

Borrisbeg Grid Connection

Non-Technical Summary

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Borrisbeg Grid Connection
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Non-Technical Summary

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Prepared by:

RPS

Prepared for:

Buirios Ltd

Dublin | Cork | Galway | Sligo | Kilkenny
rpsgroup.com

RPS Group Limited, registered in Ireland No. 91911
RPS Consulting Engineers Limited, registered in Ireland No. 161581
RPS Engineering Services Limited, registered in Ireland No. 99795
The Registered office of each of the above companies is West Pier
Business Campus, Dun Laoghaire, Co. Dublin, A96 N6T7



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1 Non-Technical Summary

1.1 Introduction

This Environmental Impact Assessment Report (EIAR) has been prepared by RPS on behalf of Buirios Ltd, as part of an application for planning permission for the Proposed Grid Connection to serve the Consented Wind Farm. The Proposed Grid Connection is located in the townlands of Strogue and Clonmore, near Templemore town in Co. Tipperary.

The Proposed Grid Connection will facilitate the connection of the Borrisbeg Wind Farm consented under Planning Reference ABP: 318704 (the Consented Wind Farm), which comprises 9 No. wind turbines with a tip height of 185 metres with an estimated installed generating capacity of 63MW.

Both the components and function of the Proposed Grid Connection fall within the scope of Section 182A (1) of the Planning and Development Acts 2000, as amended, as determined by An Coimisiún Pleanála (Planning Reference 317089), based upon the definition of electricity transmission as set out in Subsection 9 of Section 182A of the Act and therefore this application is being submitted directly to An Coimisiún Pleanála (ACP) in accordance with Section 182A of the Planning and Development Acts 2000, as amended.

The Proposed Grid Connection will connect to the national grid via a 'loop-in-loop-out' connection. The onsite 110kV substation will connect to the nearby Ikerrin to Thurles 110kV overhead line (OHL) via c.2.1km of underground electricity cabling route which will run in a south-eastward direction from the proposed onsite 110kV substation through a mix of local road and new track over agricultural land to the existing OHL. The existing OHL will be broken by 2 no. end masts (lattice type towers).

This EIAR accompanies the planning application for the Proposed Grid Connection submitted to ACP. The planning application is also accompanied by a Natura Impact Statement (NIS).

1.1.1 Applicant

The applicant for the Proposed Grid Connection, Buirios Ltd, is an associated company of Enerco Energy Ltd., which is an Irish-owned, Cork-based company with extensive experience in the design, construction and operation of wind energy and grid connection developments throughout Ireland, with projects currently operating or in construction in Counties Cork, Kerry, Limerick, Clare, Galway, Mayo and Donegal.

By Q2 2025, Enerco associated companies had over 925 Megawatts (MW) of wind generating capacity in commercial operation or in construction, with a further c.400MW of projects at various stages in its portfolio, including the Consented Wind Farm, to assist in meeting Ireland's renewable energy targets.

1.1.2 Brief Description of the Proposed Grid Connection

For the purposes of this Section 182A application, the proposed development comprises the provision of the following:

- i. A 110 kilovolt (kV) 'loop-in/loop-out' Air-Insulated Switchgear (AIS) electrical substation, including 2 no. single-storey control buildings with staff welfare facilities, underground wastewater storage tank, all associated electrical plant, cabling, equipment and apparatus, and security fencing, within a substation compound with a total footprint of approximately 1.41ha;
- ii. 2.1 kilometre 110kV underground cabling route, with 0.9km following the public road corridor and 1.2km along new proposed access track across agricultural grassland (including joint

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bays, communication and earth sheath link chambers and all ancillary works along the route);

- iii. no. lattice-type end masts with a height of 16 metres to facilitate connection to the existing 110kV Ikerrin-Thurles overhead electricity transmission line;*
- iv. 1 no. temporary construction compound (including offices and staff welfare facilities);*
- v. Vegetation removal and Spoil Management;*
- vi. Site Drainage; and*
- vii. All ancillary works and apparatus.*

A ten-year planning permission is sought.

Access to the substation will be off the L-70391 local road, immediately adjacent to its southern boundary and also through internal wind farm roads, which can be accessed off the L-3248 to the northwest of the Consented Wind Farm. Upon decommissioning of the Consented Wind Farm, the Proposed Grid Connection will remain in situ and form part of the national grid infrastructure.

1.1.3 Need for the Proposed Grid Connection

Ireland has set ambitious targets for renewable energy, aiming for 80% of electricity generation to come from renewable sources by 2030. The government's Climate Action Plan outlines a pathway to achieve this, which includes substantial investments in wind and solar energy. The integration of these renewable sources into the grid requires new substations to manage the variability and ensure stability in the electricity supply. Ireland has experienced significant population growth in recent years, which has led to increased demand for electricity.

EirGrid's Generation Capacity Statement 2023-2032 (January 2024) projects a 45% increase in electricity demand between 2023 and 2034 driven by factors such as population growth, electrification of transport and heating, and the expansion of data centres, with the latter projected to consume up to 30% of the country's electricity by 2030 if current trends continue.

The Sustainable Energy Authority of Ireland (SEAI) released its 2024 National Energy Projections Report which provides insights into current energy consumption trends and future projections up to 2050 below lists a summary of the key findings.

The National Planning Framework 2025 (NPF 2025) serves as a comprehensive guide for the development of grid infrastructure in Ireland, emphasising the need for integration with spatial planning, support for renewable energy, and the enhancement of resilience and security of supply. It highlights the critical role of grid infrastructure in facilitating economic growth and achieving national climate goals. The NPF sets out renewable electricity capacity allocations for each of the three Regional Assemblies, Northern and Western, Eastern and Midlands and the Southern Regions, by 2030. The Southern Region, within which the Proposed Grid Connection and Consented Wind Farm are located, has been allocated 978 MW of additional capacity by 2030 (40% of the National Share). As stated, the Consented Wind Farm can provide 63MW of this target; however, in order to do so, it needs a connection to the national grid.

The Tipperary County Development Plan 2022-2028 addresses grid connection development, particularly in the context of renewable energy projects. The Plan acknowledges the importance of expanding national supply grids to ensure regional connectivity and support sustainable economic growth:

'The Council will support the major service providers including EirGrid, ESB Networks and Gas Networks Ireland, where it is proposed to enhance or upgrade existing facilities or networks, or

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provide new infrastructure in order to extend or strengthen energy supply to meet demand and meet climate reduction targets.'

