Planning and Environmental Consultants

Environmental Impact Assessment Report

Taurbeg Wind Farm Extension of Operational Life

Chapter 15 - Material Assets

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15. MATERIAL ASSETS

Material Assets are defined in the 'Guidelines on the Information to be contained in Environmental Impact Assessment Reports' (EPA, 2022) as '*built services and infrastructure. Traffic is included because in effect traffic consumes transport infrastructure'.* They may be either of human or natural origin. The cultural assets of Archaeology and Cultural Heritage are addressed in Chapter 14 of this Environmental Impact Assessment Report (EIAR). Economic assets of natural heritage include non-renewable resources such as minerals or soils, and renewable resources such as wind and water. These assets are addressed in Chapter 8: Land, Soils and Geology, Chapter 9: Hydrology and Hydrogeology, Chapter 10: Air Quality, and Chapter 11: Climate. Tourism and amenity resources, which are also considered material assets, are addressed in Chapter 5 on Population and Human Health. The Population and Human Health chapter also addresses existing land-uses (economic assets), including forestry and agriculture.

For the purposes of this EIAR, the various project components are described and assessed using the following references: 'Proposed Project', 'Proposed Lifetime Extension', 'Proposed Offsetting Measures', 'Proposed Offsetting Lands' and the 'Site'. Please see Section 1.1.1 of this EIAR for further details. A detailed description of the Proposed Project is provided in Chapter 4 of this EIAR.

15.1 Introduction

This chapter of the EIAR addresses the likely significant effects of the Proposed Lifetime Extension and Proposed Offsetting Measures on transportation infrastructure (Section 15.2), telecommunications and aviation (Section 15.3) and on other material assets (Section 15.3), which are economic assets of human origin, including telecommunications, aviation and utilities. This chapter of the EIAR has been prepared in accordance with the requirements of the EIA legislation and guidance outlined in Chapter 1: Introduction

The Proposed Lifetime Extension is being brought forward in response to local, national, regional and European policy regarding Ireland's transition to a low-carbon economy, associated climate change policy objectives and to reduce Ireland's dependence on imported fossil fuels for the production of electricity.

15.2 Traffic and Transport

This section of the EIAR assesses the effects on roads, traffic and transport of the traffic movements that will be generated during the extended operational and decommissioning phase of the Proposed Lifetime Extension as well as during the Proposed Offsetting Measures.

For the development of new wind farms, the construction phase is the critical period with respect to the traffic effects experienced on the surrounding road network, in terms of both the additional traffic volumes that will be generated on the road network, and the geometric requirements of the abnormally large loads associated with the wind turbine plant.

However, since the Proposed Lifetime Extension does not involve any construction work, any potential traffic and transport effects are limited to the extended operational and decommissioning phases of the Proposed Lifetime Extension and the Proposed Offsetting Measures.

15.2.1 Guidance and Legislation

This section of the EIAR has been completed in accordance with the guidance set out in Chapter 1: Introduction. The assessment uses standard terminology to describe the likely significant effects associated with the Proposed Project. Further information on the classification of effects used in this assessment is presented in Chapter 1. The scope of the traffic impact assessment presented is in accordance with TII's Traffic and Transport Assessment Guidelines) – PE-PDV-02045 with (2014), the scope reflecting the fact that the EIAR is for the extension of life of an existing wind farm in addition to a short period of works required for the Proposed Offsetting Measures. In addition, an assessment of the Taurbeg Wind Farm access junction is made with reference Geometric Design of Junctions - DN-GEO-03060, May 2023.

15.2.2 Statement of Authority

This section of the EIAR has been prepared by Alan Lipscombe of Alan Lipscombe Traffic and Transport Consultants Ltd. Alan is a competent expert in traffic and transport assessments. In 2007 Alan set up a traffic and transportation consultancy providing advice for a range of clients in the private and public sectors. Prior to this Alan was a founding member of Colin Buchanan's Galway office having moved there as the senior transportation engineer for the Galway Land Use and Transportation Study. Since the completion of that study in 1999, Alan has worked throughout Ireland on a range of projects including: major development schemes, the Galway City Outer Bypass, Limerick Planning Land-Use and Transportation Study, Limerick Southern Ring Road Phase II, cost benefit analyses (COBA) and various studies for the University of Galway. Before moving to Galway in 1997, Alan was involved in a wide variety of traffic and transport studies for CBP throughout the UK, Malta and Indonesia. He has particular expertise in the assessment of development related traffic, including many wind farm developments including the following: Ardderroo, Derrinlough, Knocknamork, Shehy More, Cloncreen, Derrykillew, Ballyhorgan, Lettergull, Barnadivane, Cleanrath, Knockalough, Sheskin South and Borrisbeg.

Alan has a BEng (hons) Degree in Transportation Engineering (Napier University, Edinburgh, 1989), is a member of Engineers Ireland and of the Institute of Highways and Transportation and is a TII accredited Road Safety Audit Team Member.

15.2.3 Scoping and Consultation

In order to assess the potential for significant effects on local traffic in the vicinity of the Site, scoping requests were made to the Department of Transport and Transport Infrastructure Ireland. Please refer to Section 2.9 of Chapter 2 of this EIAR for details in relation to the EIA scoping exercise

Department of Transport

The Department of Transport responded to scoping via an email dated 27th February 2024, stating that it had no observations at that time and requested to be kept informed of any further developments in the future.

Transport Infrastructure Ireland

Transport Infrastructure Ireland (TII) responded to scoping via an email dated 1st of March 2024, in which it provided a list of general recommendations to be followed when preparing the EIAR. The issues raised by TII together with the Applicant's responses are provided in Table 15-1 below.

Table 15-1 Issues raised by TII in relation to the Proposed Lifetime Extension and Responses

ID	Comment/Recommendation	Response
1	Consultations should be had with relevant Local Authority / National Roads Design Offices with regards to locations of existing and future national roads schemes.	There will be no abnormal loads associated with either the Proposed Lifetime Extension or the Proposed Offsetting Measures. Neither the Site or the lands where Proposed Offsetting measures are accessed from the national road network.
2	TII would be specifically concerned as to potential significant impacts the development would have on the national road network (and junctions with national roads) in the proximity of the Proposed Project, including the potential haul route.	It is noted that the EIAR relates to the continued operation of the existing Taurbeg Wind Farm, which generates very low volumes of traffic, and the Offsetting lands, which will generate 10 HGV movements for 20 days only, as set out in Section 15.2.4.3. It is concluded that there are no significant traffic related impacts relating to either the Proposed Offsetting Measures or Proposed Lifetime Extension.
3	The Applicant, in preparing an EIAR, should have regard to TII Publications (formerly DMRB and the Manual of Contract Documents for Road Works).	A review of the design of the existing access junction is undertaken with reference to TII guidelines, as discussed in Section 15.2.4.4 and shown in Figures 15-1 and 15-2.
4	The EIAR / EIS should consider the "Environmental Noise Regulations 2006' (SI 140 of 2006) and, in particular, how the development will affect future action plans by the relevant competent authority. The developer may need to consider the incorporation of noise barriers to reduce noise impacts (see "guidelines for the	The potential impacts of the Proposed Project with regards noise set out in Chapter 12 of this EIAR.

