

Supplementary Photomontage Viewpoints: Photowires

Before selection of the final viewpoints, early-stage photomontages, draft-overlaid wireframes known as 'photowires,' were produced. In some instances, these photowires indicated limited visibility of the proposed turbines and were therefore excluded from assessment in the final *Photomontage Booklet*.

To aid discussions, a total of 5 no. supplementary photowires representing additional locations of visual receptors are presented in and discussed in this Chapter in Section 13.7.5 to illustrate certain points relating to visual effects on specific receptors. These photowires are classified as 'Type 3' Visualisations in the LI TGN (2019) and do not form part of the assessment of visual effects included in *Appendix 13-3*.

A detailed description of the viewpoint selection process and photomontage/photowire assessment methodology is provided in *Appendix 13-1: LVIA Methodology*.

13.6 Cumulative Context: Other Wind Farms

This LVIA Chapter assesses the likely landscape and visual impacts of the Proposed Project, both independently, as well as in combination with all other existing wind farm developments in the LVIA Study Area. In this section, all wind farm developments in the LVIA Study Area which potentially contribute to assessment of cumulative and in-combination landscape and visual effects are identified.

13.6.1 Cumulative Developments Identified in LVIA Study Area

There are only 'Existing' wind farm developments in the LVIA Study Area, which are defined as wind energy developments that are currently operational in the baseline landscape at the time of conducting this LVIA. There are no 'Permitted' (wind energy developments that are permitted (consented) at the time of conducting this LVIA) or 'Proposed' (well-developed wind farm proposals with project specifications in the public domain at the time of conducting this LVIA) wind farm developments within the LVIA Study Area.

The effects reported both in this Chapter and within the assessment appendices (*Appendix 13-2: LCA Assessment Tables* and *Appendix 13-3: Photomontage Visual Impact Assessment Tables*) uses appropriate and logical narrative to discuss cumulative interactions between the Proposed Wind Farm and all other wind energy developments. Discussion of cumulative interactions on specific landscape and visual receptors is relative to the effects on each receptor and is proportionate to the likelihood of significant landscape and visual effects occurring on that receptor.

In terms of cumulative landscape and visual effects, only other wind energy projects have been considered, as only these development types can be described as having very tall, vertical elements in the landscape (i.e. turbines) and therefore have the most potential to give rise to 'Significant' cumulative landscape and visual effects. These other wind energy developments within 20km of the proposed turbines were identified by searching past planning applications lodged through the online planning portals of relevant planning authorities (i.e. An Coimisiún Pleanála (ACP), and Mayo County Councils).

The information identified in the initial planning search was then used to verify, by means of a desk-based study and ground-truthing, whether the permitted wind energy developments had been constructed. No permitted or proposed wind turbines were present within the LVIA Study Area, and the list of existing wind turbines are listed below in Table 13-5.

Table 13-5: Cumulative Wind Farms Identified in the LVIA Study Area

Other Wind Farms	County	Status	No. of Turbines	Distance from Nearest Proposed Turbine
5-10km				
Mace Upper Wind Farm	Mayo	Existing	3	7.3km
Cloontooa Wind Farm	Mayo	Existing	6	9.1km
Ballykinava Wind Farm	Mayo	Existing	6	10.1km
Cuillalea Wind Farm	Mayo	Existing	6	10.5km
Magheramore Wind Farm	Mayo	Existing	6	10.8km

Within the LVIA Study Area (20km radius), 5 no. existing wind farms, no permitted wind farms and no proposed wind farms have been identified. The locations of these wind farms and corresponding wind turbines are mapped in the following section.

In cases where turbines of these wind farms are theoretically visible from the selected 19 no. photomontage viewpoints selected for this LVIA, the proposed turbines are included within the proposed photomontage imagery in the *Photomontage Booklet*.

13.6.2

Cumulative Context and Theoretical Visibility

Figure 13-17 below compares the cumulative theoretical visibility of all other existing wind farms, as well as visibility of the proposed turbines of the Proposed Wind Farm. The subsequent Figure 13-18 shows the same map overlain with a newly calculated ZTV for cumulative effects.

The legend of Figure 13-18 shows the theoretical visibility of the proposed turbines and cumulative turbines for each corresponding colour, as follows:

- Teal: Only turbines of the Proposed Wind Farm are theoretically visible;
- Yellow: Only turbines from other, existing wind farms are theoretically visible;
- Grey: All cumulative turbines are theoretically visible, including the Proposed Wind Farm and all other existing wind farms.

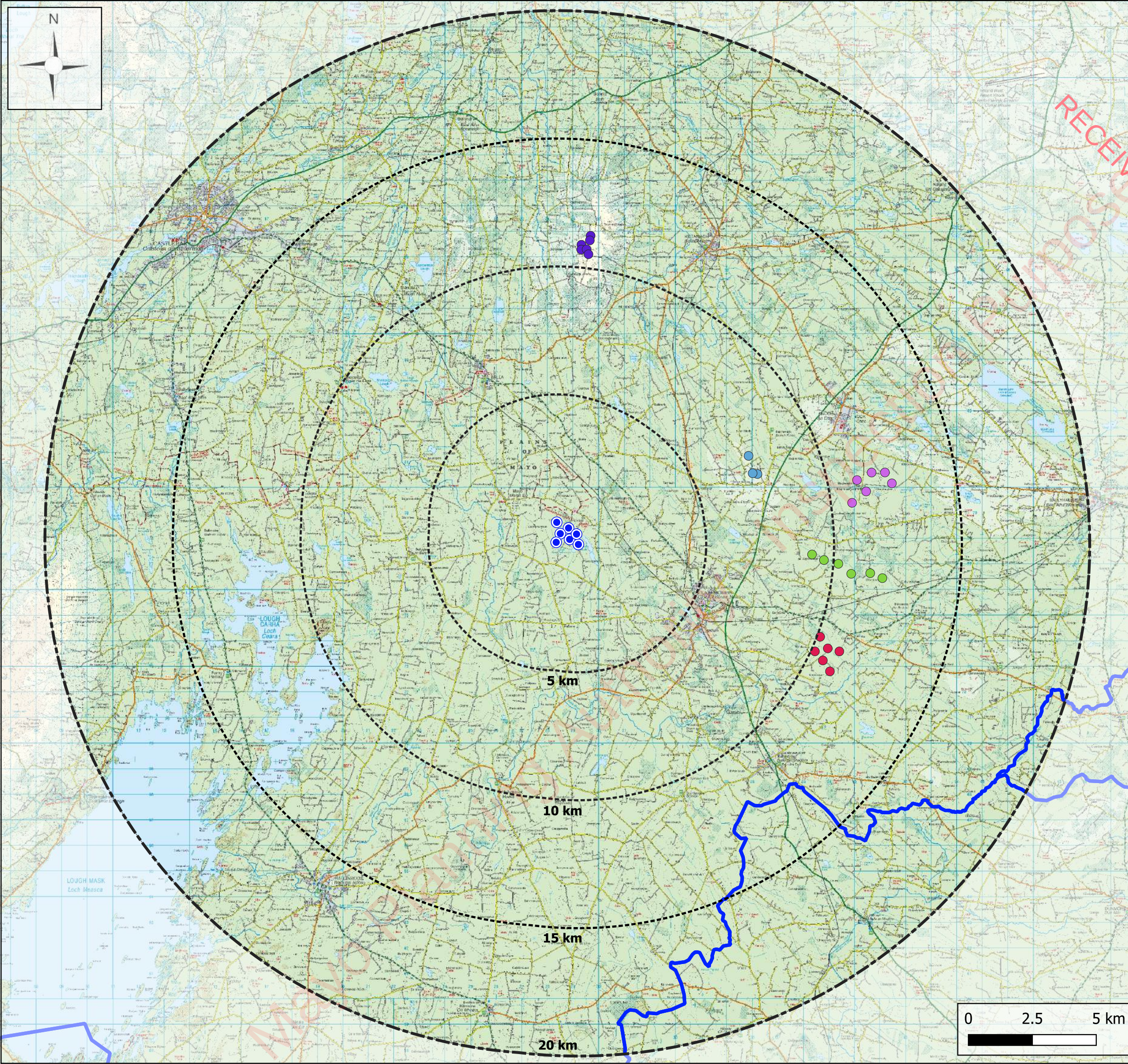
On Figure 13-18, the small pockets of teal colour on the ZTV map illustrate that the Proposed Wind Farm, on its own, introduces very little additional theoretical turbine visibility across the landscape within the LVIA Study Area. The majority of the LVIA Study Area comprises large areas where both the proposed turbines and cumulative wind farms are theoretically visible together, with smaller patches of cumulative-only theoretical visibility occurring to the north and east.

As noted previously, the ZTV does not account for localised undulations in topography or other screening factors; as such, the actual visibility from areas of lowland vegetated landscape is likely to be far less than is indicated by the ZTV. Whilst the cumulative ZTV is a useful tool to aid assessment of cumulative effects and identify areas of non-visibility where certain cumulative impacts will not occur, its utility is limited.

It should be emphasised that, in general, photomontages are a more informative tool than the Cumulative ZTV for assessing the potential cumulative landscape and visual impacts of the Proposed Wind Farm (refer to GLVIA3, LI & IEMA, 2013, p.129, para.7.30); the likely cumulative visual effects as shown in photomontages are comprehensively assessed in *Appendix 13-3: Photomontage Visual Impact Assessment Tables*.

Detailed discussions of cumulative landscape and visual effects are included below in Section 13.7 below. The likely cumulative landscape effects are assessed in the landscape character assessment tables in *Appendix 13-2: LCA Assessment Tables*, and the likely cumulative visual effects are assessed in the photomontage assessment tables in *Appendix 13-3: Photomontage Visual Impact Assessment Tables*.

The assessment of cumulative landscape and visual effects must be proportional, meaning that the focus of the assessment is on the extent to which the Proposed Wind Farm contributes toward cumulative effects on the particular receptors under assessment; these contributions are clearly explained in the narrative on cumulative impact assessment included in this Chapter (Section 13.7.5.5) as well as in the impact assessment Appendices (*Appendix 13-2* and *Appendix 13-3*).



Map Legend

- LVIA Study Area
- County Borders
- Proposed Turbines

Wind Farms within 20km

- Ballykinava Wind Farm (existing)
- Cloontooa Wind Farm (existing)
- Cuillalea Wind Farm (existing)
- Mace Upper Wind Farm (existing)
- Magheramore Wind Farm (existing)

© Ordnance Survey Ireland. All rights reserved. Licence number CYAL50267517

Drawing No.