The necessity for the Proposed Grid Connection is influenced by several key factors:

- The Proposed Grid Connection will facilitate the energy transmission from the Consented Wind Farm to the national grid. The Consented Wind Farm, which has an anticipated installed capacity of 63MW, is projected to achieve a net reduction of around 58,808 tonnes of carbon dioxide each year, totalling approximately 1,764,240 tonnes over its 30 year operational life. A detailed description of the carbon offsets associated with the Proposed Grid Connection can be found in Chapter 10: Climate.
- The Proposed Grid Connection will facilitate the Consented Wind Farm in the production of an estimated 198,676 Megawatt hours (MWh) of electricity per year, enough to power approximately 47,304 Irish homes.
- The Proposed Grid Connection will help Ireland on its way legally binding target of achieving net-zero greenhouse gas emissions by 2050, with a 51% reduction by 2030, as mandated by the Climate Action and Low Carbon Development (Amendment) Act 2021.
- The Proposed Grid Connection will help the Southern Region Assembly in achieving its goal of adding 978MW of renewable energy to the national grid by 2030.
- The Proposed Grid Connection will form part of Ireland's valuable strategic grid infrastructure portfolio, allowing future commercial, residential, renewable development within the region to meet projected demands.

In August 2025 Ireland introduced new regulations: the European Union (Planning and Development) (Renewable Energy) Regulations 2025 to transpose certain requirements of RED III into Irish law. The objective of these new regulations is to ensure a faster deployment of renewables including supporting grid infrastructure, establish better environmental safeguards, ensure energy security and align the nations climate action goals with EU targets. Without these Regulations, Ireland risked failing to meet its EU and national climate goals Furthermore, these Regulations strongly emphasise the importance of renewables, not just as an energy source, but as a matter of public interest and climate necessity. It underlines that renewables are essential infrastructure for Ireland's climate targets, EU obligations, and energy security.

Ireland has progressed its grid infrastructure over the past decade. However, in order to meet the energy demands over the next decade and to facilitate Ireland's commitment to meet its legally binding emissions and renewable energy targets, it is imperative an accelerated programme of grid infrastructure development is progressed across the State. The Proposed Grid Connection is a valuable step in achieving this much needed progression.

1.1.4 Economic Benefits

The Proposed Grid Connection will have both long-term and short-term benefits for the local economy including income to local landowners, job creation, work opportunities for local businesses and service providers and local authority commercial rate payments. Commercial rate payments from the Borrisbeg Renewable Energy Development will be provided to Tipperary County Council each year and to Tipperary County Council during the construction phase, which will be redirected to the provision of public services within Co. Tipperary. These services include provisions such as road upkeep, fire services, environmental protection, street lighting, footpath maintenance etc. along with other community and cultural support initiatives.

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1.1.5 Purpose and Structure of this EIAR

The purpose of this EIAR is to document the current state of the environment on and in the vicinity of the Site and to quantify the likely significant effects of the Proposed Grid Connection on the environment. The compilation of this document served to highlight any areas where mitigation measures may be necessary in order to protect the surrounding environment from the possibility of any negative impacts arising from the Proposed Grid Connection. The EIAR project team comprises a multidisciplinary team of experts with extensive experience in the assessment of wind energy developments and in their relevant area of expertise. Each chapter of this EIAR has been prepared by a competent expert in the subject matter. The chapters of this EIAR are as follows:

1. Introduction
2. Considerations of Reasonable Alternatives
3. Description of the Proposed Development
4. Population and Human Health
5. Biodiversity
6. Major Accidents and Natural Disasters
7. Land, Soils and Geology
8. Hydrology and Hydrogeology
9. Air Quality
10. Climate
11. Noise and Vibration
12. Cultural Heritage
13. Landscape and Visual
14. Material Assets (including Traffic and Transport, Utilities, Waste Management, Telecommunications)
15. Interactions and Cumulative Effects
16. Schedule of Environmental Commitments

A NIS has also been prepared in line with the requirements of the Habitats Directive. This EIAR and the NIS accompany the planning application to the Board for the Proposed Grid Connection under Section 182A (1) of the Planning and Development Act 2000, as amended.

1.2 Consideration of Reasonable Alternatives

Chapter 2 of the EIAR introduces the reasonable alternatives identified by the developer which are relevant to the Proposed Grid Connection and its specific characteristics and an indication of the main reasons for the option chosen. Environmental effects were taken into consideration as part of this process. The consideration of alternatives typically refers to alternative design, technology, location, size and scale. A 'Do-Nothing Alternative' i.e., an outline of what is likely to happen to the environment should the Proposed Grid Connection not be implemented, has also be considered.

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1.2.1 Alternative 110kV Substation Location

Two potential substation locations with associated temporary construction compounds (Option A and Option B), were considered in the iterative design process of the Consented Wind Farm, with the optimal location being brought forward in this application.

The two location options considered comprised an agricultural field within the northwest of the Consented Wind Farm site (Option A) and an agricultural field to the southeast of the Consented Wind Farm, directly north of the L70391 local road (Option B).

Option A would have to be sited approximately 400m from the Consented Wind Farm general construction and operation entrance off the L-3248, and within a 50m buffer zone of a watercourse. The nearest national node connection point, a 110kV overhead line, is approx.3.4 km to the southeast.

In contrast, Option B is not within a watercourse buffer and is approximately 1.4 km from the existing 110kV line (as the crow flies), which would necessitate a significantly shorter underground cabling route for grid connection. Option B is located within an agricultural field of low ecological value, is close to both the nearest consented turbine and to the existing 110kV OHL while maintaining the necessary turbine fall distance buffer and a setback of over 150m from the nearest residential receptor (the noise emanating part of the substation is over 250m from the nearest residential receptor). Option B requires just 900m of underground cabling route through local roads (with 5m crossing the R433) and 1.2km through private agricultural land. While segments of this road will be closed during the cable laying activities, it will not significantly impact on local residences along this road as there is an alternative route for access/egress to their properties.

In summary Option B is therefore being brought forward in this application for the Proposed Grid Connection as it deemed the most suitable location for the proposed 110kV substation due to the following reasons:

- The low ecological value of the Option B substation location,
- The relatively short underground cabling route to both the Consented Wind Farm and national grid,
- The short underground cabling route requirement through roads,
- The ability to achieve residential and turbine fall distance setbacks.

1.2.2 Alternative National Node Connection Point

The Tipperary Renewable Energy Strategy 2022-2028 recognises that the ‘*transport of energy from the turbines to a substation, which connects to the grid, will usually require the establishment of ancillary infrastructure which may create additional visual impact. Generally, however, the connection of the wind turbines to the substation (and sometimes from the substation to the grid) now typically is done via underground cable (where feasible), thus minimising the visual impact of overhead lines.*

The nearest 110kV substation (required to transmit its generated energy to national grid system) to the Consented Wind Farm is the Ikerrin 110kV substation located 8.6km to the north of the Consented Wind Farm (as the crow flies). Connecting to this would require over 20km of cabling along the national/regional/local road or via overhead lines across multiple land holdings, bringing with it considerable traffic and ecological disturbance, residential visual amenity impacts, increased noise and dust emissions and potential ornithological collision risk. Consultation with Tipperary County Council on the 13th July 2023 and onsite on the 19th October 2023 indicated that the preferred approach to grid connections is to avoid using the public road network for underground cabling routes if alternative options, such as third-party land, are available. However, landowner agreements to install 110kV underground cabling to the Ikerrin 110kV substation were

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not feasible. Consequently, underground or overhead grid connection cable routes to the Ikerrin 110kV substation were not pursued further.