ID	Comment/Recommendation	Response
	Treatment of Noise and Vibration in National Road Schemes' (1st Rev, NRA 2004).	
5	It would be important that, where appropriate, subject to meeting the appropriate thresholds and criteria and having regard to best practice, a Traffic and Transport Assessment (TTA) be carried out in accordance with relevant guidelines, noting traffic volumes attending the site and traffic routes to/from the site with reference to impacts on the national road network and junctions of lower category roads with national roads. In relation to national roads, the Authority's Traffic and Transport Assessment Guidelines (2014) should be referred to in relation to proposed development with potential impacts on the national road network. The scheme promoters are advised to have regard to Section 2.2 of the NRA/TII TTA Guidelines which addresses requirements for sub-threshold TTA. Any improvements required to facilitate development should be identified. It will be the responsibility of the developer to pay for the costs of any improvements to national roads to facilitate the private development proposed as TII will not be responsible for such costs.	It is confirmed that the assessment presented in this section of the EIAR is undertaken in accordance with Traffic and Transport Assessment Guidelines, TII (2014) with the scope reflecting the fact that the EIAR is for the continuance of use of an existing wind farm in addition to a short period of minor works required as part of Proposed Offsetting Measures.
6	The designers are asked to consult TII Publications to determine whether a Road Safety Audit is required.	A Road Safety Audit has not been undertaken as the road infrastructure and access junction at the existing Taurbeg Wind Farm off the L5005 is existing.
7	In the interests of maintaining the safety and standard of the national road network, the EIAR should identify the methods/techniques proposed for any works traversing/in proximity to the national road network.	While very low volumes of HGV trips may travel to from the Site during the Proposed Offsetting Measures via the N21 to the west and the N72 from the south (a maximum of 10 movements in one day for a total of 20 days only), there will be no additional traffic movements generated by the Proposed Lifetime Extension.
8	With respect to turbine and associated delivery haul route(s) which utilise national roads, in	There will be no abnormal loads generated by the Proposed Lifetime

ID	Comment/Recommendation	Response
	relation to any proposed haul route, where abnormal 'weight' loads are proposed, separate structure approvals/permits and other licences may be required. All national road structures on the haul route through all the relevant County Council administrative areas should be checked by the applicant/developer to confirm their capacity to accommodate any abnormal 'weight' load proposed.	Extension, with the HGV trips generated during the Proposed Offsetting Measures being standard trucks.
9	In addition, the haul route should be assessed to confirm capacity to accommodate abnormal 'length' loads and any temporary works required.	There will be no abnormal loads generated by either the Proposed Project or Proposed Offsetting Measures.
10	The national road network is managed by a combination of PPP Concessions, Motorway Maintenance and Renewal Contracts (MMaRC) and local road authorities in association with TII. The applicant/developer should also consult with all PPP Companies, Motorway Maintenance and Renewals Contractors (MMaRC) and road authorities over which the haul route traverses to ascertain any operational requirements, including delivery timetabling, etc. to ensure that the strategic function of the national road network is safeguarded.	The Proposed Project (including Proposed Offsetting Measures) will have no impact on the Motorway road network.
11	Where temporary works within any MMaRC Contract Boundary are required to facilitate the transport of turbine components to the Site, the applicant/developer shall contact thirdpartyworks@tii.ie in advance, as a works specific Deed of Indemnity will be needed by TII before the works can take place.	This is not applicable for the Proposed Project.
12	Additionally, any damage caused to the pavement on the existing national road arising from any temporary works due to the turning movement of abnormal loads (e.g. tearing of the surface course, etc.) shall be rectified in accordance with TII Pavement Standards and details in this regard shall be agreed with the Road Authority prior to the commencement of any development onsite.	There will be no abnormal load deliveries for the Proposed Project and so it is suggested that this is not applicable to the Proposed Project.
13	In the event of any Greenway and National Cycle Network Plan (NCN) proposals in the vicinity of the proposal or haul route,	Cork County Council will be consulted on this issue.

ID	Comment/Recommendation	Response
	consultation with the local authority internal project and/or design staff is recommended.	

15.2.4 Receiving Environment

15.2.4.1 Site Location

15.2.4.1.1 *Proposed Lifetime Extension*

The existing Taurbeg Wind Farm is located approximately 3.5km south of Rockchapel and 10.5km northwest of Newmarket, Co. Cork, in the townlands of Taurbeg, Glasheenanargid and Taurmore.

The existing wind farm comprises of 11 turbines, wind turbine foundations, hardstands, site access road and junction off the L5005 local secondary road, substation and met mast. The Taurbeg Wind Farm is connected to the national electricity grid at the existing Glenlara 110kV Substation. A 38kV underground cable runs between the onsite substation and a mast at the south of the site. A 38kV overhead line runs from the mast to the existing Glenlara 110kV Substation. The grid connection does not form part of the current planning application.

A site location map for the Proposed Lifetime Extension, is provided in Figure 1-1 of Chapter 1: Introduction.

15.2.4.1.2 *Proposed Offsetting Lands*

The Proposed Offsetting lands are located approximately 8km east of Castleisland, Co. Kerry in the townlands of Coom and Knockatee.

A site location map for the Proposed Offsetting lands, is provided in Figure 1-1 of Chapter 1: Introduction.

15.2.4.2 Local Road Network

15.2.4.2.1 *Proposed Lifetime Extension*

The existing Taurbeg Wind Farm is accessed for the purpose of routine maintenance via a single existing access junction located off the west side of the local L5005 road in the townland of Taurbeg. The access is located approximately 3.6km along the L5005 to the south of the junction with the R576 regional road. The location of the existing access is shown in the context of the local and regional road network in Figure 15-1.

15.2.4.2.2 *Proposed Offsetting Lands*

The existing lands are accessed for agricultural practises via the L10720 (Co. Kerry) to the northeast of the site. The forested areas of the site are accessed for forestry practises via the L10750.

15.2.4.3 Existing and Proposed Trip Generation

15.2.4.3.1 *Proposed Lifetime Extension*

The existing turbines are accessed via the onsite network of existing wind farm access roads, which are also shown in Figure 15-1. As the existing Taurbeg Wind Farm is currently operational, with no changes proposed, there is no construction phase associated with the Proposed Lifetime Extension. Therefore, there will be no new construction traffic generated by the continued operation of the existing Taurbeg Wind Farm.

During the Proposed Lifetime Extension, the wind farm will continue to be remotely monitored. The maintenance contractor for Taurbeg Wind Farm will be responsible for ensuring each turbine is well maintained. Each turbine is subject to a twice yearly maintenance schedule which includes twice yearly master maintenance and visual blade inspections. In addition, there will be a requirement for unscheduled maintenance, which could vary between resetting alarms to major component changes. The use of a crane on site may be required but this is only for major component repairs/change. All site roads and public roads are suitable for this access if required, as per the construction phase of the existing Taurbeg Wind Farm and no modifications are required. Typically, maintenance traffic will consist of four-wheel drive LGVs. The wind farm operations and maintenance manager will continue to attend the site regularly (in recent years this has averaged approximately 9 no. visits per year) to perform inspections and oversee maintenance works. The onsite substation and site tracks will also require periodic maintenance. The existing Taurbeg 38 kV Substation will continue to be operational 24 hours per day, 7 days a week throughout the year. Substations can be operated remotely and manually. Supervisory operational and monitoring activities will be carried out remotely using a SCADA system, with the aid of computers connected via a telephone modem link. It is estimated that daily visits of one maintenance team will be made to the site for authorised persons and vehicles to undertake minor routine maintenance and inspection, if and when required. The level of activity required for the maintenance of the existing Taurbeg Wind Farm infrastructure is minimal.