Figure 13-17

Drawing Title

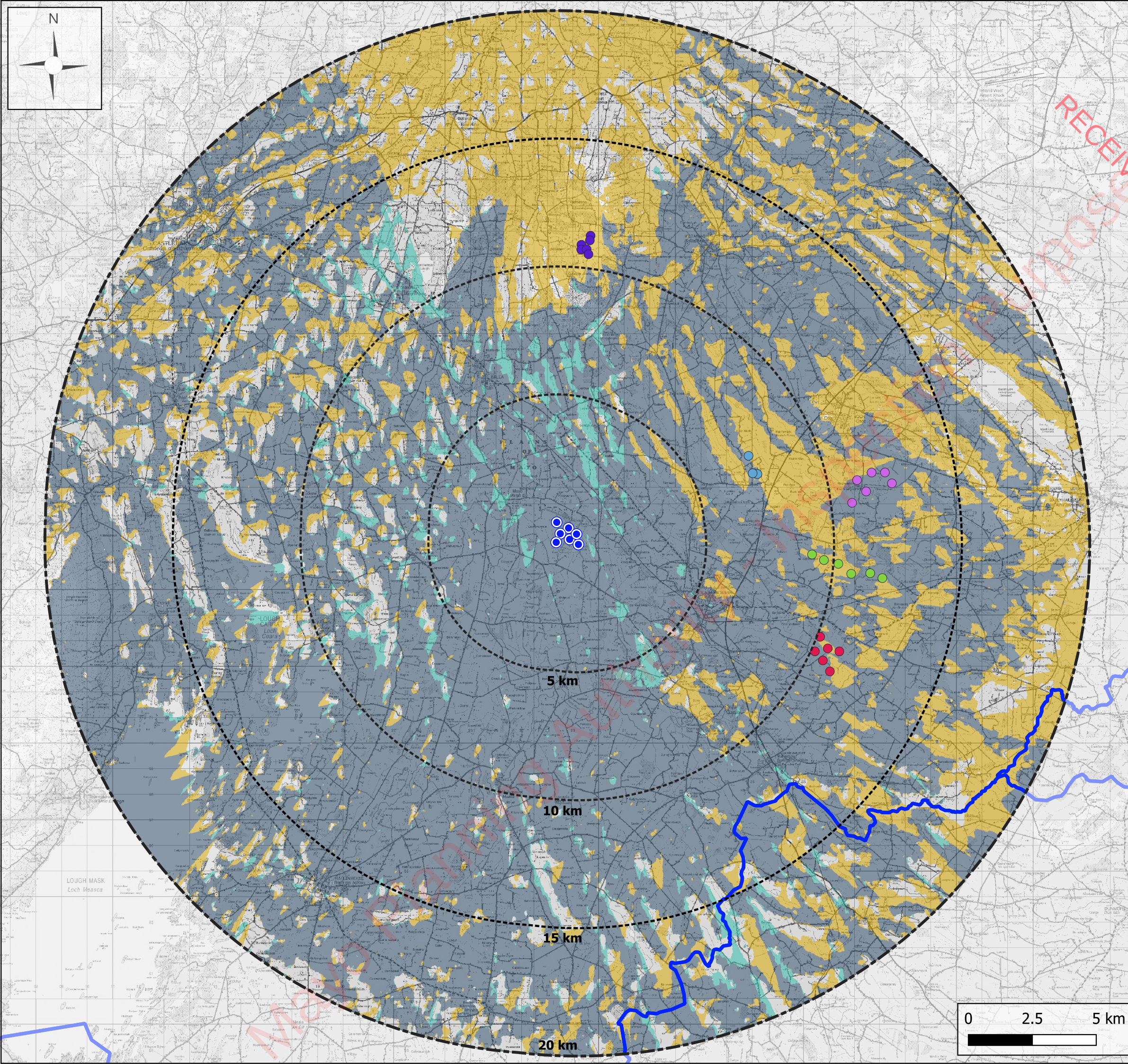
Cumulative Context

Project Title

Cunlaghfadda Green Energy Project

Scale	Project No.	Date	Drawn By	Checked By
1:140,000	220825	15.04.2026	GL	DM

 **Planning and Environmental Consultants**



Map Legend

- LVIA Study Area
- County Borders
- Proposed Turbines
- Wind Farms within 20km**
 - Ballykinava Wind Farm (existing)
 - Cloontooa Wind Farm (existing)
 - Cuillalea Wind Farm (existing)
 - Mace Upper Wind Farm (existing)
 - Magheramore Wind Farm (existing)
- Cumulative Comparative ZTV**
 - Only Proposed Turbines Theoretically Visible
 - Only Cumulative Wind Farms Theoretically Visible
 - Both Proposed Turbines and Cumulative Wind Farms Theoretically Visible

© Ordnance Survey Ireland. All rights reserved. Licence number CYAL50267517
Drawing No.

Figure 13-18

Cumulative Comparative

Cunlaghfadda Green Energy Project

Scale	Project No.	Date	Drawn By	Checked By
1:140,000	220825	15.04.2026	GL	DM



13.7 Likely Significant Landscape and Visual Effects

13.7.1 'Do-Nothing' Scenario

If the Proposed Project were not to proceed, the Site will continue to function as it does at present, with no changes made to the existing land use of agriculture and pasture, and potential for Landscape and Visual impacts through the construction, operation and decommissioning of the Proposed Project would not occur.

The opportunity to capture part of Co. Mayo's valuable renewable energy resource from a highly suitable landscape for wind energy would be lost, as would the opportunity to contribute to meeting Government and EU targets for the production and consumption of electricity from renewable resources and the reduction of greenhouse gas emissions.

Furthermore, as this application includes a Biodiversity Management and Enhancement Plan (Appendix 6-4) to be implemented during the development's operation, the opportunity to enhance the site for biodiversity, at a local scale, would also be lost.

13.7.2 Construction Phase Effects

It is estimated that the construction phase of the Proposed Wind Farm will last between 12-18 months. Construction of the development will involve the installation of the 7 No. turbines with a blade-tip height of 160m and all associated works, as well as the 110kV substation and associated works.

Construction phase effects will also include the associated impacts resulting from the movement of construction and turbine transport vehicles into and out of the Site, to allow for construction of the turbines, access tracks and associated elements.

13.7.2.1 Landscape Effects during the Construction Phase of the Proposed Project

Associated earthworks, such as the cut and fill, and the provision of borrow pits required to facilitate construction of the Proposed Wind Farm, as well as the proposed 110kV onsite substation and end masts, have the greatest potential for landscape effects. Where excavation is required, the existing landcover, vegetation and spoil will be removed during the construction phase. In most instances, groundworks and excavation trenches will be re-instated upon completion of the construction. It is considered that this is a 'Moderate', 'Short-term', 'Negative' effect in terms of landscape effects. On balance, these effects are not considered significant.

Proposed Grid Connection – Underground Cabling

The proposed onsite 110kV substation will be connected to the existing Cloon – Castlebar 110kV overhead line (OHL) by an underground cabling route c. 982m in length. The greatest effects attributed to this element of the Proposed Project (under-ground cabling) will occur during the construction phase only, as the landscape is materially altered to allow the underground installation. The construction phase of the proposed underground cabling will be temporary, localised to the Proposed Wind Farm itself, and transient in nature, as the works move along the cable route. The works will include vegetation removal, soil stripping, excavation, and other associated construction activities. These activities will cause temporary change to the physical landscape along the Proposed Grid Connection; however, these changes will be localised to the immediate environment surrounding the c. 982m cabling route and will not affect the character of the landscape setting or visual amenity of the wider area. The construction works will be short-term in nature and completed as soon as practically possible.

The Proposed Grid Connection construction works are likely to result in 'Slight', 'Short-term', 'Negative' landscape effects. On balance, these effects are not considered significant.

13.7.2.1.2 **Mitigation Measures for Landscape Effects during Construction**

All construction activities will follow best practice methods to reduce impacts upon the environment and landscape of the Proposed Project. Further details are presented in the *Construction and Environmental Management Plan* (CEMP) contained in *Appendix 4-5* of this EIAR. The following measures should be implemented to mitigate landscape effects during the construction phase of the Proposed Project:

- In all circumstances, excavation depths and volumes will be minimised, and excavated material will be re-used where possible.
- Where spoil arising from construction activities is managed within the Site, the vegetative top-soil layer will be removed and re-instated following spoil management taking place. New topsoil should be provided should the existing topsoil not be of sufficient standard. Further details are presented in the *Peat and Spoil Management Plan (PSMP)* contained in *Appendix 4-3* of this EIAR.
- Any areas of bare soil remaining after the landscaping phase will be seeded as soon as possible with a grass-seed mix to minimise sediment run-off.

13.7.2.2 **Visual Effects during the Construction Phase**

13.7.2.2.1 **Proposed Wind Farm**

The most substantial visual effects will arise from requisite construction activities of the Proposed Wind Farm, such as building tower sections, hardstands, access tracks, and the erection of the proposed turbines and proposed met mast. There will be temporary scenarios during the construction phase in which the proposed turbines will be partially constructed and may be seen as either stand-alone tower sections, or incomplete turbines where only one or two blades are visible. The equipment and vehicles required to transport and erect the wind farm components include large cranes and large haulage vehicles. The visual effects arising from the construction of the proposed turbines and the ancillary infrastructure such as access tracks and hardstands to service and build turbines T1 to T7 will be experienced by a range of visual receptors (primarily residential receptors and local road users) in the landscape surrounding the Proposed Wind Farm, with most visibility occurring within 5km of the proposed turbines. These construction activities will cause 'Slight', 'Short-term', 'Negative' visual effects. On balance, these effects are not considered significant.

General housekeeping measures, necessary for Health and Safety requirements, will ensure that the active construction areas will be kept tidy, mitigating localised visual impacts during the construction phase. A detailed description of these is included in the CEMP (Appendix 4-5).

The following sections assess the visual effects associated with the construction phase of the other (non-turbine) components of the Proposed Project.

Turbine Delivery Route (TDR) Accommodation Works

Works such as road widening are sometimes required along proposed turbine transport routes to accommodate the large vehicles used to transport turbine components to the Site. In the case of the Proposed Project, there will be minor accommodation works located at several locations along the TDR (detailed in Chapter 4 Description). Minor accommodation works will include temporary alterations to the existing streetscape, as well as temporary local road widening, and temporary relocation of some road signs. The comprehensive traffic impact assessment of the Proposed Project is set out in Section

15.1 Traffic and Transport of Chapter 15 Material Assets. The areas of accommodation works are deemed to have a 'Slight' sensitivity and the change to occur will be concentrated along the road network. These works are likely to be 'Temporary', 'Slight', 'Negative' visual effects. On balance, these effects are not considered significant.

Borrow Pits and Spoil Management Areas

It is proposed to construct a borrow pit c.30m to the south-east of proposed turbine T1. The extraction of material from the borrow pits is a construction phase activity only, done through means of rock breaking and blasting (as appropriate). The proposed borrow pit will be located within an area of dry meadows, grassy verges, and scrub, therefore the borrow pit will be visible. However, any visibility would be limited and primarily confined to the residential receptors and local road users in the immediate vicinity of the Site. The location of the proposed borrow pit within the Site is of 'Low' landscape sensitivity, as detailed in Section 13.4.3. The visual effects that will arise from the excavation at the borrow pit will be very localised, 'Slight', 'Short-Term,' and 'Negative' visual effects. Several rehabilitation measures will be implemented post-construction phase. For example, the borrow pit will be backfilled with spoil on top of which a layer of living peat will be placed to encourage growth. Following rehabilitation, the visual effects will be 'Not Significant' during the operational phase. On balance, these effects are not considered significant.

To manage any excess overburden generated through construction activities, peat and spoil management areas have been selected within the Site. The effects of peat and spoil management areas will be localised within the Site. Therefore, the creation of peat and spoil management areas will have a 'Short-term', 'Slight' and localised 'Negative' effect on the landscape during the construction phase. Following regrading and re-establishment of vegetation of these areas following completion of the construction phase, effects will be 'Not Significant' during the operational phase. On balance, these effects are not considered significant.

Proposed Grid Connection – Construction Phase Effects

Underground Cabling

The underground cabling of the Proposed Grid Connection works will consist of the installation of ducts in an excavated trench to accommodate electrical and fibre communications cables to facilitate a connection between the proposed 110kV on-site substation to the 110kV Castlebar to Cloon Overhead Line. The Proposed Grid Connection cabling route c.982m in length will be located underground, therefore the greatest effects attributed to this element of the Proposed Project will occur during the construction phase. The underground cabling will be laid predominantly beneath the surface of a private agricultural land. The construction phase of all underground cabling will be 'Short-term'. However, due to the localised, and transient nature of the works moving along the cabling route, impacts on any visual receptors will be 'Temporary'. Any areas of bare soil remaining after the landscaping phase will be seeded as soon as possible with a grass seed mix. Regarding the underground cabling, changes will be localised to the immediate environment surrounding the cabling route and will not permanently affect the character of the landscape setting or visual amenity of the wider area.