The nearest 110kV OHL is approx. 1.9km to the southeast of the nearest consented turbine (as the crow flies). A connection into this OHL was selected as the Chosen Option for the Proposed Grid Connection as it is considered to be the least environmentally impactful and most economically prudent grid connection.

1.2.3 Alternative Connection to Existing 110kV Overhead Line

An underground cabling connection will run from the proposed 110kV substation located to the east of the nearest consented turbine through approx. 900m of local road with 5m crossing the R433, and approx. 1.2km of agricultural land. This underground cabling route will need to cross two watercourses; one within the L-7039, which will be crossed using a Horizontal Directional Drilling method, and the other on private agricultural land, which will be crossed using a clear span culvert, meaning no in-stream work is proposed. Additionally, 3 no. field drains will require culverting. To facilitate the connection to the proposed onsite substation via the underground cabling, the existing overhead line will be broken by installing two new end masts (lattice-type towers) located beneath the existing 110kV Ikerrin-Thurles 110kV OHL. Once constructed, electricity from the Ikerrin-Thurles 110kV overhead line will be transmitted through the proposed substation, resulting in a "loop-in/loop-out" configuration.

An alternative to the approx. 2.1km underground cabling route would be to construct an overhead line of approx. 1.4 km from the proposed onsite substation to the existing Ikerrin to Thurles 110kV OHL. Overhead lines are generally less costly and easier to maintain than underground cable connections.

However, the chosen design requires approx. 1.2km of excavations through agricultural land of low ecological value, eliminates the operational visual impact and also reduces the potential for bat and bird collision risk. Additionally, while approx. 900m of underground grid route will be placed within the public road network, an alternative connecting road allows for all local residents to access and egress their properties without undue impact. Furthermore, the preference for underground cabling connections between wind farms and the national grid is supported by the 2006 Wind Energy Development Guidelines (WEDGs)¹, the 2019 draft WEDGs², and the Tipperary Renewable Energy Strategy 2022-2028³.

Therefore, the Proposed Grid Connection underground cabling route is the preferred option due to its general compliance with local and national policy and the lower potential for environmental impacts.

1.2.4 Alternative Mitigation Measures

Mitigation through avoidance has played a crucial role in the development of the Proposed Grid Connection during its selection and design phases. The agricultural fields within which the proposed substation, .2km of underground cabling route and the end masts are proposed are of low ecological value. Where watercourse crossings are required, instream works are avoided by the use of horizontal directional drilling and the insertion of a clear span culvert. The substation itself has

¹ <https://assets.gov.ie/static/documents/wind-energy-development-guidelines-2006.pdf>, P73.

² <https://assets.gov.ie/static/documents/draft-revised-wind-energy-development-guidelines-december-2019-385c92c2-16f9-4511-80bf.pdf>, P42.

³ [Volume 3 Renewable Energy Strategy.pdf](#), P.A25

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been rotated to cite the noisier elements such as the transformer, furthest away from the nearest residential receptor.

The Consented Wind Farm includes a commitment to replant 5.17 km of hedgerow within the adjacent wind farm site which is above and beyond the required amount needed to be removed to facilitate the construction of both the Consented Wind Farm and the Proposed Grid Connection. Should the Proposed Grid Connection not receive a grant, the Consented Wind Farm will not be constructed and therefore the net gain in hedgerow habitat will not be planted.

Likewise, the Consented Wind Farm includes a commitment to plant approx. 1.8 hectares of natural woodland along a section of the Eastwood River within the adjacent wind farm site. This replanting effort exceeds the area of habitat loss and will be preserved as a Woodland Conservation Area for the duration of the Consented Wind Farm's operation. This initiative is expected to yield a long-term, slight positive impact on biodiversity. Additionally, around 2.42 hectares of felled conifer will be replanted more than 10 kilometres away from the Site and outside the hydrological catchment area. Should the Proposed Grid Connection not receive a grant, the Consented Wind Farm will not be constructed and therefore the net gain in native woodland planting into an established Woodland Conservation Area will not be realised.

In addition to the above, the Consented Wind Farm includes a commitment to restore the pattern, profile, and dimensions of a 340m segment of the Eastwood River, which will also contribute to a long-term, slight improvement in local water quality and aquatic species. Should the Proposed Grid Connection not receive a grant, the Consented Wind Farm will not be constructed and therefore the river restoration project and subsequent improvement to water quality and aquatic ecology will not occur.

The best practice design and mitigation strategies outlined in this EIAR aim to minimise environmental risks and sever the connection between the Site and any identified environmental receptors. The alternatives would be to forgo these measures or to propose less effective, non-best practice solutions, both of which are unsustainable options.

1.3 Description of the Proposed Development

Chapter 3 of the EIAR describes the Proposed Grid Connection and all its component parts. Construction methodologies for the main infrastructural components of the Proposed Grid Connection are included in this chapter. The proposed development for the purposes of the accompanying Section 182A application corresponds to the Proposed Grid Connection comprising the following:

A 110 kilovolt (kV) 'loop-in/loop-out' Air-Insulated Switchgear (AIS) electrical substation, including 2 no. single-storey control buildings with staff welfare facilities, underground wastewater storage tank, all associated electrical plant, cabling, equipment and apparatus, and security fencing, within a substation compound with a total footprint of approximately 1.41ha;

2.1 kilometre 110kV underground cabling route, with 0.9km following the public road corridor and 1.2km along new proposed access track across agricultural grassland (including joint bays, communication and earth sheath link chambers and all ancillary works along the route);

no. lattice-type end masts with a height of 16 metres to facilitate connection to the existing 110kV Ikerrin-Thurles overhead electricity transmission line;

1 no. temporary construction compound (including offices and staff welfare facilities);

Vegetation removal and Spoil Management;

Site Drainage; and

All ancillary works and apparatus.

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A ten-year planning permission is sought.

It is proposed to construct a 110 kV electricity substation within the Site. This substation will be situated in the northwest part of the Site, within the townland of Clonmore.

The construction and arrangement of the electrical equipment in the substation will adhere to the specifications set by EirGrid/ESB Networks. The precise siting of all Joint Bays, Earth Sheath Link Chambers and Communication Chambers within the underground cabling route corridor assessed is subject to approval by EirGrid/ESB Networks.