The impact of these trips on local traffic during the Proposed Lifetime Extension is discussed in Section 15.2.5.3 below.

15.2.4.3.2 *Proposed Lifetime Extension- Decommissioning Phase*

It is estimated, on a precautionary basis, that 157 truckloads, traveling to and from the site, will be generated during the Decommissioning Phase, of which 88 will be abnormal loads, and 69 will be standard large articulated HGVs or trucks.

It is estimated that this will occur over a 3 to 6 month period.

15.2.4.3.3 *Proposed Offsetting Measures*

In addition to the above, there will also be some HGV movements generated during the deforestation works associated with the Proposed Offsetting Measures, which is described in detail in Appendix 7-7. It is estimated that as part of this work, 95.5 Ha of trees will be felled to waste material which will be retained on the site. There will be a further 10 Ha of trees felled which will be chipped and removed from the site. It is estimated that this will produce 2,000 tonnes of material or 80 x 25 tonne loads that will be removed from the site at a rate of 5 HGV loads, or 10 HGV movements per day on 20 separate days. The impact of these trips on the local traffic during the Proposed Offsetting Measures is discussed in Section 15.2.5.2 below.

15.2.4.4 Existing Site Access

A site visit was undertaken on Thursday 30th May 2024 in order to assess the existing Taurbeg Wind Farm access junction on the L5005, with images from the visit shown in Plates 15-1 to 15-4 Below.

As shown in Plate 15-1 below, the existing access is a wide gravel surfaced road with a width of approximately 12m at the mouth of the junction at the connection with the L5005. As shown in Plate 15-1, there are currently no junction markings or signs.

Plate 1 Existing Taurbeg Wind Farm Access Road – Taken from L5005

Plate 2 Looking east along L5005 – Taken from Taurbeg Wind Farm access road

Plate 3 Looking west along L5005 – Taken from Taurbeg Wind Farm access road

Plate 4 Looking east along along L5005 with Taurbeg Wind Farm access road on right

During the site visit the available visibility splays for traffic exiting the existing Taurbeg Wind Farm were measured to be as follows:

- To the west, due to existing hedgerow / tree lines the available visibility splay was measured to be approximately 110m along the nearside carriageway edge of the

L5005 taken from a setback of 2.4m back from the carriageway edge along the location of the estimated centre of the access road.
- To the east, the available visibility splay was measured to be approximately 90m.

During the time of the site visit in May 2024, the default speed limit on the L5005 in the proximity of the Taurbeg Wind Farm access junction was 80 kph. However, as part of the Department of Transports road safety program it is, however, proposed to reduce the speed limit on all local roads in Ireland from 80 kph to 60 kph from February 2025, so the lower speed limit is adopted for the purpose of this assessment.

It is noted that no specific visibility splays are recommended in the current Cork County Development Plan 2022 – 2028, so reference is made to the document DN-GEO-03060 Geometric Design of Junctions, TII, May 2023, which states that visibility splays of 90m should be provided for a design speed of 60 kph. Therefore, the existing visibility splays to the west and east of the existing site entrance are in compliance with this requirement.

Minor improvements to the existing Taurbeg Wind Farm access junction are included in the extended operational phase mitigation measures included in Section 15.2.5.3 in order to maximise safety for all road users.

15.2.5 Likely and Significant Effects and Associated Mitigation Measures

15.2.5.1 'Do-Nothing' Scenario

Under the Do-Nothing Scenario, the operational life of the Taurbeg Wind Farm would not be extended beyond 2026, the wind farm would be decommissioned, following the expiration of the current planning permission. Should this occur, the impact on local traffic would be slight, negative and short term in duration, arising from the implementation of the decommissioning plan included in this EIAR (Appendix 4-3). This plan details the removal of all turbine infrastructure from site. Cranes and heavy plant vehicles will be required onsite to disassemble each turbine tower and associated infrastructure. Excavators and HGVs will be required to dismantle the foundations and internal roads and transport the resulting material offsite for disposal or recovery. There will be additional trips generated by the site from staff required to undertake the decommissioning work onsite.

15.2.5.2 Proposed Offsetting Measures

As discussed in Section 15.2.4.3 above, there will be approximately 20 days when 5 HGV loads or 10 HGV movements per day will be generated to and from the Proposed Offsetting lands during the Proposed Offsetting Measures. It is estimated that the impact of these movements on local traffic will be negative, temporary and slight in terms of severity.

There will be **No Significant Effects** on local traffic as a result of the Proposed Lifetime Extension.

15.2.5.3 Extended Operational Phase - Proposed Lifetime Extension

During the Proposed Lifetime Extension, the majority of maintenance works on the Site will be completed by a two-person team travelling in a light goods vehicle. Maintenance crews will be required onsite to complete major component replacement on a sporadic basis, e.g. turbine component changes or onsite control building maintenance.

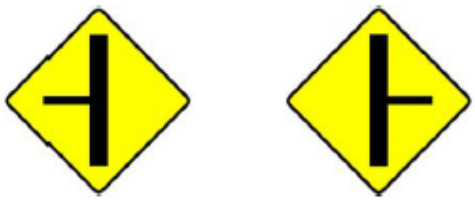
Typically, there are no more than two trips per day to the Site made by car or light goods vehicle. The direct effect on local traffic will be imperceptible neutral and medium-term given the very low volume of daily trips to the Site.

Further information on maintenance procedures on the Site is detailed in Section 4.6.2 of Chapter 4 of this EIAR.

Mitigation Measures

- The following minor improvements to the existing Taurbeg Wind Farm access junction are proposed to improve road safety during the Proposed Lifetime Extension. Junction delineated with edge of carriageway markings and STOP junction markings and STOP signs in accordance with Figure 7.35 of the Traffic Signs Manual, as shown in Figure 15-1.
- The trimming back of shrubs on the northside of the L5005 in order to provide forward visibility for traffic turning right into the Taurbeg Wind Farm site, as shown in Figure 15-2, and also to maintain the available visibility splays on the southern side of the L5005, also shown in Figure 15-2 is recommended.
- The introduction of junction warning signs W002L of the Traffic Signs Manual on the westbound approach to the Taurbeg Wind Farm access junction on the L5005, and W002R on the eastbound approach, in order to increase the conspicuity of the access junction. These signs should be located on the left side of the L5005 and approximately 100m in advance of the junction.