The underground cabling works are likely to cause 'Slight' 'Temporary', 'Negative' visual effects. On balance, these effects are not considered significant. The underground cabling will only cause perceptible effects on the visual amenity during the construction phase. No landscape and visual effects will occur during the operational phase.

Proposed 110kV Onsite Substation and End Masts

Visual effects will occur as the proposed 110kV onsite substation, 2 no. new end-masts, and temporary construction compound are built as a result of the earthworks and requisite construction activities;

which will result in short-term, localised change to views in the immediate vicinity of the works. As established in the baseline investigations, the proposed 110kV substation is located within an agricultural field of 'Low' sensitivity. Visual effects arising from the construction of the proposed 110kV substation, 2 no. new end-masts, and associated temporary construction compound, as experienced by visual receptors in the immediate vicinity of the Site are considered to be localised, 'Negative', 'Short-Term', 'Not Significant' effects. On balance, these effects are not considered significant.

Visual effects that will arise once the proposed 110kV onsite substation is operational is addressed separately in Section 13.7.5.4 below.

13.7.3 Operational Phase Effects

This section reports the landscape and visual effects anticipated during the operational lifetime of the Proposed Project. This section is organised as follows:

- **Landscape Effects:** Reporting landscape effects for the Proposed Wind Farm and Proposed Grid Connection;
- **LCA Assessment Outcomes:** A summary of the landscape impact assessment outcomes for each LCA in the (15km) LCA Study Area as is comprehensively reported in *Appendix 13-2: LCA Assessment Tables*;
- **Photomontage Viewpoint Assessment Outcomes:** A summary of the visual impact assessment outcomes in the (20km) LVIA Study Area for each photomontage as is comprehensively reported in *Appendix 13-3: Photomontage Visual Impact Assessment Tables*;
- **Visual Effects - Receptors:** Discussion of visual effects on the specific visual receptors selected for assessment within the visual baseline exercise (recall Section 13.5.2: Preliminary Analysis: Visual Receptors) with reference to photomontages and photowires;
- **Residential Visual Amenity:** Discussion of visual effects on residential receptors within close proximity to the Proposed Wind Farm;
- **Visual Effects -Ancillary Project Elements:** Discussion of visual effects of the non-turbine infrastructure of the Proposed Project;
- **Cumulative Effects:** Discussion of landscape and visual effects expected to occur in combination with the Proposed Wind Farm and all identified existing wind farms identified in the LVIA Study Area.

13.7.4 Landscape Effects (Operational Phase)

13.7.4.1 Landscape of the Site

The landscape character of the Site will undergo major changes in the landscape by the introduction of vertical man-made structures and ancillary infrastructure. There will be a 'Substantial' magnitude of change to the landscape in the localised areas within the Site where the landscape is materially altered (infrastructure footprint).

In a local context, the Site is located in a remote upland, marginal landscape. Forestry, agricultural fields and peatlands are the dominant landcover within the Site itself. As outlined in Section 13.4.3 above, the landscape value and sensitivity of the Site is deemed to be 'Low.' Low sensitivity balanced with a 'Substantial' magnitude of change amounts to long-term landscape effects of 'Moderate' upon the physical fabric of the landscape of the Site (See LVIA Methodology, *Appendix 13-1*). These direct landscape effects will be highly localised to the footprint of the Proposed Project. Effects on the perceptual and aesthetic character of the Site are also deemed to be 'Moderate'.

13.7.4.1.1 Mitigation of Landscape Effects within the Proposed Wind Farm

The following measures have been included in the Proposed Wind Farm design in order to avoid or reduce direct effects on landscape receptors (individual landscape features and the landscape character of the Proposed Wind Farm as a whole) on the Proposed Wind Farm:

- The internal site access track layout makes use of the existing tracks wherever possible to minimise the requirement for new tracks within the Site.
- To minimise cut and fill activities required to construct the Proposed Wind Farm, the proposed access tracks, and other infrastructure such as hardstands have been designed to align with the existing terrain within the landscape of the Site.
- In all circumstances, excavation depths and volumes will be minimised, and excavated material will be re-used where possible.
- During initial vegetation stripping, all topsoil material will be temporarily stored on the Site and used for 'landscaping' the edges of the development infrastructure during reinstatement/regrading, including that of the peat and spoil management areas and proposed borrow pit. This will be particularly important in areas of cut and fill. The stripped topsoil will contain a natural seed source of local provenance and result in the re-establishment of baseline vegetation.
- The layout and design of the Proposed Wind Farm has been designed to ensure minimal loss of valuable landscape receptors and biodiversity corridors such as woodland and hedgerows along field boundaries.
- A *Biodiversity Management and Enhancement Plan* (BMEP) has been prepared as part of this EIAR and is included as *Appendix 6-4* to this EIAR. Mitigation measures included in the BMEP will have a dual effect of providing ecological enhancement to the area as well as screening of some Proposed Wind Farm infrastructure, thereby providing a mitigating effect on landscape. Mitigation measures proposed in the BMEP that will also have a mitigating effect on landscape areas as follows:
 - Avoidance of high-value peatland habitats within the Proposed Wind Farm;
 - Proposed planting of native broadleaf trees to increase woodland habitat and bolster wildlife corridors;
 - Proposed planting and bolstering of linear vegetation (treeline and hedgerow) to increase hedgerow and treeline habitat and bolster wildlife corridors, as well as provide visual screening of the proposed on-site 110 kV substation.

13.7.4.1.2 Proposed Grid Connection – Under-Ground Cabling

As the connection for the Proposed Grid Connection to the existing OHL is located underground, landscape and visual effects during the operational phase will be 'Imperceptible' once vegetation has re-established along the roadway following earthworks during the construction phase. The landscape and visual effects occurring during the construction phase of the Proposed Grid Connection are reported previously in Section 13.7.2: Construction Phase Effects. Visual effects arising from the above-ground features of the Proposed Grid Connection are discussed in Section 13.7.5.4.

13.7.4.2 LCA Assessment Outcomes

An assessment of the effects on landscape character based on designated LCAs was undertaken for the 3 no. LCUs within the LCA Study Area selected for assessment; these were mapped previously in Section 13.4.1.1.2. The individual assessments for each LCA are summarised below in Table 13-6 and presented in detail in *Appendix 13-2: LCA Assessment Tables*. The assessment criteria and grading scales which aided the assessment of landscape character effects are detailed in *Appendix 13-1: LVIA Methodology* (Section 1.7: Assessing Landscape Effects).

Table 13-6 LCA Assessment Summary

LCA Ref.	Name	LCA Sensitivity	Magnitude of Change in LCA	Residual Significance of Effect
LCU L	South East Mayo Plains	Low	Moderate	Slight
LCU K	East Central Drumlin Spine	Low	Moderate	Slight
LCU M	Lakeland Drumlins	Medium	Slight	Not Significant

The largest magnitude of Change (Moderate) will occur within LCU L and LCU K, as the infrastructure of the Proposed Project will materially alter the landscape of these LCUs. Both of these LCUs are located within Policy Area 4, which has the lowest sensitivity (medium) to wind farm development compared to other Policy Areas in Co. Mayo.

The Proposed Project is consistent with the policies set out for Policy Area 4 outlined in Section 13.4.1 previously. As discussed later in the Visual Effects in Section 13.7.4.2.1, the Proposed Project will not “significantly interfere or detract from scenic Lakeland vistas”, in accordance with **Policy 23**. Furthermore, the proposed turbines are not located on any sensitive ridgelines and will not “interrupt or penetrate distinct linear sections of primary ridge lines when viewed from areas of the public realm”, thereby complying with **Policy 14**. Furthermore, having regard to the factors listed out previously in Section 13.1.3 Mitigation by Best Practice Wind Farm Design, and noting that the Proposed Project follows the appropriate siting and design principles for Hilly and Flat Farmlands as set out in the Guidelines (DoEHLG, 2006) and the Draft Guidelines (DoHLPG, 2019), the Proposed Project will not result in “detrimental impacts” on the “landscape at a local or micro level as viewed from areas of the public realm”, in accordance with **Policy 24**.

As discussed in *Appendix 13-2*, LCU L and LCU M are flat landscapes on a macro-scale with localised undulations arising from the drumlin landscape. Both of these LCUs are characterised as settled, working landscapes comprising agricultural - pasture fields, forestry and cutover peatland forming the predominant land use, which are not landscapes of high sensitivity. Furthermore, it is noted that all of the proposed turbines are located within an area classified as ‘Tier 1 – Preferred’ in these LCUs, with additional areas within these LCUs designated as ‘Tier 2 – Open for Consideration’, as well as areas identified as ‘Existing Wind Farms’. Overall, the proposed turbines will have a ‘Long-term’, ‘Negative’, ‘Slight’ residual effect on LCU L and LCU K. On balance, these effects are not considered significant.

The proposed turbines will not materially alter any of the other LCUs in the LCA Study Area, resulting in ‘Long-term’, ‘Negative’, ‘Not Significant’ residual landscape effects on LCU M. On balance, these effects are not considered significant.

13.7.4.2.1 Designated Landscape Features (Vulnerable Features)

A number of designated Vulnerable Features were identified in the Landscape Baseline – Section 13.4.1.1.5 within the LVIA Study Area and have been scoped in for further assessment. These include ‘Skylines and Ridgelines’ and ‘Shorelines of Lakes, Rivers and Estuaries’.

Skylines and Ridges

As detailed previously in Section 13.4.1.1.5, four ridgelines within the LVIA Study Area are designated as LACM Vulnerable Features, comprising of the following:

- the western side of the Partry Mountains

- > Cruispullagadaun (Rush Hill/Fox Hill)
- > Cuillalea Hill
- > Sraheens Ridgeline on the west-facing side of Treannagleragh Mountain (north of Cuillalea Hill).

The closest of these vulnerable features (Cuillalea Hill) is located approximately 8.4km from the nearest proposed turbine, with all designated ridgelines and skylines situated beyond 9km from the nearest proposed turbine. The proposed turbines and associated infrastructure are not located on or along any of these sensitive ridgelines, and therefore the Proposed Project will not alter the physical fabric or landform structure of these landforms.

Only perceptual effects on the character of these skylines and ridgelines have potential to occur, which may arise where the proposed turbines are visible from these ridgelines (e.g. VP11 – ‘Slight’ residual visual effects), or where the ridgelines form part of the distant landscape context in views towards the proposed turbines (e.g. VP14 – ‘Moderate’ residual visual effects).

While the proposed turbines will introduce new, distant elements within some views (when viewed from or towards these landforms), they will not materially alter the defining characteristics, integrity, or uniformity of these ridgelines. Accordingly, given the set-back, the Proposed Project is considered to be consistent with the policy framework for Vulnerable Features set out in **Section 3.1(b)** of the LACM and will not give rise to any significant landscape effects on these features.