The Proposed Grid Connection infrastructure will remain in place as it will become part of the National Grid under the ownership and control of ESB Networks and EirGrid.

The footprint of the proposed on-site 110 kV substation compound is approximately 11,600 m² and will feature two control buildings along with the necessary electrical components to consolidate the energy generated by each wind turbine of the Consented Wind Farm and facilitate its export to the national grid. The 110 kV substation compound will be enclosed by steel palisade fencing, approximately 2.6 meters high, or as otherwise specified by ESB. Additionally, internal fencing will separate different areas within the main substation. Two control buildings for the substation will be situated within the compound. The Independent Power Producer (IPP) Control Building will measure approximately 18 metres by 11 metres and approximately 7 metres in height. The Transmission System Owner (TSO) Control Building will measure approximately 18 metres by 25 metres and approximately 7.5 metres in height.

The control buildings will include staff welfare facilities. On-site wastewater treatment is not planned. Wastewater from the staff welfare facilities in the control buildings will be managed using a sealed underground storage tank, with all wastewaters being transported off-site by a licensed waste collector to a permitted wastewater treatment facility.

The proposed 110kV substation will require a dedicated temporary construction compound. This compound will cover an area of approximately 2,540 m² and will be situated adjacent to the proposed 110kV substation. The temporary construction compound will feature a bunded refuelling and containment area for storing lubricants, oils, site generators, and other materials, as well as a full retention oil interceptor, a waste storage area, temporary site offices, staff facilities, and parking spaces for both staff and visitors. Temporary port-a-loo toilets within a staff portacabin will be used during the construction phase. Wastewater from the staff toilets will be directed to a sealed storage tank, with all wastewater being transported off-site by a licensed waste collector to wastewater treatment facilities.

The Proposed Grid Connection underground cabling route will be approximately 2.1km long. This underground cabling route will intersect two watercourses: one located within the L7039, which will be crossed using a Horizontal Directional Drilling method, and the second, situated in agricultural land, will be crossed via a proposed new clear span bridge, meaning no in-stream work are proposed for either crossing. Six joint bays are required along underground cabling connection.

Two proposed end masts (lattice type towers) will be located immediately beneath the existing OHL to facilitate the connection.

The volumes (estimated 15,000m³) of granular fill (sand and stone) required for the construction of the Proposed Grid Connection will be locally sourced from licenced quarries.

Some of the excavated materials from the Proposed Grid Connection underground electrical cabling route will go to an appropriate licenced facility as required. The remaining spoil will be managed into linear berms alongside the new access tracks proposed along the underground cabling route within agricultural fields. A berm will also be provided at the substation, up to 4m high creating visual screening of the substation from the local roads during the operational phase.

A Construction and Environmental Management Plan (CEMP) has been prepared for the Proposed Grid Connection, refer to Appendix 3-2 for details. The CEMP includes details of drainage

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management, spoil management, waste management etc, and details all the recommended mitigation and monitoring measures to be implemented during the construction phase. Should the Proposed Grid Connection receive a consent, the CEMP will be updated prior to the commencement of the construction phase to address the requirements of any relevant planning conditions, including any additional mitigation measures which are conditioned and will be submitted to the Planning Authority for written approval. The Contractor will be responsible for implementing the mitigation and monitoring measures detailed in the updated CEMP.

It is anticipated that the Proposed Grid Connection construction works will take 9-12 months, spread across an 18–24-month period due to pauses required for turbine delivery, erection and testing activities. Where vegetation removal is required, e.g. segments of hedgerow, this will be done outside of breeding season, which runs from March 1 to August 31, in order to minimise any potential for impacts on nesting birds. Construction may commence from September to March so that construction activities are ongoing by the time the next bird breeding season comes around and can continue throughout that bird breeding season.

1.4 Population and Human Health

Chapter 4 of the EIAR identifies, describes, and presents an assessment on the likely significant effects for the Proposed Grid Connection on Population and Human Health during both the construction and operational phases of the development.

The Site is located approximately 14.5km south of Roscrea Town and approximately 3.8km northeast of Templemore town centre. The Site measures approximately 47.5 hectares and predominantly comprises pastoral agriculture and local roads. The surrounding landuse predominantly comprises pastoral agriculture, one-off housing, small scale private forestry, local and regional roads, Irish Rail infrastructure and commercial and residential landuse within Templemore town. The Consented Wind Farm is located immediately west of the Proposed Grid Connection site.

A desk-based assessment was conducted using the sources and guidelines referenced in section 4.2 of Chapter 4 Population and Human Health to analyse relevant information for the population impact assessment. The following aspects were considered in the assessment of the potential effects of the Proposed Grid Connection on population:

- **Population Level:** An evaluation of the impact on population level.
- **Economic Effects:** An evaluation of the impact that the Proposed Grid Connection will have on economic development and employment.
- **Residential Amenity:** An assessment of the residential and recreational amenity considering the benefit enjoyed from physical external space, which is part of the private home including, size, noise, accessibility, enclosure and the wider natural and built environment.
- **Community Facilities:** An assessment of potential effects with regard to any severance from community facilities, particularly those used by older people, children or other sensitive or vulnerable groups (this category includes relief from existing severance and new severance).
- **Recreational and Tourism Facilities:** An evaluation of the potential impact on recreational and tourism facilities within the population study area.
- **Transport, Connectivity and Accessibility:** An evaluation of the impact on connectivity and accessibility.

The human health assessment is undertaken using the guidance and policies set out in section 4.2 of Chapter 4 Population and Human Health and considers

- Air quality- Dust emissions a dust soiling, CO₂ and other noxious elements
- Water Quality

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- Noise and Vibration
- Traffic and Transport (emissions).

The provision of underground electric cables of the capacity proposed is common practice throughout the country and installation to the required specification does not give rise to any specific health concerns. The Extremely Low Frequency (ELF) Electric and Magnetic Fields (EMF) associated with the operation of the proposed cables fully comply with the international guidelines for ELF-EMF set by the International Commission on Non-Ionizing Radiation Protection (ICNIRP), a formal advisory agency to the World Health Organisation, as well as the EU guidelines for human exposure to EMF. Accordingly, there will be no operational impact on residential or commercial properties as the ICNIRP guidelines will not be exceeded at any distances even directly above the cables.

Impacts on Population and Human Health during the construction and operational phases of the Proposed Grid Connection, and potential cumulative effects with the Consented Wind Farm and other plans/projects within the surrounding landscape, are described in Chapter 4. Measures will be put in place to ensure that there will be no significant health effects on sensitive properties in the surrounding area.

1.5 Biodiversity

Chapter 5 of the EIAR identifies, describes, and presents an assessment on the likely significant effects for the Proposed Grid Connection on Biodiversity during both the construction and operational phases of the development.