Extract from TSA Chapter 6 – Warning Signs



W 002L W 002R
W 002: Side Road

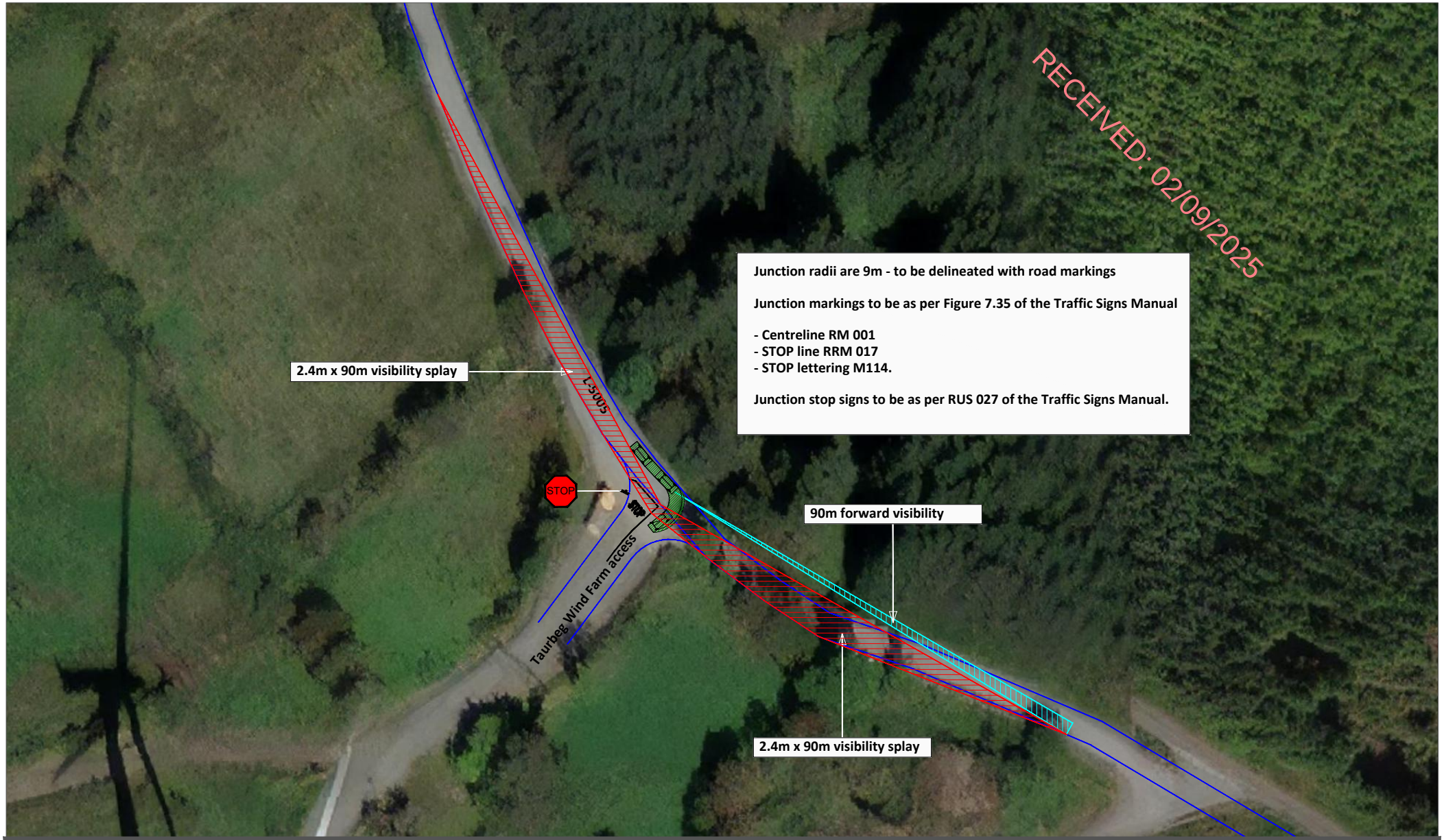
NOTES:

PLANNING DRAWING ONLY - NOT FOR CONSTRUCTION PURPOSES

Figure 15-1 L5005 / Taurbeg Wind Farm access junction - Proposed junction markings and signs

PROJECT:	Taurbeg Wind Farm Proposed Lifetime Extension, County Cork		
CLIENT:	Taurbeg Ltd	SCALE:	1:1000
AL PROJECT NO: 11550	DATE: 22.12.24	DRAWN BY:	AL

ALAN LIPSCOMBE
TRAFFIC & TRANSPORT CONSULTANTS



NOTES:

PLANNING DRAWING ONLY - NOT FOR CONSTRUCTION PURPOSES

Figure 15-2 L5005 / Taurbeg Wind Farm access junction - 2.4m x 90m visibility splays and 90m forward visibility

PROJECT:	Taurbeg Wind Farm Proposed Lifetime Extension, County Cork		
CLIENT:	Taurbeg Ltd		SCALE: 1:1000
AL PROJECT NO: 11550	DATE: 22.12.24		DRAWN BY: AL

ALAN LIPSCOMBE
TRAFFIC & TRANSPORT CONSULTANTS

Residual Impacts

The Proposed Lifetime Extension will have **Medium-Term, Imperceptible, Neutral Effects** on local traffic as no changes to the existing infrastructure are proposed.

Significance of the Effects

Based on the assessment above, there will be **No Significant Effects** on local traffic as a result of the Proposed Lifetime Extension.

15.2.5.4 Decommissioning Phase

It is proposed to extend the lifetime of the existing wind farm by 10 years, thereby amending the required decommissioning date from 2026 to 2036. The proposed decommissioning works are outlined in Chapter 4, Section 4.7. A Decommissioning Plan is also presented in Appendix 4-3 of this EIAR.

Upon decommissioning of the existing Taurbeg Wind Farm, as proposed in 2036, cranes and heavy plant vehicles will be required onsite to disassemble the existing above-ground turbine structures. Turbine infrastructure including turbine towers, nacelles and rotor components will be separated and removed offsite for re-use or recycling. The Applicant has made a commitment not to send turbine blades to a landfill or incineration facility. Instead, the Applicant is committed to recycling the wind turbine components, insofar as possible. The exact approach for recycling the turbines has yet to be determined as it will be 10 years from now, however recycling will be carried out in accordance with best practice at that time.

It is proposed to leave the turbine foundations and hardstanding areas in-situ and to cover them with earth and reseed as appropriate. Leaving the turbine foundations and hardstanding areas in-situ is considered a more environmentally prudent option, as to remove that volume of reinforced concrete and crushed stone from the ground could result in significant environmental nuisance such as noise, dust and/or vibration. It is proposed to leave access roads in-situ, as these are in use by the participating landowners to access their lands and as existing walking trails. Underground cables within the wind farm site are laid inducting at a depth of more than 2m. The cabling will be removed while the ducting will be left in situ in order to avoid unnecessary effects on soils. While the actual number of loads that will be required to be removed from the wind farm components from the Site when the wind farm is decommissioned has not been determined at this stage, the impact in terms of traffic volumes will be significantly less than during the original construction stage.

15.2.5.4.1 *Trip Generation – During Decommissioning*

Table 15-2 below outlines an estimate of trip generations for the decommissioning of Taurbeg Wind Farm, including delivery of crane, plant, refuelling and delivery of soil. Table 15-3 estimates the trip generations for the removal of the 11 no. turbines following decommissioning of the wind farm. For the purpose of this assessment, it is assumed that this is a theoretically precautionary scenario, where there is no potential for turbine blades to be cut onsite and assumes that delivery of soil for covering hardstanding areas, foundations, etc. is required rather than sourcing soil onsite.