Shorelines of Lakes, Rivers, and Estuaries

As detailed previously in Section 13.4.1.1.5, the Meander River (as designated on page 54 of the LACM) was scoped in for assessment given the proximity of the designated portion of this watercourse to the proposed turbines (approx. 2.13km west from the nearest proposed turbine). The proposed turbines are not located on the part of the Meander River designated within the LACM (see Plate 13-23 below) and therefore the Proposed Project will not alter the physical fabric, structure or physical characteristics of this designated ‘Vulnerable Feature’. Whilst the proposed turbines may be visible in the background of views from the river, they will not materially alter the defining characteristics of the river, and will therefore will not give rise to any significant landscape effects on this landscape feature. The wider Meander River corridor, including its tributaries and areas outside the designated Vulnerable Feature, are considered separately in Chapter 9 Water of this EIAR.

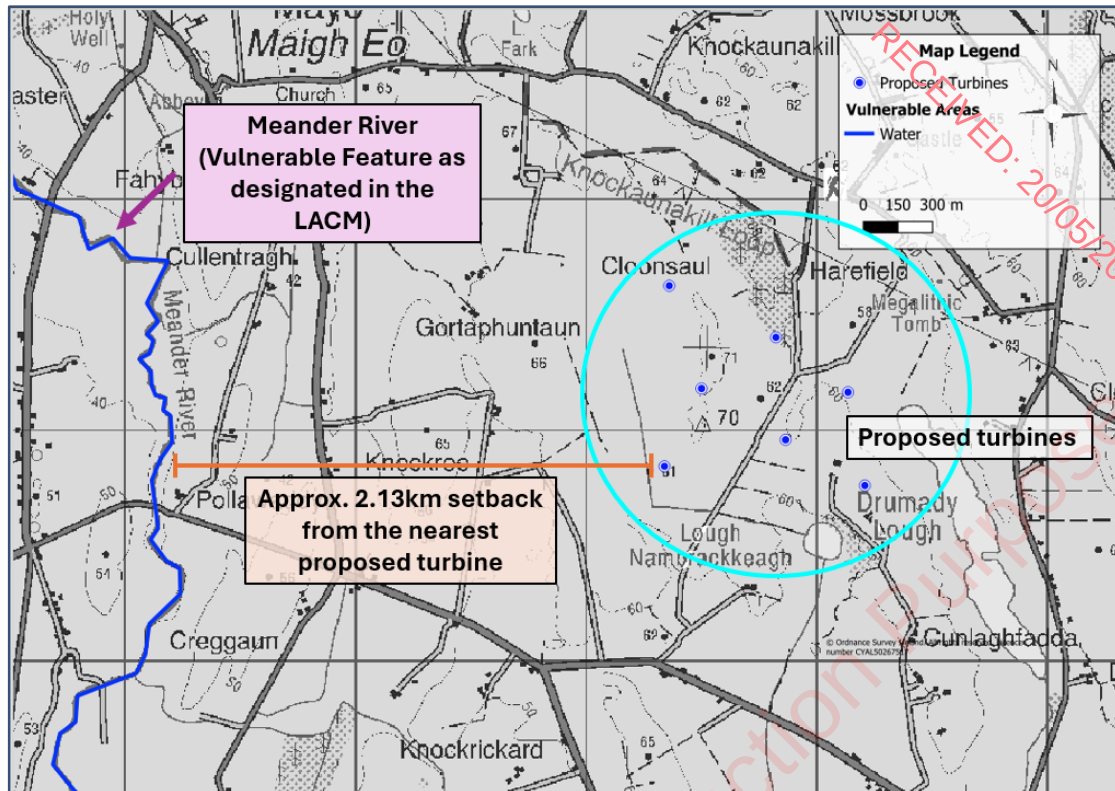


Plate 13-22 Close-up of Meander River (Vulnerable Feature)

Lough Carra and Lough Mask, considered in relation to potential visual effects as experienced by users and visitors is discussed in detail in Section 13.7.2.2 Visual Effects.

13.7.4.2.2 Cumulative Landscape Effects

The Proposed Wind Farm will contribute to cumulative effects on the landscape of this area of County Mayo where there are a number of other existing wind energy developments. This section describes the cumulative effects on the wider landscape, as well as relevant landscape receptors (i.e. Vulnerable Features).

The wider landscape of the LVIA Study Area includes several other existing wind energy developments that contribute to the cumulative baseline. These other developments are listed and mapped previously in Section 13.6, and are primarily located within the eastern uplands of the Study Area and to the north upon Cuillalea Hill.

Uplands to the East

A collection of wind farms is located within the uplands to the east, east of Claremorris. This collection of wind farms form part of the wider cumulative wind energy context, physically separated by undulating landforms and ridgelines. The proposed turbines are likely to be seen in succession or in combination with these other wind farms from occasional remote elevated vantage point and contribute to cumulative landscape effects on overall change in landscape character but do not cumulatively affect the character of the eastern uplands themselves. Any potential cumulative effects on landscape character with these other windfarms to the east is likely to be very intermittent and only perceived from isolated locations as a result of the elevated topography which provides topographical screening of the proposed turbines from the east (as seen in VP 16) and the nature of the undulating drumlin landscape in this direction.

Cuillalea Hill to the North

Cuillalea Wind Farm (incl. the extension) is located within uplands to the north in a different landscape type. This Wind Farm forms part of the wider cumulative wind energy context as experienced from locations across the LVIA Study Area and is located approx. 10.5km north at its closest point.

The proposed turbines may be experienced with this other windfarm from locations between the Proposed Wind Farm and the lands to the north, whether in succession (where the proposed turbines and cumulative wind farms are experienced in opposite directions) or in combination - the proposed turbines would become a noticeable component of the distant landscape and would therefore contribute to cumulative perceptual change in overall landscape character of the area. Given the separation and different landscape types, the proposed turbines will not impact the key characteristics and sensitivities of Cuillalea Hill to the north.

13.7.5 Visual Effects (Operational Phase)

13.7.5.1 Selection of Photomontage Viewpoints

Photomontages were used to assess the visual effects arising as a result of the proposed turbines from 19 no. viewpoint locations, which are presented in EIAR Volume 2: Photomontage Booklet. These 19 no. viewpoint locations are depicted in Appendix 13-4 *LVIA Baseline Map* and on Figure 13-15. The locations chosen for photomontages follow a detailed and extensive process including review of baseline information and site visits. High-quality photos are then taken at multiple locations within the LVIA Study Area. Many locations, which based on a desktop review had the potential for views of the proposed turbines, had complete intervening visual screening or were screened to such an extent that the development of photomontages was not considered useful in terms of the assessment process i.e., little or no visibility towards the proposed turbines.

On-site surveys and visibility appraisals conducted throughout the years 2023, 2024, and 2025 determined that visibility of the proposed turbines is greatest from the locations in close proximity to the Site due to the characteristics of the surrounding landscape. Due to this, viewpoint selection was particularly focused on locations proximate to the proposed turbines. In this regard, it is important to note that the visual impact of the proposed turbines shown in the photomontages selected for the EIAR Volume 2: Photomontage Booklet is not entirely representative of visual effects in the wider landscape of the 20km LVIA Study Area, where in reality very little visibility occurs.

Alternative Photomontage Viewpoints – Photowires

Photomontage imagery was captured from many locations in the LVIA Study Area other than the 19 no. Photomontage viewpoints that were selected for the EIAR Volume 2: Photomontage Booklet. Photowires are early-stage photomontage visualisations comprising panoramic photos with overlaid wirelines (Classified as Type 3 Visualisations in the Landscape Institute Technical Guidance Note, 2019). Photowires were produced from five other viewpoint locations in the LVIA Study Area. These viewpoints were not selected for inclusion in the EIAR Volume 2: Photomontage Booklet due to limited visibility of the proposed turbines or a more appropriate nearby location being included in Volume 2 instead. These Photowires do not form part of the assessment of visual effects included in Appendix 14-3. However, the 5 no. Photowires are presented and are discussed in this section of the Chapter to illustrate certain points. The location of Photowire viewpoints used in this section of the Chapter are marked as orange icons in Figure 13-16, and are discussed throughout the chapter as Photowire Viewpoint Locations (referred to as PWVPs (e.g., PWVP-A, etc.))

13.7.5.1.2 **Photomontage Viewpoint Assessment Outcomes**

Visual Effects were assessed using the assessment methodology described in *Appendix 13-1*. Each Viewpoint location is shown in Figure 13-15 above. The individual, comprehensive and detailed assessment from the 19 no. viewpoints are presented in *Appendix 13-3* of this EIAR – *Photomontage Assessment Tables* and summarised in Table 13-7 below. *Appendix 13-3* should be read in conjunction with the photomontage booklet forming Volume 2 of the EIAR.

The visual effect of the proposed turbines was assessed from each viewpoint in terms of the sensitivity of the visual receptors, along with the magnitude of change, as recommended in GLVIA3. This, in conjunction with a detailed review of the photomontages themselves as well as the likely visibility of the proposed turbines within the LVIA Study Area informed the assessment of visual effects.

Visualisations such as photomontages are tools that can represent the likely effect of a development and are used to inform the reader's prediction of how that development will appear in the landscape. In terms of the predicted visual quality of the proposed turbines, however, whether a visual effect is deemed to be positive, negative, or neutral, this involves a degree of subjectivity. What appears to be a positive effect to one viewer could be deemed to be a negative effect by another viewer. All predicted visual effects of the viewpoints below are Long-Term and Direct effect.

Table 13-7 Summary of Viewpoint Impact Assessment Results

VP No.	Description	Grid Ref.	Sensitivity of Receptor(s) (at Viewpoint)	Magnitude of Change	Significance of Residual Visual Effect
VP01	View from the N60 National Road, in the townland of Brees. Located approximately 2.9km north from the nearest turbine (T7).	E: 529,299 N: 781,449	Medium	Slight	Slight
VP02	View from the L5536 Local Road in the townland of Knockaunakill. Located approximately 690m north from the nearest turbine (T6).	E: 529,063 N: 779,060	High	Moderate	Moderate
VP03	View from the L1506 Local Road in the townland of Ahena. Located approximately 3.2km south from the nearest turbine (T5).	E: 528,538 N: 774,669	Medium	Slight	Not Significant
VP04	View from the L1505 Local Road in the townland of Knockrickard. Located approximately 1km south from the nearest turbine (T1).	E: 527,782 N: 776,968	High	Moderate	Moderate
VP05	View from the L5636 Local Road along Lough Carra. View also from Co. Mayo Scenic Route 1. Located approximately 9.2km south-west from the nearest turbine (T1).	E: 520,002 N: 773,747	High	Negligible	Not Significant
VP06	View located along the L1506 Local Road in the townland of Oory. Located approximately 4km southwest from the nearest turbine (T1).	E: 525,939 N: 774,668	Medium	Slight	Not Significant

VP07	View from the L15057 Local Road in the townland of Knockroe. Located approximately 700m west from the nearest turbine (T1).	E: 527,520 N: 777,903	High	Moderate	Moderate
VP08	View from the L55398 Local Road in the townland of Lehanagh. Located just outside Mayo Abbey Church and Ruins. Located approximately 2km northwest from the nearest turbine (T7).	E: 526,467 N: 779,553	High	Slight	Slight
VP09	View from Mayo Abbey, located approximaely 2.1km north-west from the nearest turbine (T7).	E: 526,425 N: 779,602	High	Slight	Slight
VP10	View from the L5653 Local Road in the townland of Caherwilaun. Located approximately 16.9km south from the nearest turbine (T5).	E: 526,966 N: 761,022	Medium	Negligible	Not Significant
VP11	View from the L5766 Local Road in the townland of Carrowkeel. Approx. 10km north. Representative of long-ranging views towards the turbines from an elevated vantage point.	E: 524,056 N: 787,906	High	Slight	Slight
VP12	View from the R300 Regional Road along Lough Mask. View also located on Co. Mayo Scenic Route 2. Located approximately 18.9km south-east from the nearest turbine (T1).	E: 511,092 N: 770,018	High	Negligible	Slight
VP13	View from the N60 National Road in the townland of Claremount, exiting Claremorris. Located approximately 4.7km east from the nearest turbine (T5).	E: 533,613 N: 776,138	Medium	Slight	Slight