The baseline environment for biodiversity was characterised through a detailed desktop review of existing studies and datasets as well as an ecological walkover undertaken on the 7th May 2025. This walkover focussed on habitats, Invasive Alien Plant Species (IAPS), bird, bat, protected non-volant mammals', invertebrates, reptiles and amphibians along the Proposed Grid Connection works footprint plus a 20m buffer, where access was permitted. No instances of Invasive Alien Plant Species (IAPS) were found during this survey. No bird, bat, protected non-volant mammal, invertebrate, reptile or amphibian individuals or suitable/potential breeding/resting areas were found during these surveys and as such these aspects were not brought forward in the impact assessment. Habitats identified during the impact assessment that were brought forward consisted of depositing/lowland rivers.

The impact assessment for the EIAR identified surface water run-off carrying suspended silt or contaminants into local watercourses during the construction and operation phases as the single potential impact. Potential effects as a result of surface water run-off carrying suspended silt or contaminants into local watercourses were assessed for Lower River Suir Special Area of Conservation (SAC) and Cabragh Wetlands proposed Natural Heritage Area (pNHA). The effect was assessed to be not significant due to the scale of the Proposed Grid Connection and the distance from these receptors, but a highly conservative and precautionary approach was taken to add a level of additional certainty, in the form of surface water mitigation measures, so that the potential for significant effects to the SAC and pNHA would not arise as a result of the construction and operation of the Proposed Grid Connection.

Potential effects as a result of surface water run-off carrying suspended silt or contaminants into local watercourses were assessed for habitat depositing/lowland rivers. The effect on this habitat was considered to be significant due to the proximity of this habitat to the works but a localised effect and dissipating beyond the source of the impact. With the implementation of surface water mitigation measures detailed within this EIAR, this effect is considered not significant.

The Biodiversity assessment confirm there will be no significant cumulative effects on flora and fauna or Designated Sites, as a result of the Proposed Grid Connection.

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With the implementation of best practise measures and all proposed mitigation and monitoring measures detailed in the EIAR, the residual effects associated with the construction and operation of the Proposed Grid Connection are not significant.

1.6 Major Accidents and Natural Disasters

Chapter 6 of the EIAR describes the likely significant effects on the environment arising from the vulnerability of the Proposed Grid Connection as detailed in Chapter 3 to risks of major accidents and/or natural disasters.

Major accidents or natural disasters are hazards which have the potential to affect the Proposed Grid Connection and consequently have potential impacts on the environment. These include accidents during construction and operation caused by operational failure and/or natural hazards. The assessment of the risk of major accidents and/or disaster considers all factors defined in the EIA Directive that have been considered in this EIAR, i.e., population and human health, biodiversity, ornithology, land, soil, water, air quality, climate and material assets, cultural heritage and the landscape.

A desk-study has been completed to establish the baseline environment for which the proposed risk assessment is being carried out. This will influence both the likelihood and the impact of a major accident or natural disaster. Local and regional context has been established prior to undertaking the risk assessment to develop an understanding of the vulnerability and resilience of the area to emergency situations.

Further detail on the baseline environment is provided in Section 6.3 of this EIAR.

The scenario with the highest risk score in terms of the occurrence of major accident and/or disaster was identified as ‘Contamination’ of the Proposed Grid Connection site during the construction phase, ‘Fire/ Explosion’ during operational phase.

The Proposed Grid Connection has been designed and built in accordance with the best practice measures set out in this EIAR and, as such, mitigation against the risk of major accidents and/or disasters is embedded through the design.

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

When the implementation of best practise measures and all proposed mitigation and monitoring measures detailed in the EIAR is implemented, the residual effect(s) associated with the construction and operation of the Proposed Grid Connection are not significant.

1.7 Land, Soils and Geology

Chapter 7 of the EIAR assesses the likely significant effects that the Proposed Grid Connection may have on land, soils and geology and sets out the mitigation measures prescribed to avoid, reduce or offset any potential significant effects that are identified.

The land, soils and geology of the Site has been characterised using a combination of desk study and site investigation data. Walkover inspections of the Proposed Grid Connection have been completed as well as soil probing and a trial pit excavation. A visual assessment of exposed soils, subsoil and bedrock and topographic changes along the underground cabling route was also completed.

The proposed 110kV Substation, wind farm control buildings, and associated temporary construction compound are in agricultural pastures.

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Based on site investigations, no significant peat deposits are present at the Site. Where present, the peat is shallow and comprises of a peaty topsoil with depths of <0.3m. Meanwhile, the subsoils at the proposed onsite substation comprise of silt/clay. The bedrock at the Site is mapped by the GSI as Ballysteen Formation (muddy limestone and shale) and the Lisduff Oolite Member (oolitic limestones).

Excavation of soil and subsoil will be required for the construction of foundations and for the formation of trenches to accommodate the underground electrical cabling connection. This will result in the removal of some soil and subsoil at most excavation locations. Spoil will typically be stored on site in linear berms up to 1 m high alongside the new access tracks and a 4m high screening berm along the Eastern boundary of the proposed substation. Some of the excavated materials from the Proposed Grid Connection underground electrical cabling route will go to an appropriate licenced facility as required, dependent on the road makeup at locations along the underground electrical cabling route.

Storage and handling of hydrocarbons/chemicals will be carried out using best practice methods. Measures to prevent soil and subsoil erosion during excavation and reinstatement will be undertaken to prevent water quality impacts.

No significant effects on the land, soil and geology along the Proposed Grid Connection will occur during the construction or operation phases.

The land, soils and geology assessment confirm there will be no significant cumulative effects on land, soil and geology as a result of the Proposed Grid Connection.

1.8 Hydrology and Hydrogeology

Chapter 8 of the EIAR assesses the likely significant effects that the Proposed Grid Connection may have on hydrology and hydrogeology (*i.e.* the Water environment) and sets out the mitigation measures proposed to avoid, reduce or offset any potential significant effects that are identified.

The Proposed Grid Connection is relatively small and given its small scale, the potential for effects on the hydrological and hydrogeological environment is reduced due to the small scale of the proposed earthworks and the limited construction time in comparison to larger projects.

Regionally, the Site is located in the River Suir surface water catchment and is drained by the River Suir and its tributary the Clonmore Stream. The local surface water network provides a direct hydrological connection to downstream designated sites including the Lower River Suir SAC. However, this designated site is located a significant distance from the site, with a hydrological flowpath of 24.5km.

The bedrock underlying the Site is classified as a Locally Important Aquifer and forms part of the Templemore Groundwater Body (GWB). Due to the presence of low permeability soils and subsoils, the local hydrogeological regime is characterised by high rates of surface water runoff and low rates of groundwater recharge. There will be no effect on local private groundwater wells as a result of the Proposed Grid Connection.