Table 15-2 Estimated trip generation for decommissioning phase

Material	Total Truck Loads	Truck type
Delivery of plant	5	Large Artic
Cranes for site	1	Large Artic
Additional Crane Materials Delivery	3	Large Artic
Refuelling for plant	5	Large Artic
Removal of plant	5	Large Artic
Delivery of Soil*	17	Large Artic
Total Truck Loads	**36**	
*For this table, the worst-case scenario is assumed. Therefore, delivery of soil is opted for rather than sourcing soil onsite		

Table 15-3 Estimated trip generation for the removal of the 11 no. turbines following decommissioning of the wind farm

Material	Units	Quantity per Unit	Total Quantity	Quantity per Truck	Total Truck Loads	Truck type
Nacelle	11	1	11	1	11	Extended Artic
Blades	11	3	33	1	33	Extended Artic
Towers	11	4	44	1	44	Extended Artic
Sub total					**88**	**Extended Artic**
Transformer	11	1	11	1	11	Large Artic
Blade hub	11	1	11	1	11	Large Artic
Other Components	11	1	11	1	11	Large Artic
Sub total					**33**	**Large artic**

Total Truck Loads	121	

It is estimated, on a precautionary basis, that 157 truckloads, traveling to and from the site, will be generated during the Decommissioning Phase, of which 88 will be abnormal loads, and 69 will be standard large articulated HGVs or trucks.

The decommissioning phase will take approximately 3-6 months to complete from commencing the removal of turbines to the final reinstatement of the site. At this time, it is not possible to determine exactly when decommissioning will take place.

Mitigation Measures

As noted in the Scottish Natural Heritage (SNH) report *Research and Guidance on Restoration and Decommissioning of Onshore Wind Farms* (SNH, 2013), reinstatement proposals for a wind farm are typically made far in advance, so within the proposed 10-year extension of operation of the site, technological advances and preferred approaches to reinstatement are likely to change. According to the SNH guidance, it is therefore "best practice not to limit options too far in advance of actual decommissioning but to maintain informed flexibility until close to the end-of-life of the wind farm".

Prior to decommissioning, an updated Decommissioning Plan, including material recycling/disposal and a Traffic Management Plan, will be developed to minimise impacts to local traffic. The updated decommissioning plan will be prepared in consultation with the local authority, and the final documentation will be agreed with the local authority in advance of decommissioning.

Residual Impact

As stated above, in the event that the existing wind farm is decommissioned in 2036, an updated Decommissioning Plan will be prepared and implemented in order to minimise the residual impacts. The decommissioning phase will likely result in a residual impact on local traffic that is a **Temporary, Slight, Negative Effect**.

Significance of the Effects

Based on the assessment above, there will be **No Significant Direct or Indirect Effects** on local traffic as a result of the decommissioning phase.

15.2.5.5 Cumulative Effects

The potential cumulative impact and associated effects between the Proposed Project and the projects described in Chapter 2 of this EIAR, hereafter referred to as the 'other projects', have been considered in terms of traffic and transport.

While there is no construction phase impacts associated with the Proposed Lifetime Extension, there are deforestation works (and associated traffic movements) proposed as part of the Proposed Offsetting Measures, with the impacts assessed in Section 15.2.5.2 to be slight. For the purpose of local traffic related cumulative impacts associated with the Proposed Offsetting lands, a 5km cumulative boundary was selected. No significant cumulative effects in relation to local traffic associated with the Proposed Offsetting Measures are envisaged.

Operational phase impacts on local traffic are imperceptible and therefore there are no significant cumulative effects in relation to local traffic associated with the Proposed Lifetime Extension or with the Proposed Offsetting Measures.

For the purpose of local traffic related cumulative impacts associated with the Proposed Lifetime Extension, the cumulative planning search as set out in Appendix 2-3 was reduced to a radius of 5km from the existing wind farm and substation. Following this, it was considered that there were no developments located within this 5km radius that had the potential to overlap with the decommissioning phase of the wind farm, and therefore there are No Significant Cumulative Effects in relation to local traffic associated with the extended operational life or the decommissioning phase of the Proposed Project in combination with other projects.

15.3 Telecommunications, Aviation and Other Material Assets

15.3.1 Introduction

This section of the EIAR assess the likely significant effects of the Proposed Lifetime Extension and Proposed Offsetting Measures on telecommunications, aviation and other material assets which include utilities or built services in the area such as electricity supply and transmission, water, gas and underground telecommunications. This section also considers waste management during the extended operational and decommissioning phases of the Proposed Lifetime Extension and Proposed Offsetting Measures.

This section describes the way in which wind turbines can potentially interfere with telecommunications signals or aviation activities. Likely significant effects are assessed in Section 15.3.6.

15.3.2 Statement of Authority

This section of the EIAR has been prepared by Gráinne Griffin and Natalia Stolarska of MKO and reviewed by Eoin McCarthy. Gráinne is an Environmental Scientist with MKO with over 3 years' experience in the environmental consultancy sector. Gráinne has experience in report writing, including Appropriate Assessments, Natura Impact Statements, feasibility studies and EIA screening reports and EIAR chapters including Material Assets chapters for large-scale renewable energy developments. Natalia is an Environmental Scientist with MKO having joined the company in September 2023. Since joining MKO, Natalia has become a member of the MKO Environmental Renewables Team which work on producing high quality Environmental Impact Assessment Reports for a variety of Renewable Energy clients.

Eoin is a Project Director with MKO with over 13 years of environmental consultancy experience. Eoin's key strengths and areas of expertise are in project management, environmental impact assessment, wind energy site selection and feasibility assessment.

15.3.3 Methodology and Guidance

The methodology for the assessment included in this section focuses particularly on the scoping and consultation exercise conducted with telecoms operators and aviation authorities. Scoping was carried out in line with the EPA Guidelines (EPA, 2022), and the 'Best Practice Guidelines for the Irish Wind Energy Industry' (Irish Wind Energy Association, 2012) which provides a list of telecommunications operators for consultation.

A full description of the scoping and consultation exercise is provided in Section 2.9 of Chapter 2 of this EIAR. Consultation with the telecommunications operators and aviation bodies informed the constraints mapping process, which in turn informed the layout of the Proposed Project.

The assessment of likely significant effects on material assets uses the standard methodology and classification of impacts as presented in Chapter 1 of this EIAR.

This section of the EIAR focuses on the Proposed Lifetime Extension and potential effects associated with telecommunications, aviation and other material assets. Given the nature of the Proposed Offsetting Measures, it is envisaged that the works will not have any effect on telecommunications, aviation or other material assets.

15.3.3.1 Legislation, Policy and Guidance

This section has been carried out in accordance with the 'EIA Directive' as amended by Directive 2014/52/EU and having regard, where relevant, to guidance and policy documents listed below:

- Cork County Development Plan 2022-2028
- Guidelines on the Information to be contained in Environmental Impact Assessment Reports' (EPA, 2022)
- Draft Air Corps Wind Farm/Tall Structures Position Paper (August 2014)
- Department of Environment, Heritage and Local Government (2006) Wind Energy Development Guidelines for Planning Authorities "the Guidelines"
- Department of the Environment, Heritage and Local Government (2019) Draft Revised Wind Energy Development Guidelines for Planning Authorities 'the draft Guidelines'
- Irish Wind Energy Association (2012) Best Practice Guidelines for the Irish Wind Energy Industry
- ESB Networks (2019) Code of Practice for Avoiding Danger from Overhead Electricity Lines.
- ESB (2017) EMF & You: Information about Electric & Magnetic Fields and the electricity network in Ireland

15.3.4 Receiving Environment

15.3.4.1 Broadcast Communications

Wind turbines, like all large structures, have the potential to interfere with broadcast signals, by acting as a physical barrier or causing a degree of scattering to microwave links. The most significant effect at a domestic level relates to a possible flicker effect caused by the moving rotor, affecting, for example, radio signals. The most significant potential effect occurs where the wind farm is directly in line with the transmitter radio path.