VP14	View from the L5537 Local Road in the townland Clogher Beg. Located approximately 1.4km south-east from the nearest turbine (T5).	E: 529,938 N: 776,557	High	Moderate	Moderate
VP15	View from the N60 National Road in the townland of Birchfield. Located approximately 2.5km from the nearest turbine (T4).	E: 531,420 N: 779,290	High	Slight	Slight
VP16	View from the N17 National Road in the townland of Ballyhowly. Located approximately 10km east from the nearest turbine (T4).	E: 538,207 N: 782,403	Medium	Negligible	Not Significant
VP17	View from the R324 Regional Road, in the townland of Ballymaccloughlin. Located approximately 6.8km from the nearest turbine (T7).	E: 526,212 N: 785,102	Medium	Slight	Slight
VP18	View from the L5537 Local Road in the townland of Drumady. Located approximately 660m east of the nearest turbine (T5).	E: 529,839 N: 777,819	High	Moderate	Moderate
VP19	View from the L1706 Local Road in the townland of Doonnamona. View also on the Croagh Patrick Heritage Trail. Located approximately 8.5km north-west from the nearest turbine (T7).	E: 520,256 N: 781,286	Medium	Negligible	Imperceptible

The significance of the residual visual effect was not considered to be Profound or Very Significant, at any of the 19 viewpoint locations. The residual effects were found to be Moderate (5), Slight (8), Not Significant (5), and Imperceptible (1). The viewpoint assessment results (see *Appendix 13-3*) will be summarised and discussed in more detail in the following sections.

13.7.5.2 Discussion of Visibility and Visual Effects of Specific Receptors in the LVIA Study Area

The assessment of visual effects uses photomontages shown in the Volume 2 Photomontage Booklet, and discussion of these effects is aided by the photowires. ZTV mapping is also a useful tool for scoping receptors in and out (based on bare-ground topography) and selection of photomontage viewpoints. The ZTV indicates vast areas of the LVIA Study Area where the proposed turbines will not be visible, as comprehensively discussed in Section 13.3. The following section discusses the visual effects arising at key sensitive visual receptors within the zone of theoretical visibility and scoped in for assessment previously in Section 13.5 – Visual Baseline.

13.7.5.2.1 Designated Scenic Route and View (SV1) / Lough Carra

This scenic route is described as the “local road north-east of Lough Carra, from Carrownacon to north of Ballygarries”, with views “looking towards Lough Carra” in the LACM. The ZTV analysis shows that this scenic route, located approx. 10km west from the nearest proposed turbine has primarily full theoretical visibility of the proposed turbines. VP05 was captured from along this scenic route. As discussed in *Appendix 13-3*, at this distance, the proposed turbines are seen in the distant background, largely screened by intervening vegetation. This viewpoint has been assigned a ‘High’ sensitivity, with a ‘Negligible’ magnitude of change, with an overall ‘Not Significant’ residual visual effect. It is noted that the key focus of this scenic route are the views “towards Lough Carra”, which are directed to the west, in the opposing direction of the proposed turbines and the view shown in the photomontage. Therefore, the proposed turbines do not impact the key sensitivities relating to this designated scenic route. An overall residual ‘Long-Term’, ‘Negative’ and a ‘Not Significant’ visual effect was deemed to arise for this scenic route. On balance, these effects are not considered significant.

13.7.5.2.2 Designated Scenic Route (SR2) / Lough Mask Viewing Point / Lough Mask

This scenic route is described as the “local road from Maumtrasna to Srah, west of Lough Mask” in the LACM, and is located approx. 17.3km west from the nearest proposed turbine. VP12 was captured from along this scenic route where the most open views towards the proposed turbines occur. This viewpoint has been assigned a ‘High’ sensitivity, with a ‘Negligible’ magnitude of change in *Appendix 13-3*. As discussed in *Appendix 13-3*, the proposed turbines are seen as small features relative to the landscape in the distant background of the view, occupying a very small horizontal extent. Given the large setback distance from this viewpoint, the proposed turbines, while visible, do not affect the sensitivity of the view derived from the lake’s amenity value nor the character of its surrounding environment. The proposed turbines only form a very minor component within a single view of the wider lake setting. An overall residual ‘Long-Term’, ‘Negative’ and ‘Slight’ visual effect was deemed to arise at this viewpoint.

In a journey scenario, receptors travelling on the scenic route are likely to have less visual impact than what is shown in the viewpoint owing to intermittent visual screening from roadside vegetation and the undulating nature of the hilly terrain, which restricts visibility of the proposed turbines.

Furthermore, as noted in *Appendix 13-3*, this viewpoint does not represent the only available view of the lake. There are numerous locations from which the lake can be seen without any visibility of the proposed turbines. An example of this occurs at the nearby car park where visitors typically stop to

experience panoramic views of Lough Mask. On-site visibility appraisals confirmed that visibility of the proposed turbines will not occur from the car park itself due to dense, mature vegetative screening in the direction of the proposed turbines, as illustrated in Figure 13-19 below.

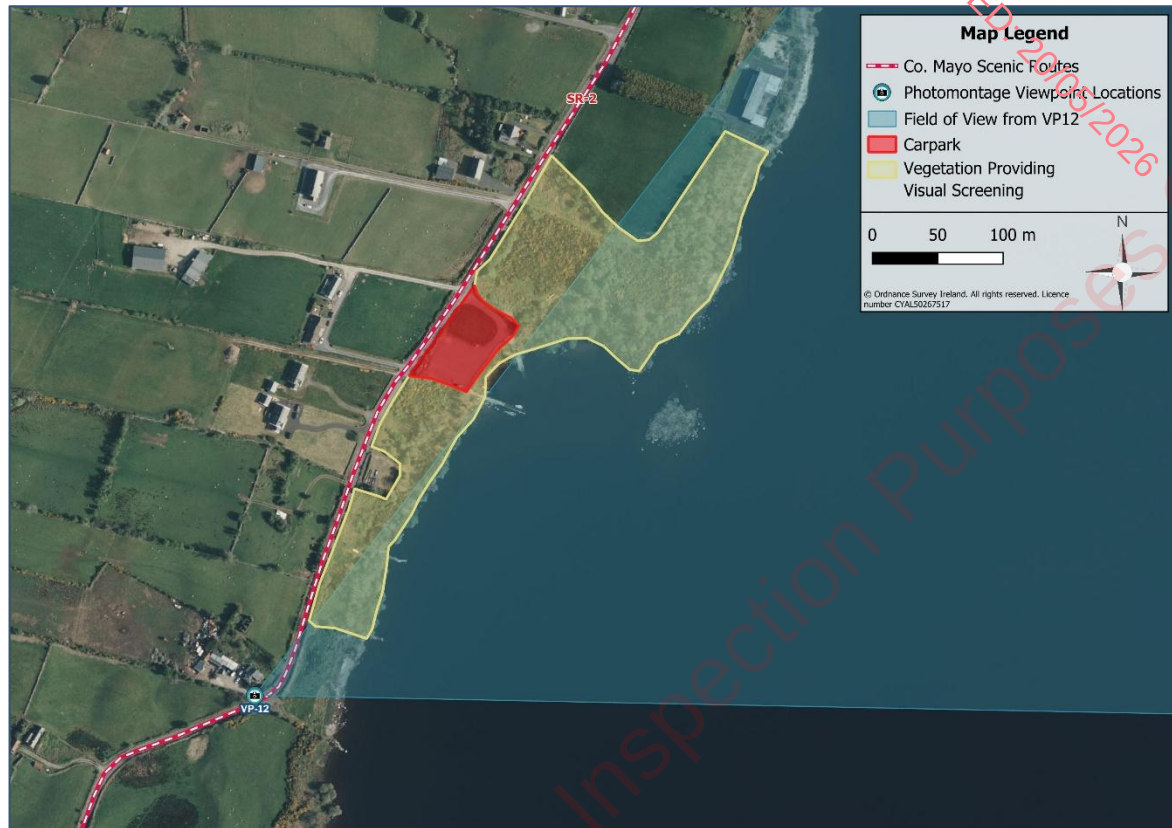


Figure 13-19 Aerial View of Scenic Route SR26 and visibility towards the proposed turbines

Overall, considering the points made above, and what is discussed in *Appendix 13-3*, visual effects on SR2, and the on the lake itself ranges from 'Long-Term', 'Negative' 'Imperceptible' (where the proposed turbines can't be seen) to 'Slight'. On balance, these effects are not considered significant.

13.7.5.2.3 Mayo Abbey Cemetery and Church Ruins

Mayo Abbey Cemetery and Church Ruins is a cultural heritage receptor of high sensitivity and is located approx. 2km northwest from the nearest proposed turbine (T7).

VP09 was captured from within the cemetery itself, and VP08 was captured further set-back on the L55398 local road to the west of the cemetery to show the visual impact on the landscape setting of Mayo Abbey Cemetery and Church Ruins. As discussed in *Appendix 13-3*, the proposed turbines are largely screened from view by features such as mature vegetation in the intervening landscape and the undulating landforms resulting from the drumlin landscape, reducing their visual prominence in this view. The visible turbine components are viewed beyond the horizon within a visual setting that is already characterised by a degree of human modification, as seen through the agricultural fields, as well as overhead lines and utility poles.

These viewpoints (VP08 and VP09) were captured where the most visibility occurs in the direction of the proposed turbines, because, in other locations the turbines are largely screened from view by intervening vegetation, as seen in the PWVP-A below (Plate 13-23 Photowire visualisation PWVP-A from within the graveyard at Mayo Abbey Church and Ruins in the direction of the proposed turbines.). This viewpoint was captured at one of the more elevated vantage points with clear views in the direction of the proposed turbines to show a worst-case scenario. Many locations from within Mayo

Abbey itself have no visibility of the proposed turbines. Visual receptors visiting the Abbey will experience reduced visibility of the proposed turbines in and around the Abbey itself – which is the key focal point and sensitivity of the area.

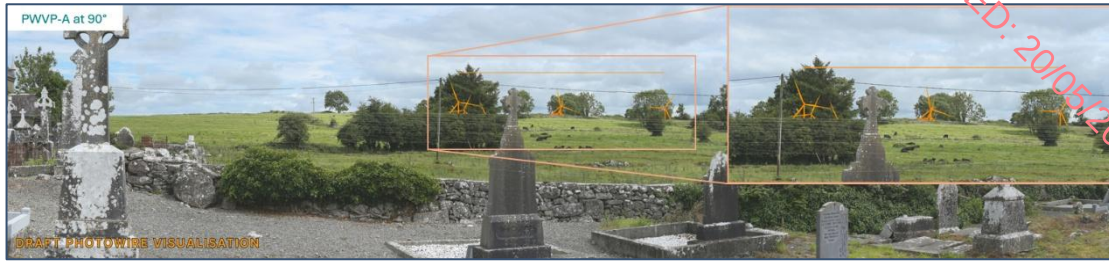


Plate 13-23 Photowire visualisation PWVP-A from within the graveyard at Mayo Abbey Church and Ruins in the direction of the proposed turbines.