Due to the nature of grid connection works, being near surface construction activities, effects on groundwater are generally negligible and surface water is the main sensitive receptor assessed during impact assessments. The primary risk to groundwater would be from oil spillage and leakages during construction plant refuelling. These are common potential impacts on all construction sites (such as road works and industrial sites). These potential contamination sources are to be carefully managed at the Site during the construction and operational phases and measures are proposed within the EIAR to deal with these potential minor local impacts.

During each phase (construction and operation) a number of activities will take place at the Site, some of which will have the potential to significantly affect the hydrological regime or water quality

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at the Site or downstream. These significant potential effects generally arise from sediment input from runoff and other pollutants such as hydrocarbons and cement-based compounds.

Surface water drainage measures, pollution control and other preventative measures have been incorporated into the project design to minimise significant effects on water quality and downstream designated sites. A self-imposed 50m stream buffer was used during the design of the project, thereby avoiding sensitive hydrological features. The surface water drainage plan will be the principal means of significantly reducing sediment runoff arising from construction activities and to control runoff rates. The key surface water control measure is that there will be no direct discharge of wind farm runoff into local watercourses or into the existing site drainage network. This will be achieved by avoidance methods (i.e. stream buffers) and design methods (i.e. surface water drainage plan). Preventative measures also include fuel and concrete management and a waste management plan which will be incorporated into the CEMP (refer to Appendix 3-2).

No significant effects to surface water (quality and flows) and groundwater (quality and quantity, and any local groundwater wells) will occur as a result of the Proposed Grid Connection provided the proposed mitigation measures are implemented. This EIAR presents proven and effective mitigation measures to mitigate the release of sediment which will reduce the concentration of suspended solids to acceptable levels. The storage and handling of hydrocarbons/chemicals will be carried out using best practice methods which will ensure the protection of surface and groundwater quality. The proposed drainage system is designed to slow surface water runoff from the Site by providing greater attenuation. This will ensure that the Proposed Grid Connection does not alter downstream surface water flows and will not contribute to downstream flooding.

With the implementation of the mitigation measures detailed in this EIAR there will be no change in the Water Framework Directive (WFD) status of the underlying GWB or downstream surface waterbodies as a result of the Proposed Grid Connection. The Proposed Grid Connection has been found to be fully compliant with the WFD. The Proposed Grid Connection will not result in the deterioration in the status of any SWB or GWB and will not prevent any waterbody from achieving its WFD objectives.

An assessment of potential cumulative effects associated with the Proposed Grid Connection and other developments on the hydrological and hydrogeological environment has been completed. With the implementation of the mitigation measures detailed in this EIAR, the cumulative assessment found that there will be no significant effects on the hydrological and hydrogeological environments.

No significant effects on the water environment will occur during the construction or operation of the Proposed Grid Connection.

1.9 Air Quality

Chapter 9 of the EIAR identifies, describes and assesses the potential significant direct and indirect effects on air-quality arising from the construction and operation of the Proposed Grid Connection. The Environmental Protection Agency (EPA) has designated four Air Quality Zones for Ireland:

- Zone A: Dublin City and environs
- Zone B: Cork City and environs
- Zone C: 16 urban areas with population greater than 15,000
- Zone D: Remainder of the country.

These zones were defined to meet the criteria for air quality monitoring, assessment and management described in the Clean Air for Europe (CAFE) Directive (as amended) and the Fourth Daughter Directive.

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The air quality zone for the Site was selected, followed by a review of EPA collated baseline air quality data namely Sulphur Dioxide (SO₂), Particulate Matter (PM₁₀), Nitrogen Dioxide (NO₂), Carbon Monoxide (CO) and Ozone (O₃) for the selected air quality zone to determine the representative levels of such emissions for the Proposed Grid Connection. The Site lies within Zone D, which represents rural areas located away from large population centres.

The air quality in the vicinity of the Proposed Grid Connection is typical of that of rural areas of Ireland, i.e., Zone D. Prevailing south-westerly winds carry clean, unpolluted air from the Atlantic Ocean onto the Irish mainland. The EPA publishes Air Monitoring Station Reports for the respective air quality zones. The most recent report for air quality in Ireland is the 'Air Quality in Ireland 2023'. The EPA reports provide Sulphur Dioxide (SO₂), Particulate Matter (PM₁₀), Nitrogen dioxide (NO₂), Carbon Monoxide (CO) and Ozone (O₃) concentrations for areas in Zone D. These are detailed in section 9.3.1 of Chapter 10 Air Quality.

Due to the non-industrial nature of the Proposed Grid Connection and the general character of the surrounding environment, air quality sampling was deemed to be unnecessary for this EIAR.

The construction phase of the Proposed Grid Connection will require the operation of construction vehicles and heavy plant machinery around the site. This potential effect will not be significant and will be restricted to the short term duration of the construction phase and localised to works areas.

The nearest Designated Site SAC: 000934 - Kilduff, Devilsbit Mountain Special Area for Conservation (SAC; [000934]) is located approx. 7.2 km west of the Proposed Grid Connection. Multidisciplinary walkover surveys including habitat surveys, botanical surveys, invasive species and mammal surveys concluded that there are no sensitive habitats, Annex I or protected flora within the EIAR Study Boundary. Based on the criteria set out in Section **Error! Reference source not found.**, it can be concluded that the baseline for sensitive ecological receptors with respects to air quality is low. The overall sensitivity of the area to dust soiling impacts during the construction phase is low. For the construction phase, the impact is considered to be a short term, slight negative impact. The impact on air quality from exhaust emissions and dust emissions during the operational phase is imperceptible negative impact and permanent in duration.

A CEMP will be in place throughout the construction phase (see Appendix 3-2 of the EIAR) and includes dust suppression measures. In addition, construction materials will be transported to the site on specified transport routes only. The agreed transport route roads adjacent to the Site will be regularly inspected for cleanliness and cleaned as necessary.

The indirect positive contribution that the Proposed Grid Connection has with meeting National and EU targets for the production and consumption of electricity from renewable resources by 2030 would be lost. The opportunity to indirectly facilitate the reduction of emissions such as carbon dioxide (CO₂), oxides of nitrogen (NO_x), and sulphur dioxide (SO₂) would not occur due to the continued demand on electricity from coal, oil and gas-fired power stations.

1.10 Climate

Chapter 10 of the EIAR on the potential climate impacts from the Proposed Grid Connection identifies and presents the likely significant effects on climate and also the vulnerability of the project to climatic factors (adaptation).