15.3.4.2 Domestic Receivers

Depending on local topography, a domestic receiver may receive broadcast signals from more than one location. The strength of the signal varies with distance from the transmitter, and the receiver's antenna is generally always directed towards the most local, and usually the strongest, broadcasting station.

There are two types of potential electromagnetic interference to domestic receivers, depending on the location of the receiver in relation to a wind farm. 'Shadowed' houses are located directly behind a wind farm, relative to the location from where the signal is being received. In this case, the main signal passes through the wind farm and the rotating blades can create a degree of signal scattering. In the case of viewers located beside the wind farm (relative to the broadcast signal direction), the effects are likely to be due to periodic reflections from the blade, giving rise to a delayed signal.

In both cases, i.e., shadowed houses located behind the wind farm and those located to the side of it, the effects of electromagnetic interference may depend to some degree on the wind direction, since the plane of rotation of the rotor will affect both the line-of-sight blockage to viewers located behind the wind farm and the degree of reflection to receivers located to the side.

15.3.4.3 Other Signal Types

Wind turbines have the potential to affect other signal types used for communication and navigational systems, for example tower-to-tower microwave communication links, and airborne and ground radar

systems. Interference with radar systems occurs when wind turbines are located close to an airport or directly in line with the instrument landing approach. These effects are generally easily dealt with by detailed micro-siting of turbines in order to avoid alignment with signal paths or by the use of repeater relay links out of line with the wind farm.

15.3.4.4 Existing and Built Services and Utilities

15.3.4.4.1 *Electricity*

Proposed Lifetime Extension

The Taurbeg Wind Farm is connected to the national electricity grid at the existing Glenlara 110kV Substation. A 38kV underground cable runs between the onsite substation and a mast at the south of the site. A 38kV overhead line runs from the mast to the existing Glenlara 110kV Substation.

There are no other 110kV or 38kV overhead electricity lines within or adjacent to the existing Taurbeg Wind Farm, with the closest 110kV overhead electricity line being c.2.2km west of Taurbeg Wind Farm site.

Proposed Offsetting Measures

There is no electrical infrastructure located within the Proposed Offsetting Lands. The closest 220kV overhead line is located c.4.5 km west of the Proposed Offsetting Lands.

15.3.4.4.2 *Gas*

Proposed Lifetime Extension

A data request was sent to Gas Networks Ireland in May 2025. The data returned concluded there are no gas pipelines within or near the existing Taurbeg Wind Farm.

Proposed Offsetting Measures

A data request was sent to Gas Networks Ireland in May 2025. The data returned concluded there are no gas pipelines within or near the Proposed Offsetting Lands.

15.3.4.4.3 *Water*

Proposed Lifetime Extension

The GSI do not map the presence of any registered Group Water Schemes (GWS) or Public Water Schemes (PWS) or associated source protection areas within the Site (www.gsi.ie). There are no PWS or GWS within 10km of the existing Taurbeg Wind Farm Site. The closest mapped GWS is the Kileedy GWS. The source protection area associated with this GWS is mapped ~11km to the northeast of the Site.

A search of private well locations (wells with location accuracy of 1–100m were only sought) was undertaken using the GSI well database (www.gsi.ie). Two wells (GSI Name: 1111SWW041 and 1111SWW040) are located to the northeast of the existing Taurbeg Wind Farm Site in the townland of Glennakeel South. These wells are mapped ~1.4km and 1.9km northwest of T3 and are listed as having

agricultural and domestic uses. According to the GSI (www.gsi.ie) these wells have a moderate yield class of 16.4m^3/day.

The primary risks to the water environment during the extended operational phase are from hydrocarbon spillage and leakages along with surface water runoff and potential erosion issues (sediment entrainment) arising from the existing hardstand areas.

Proposed Offsetting Measures

The GSI do not map the presence of any registered Group Water Schemes (GWS) or Public Water Schemes (PWS) or associated source protection areas within the Proposed Offsetting Lands (www.gsi.ie). The closest mapped GWS is the Kileedy GWS. The source protection area associated with this GWS is mapped ~22km to the northeast of the Proposed Offsetting lands. The GSI map several local private wells/boreholes in the lands to the west of the Proposed Offsetting lands. These wells are used for agricultural and domestic purposes and are listed as having a poor to moderate yield class.

15.3.4.5 Waste Management Services

Proposed Lifetime Extension

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 29km southwest in Killarney, Co. Kerry.

It is not anticipated that any significant volume of waste will be generated within the Site during the Proposed Lifetime Extension as only a small number of operational and maintenance personnel will be present onsite during maintenance. All waste arising as a result of servicing and maintenance (e.g., lubrication oils, packaging from spare parts or equipment, unused paint etc.) will be removed from site and reused, recycled, or disposed of in accordance with best practice in an authorised facility.

Waste from the toilet facility will be removed from its storage tank by a licenced provider and disposed of in an authorised facility.

Proposed Offsetting Measures

There are no EPA-licensed or local authority-authorised waste facilities or activities located within the Proposed Offsetting Lands. The closest, authorised municipal waste facility is located approximately 19km southwest in Killarney, Co. Kerry.

It is not anticipated that any significant volume of waste will be generated within the Proposed Offsetting Lands during the Proposed Offsetting Measures as only a small number of forestry workers and maintenance personnel will be present onsite. All waste arising as a result of deforestation works and maintenance will be removed from site and reused, recycled, or disposed of in accordance with best practice in an authorised facility.

15.3.5 Scoping and Consultation

15.3.5.1 Telecommunications Operators

As part of the EIAR scoping and consultation exercise, MKO contacted ComReg (Commission for Communications Regulation) to identify licensed telecommunication operators in the vicinity of the Site whose infrastructure may be impacted by the Proposed Lifetime Extension. ComReg responded on the 17th of November 2023 with a list of the relevant national and regional broadcasters, fixed and mobile

telephone operators within 10km of the Site. The responses received by MKO from these consultees are summarised below in Table 15-4.