While the turbines will introduce new elements into the wider landscape that will be visible from within the cemetery, their location is consistent with established planning policy (they are located within an area deemed suitable for wind energy development, and they are located in Policy Area 4, the LPA with the lowest sensitivity classification compared to all other policy areas – as discussed in Section 13.4.1.1.3 previously). Given the nature of views, the setback distance, and existing vegetative screening, the proposed turbines will not materially alter the key characteristics of this receptor. The proposed turbines are not situated within the immediate visual context of the abbey or the cemetery, as they are seen beyond the ridgeline.

Visual impacts on the setting of Mayo Abbey Church and Ruins are considered reversible, given the proposed turbines have an operational life span of 35 years, with potential for decommissioning after that. The magnitude of change for both VP08 and VP09 was deemed to be 'Slight', with a residual visual effect of 'Slight'. An overall residual visual effect of 'Long-Term', 'Negative' and 'Slight' was therefore deemed to arise for Mayo Abbey Cemetery and Church Ruins. On balance, these effects are not considered significant.

13.7.5.2.4 Settlements

Mayo Abbey

Mayo Abbey is a small village located approximately 2.4km north-west from the nearest proposed turbine (T7). ZTV analysis indicates primarily full theoretical visibility of the proposed turbines within the settlement. However, on-site appraisals determined that actual visibility is less, due to the visual screening provided by the built environment and surrounding vegetation within this low-lying settlement. Figure 13-4 within the Route Screening Analysis shows that the majority of roads within the village of Mayo Abbey are classified as having either 'Full/Dense' Visual Screening or 'Partial/Intermittent' Visual Screening. As a result, visibility of the proposed turbines within the low-lying streetscapes of Mayo Abbey will be limited.

Visibility of the proposed turbines is primarily confined to the outskirts of the village, where the density of the built environment reduces and receptors experience more open, longer-ranging views across the wider landscape. VP08 and VP09 discussed above were captured on the outskirts of Mayo Abbey village, within the ruins of Mayo Abbey and the church, where, as discussed previously, residual visual effects were deemed to be 'Slight'. An overall 'Long-Term', 'Negative' and 'Slight' residual effect was therefore deemed to arise for the settlement of Mayo Abbey. On balance, these effects are not considered significant.

Claremorris

Claremorris town is located approx. 5.6km south-east from the nearest proposed turbine, T5, and has full theoretical visibility of the proposed turbines. VP13, captured from a more open and proximal location from within the same geographic area but not in the settlement of Claremorris, is representative of the open views from this part of the landscape where visibility does occasionally occur. As discussed in *Appendix 13-3*, the proposed turbines are seen beyond the forestry, occupying a short horizontal extent. An overall 'Slight' residual visual effect was deemed to arise for this viewpoint. As Claremorris itself is further set-back and has considerable screening from the built environment, visibility of the proposed turbines from Claremorris will therefore be much reduced in comparison to this viewpoint. An overall 'Long-Term', 'Negative' and 'Slight' residual effect was therefore deemed to arise for the settlement of Claremorris. On balance, these effects are not considered significant.

Balla

Balla town is located approx. 6.7km north-west of the nearest proposed turbine, T7, and has full theoretical visibility of the proposed turbines. VP17, captured 6.8km from the nearest proposed turbine is representative of the views from Balla. As discussed in *Appendix 13-3*, the proposed turbines are seen in the distant background, occupying a short horizontal extent. The lower sections of the turbine towers are partially screened by intervening topography within the landscape, reducing their visual prominence. Within the settlement itself, visibility will be further mitigated due to the visual screening from the built form. An overall 'Long-Term', 'Negative', 'Slight' residual visual effect is deemed to arise for this settlement. On balance, these effects are not considered significant.

Ballindine

Ballindine town is located approximately 11.2km north-east of the nearest proposed turbine (T5), and has full theoretical visibility of the proposed turbines. Photowire PWVP-B (Plate 13-24) was captured from the outskirts of Ballindine, and is representative of the typical views from outside this settlement. As seen in the photowire below, at this distance in this flat landscape, the proposed turbines are screened from view by intervening vegetation. Within the settlement itself, visibility will be further mitigated due to the visual screening from the built form. An overall 'Long-Term', 'Negative', 'Imperceptible' residual visual effect is deemed to arise for the settlement of Ballindine. On balance, these effects are not considered significant.



Plate 13-24 Photowire visualisation PWVP-B from the outskirts of Ballindine.

Kiltimagh

Kiltimagh town is located approximately 12.3km north-east of the nearest proposed turbine (T7), and has full theoretical visibility of the proposed turbines. Photowire PWVP-C was captured from the R232 Regional Road, on the outskirts of Kiltimagh, and is representative of the typical views from outside this settlement. As seen in photowire PWVP-C below (Plate 13-25), at this distance in this flat landscape, the proposed turbines are screened from view by intervening vegetation. Within the settlement itself, visibility will be further mitigated due to the visual screening from the built environment. An overall 'Long-Term', 'Negative', 'Imperceptible' residual visual effect is deemed to arise for the settlement of Kiltimagh. On balance, these effects are not considered significant.



Plate 13-25 Photowire visualisation PWVP-C from the outskirts of Kiltimagh.

13.7.5.2.5 Recreational Routes

Knockaunakill Loop

The Knockaunakill Loop is an 8km looped recreational route and is the closest recreational trail to the Proposed Wind Farm, passing approximately 260m north of the nearest proposed turbine, T6. The route follows the local road network and ZTV analysis indicates primarily full theoretical visibility of the proposed turbines along sections of the route. However, on-site appraisals determined that visibility would vary due to intermittent visual screening provided by roadside vegetation, as illustrated in the Route Screening Analysis map (Figure 13-4).

VP02 was captured along this loop in close proximity to the proposed turbines where, as discussed in *Appendix 13-3*, the proposed turbines would appear as moderately scaled elements within the landscape, occupying a moderate horizontal extent within the view. The magnitude of change at this location was deemed to be 'Moderate', resulting in an overall 'Moderate' residual visual effect.

In a journey scenario, receptors travelling along the loop will experience varying levels of visibility, with turbines intermittently screened by roadside vegetation and occasionally appearing behind the direction of travel. As such, visibility of the proposed turbines on visual receptors as experienced along the route will vary. Overall, residual visual effects on this recreational route are deemed to be 'Long-Term', 'Negative', and 'Moderate.' On balance, these effects are not considered significant.

Croagh Patrick Heritage Trail (Incl. Clogher Bog Loop, Clogher Holy Well Loop, and Clogher Red Walk)

Croagh Patrick Heritage Trail (and its adjoining loops) is located approximately 6.2 km north-west of the nearest proposed turbine (T7) at its closest point. The route primarily traverses relatively low-lying landscapes enclosed by localised landforms and dense vegetation, which limits visibility towards the proposed turbines. Large sections of the trail within the LVIA Study Area experience no theoretical visibility, as shown on the ZTV map (Figure 13-14).

VP19 was captured along this route to represent a location where visibility of the proposed turbines does occur. As discussed in *Appendix 13-3*, only two blades of two proposed turbines are just discernible beyond the distant ridgeline and intervening mature boundary vegetation, while all other turbines are screened from view. A residual visual effect of 'Imperceptible' was deemed to arise at this viewpoint. Such views are representative of the typical visibility along this route, where vegetation is generally well established and limits visibility in the direction of the proposed turbines.

Overall, visibility of the proposed turbines along this walking trail will be intermittent, with views generally brief and limited while travelling along the route. Where visibility does occur, the visibility of the proposed turbines will be further mitigated by distance and vegetative screening within the surrounding landscape. Residual visual effects on this recreational are therefore deemed to be 'Long-Term', 'Negative', and 'Imperceptible'. On balance, these effects are not considered significant.

Crucspullagadaun Loop

Crucspullagadaun Loop is a short, looped walking trail along Crucspullagadaun/Fox Hill/Rush Hill. VP11 was captured along this loop. As discussed in *Appendix 13-3*, the proposed turbines are seen in the distant background, arranged in a staggered, coherent, linear array, occupying a limited horizontal extent within the view. The turbines occupy a very small portion of the expansive, open, and flat panoramic landscape, which has the capacity to effectively accommodate both the proposed turbines and other cumulative wind energy developments within this lowland midland setting. The residual visual effect for this viewpoint was deemed to be 'Slight.' Residual visual effects on this recreational are therefore deemed to be 'Long-Term', 'Negative', and 'Slight' residual visual effect was deemed to occur. On balance, these effects are not considered significant.

Kilmaine Loop Trails

A series of various Kilmaine Loop Trails are located 16.9km south from the nearest proposed turbine. VP10 was captured along one of these loops, where most visibility in the direction of the proposed turbines occurs. As discussed in *Appendix 13-3*, the proposed turbines are set-back beyond the mature vegetation along the horizon, seen in the distant background of views, largely screened by intervening vegetation. The residual visual effect for this viewpoint was deemed to be 'Not Significant.' An overall 'Long-Term', 'Negative' and 'Not Significant' residual visual effect was deemed to occur for these recreational routes. On balance, these effects are not considered significant.

13.7.5.2.6 Transport Network

N60 National Road

The N60 National Road traverses through the LVIA Study Area, first running north-west to south-east before turning east-west in the eastern portion, and connects the settlements of Ballyhaunis, Claremorris, Balla, and Castlebar. While the ZTV map indicates full theoretical visibility along large portions of the route, as discussed throughout the entirety of this chapter, visibility beyond 5km will be limited, due to above-ground vegetation and the intervening landform arising from the undulating drumlin landscape. As outlined in the Route Screening Analysis, within 3km of the proposed turbines, the majority of the route is characterised by 'Dense/Full' Visual Screening and 'Partial/Intermittent' Visual Screening, with 'Little/No' Visual Screening occurring mostly outside 3km. VP01, VP13, and VP15 were captured along different section of this route with various set-back distances. As discussed in *Appendix 13-3*, where the proposed turbines are visible, they occupy relatively small horizontal extents. Residual visual effects of 'Slight' were deemed to occur for all of these viewpoints. In general, where visibility does occur within 3km along this route, views will be brief and intermittent, with visibility further reducing beyond 3km. An overall 'Long-Term,' 'Negative,' and 'Slight' residual effect was deemed to arise for the N60 National Road. On balance, these effects are not considered significant.

R320 Regional Road

The R320 Regional Road runs approximately north-south along the eastern portion of the LVIA Study Area, ultimately connecting Claremorris and Swinford, passing through Kiltimagh within the LVIA Study Area. An approximately 4.2km stretch of the R320 is within 5km of the proposed turbines. While the ZTV map indicates most of the section has full theoretical visibility, the RSA indicates the route has primarily 'Dense/Full' Visual Screening or 'Partial/Intermittent' Visual Screening, with only small stretches of 'Little/No' Visual Screening within 5km. As discussed throughout the entirety of this chapter, visibility beyond 5km will be limited, due to above-ground vegetation and the intervening landform arising from the undulating drumlin landscape. VP13 was captured along the portion of this route shared with the N60. Where the turbines were visible, they occupied relatively small horizontal extents, and residual visual effects of 'Slight' are deemed to occur at this viewpoint. In general, where visibility does occur between 3km and 5km along this route, views will be brief and intermittent, with visibility further reducing beyond 5km. An overall 'Long-Term,' 'Negative,' and 'Slight' residual effect

was deemed to arise for the R320 Regional Road. On balance, these effects are not considered significant.