The assessment also considers the consistency of the Proposed Grid Connection with the provisions of the Climate Action and Low Carbon Development Acts 2015 to 2021, the Climate Action Plan 2025 (CAP25), and all applicable domestic and European Union legislative and regulatory requirements. Annex IV to Directive 2014/52/EU includes direct reference to climate and climate change with the emphasis placed on two distinct aspects of the climate change issue:

- **Climate Change Mitigation:** this considers the impact the Proposed Grid Connection will have on climate change, through greenhouse gas emissions primarily; and

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- **Climate Change Adaptation:** this considers the vulnerability of the Proposed Grid Connection to future changes in the climate, and its capacity to adapt to the impacts of climate change, which may be uncertain.

Approximately 58,808 tonnes of CO₂ will be displaced per annum from the largely carbon-based traditional energy mix by the Consented Wind Farm. Over the 30-year lifetime of the wind farm therefore, 1,764,240 tonnes of CO₂ will be displaced from traditional carbon-based electricity generation. The GHG emissions associated with the construction of the Proposed Grid Connection is 265.7 tCO₂e. This represents 0.02% of the total amount of carbon dioxide emissions that will be offset by the Consented Wind Farm over its operational life. By facilitating the connection of the wind farm to the National grid, the Proposed Grid Connection indirectly supports the displacement of CO₂ from fossil fuel-based electricity generation. In the long-term there will be a long term beneficial or imperceptible positive effect (EPA 2022) effect on Climate as a result of reduced GHG emissions.

The Proposed Grid Connection will implement a number of best practice mitigation measures to reduce GHG emissions which will reduce the impact to climate further. In conclusion, the Proposed Grid Connection is consistent, in so far as practicable, with the relevant national and EU climate policy. Overall, the Proposed Grid Connection will indirectly displace fossil fuels and will support the electrification of Irelands energy system, this will have a net positive impact on Climate.

1.11 Noise & Vibration

Chapter 11 of the EIAR assesses the likely noise and vibration impacts, associated with the Proposed Grid Connection, on Noise Sensitive Locations (NSL) during the construction and operational phases. Each component of the Proposed Grid Connection is assessed in terms of the potential operational phase and short-term construction phase noise and vibration impacts.

This section assesses the likely noise & vibration impacts and effects associated with the Proposed Grid Connection.

The noise impact assessment has focused on the potential outward impacts associated with the construction and operational phases of the Proposed Grid Connection on its surrounding environment.

Baseline noise measurements undertaken for the Consented Wind Farm have been reviewed. The baseline noise levels have informed proposed noise thresholds for both the construction and the operational phase of the works based on current relevant guidance and criteria.

During the main construction phase the majority of works are predicted to have not significant, temporary effects at the closest receptor locations. During the underground cabling activities there is potential for the noise thresholds to be exceeded, however given the proposed duration of the activity, and taking account of the temporal criteria, it is considered that the overall effect is not significant and temporary.

There is predicted to be an increase in traffic noise along the LS7039 of approximately 2 dB during the construction phase, which is a slight and temporary effect, although noise levels along the road will remain low due to the low level of traffic. All other traffic routes are predicted to have an imperceptible increase in noise. Due to the limited traffic generated by the Proposed Grid Connection during the operational phase (1-2 visits to the substation per day by personnel vehicles), no impacts are foreseen.

No mitigation measures are necessary for the construction phase of the project. however, a range of good practise mitigation measures have been outlined.

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During the operational phase, outward noise at the receptor locations has been predicted to be within the proposed criteria at all NSLs, hence, the effect is described as not significant and permanent. No mitigation measures are necessary for the operational phase.

Cumulative impacts and effects have been considered in the assessment. No cumulative noise concerns are identified and the effects can be described as not significant.

1.12 Cultural Heritage

Chapter 12 of the EIAR assesses the potential effects of the Proposed Grid Connection on the Cultural Heritage resource. Cultural heritage includes archaeology, architectural heritage and any other tangible assets. The assessment was based on desktop research, field survey and GIS based mapping. There are no National Monuments, recorded monuments or recorded architectural heritage items located on or in close proximity to the Proposed Grid Connection. One item of local cultural heritage merit (CH1 stone road bridge) is located on the proposed underground electrical cabling route. Horizontal directional drilling will be utilised at this structure. In this regard no potential direct effects to the known archaeological, architectural and cultural heritage resource will occur as a result of the Proposed Grid Connection.

Where potential effects have been identified, such as to sub-surface archaeology should it exist, appropriate mitigation measures have been proposed in order to minimise any such effects. Proposed mitigation includes licenced archaeological testing of previously undisturbed greenfield areas and subsequent reporting.

An assessment of potential indirect effects on the setting of UNESCO World Heritage Sites and those on the Tentative List, National Monuments, Recorded Monuments, Protected Structures and NIAH structures as a result of the Proposed Grid Connection was undertaken. No significant visual effects were identified.

An assessment of potential cumulative effects was also undertaken taking into consideration other extant planning applications and the Consented Wind Farm. No significant cumulative effects were identified and no cumulative effects to the immediate setting of cultural heritage assets will occur.

1.13 Landscape & Visual

Chapter 13 of the EIAR identifies, describes, and presents an assessment of the likely significant effects on landscape character and visual amenity from the Proposed Grid Connection. Landscape Impact Assessment (LIA) relates to assessing effects of a development on the landscape as a resource in its own right and is concerned with how the proposal will affect the elements that make up the landscape, the aesthetic and perceptual aspects of the landscape and its distinctive character. Visual Impact Assessment (VIA) relates to assessing effects of a development on specific views and on the general visual amenity experienced by people.

The LVIA uses methodology as prescribed in the following guidance documents:

- Environmental Protection Agency (EPA) publication '*Guidelines on the Information to be contained in Environmental Impact Statements* (2022);
- [Landscape Institute and the Institute of Environmental Management and Assessment](#) publication entitled *Guidelines for Landscape and Visual Impact Assessment* (2013).

A 2km radius study area is used for the LVIA, which is considered appropriate to the scale and nature of the Proposed Grid Connection and in terms of there being no potential for significant effects to occur beyond this distance.

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In terms of landscape policy, objectives and designations, the Tipperary County Development Plan 2022-2028 is the relevant planning document. This contains a Landscape Character Assessment for the county which identifies that the Proposed Grid Connection is contained within 'The Plains' Landscape Archetype, the 'A1 Lowland Pasture and Arable' Landscape Character Type' and then LCA 5 – Templemore Plains'. This is considered to be a robust landscape classification based on the landscape policy objectives of the County Development Plan.

The Proposed Grid Connection is considered to have only a modest physical impact on the landform and land cover of the Site. It is clearly an ancillary development to the Consented Wind Farm and will not exist in isolation, other than after decommissioning of the Consented Wind Farm. The Proposed Grid Connection will add to the intensity and diversity of utilitarian built development within this rural landscape. Therefore, within the immediate context of the substation element there will be some moderate-slight negative effects, which diminish quickly with distance and broader context. However, no significant landscape effects are reached in the impact assessment.