Table 15-4 Telecommunications Scoping Responses

ComReg Consultee	Initial Scoping Response	Potential for Interference Following Consultation Exercise	Action Required
Broadcasting Authority of Ireland	Received 30.11.2023	No	N/A
Cellnex	Received 19.12.2023	No	N/A
Dense Air	No Response	N/A	N/A
Eircom Ltd/Eir	Received 01.12.2023	No	N/A
ESB	No Response	N/A	N/A
Enet	Received 20.11.2023	No	N/A
EOBO Ltd.	No Response	N/A	N/A
Fastcom Broadband Limited	No Response	N/A	N/A
Hibernian Towers	Received 11.01.2024	No	N/A
Imagine Networks Ltd	Received 21.11.2023	No	N/A
Irish Rail	Received 21.11.2024	No	N/A
Ivertec Ltd.	Received 20.11.2023	No	N/A
JFK Communications Ltd.	Received 11.12.2023	No	N/A
JS Whizzy Ltd.	Received 04.03.2024	No	N/A
Lackabeha Services Ltd T/A Airwaves Internet	Received 04.03.2024	No	N/A
RTE Transmission Network (2rn)	Received 20.11.2023	No	N/A
TETRA Ireland	No Response	N/A	N/A
Three Ireland Ltd	Received 20.11.2023	No	N/A
Towercom	Received 21.11.2023	No	N/A

ComReg Consultee	Initial Scoping Response	Potential for Interference Following Consultation Exercise	Action Required
Viatel	No Response	N/A	N/A
Virgin Media Ltd	Received 20.11.2023	No	N/A
Vodafone Ireland Ltd	Received 30.11.2023	No	N/A
Western Broadband Network	Received 20.11.2023	No	N/A

The full scoping responses received from all operators are provided in Appendix 2-1.

As outlined in the table above, there are no confirmed telecommunications links located within the Site. Responses were received from various operators which confirmed there to be no presence of telecommunications links within the Site. It should be noted that Cellnex responded stating that one telecoms installation is present within the affected area, with the links on the tower being owned by Three Ireland, Vodafone, Imagine, Eir and Tetra. The correspondence stated that there may be interference with these links and the providers should be contacted directly, however this is unlikely given the wind farm is existing. Each of these operators were subsequently contacted, with each operator confirming no impact being anticipated. No response has been received from Tetra.

Given the nature of the Proposed Offsetting Measures, which consist of permanent removal of forestry and restoration of farmland for the benefit of hen harrier, no interference is anticipated on telecommunications links in the area.

15.3.5.2 Aviation

Irish Aviation Authority

On February 21st, 2024, the Irish Aviation Authority sent an email requesting details regarding the specifications of the lights for the turbines at the current wind farm, such as candela value, Type B/C, medium or low intensity lighting, and colour.

Planning Ref 02/3608 Condition 18 states the following in relation to aviation lighting requirements:

Model Cegelec ZA 768 red low intensity Type A obstacle lighting or similar shall be installed on all turbines if required by the IAA, full details shall be submitted to and agreed with the IAA before development commences'.

Following consultation with the IAA in 2004 only the turbine with the highest elevation (Turbine no.11) required lighting. Refer to copy of correspondence in Appendix 15-1.

On March 22nd 2024, the IAA responded further stating:

> *"For information, having reviewed the information provided, it should be noted that the historic aviation warning light or obstacle lighting specification associated with Taurbeg Windfarm would not be in compliance with the requirements of ICAO (International Civil*

Aviation Organization) or EASA (European Aviation Safety Agency) with regard to the marking and lighting of obstacles.

Since the original planning was granted, revisions to the standards and recommended practices as outlined by ICAO and the requirements as specified in European Regulation by EASA would now necessitate that the full geographical perimeter of the wind farm should be lighted to provide appropriate visual warning to pilots operating in the vicinity.

Therefore, should a formal planning application be submitted for the extension of the lifetime of Taurbeg WF, the Authority will make observations to the effect that a new obstacle lighting scheme shall need to be agreed with the applicant."

Irish Air Corps

A scoping response was received from the Irish Air Corps, the Department of Defence on the 29th of August 2024. In their response, they made the following observation, clarifying that any Irish Air Corps requirements are separate to any IAA requirements:

"All turbines should be illuminated by Type C, Medium intensity, Fixed Red obstacle lighting with a minimum output of 2,000 candela to be visible in all directions of azimuth and to be operational H24/7 days a week. Obstacle lighting should be incandescent or, if LED or other types are used, of a type visible to Night Vision equipment. Obstacle lighting used must emit light at the near InfraRed (IR) range of the electromagnetic spectrum, specifically at or near 850 nanometres (nm) of wavelength. Light intensity to be of similar value to that emitted in the visible spectrum of light."

The existing Taurbeg Wind Farm has been in operation since March 2006 and no aviation issues have arisen in that time, with the wind farm operating as per Condition 18 of the schedule of conditions. No changes to the existing wind farm infrastructure or turbine dimensions are proposed. Furthermore, the Proposed Offsetting Measures are not expected to give rise to any aviation issues.

15.3.5.3 Utilities

Uisce Éireann

A scoping request was sent to Uisce Éireann on the 15th of February 2024. A response was received on the 7th of March 2024 stating that they do not have the capacity to comment on individual projects, but general aspects of Water Services should be considered in the EIA where relevant. Some of the items to consider are listed below. Please see Chapter 2, Section 2.9 for a full list of Uisce Éireann comments. It should be noted that the Proposed Lifetime Extension does not intend to connect into Irish Water assets.

1. *Ensure no ensure that there will be no negative impact to Irish Waters Drinking Water Source(s) during the construction and operational phases of the development. Hydrological/hydrogeological pathways between the applicant's site and receiving waters should be identified as part of the report.*
2. *Any and all potential impacts on the nearby reservoir as public water supply water source(s)are assessed, including any impact on hydrogeology and any groundwater/ surface water interactions.*
3. *If a development requires a connection to either a public water supply or sewage collection system, the developer is advised to submit a Pre-Connection Enquiry (PCE) enquiry to Irish Water to determine the feasibility of connection to the Irish Water network.*
4. *The applicant shall identify any upgrading of water services infrastructure that would be required to accommodate the Proposed Project.*

5. *In relation to a development that would discharge trade effluent–any upstream treatment or attenuation of discharges required prior to discharging to an Irish Water collection network.*

ESB

A scoping request was sent to the ESB on the 20th of November 2023 and again on the 30th of November 2023, 4th of January 2024 and 29th of February 2024. No response has been received to date.

Eirgrid

A scoping request was sent to Eirgrid on the 15th of February 2024, with a follow up request issued on the 19th of August 2024. No response has been received to date.

15.3.6 Likely Significant Effects and Associated Mitigation Measures

15.3.6.1 'Do-Nothing' Scenario

The Do-Nothing alternative to extending the lifetime of the existing Taurbeg Wind Farm would be to decommission the wind farm once the current planning permission expires in 2026. In the do-nothing alternative, the Proposed Offsetting Measures will not take place. Should this occur, there will be no impacts on telecommunications, aviation or other material assets.

15.3.6.2 Extended Operational Phase

15.3.6.2.1 *Telecommunications*

Pre-Mitigation Impact

Scoping responses were received from 2RN, BAI, Cellnex, Enet, Eir, ESB Telecommunications, EOBO Ltd., Imagine, Ivertec, JFK Communications, JS Whizzy Ltd., Lackabeha Services Ltd., TETRA Ireland, Three Ireland, Viatel, Virgin Media Ltd., Vodafone and Western Broadband Network during the period of November 2023 to February 2024, affirming that the Proposed Lifetime Extension will have no negative impact on their transmission links. See Table 15-4 for further details. Therefore, the Proposed Lifetime Extension will have no impact on telecommunications.