Railway

The connecting line between Claremorris and Castlebar of the Irish Rail Network traverses through the LVIA Study Area in a north-west to south-east direction, and is representative of the views as experienced from the N60 National Road as they run approximate parallel to each other, although more visibility from the rail line may be experienced from the railway due to its relatively higher elevation. The ZTV map indicates full theoretical visibility along the route. Route screening analysis was not possible along the rail line, however, as discussed throughout the entirety of this chapter, visibility will be limited due to above-ground vegetation and the undulating drumlin landscape. VP01, VP13, and VP15 were captured along the N60. Where the turbines were visible, they occupied relatively small horizontal extents. Residual visual effects were deemed to be 'Slight' at these viewpoints. In general, where visibility does occur within 5km along this route, views will be brief and intermittent, with visibility further reducing beyond 5km. There are locations along the rail line where no visibility occurs, as seen in Photowire PWVP-D (Plate 13-26), which was taken at a bridge overlooking the railway. An overall 'Long-Term,' 'Negative,' and 'Slight' residual effect was deemed to arise for the Claremorris-Castlebar Railway Line. On balance, these effects are not considered significant.

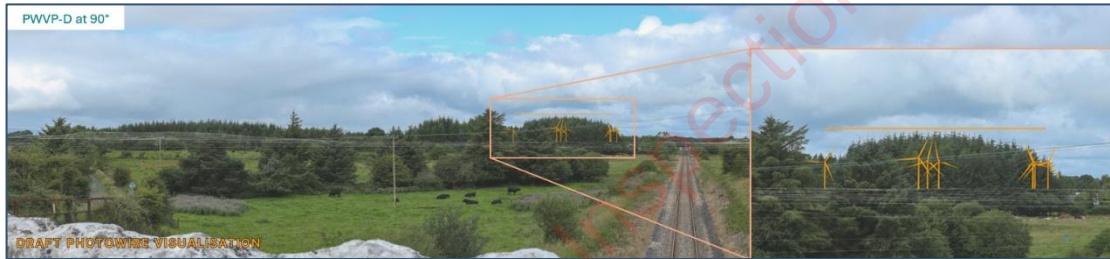


Plate 13-26 Photowire visualisation PWVP-D representing views from the Irish Rail Network within the LVIA Study Area.

13.7.5.3 Residential Receptors

During the iterative design process, early stage LVIA appraisals identified local residential receptors as some of the most locally sensitive receptors with the greatest potential to be impacted by the proposed turbines with regard to visual impacts. Consequently, effects on residential receptors was of key consideration throughout the iterative design process for the Proposed Project. This section of the LVIA firstly states how design measures have been used to mitigate the potential for significant visual effects on some areas of residential amenity, then gives an overview of the residential context in terms of population density in the surrounding area and the geographic arrangement of residential receptors in close proximity to the Proposed Wind Farm. Finally, a visual impact assessment of each cluster of residential receptors is reported, these assessments use analysis of aerial maps, photomontages and photowire visualisations with the intention of identifying the worst-case scenario for potential visual effects on these residential receptors in close proximity to the Proposed Wind Farm.

The design of the Proposed Wind Farm has been informed by industry best practice set-back distances, with regard to the siting of the proposed turbines relative to residential receptors, including the following measures:

- All proposed turbines exceed the mandatory 500m set-back distance from residential receptors set out in the Guidelines (DoEHLG, 2006).
- All proposed turbines adhere to the recommended 4-times-tip-height set-back distance from third-party receptors for residential visual amenity as prescribed by the Draft Guidelines (DoHPLG, 2019).

Residential Context: Population Density and Arrangement of Dwellings

As previously reported in the landscape baseline (see previous Section 13.4.2, Landscape Character of the Proposed Wind Farm), the Proposed Wind Farm itself is located within a sparsely populated agricultural landscape, as seen in Plate 13-27. It is not a densely populated area, with residential receptors primarily situated along the local road network, with localised undulations and varying levels of vegetation providing visual screening of the proposed turbines.



Plate 13-27 Drone Image for Landscape Context: Views west towards the rural landscape

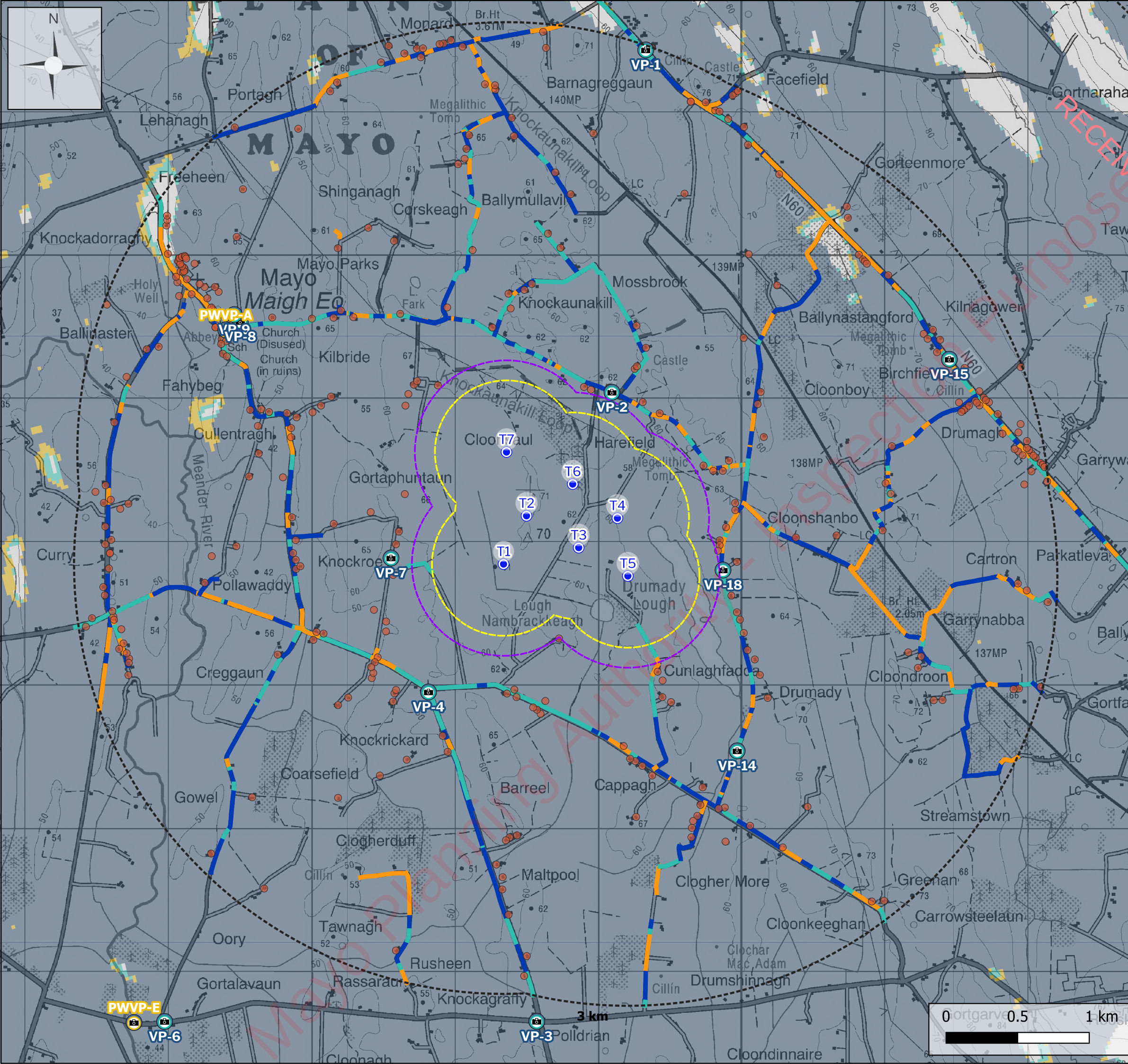
The Residential Receptors Map (See Figure 13-20 below) illustrates how the proposed turbines are set-back from residential receptors in the surrounding landscape with respect to distances compliant with guidance in the Guidelines (DoEHLG, 2006) and the Draft Guidelines (DoHPLG, 2019). There are 51 residential receptors located within 1 km of the proposed turbine locations. The closest residential receptor is located approximately 643m from the nearest proposed turbine (T1) i.e. greater than the minimum recommended setback as identified in the Draft Guidelines (DoHPLG, 2019).

Assessment of Residential Amenity – Photomontages

8 no. photomontage viewpoints were taken within 3km of the proposed turbines to represent the residential receptors in close proximity to the Proposed Wind Farm.

Photomontages are just one of the tools employed during the LVIA that was conducted in order to inform the assessment of landscape and visual effects. The visual impact assessment is strongly informed by site visits and the reading of the landscape on the ground. It would be a disproportionate measure to include an individual photomontage from every residential receptor and this is not required to conduct a thorough and robust assessment of landscape and visual effects. In line with the guidance laid out in GLVIA3, the viewpoints selected for the LVIA conducted were informed by a range of factors including the “ZTV analysis, by fieldwork, and by desk research” (para 6.18, GLVIA3). Furthermore, GLVIA3 states that representative viewpoints are “selected to represent the experience of different types of visual receptor, where larger numbers of viewpoints cannot all be included individually and where the significant effects are unlikely to differ” (para 6.19 GLVIA3). The large number of viewpoints used in the conduct of the LVIA particularly in very close proximity to the proposed turbines are sufficient

to represent the residential receptors within the LVIA Study Area, including the “*distribution of population*” (para 6.18, GLVIA3).



Map Legend

- 3km buffer
- 500m Buffer (DoEHLG, 2006)
- 4x Tip-Height Setback Distance (DoHPLG, 2019)
- Proposed Turbines
- Residences within 3km
- Photomontage Viewpoint Locations
- Photowire Viewpoint Locations

Route Screening Analysis

- No / Very Little Visual Screening
- Partial / Intermittent Visual Screening
- Dense / Full Visual Screening

Half-Blade Zone of Theoretical Visibility

- 1-2 Turbines Theoretically Visible
- 3-4 Turbines Theoretically Visible
- 5-7 Turbines Theoretically Visible

© Ordnance Survey Ireland. All rights reserved. Licence number CYAL50267517
Drawing No.

Figure 13-20

Residential Receptors

Cunlaghfadda Green Energy Project

Scale	Project No.	Date	Drawn By	Checked By
1:25,000	220825	15.04.2026	GL	DM



Planning and Environmental Consultants

Assessment of Residential Receptors to the West

To the west of the proposed turbines, the character of the landscape is primarily defined by agricultural fields enclosed by treelines and shrub vegetation. Where residential receptors are present, they are typically located along the local road network. The Route Screening Analysis (See Section 13.3.2 previously) notes that the road network to the west of the proposed turbines is classified as a mix of 'Partial/Intermittent' Visual Screening and 'No/Very Little' Visual Screening, with some smaller sections of 'Dense/Full' Visual Screening, especially around the settlement of Mayo Abbey.

VP07 is located along the L15057 local road, within the townland of Knockroe and is representative of typical views towards the proposed turbines experienced by residential receptors to the west in close proximity. This image was taken from a local road adjacent the Proposed Wind Farm and illustrates a relatively open view towards the proposed turbines. Due to the proximity (700m from the nearest proposed turbine (T1)), the proposed turbines occupy a relatively wide horizontal extent. The closest turbines (T1 and T2) appear as tall vertical features within the view, while the remaining turbines appear as moderately scaled features, set-back beyond multiple agricultural fields. Majority of the proposed turbines form a coherent cluster of turbines, with one turbine, T7, appearing set-back to the left. The arrangement and spacing of the proposed turbines give an orderly and visually coherent appearance within the view, with limited overlap of turbine components, avoiding visual confusion and supporting their assimilation into the landscape. As seen in VP07, many of the turbines are seen set-back beyond multiple agricultural fields, giving a sense of set back and spatial separation from the viewpoint. Residential visual amenity effects are mitigated by strategic siting, greater than 4x tip height separation and appropriate scaling. As discussed in *Appendix 13-3*, a 'Moderate' magnitude of change was deemed to arise at VP07 with an overall 'Moderate' residual effect. On balance, these effects are not considered significant.

