the curtilage of the structure,
 - (iii) any other structures lying within that curtilage and their interiors, and
 - (iv) all fixtures and features which form part of the interior or exterior of any structure or structures referred to in *subparagraph (i) or (iii)*".

The reader is also advised to bear in mind at all times that An Architectural Conservation Area (ACA) is a place, area, group of structures or townscape that is of special architectural, historical, archaeological, technical, social, cultural, or scientific interest, or that contributes to the appreciation of a Protected Structure. The Planning and Development Act 2000 (as amended) provides the legislative basis for the protection of ACAs.

Assessment

I have examined the documentation submitted in support of the application.

The Grid Connection Route travels through Cappamore, which is an Architectural Conservation Area. This has not been identified in Chapter 13 of the EIAR.

I note that the EIAR Chapter 13 utilised a 50m corridor study area for the Proposed Grid Connection Route. This may not be sufficient in all cases, as Protected Structures may be set back further from the road/Grid Connection Route but have boundary walls, gates, or other features within their curtilage located along the roadside. Protected Structures and other assets that appear to have been omitted from the assessment in Chapter 13 of the EIAR include:

R.P.S. Reg. No. 726 – Toomaline House (however associated designed landscape has been identified)
 R.P.S. Reg. No. 1054 – McCarthy's, Cappamore
 R.P.S. Reg. No. 1060 – Coffey's, Cappamore
 R.P.S. Reg. No. 1062 – Dillon's Warehouse, Cappamore
 R.P.S. Reg. No. 1064 – Convent of Mercy, Cappamore
 R.P.S. Reg. No. 1065 – National School, Cappamore
 R.P.S. Reg. No. 1069 – Blackwell's House, Cappamore
 R.P.S. Reg. No. 188 – Brittas Castle
 R.P.S. Reg. No. 495 – Hickey's
 R.P.S. Reg. No. 685 – Thatched Building
 R.P.S. Reg. No. 185 – O'Meara's
 R.P.S. Reg. No. 6009 – Ahabeg House
 R.P.S. Reg. No. 519 – Kishiquirk School (however associated NIAH no. identified)

N.I.A.H. 21901509 – Eyon House

N.I.A.H. Garden Site ID – 1575 - Ahabeg

Any works relating to the Grid Connection Route and associated joint bays located within the Cappamore A.C.A. or adjacent to other built heritage assets, as identified above, should be overseen

by a conservation accredited professional so as to ensure that no damage to the historic fabric or setting of these assets will occur.

Recommendation:

I recommend that any works relating to the Grid Connection Route and associated joint bays located within the Cappamore A.C.A. or adjacent to other built heritage assets, as identified above, should be overseen by a conservation accredited professional so as to ensure that no damage to the historic fabric or setting of these assets will occur.

Signed:



Shóna O'Keeffe

Executive Architectural Conservation Officer

Date: 15th May 2026