Mitigation and Monitoring Measures

No telecoms operators have highlighted issues regarding the Proposed Lifetime Extension, therefore no mitigation measures are proposed. A dedicated Community Liaison Officer employed by the Applicant will be available for contact to householders in the area should any interference be caused by the Proposed Lifetime Extension

Residual Impact

The Proposed Lifetime Extension will have no residual impact on telecommunications.

Significance of Effects

The Proposed Lifetime Extension will have no significant direct or indirect effects on telecommunications.

15.3.6.2.2 Aviation

Pre-Mitigation Impact

As detailed above planning condition no. 18 of the existing permission (N/2002/3608) states that:

> *'Model Cegelec ZA 768 red low intensity Type A obstacle lighting or similar shall be installed on all turbines if required by the IAA, full details shall be submitted to and agreed with the IAA before development commences'.*

The existing Taurbeg Wind Farm is in compliance with Condition 18 and as such, the Proposed Lifetime Extension will have no impact on aviation.

Mitigation and Monitoring Measures

The Applicant will coordinate with the IAA should a grant of permission be issued, to ensure that the development remains in compliance with all IAA requirements including lighting requirements. Any further details will be agreed with the Department of Defence, Air Corps and the IAA. The coordinates and elevations for the existing turbines has been supplied to the IAA, as is standard practice for all wind farm developments.

Residual Impact

The Proposed Lifetime Extension will have no residual impact on aviation as all lighting and other requirements will continue to be met by the Applicant.

Significance of Effects

There will be no significant direct or indirect effects on aviation operations due to the Proposed Lifetime Extension.

15.3.6.2.3 Other Material Assets

Pre-Mitigation Impact

There will be no operational phase impacts or associated effects on other material assets associated with the Proposed Lifetime Extension.

Mitigation and Monitoring Measures

No mitigation measures are proposed.

Residual Impact

The Proposed Lifetime Extension will have no residual impact on other material assets.

Significance of Effects

There will be no significant direct or indirect effects on other material assets due to the Proposed Lifetime Extension.

15.3.6.3 Proposed Offsetting Measures

15.3.6.3.1 *Telecommunications*

Pre-Mitigation Impact

Given the nature of the Proposed Offsetting Measures, which consist of permanent removal of forestry and restoration of farmland for the benefit of hen harrier, no interference is anticipated on telecommunications links in the area. As such, the Proposed Offsetting Measures will have no impact on telecommunications.

Mitigation and Monitoring Measures

No mitigation measures are proposed.

Residual Impact

The Proposed Offsetting Measures will have no residual impact on telecommunications.

Significance of Effects

The Proposed Offsetting Measures will have no significant direct or indirect effects on telecommunications.

15.3.6.3.2 *Aviation*

Pre-Mitigation Impact

Given the nature of the Proposed Offsetting Measures, which consist of permanent removal of forestry and restoration of farmland for the benefit of hen harrier, no interference is anticipated with aviation. As such, the Proposed Offsetting Measures will have no impact on aviation.

Mitigation and Monitoring Measures

No mitigation measures are proposed.

Residual Impact

The Proposed Offsetting Measures will have no residual impact on aviation.

Significance of Effects

There will be no significant direct or indirect effects on aviation operations due to the Proposed Offsetting Measures.

15.3.6.3.3 *Other Material Assets*

Pre-Mitigation Impact

There will be no impacts or associated effects on other material assets associated with the Proposed Offsetting Measures.

Mitigation and Monitoring Measures

No mitigation measures are proposed.

Residual Impact

The Proposed Offsetting Measures will have no residual impact on other material assets.

Significance of Effects

There will be no significant direct or indirect effects on other material assets due to the Proposed Offsetting Measures.

15.3.6.4 Decommissioning Phase

The existing wind turbines onsite are expected to have a lifespan beyond 30 years. Following the end of their useful life, the wind turbines may be replaced with a new set of turbines, subject to planning permission being obtained, or the Taurbeg Wind Farm will be decommissioned fully as described in Chapter 4 and the accompanying decommissioning plan in Appendix 4-3.

The works required during the decommissioning phase are described in Section 4.7 in Chapter 4 of this EIAR. Any impact and consequential effect that occurs during the decommissioning phase will be similar to that which occurred during the construction phase, however to a lesser extent. Based on the assessment outlined above, there will be no significant effects on telecommunications, aviation or other material assets as part of the decommissioning phase.

15.3.6.5 Cumulative Effects

The potential for impact between the Proposed Lifetime Extension, and other relevant developments has been carried out with the purpose of identifying what influence the Proposed Lifetime Extension will have on the surrounding environment when considered cumulatively and in combination with relevant existing permitted or proposed projects and plans, as set out in Chapter 2 of this EIAR.

Similarly for the Proposed Offsetting Measures, the potential for impact between the Proposed Offsetting Measures, and other relevant developments has been carried out with the purpose of identifying what influence the Proposed Offsetting Measures will have on the surrounding environment when considered cumulatively and in combination with relevant existing permitted or proposed projects and plans

Please see Section 2.11 of Chapter 2 for cumulative assessment methodology.

15.3.6.5.1 *Proposed Lifetime Extension*

Telecommunications and Aviation

During the development of any large project that holds the potential to affect telecoms or aviation, the Developer is responsible for engaging with all relevant telecoms operators and aviation authorities to ensure that the proposals will not interfere with television or radio signals by acting as a physical barrier. In the event of any potential impact, the developer for each individual project is responsible that the necessary mitigation measures are in place. Therefore, as each project is designed and built to avoid impacts arising, a cumulative impact cannot arise.

The existing Taurbeg Wind Farm has been operational since 2006 and no changes to the existing wind farm infrastructure are proposed. Therefore, no impacts on telecommunications and aviation are

anticipated. There will be no significant cumulative effects in relation to telecommunications and aviation associated with the Proposed Lifetime Extensionin combination with other projects.

Other Material Assets

The potential for cumulative impacts with other wind farms is considered. There are 6 no. operational wind farms located within 10km of the existing Taurbeg Wind Farm. There will be a significant positive cumulative effect on electrical supply with the Proposed Lifetime Extension along with the existing operational wind farms within the area.

There are no construction works proposed as part of the Proposed Lifetime Extension. Therefore, based on the assessment above, there is no potential for cumulative effects on built services. There will be minimal volumes of waste during the Proposed Lifetime Extension, therefore there will be no cumulative significant effects on waste management.

The potential for cumulative effects with these nearby energy developments are not significant from the perspective of built services and waste management.

There were no other potential cumulative effects identified as part of this assessment.

15.3.6.5.2 *Proposed Offsetting Measures*

Telecommunications and Aviation

Given the nature of the Proposed Offsetting Measures, no interference is anticipated on telecommunications links or aviation in the area. As such, the Proposed Offsetting Measures will have no impact on telecommunications. There will be no significant cumulative effects in relation to telecommunications and aviation associated with the Proposed Offsetting Measures in combination with other projects.

Other Material Assets

Given the minor scale of works proposed as part of the Proposed Offsetting Measures, consisting of deforestation, there is no potential for cumulative effects on built services. With the deforestation works being temporary in nature, there will be minimal volumes of waste during the Proposed Offsetting Measures, therefore there will be no cumulative significant effects on waste management.

There were no other potential cumulative effects identified as part of this assessment.