Visual impacts were assessed at three representative viewpoint locations, representing various viewing distances, and angles in which visual receptors may obtain views of one or both of the end masts and substation. Whilst there are some localised moderate-slight negative visual impacts, in the context of the cumulative Consented Wind Farm, the Proposed Grid Connection becomes less noticeable in its own right and is assimilated as a modest scale ancillary development to the Consented Wind Farm. No significant visual effects are reached in the impact assessment.

1.14 Material Assets

Chapter 14 of the EIAR assesses the potential effects of the Proposed Grid Connection on the Material Assets such as Traffic and Transport, Utilities, Telecommunications and Waste Management.

Traffic and Transport

An assessment of the traffic effects on the public road network was undertaken for the Proposed Grid Connection. The assessment considers the likely impacts that will be incurred by existing local traffic during the construction phase, including the impacts of local traffic diversions that will be required during temporary road closures and the impacts that the additional traffic that will be generated will have during the 12 month construction period.

The Proposed Grid Connection underground cabling route is considered in 2 no. short sections for the purpose of the traffic assessment which are determined by the proposed diversions routes considered to be appropriate for each part of the route. During the construction of the 2 no. sections of the route on the public road network temporary road closures and associated traffic diversions will be required.

It is estimated that the construction of the Proposed Grid Connection underground cabling route will take approximately 31 days to complete during which an additional 150 passenger car units (pcus) generated by construction activity will travel on the local road network. The diversions that will be incurred by local traffic during the construction of the Proposed Grid Connection underground cabling route will result in an average increase in trip length of 4.4 km and journey time of 5 minutes 17 seconds, for the trips that will be impacted.

In terms of the impacts on traffic flows on the local road network during the construction phase during which development generated traffic is greatest, the section of road that is forecast to be busiest is the short section of the R502 just east of Templemore which is forecast to operate at 108% capacity for the background traffic only scenario, increasing by a maximum of 3% points to

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111% during the 31 days that construction of the Proposed Grid Connection underground cabling route takes place.

The access junction proposed to provide access to the proposed substation off the L-70391 during the construction stage and once operational is designed in accordance with current design guidelines. It is estimated that the construction of the Proposed Grid Connection elements (excluding the underground cabling route) will take up to 224 working days during which an additional 41 pcus will travel on the local road network.

All links are forecast to operate well within link capacity for the background and with construction traffic scenarios.

A range of mitigation measures will be implemented during the construction of the Proposed Grid Connection, including;

- A Traffic Management Plan to minimise traffic impacts to local traffic,
- A construction and delivery program, including identification of delivery routes,
- Provision of information to local residents, businesses and schools,
- Liaison with Tipperary County Council, including and pre and post construction road condition surveys,

It is concluded that the traffic effects that will be incurred during the construction of the Proposed Grid Connection will be negative, and short-term and will be slight in terms of severity. Once operational the traffic impact will be imperceptible.

Irish Rail

The Dublin-to-Cork Irish Rail line runs in a northeast to southwest direction approximately 20m south of the proposed underground cabling route. The Railway bridge OBC 202 is located approximately 30m from the proposed underground cabling route. No Proposed Grid Connection infrastructure will physically interact with the railway line. There is no requirement to cross Railway bridge OBC 202. There will be no interference with the railway slope embankment or zone of influence of 5m. The proposed underground cabling route will run at a minimum of 20m north of the railway track and therefore sufficient setback is incorporated into the design. Cognisance has been taken of requirements for third parties as set out in CCE (Chief Civil Engineers) guidance documents for third parties working near railway infrastructure. Additionally, contact will be made to Iarnród Éireann Designated Representative (IEDR) 30 days prior to the works that will take place adjacent to the CIE infrastructure. Therefore, the effects from the Proposed Grid Connection on Irish Rail infrastructure during the construction and operation of the Proposed Grid Connection are imperceptible.

Telecommunications

Despite scoping responses indicating no presence of telecommunication cables along the underground cabling route, prior to the commencement of connection works, confirmatory surveys along the proposed cable route shall be completed. These surveys will confirm the presence of services such as telecommunications cables. If services are identified during these surveys, the utility provider will be contacted to determine appropriate mitigation measure i.e. specific excavation, relocation methods, schedule a suitable time to carry out works. Works undertaken within proximity to identified utilities will be carried out in accordance with the specifications of the relevant utility provider.

Utilities

The Ikerrin to Thurles 110kV overhead line (OHL) crosses over the southeast of the EIAR Study Boundary in a north—south direction. The proposed end masts (lattice-type towers) will be located under this OHL, one in the townland of Clonmore, one in the townland of Strogue.

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There is no gas network Ireland infrastructure within or near the Site.

The nearest Public Water Scheme (Templemore) and Source Protection Area which are located approximately 2.6 km west of the Proposed Grid Connection. A data request sent to Uisce Éireann in July 2025 confirmed a water mains along the R433. These mains will require crossing by the proposed underground electricity cabling. Additional water mains valves are also located approx. 5m from the proposed underground cable route.

Waste Management

There are no EPA-licensed or local authority-authorised waste facilities or activities located within the Site. The closest, authorised municipal waste facility is located approximately 18km south of the Site in Thurles, Co. Tipperary.

With the implementation of best practice measures and all mitigation and monitoring measures set out in Chapter 16, the effects on utilities and waste management listed above range from slight to imperceptible for the short-term construction phase. For the operational phase, the effects will be imperceptible for all except electrical supply as the Proposed Grid Connection will facilitate the transmission of renewable energy from the Consented Wind Farm to the national grid, providing clean, electricity to approximately 47,000 households per annum and offsetting 58,808 tonnes of CO₂.

1.15 Interactions and Cumulative Effects

Chapter 15 of the EIAR identifies the potential significant environmental effects that may occur in terms of Population and Human Health, Biodiversity, Major Accidents and Natural Disasters, Land, Soils and Geology, Hydrology and Hydrogeology, Air Quality, Climate, Noise and Vibration, Landscape and Visual, Archaeological, Architectural and Cultural Heritage, and Material Assets, as a result of the Proposed Grid Connection. All potential significant effects of the Proposed Grid Connection and the measures proposed to mitigate them have been outlined in the EIAR. However, for any development with the potential for significant environmental effects there is also the potential for interaction between these potential significant effects. The result of interactive effects may exacerbate the magnitude of the effects or ameliorate them or have a neutral effect. A matrix is presented in Chapter 15 of the EIAR to identify interactions between the various aspects of the environment already discussed in the EIAR. The matrix highlights the occurrence of potential positive or negative impacts during the construction, and operational phases of the Proposed Grid connection. Where any potential interactive impacts have been identified, appropriate mitigation is included in the relevant sections (Chapters 4—14) of the EIAR.