VP08 was captured further set-back from VP07, along the L55398 Local Road within the townland of Lehanagh, approximately 2km from the nearest proposed turbine (T7). VP08 was captured within an area of 'Little/No' Visual Screening and is representative of the typical views experienced by residential receptors on the outskirts of Mayo Abbey. This viewpoint demonstrates a notable reduction in visibility compared to VP07, owing to the increased set-back distance within the undulating drumlin-like landscape, with visual exposure further reduced by screening from intervening vegetation and landform. As discussed in *Appendix 13-3*, all proposed turbines are partially visible beyond the ridge, occupying a relatively short horizontal extent relative to the landscape. Turbines T1, T2, and T7 are the most prominent, whilst the remaining turbines are largely screened from view, with only the blades visible. Residential visual amenity effects are mitigated by predominate visual screening by landform and vegetation. As detailed in *Appendix 13-3*, a 'Slight' magnitude of change was assigned to this viewpoint, with an overall 'Slight' residual visual effect. On balance, these effects are not considered significant.

VP06 was captured along the L1506 Local Road within the townland of Oory, approximately 4km from the nearest proposed turbine (T1) and is representative of views from the west/south-west with a larger set-back distance. As discussed in *Appendix 13-3*, only three proposed turbines are visible to their full extent, set-back beyond the ridgeline. The proposed turbines occupy a relatively short horizontal extent. As VP06 clearly demonstrates, with increased set back distance the proposed turbines reduce in scale and are more visually screened by the intervening vegetation within the relatively flat landscape. A 'Slight' magnitude of change was determined for this viewpoint, with a 'Not Significant' residual visual effect. There are instances in this general direction where no visibility occurs due to dense forestry screening visibility toward the proposed turbines, as can be seen in Photowire PWVP-E below (Plate 13-28), also from nearby in the townland of Oory. Visual effects are 'Imperceptible' from this location. On balance, these effects are not considered significant.



Plate 13-28 Photowire visualisation PWVPE from the townland of Oory.

Assessment of Residential Receptors to the East

Similar as the west, the rural character of the landscape to the east is primarily defined by agricultural fields often bordered by dense shrub and tree vegetation, although to the east the elevation eventually begins to increase. Where residential receptors are present, they are typically arranged in along the local road network. As outlined in the Route Screening Analysis (see Section 13.3.2), the road network to the east of the proposed turbines is predominantly classified as a mix of 'Partial/Intermittent' and 'Dense/Full' Visual Screening with some short stretches of 'No/Very Little' Visual Screening, particularly in areas within 3km of the proposed turbines.

VP18 was captured along the L5537 Local Road in the townland of Drumady, approximately 660m from the nearest proposed turbine (T5). This viewpoint is representative of residential receptors in very close proximity to the proposed turbines and is representative of the worst-case scenario for residential receptors to the east of the proposed turbines. As discussed in *Appendix 13-3*, the proposed turbines are set-back beyond the ridge of the hilly terrain, with some of the proposed turbines partially visually screened by terrain and vegetation. As shown by the Route Screening Analysis in Section 13.3.2 previously, this viewpoint was captured along one of the few locations in this area to the east of the Site with open visibility towards the proposed turbines. Other sections of the road are primarily characterised as having dense roadside screening from mature vegetation, thereby limiting visibility towards the proposed turbines from other sections of the road. Residential visual amenity effects are mitigated by strategic siting, greater than 4x tip height, and location within a rural, working landscape. A 'Moderate' magnitude of change was determined for this viewpoint, with a 'Moderate' residual visual effect. On balance, these effects are not considered significant.

VP15 was captured along the N60 National Road in the townland of Birchfield, approximately 2.5km east from the nearest proposed turbine (T4) and is representative of residential receptors along the N60 with the most open views toward the proposed turbines. As discussed in *Appendix 13-3*, all the proposed turbines are visible from this viewpoint, across a relatively short horizontal extent in the centre of the view, beyond the intervening tract of forestry which partially screens the proposed turbines. Furthermore, the upward-sloping agricultural field and roadside shrub vegetation provide further screening of the lower sections of the turbines, creating a sense that the turbines are visually set back from the viewpoint. This reduces the overall visual prominence of the proposed turbines for residential receptors in this general direction. Residential visual amenity effects are mitigated by visual screening from vegetation and sense of set back from the proposed turbines. Many residential properties in the area have mature boundary vegetation, further reducing visibility of the proposed turbines. A 'Slight' magnitude of change was determined for this viewpoint, with an overall 'Slight' residual effect. On balance, these effects are not considered significant.

Assessment of Residential Receptors to the North

Similar to both east and west of the proposed turbines, the rural character of the landscape to the north is primarily defined by agricultural fields often bordered by dense shrub and tree vegetation. There are increasingly amounts of localised undulations in the terrain from the drumlin landscape. Where residential receptors are present, they are typically arranged along the local road network. As outlined in the Route Screening Analysis (see Section 13.3.2), the road network to the north of the proposed turbines is predominantly classified as a mix of 'No/Very Little' and 'Partial/Intermittent' Visual Screening with some short stretches of 'Dense/Full' Visual Screening.

VP02 was captured along the L5536 Local Road in the townland of Knockaunakill, approximately 690m from the nearest proposed turbine (T6) and is representative of residential receptors in very close proximity. As discussed in *Appendix 13-3*, the closest turbine, T6 appears as a tall vertical feature within the view, while the remaining turbines are perceived as moderately scaled elements in the background, partially screened by intervening vegetation. Some visual overlap occurs with turbines T5 and T4, as well as turbines T3 and T2. The proposed turbines appear visually set-back from this viewpoint, beyond the ridgeline and treelines, giving a sense of set back and spatial separation from the viewpoint. Furthermore, the visual effects shown in this photomontage represent the worst-case scenario for this area immediately north of the Proposed Wind Farm and will only be experienced by a very low number of receptors. Many residential receptors in the surrounding area will not experience comparable levels of visibility due to further set-back distance and mature boundary vegetation surrounding their properties, which will further reduce visibility of the proposed turbines and effects on the perceived visual amenity. Residential visual amenity effects are mitigated by greater than 4x tip height and a sense of set-back and separation behind localised terrain undulations and mature vegetation. A 'Moderate' magnitude of change was determined for this viewpoint, with a 'Moderate' residual visual effect. On balance, these effects are not considered significant.

VP01 was captured along the N60 National Road in the townland of Brees, approximately 2.9km from the nearest proposed turbine (T7). This viewpoint is representative of residential receptors within 3km with relatively open views of the proposed turbines. As discussed in *Appendix 13-3*, all proposed turbines are visible from this viewpoint. 4 no. turbines (T5, T4, T2, and T7) are largely screened by mature vegetation and the intervening rise in terrain. The proposed turbines form a coherent, linear array of turbines, visually set-back beyond the ridgeline and occupy a relatively small horizontal extent. Residential visual amenity effects are mitigated by set back and visual screening behind localised terrain undulations and mature boundary vegetation. A 'Slight' magnitude of change was determined for this viewpoint, with a 'Slight' residual visual effect. On balance, these effects are not considered significant.

Assessment of Residential Receptors to the South

As with most of the area within 3km of the proposed turbines, the rural character of the landscape to the south is primarily defined by agricultural fields and cutover bog. Where residential receptors are present, they are typically arranged along the local road network. As outlined in the Route Screening Analysis (see Section 13.3.2), the road network to the south of the proposed turbines is predominantly classified as a mix of 'No/Very Little' Visual Screening, with some stretches of 'Partial/Intermittent' Visual Screening and some occasional sections of 'Dense/Full' Visual Screening.

VP04 was captured on the L1505 Local Road in the townland of Knockrickard, approximately 1km from the nearest proposed turbine (T1). This viewpoint is representative of residential receptors in close proximity with open views toward the proposed turbines. This area close to the Proposed Wind Farm overall has the least visual roadside screening, being classified as predominantly 'No/Very Little' Visual screening. As discussed in *Appendix 13-3*, the proposed turbines are seen beyond rising terrain, and occupy a moderate horizontal extent. Some visual overlap occurs with turbines T2 and T1, as well as T3 and T4. Turbines T7 and T5 appear partially set-back from the remaining turbines. Residential visual amenity effects are mitigated by greater than 4x tip height and a sense of set-back and separation behind localised terrain and mature vegetation. A 'Moderate' magnitude of change was determined for this viewpoint, with a 'Moderate' residual visual effect. On balance, these effects are not considered significant.

VP14 was captured along the L5537 Local Road, approximately 1.4km from the nearest proposed turbine (T5) and is representative of views from the south with a greater proportion of visual screening. As discussed in *Appendix 13-3*, all of the proposed turbines are seen centrally from this viewpoint, set-back beyond multiple agricultural fields, and occupy a relatively moderate horizontal extent. Turbine T3 appears slightly separated from the other proposed turbines. Some visual overlap occurs with turbines T3 and T7, as well as T5 and T6. Residential visual amenity effects are mitigated by greater than 4x tip height and the landscape buffer of the various hedgerows and mature trees in the area. A 'Moderate' magnitude of change was determined for this viewpoint, with a 'Moderate' residual visual effect. On balance, these effects are not considered significant.

VP03 was captured along the L1506 Local Road from the townland of Ahena, approximately 3.2km from the nearest proposed turbine (T5) and is representative of views from the south with a larger set-back distance. As discussed in *Appendix 13-3*, most of the proposed turbines are seen viewpoint, set-back beyond the ridgeline and largely screened by roadside and residential vegetation. The proposed turbines occupy a relatively short horizontal extent. Residential visual amenity effects are mitigated by partial visual screening, set-back from the proposed turbines, and intervening vegetation and the built environment. A 'Slight' magnitude of change was determined for this viewpoint, with a 'Not Significant' residual visual effect. On balance, these effects are not considered significant.

Summary of Visual Effects on Residential Receptors

Within the LVIA Study Area, the visual impact on residential receptors ranges from 'Imperceptible' to 'Moderate'. Given the adherence to the 4x tip height set-back distance to protect visual amenity, on balance, effects on residential receptors are mitigated and are therefore not significant.

13.7.5.4 Visual Effects of the Proposed Grid Connection and Met Mast

Proposed Met Mast

This will be a slender structure, 92m in height, and will not be an imposing structure in terms of visual impact. The landscape and visual effects of the proposed met mast will be localised, considering that it will be significantly less visible than any proposed turbine given its shorter and slender lattice form.

Proposed 110kV Onsite Substation

The proposed onsite 110kV substation and its associated components including the control buildings and storage containers is one of the larger and potentially more visually prominent elements of the non-turbine infrastructure of the Proposed Project. As shown previously in Figure 13-11, the proposed onsite 110kV substation is located to the north-east of the proposed turbines. As shown previously in Plate 13-17, the proposed onsite 110kV substation is sited in a location partially enclosed by existing vegetation (as can be seen in Figure 13-21 and Plate 13-29 below), which would provide some visual screening for residential receptors in the surrounding landscape. Furthermore, as discussed in Appendix 6-4 and shown in Figure 13-21 and Plate 13-29 below, woodland and treeline/ hedgerow planting and enhancement is proposed along the west and north-east of the proposed onsite 110kV substation, providing further visual screening for nearby residential receptors. The nearest residential receptor is located approx. 300m west of the proposed 110kV substation location. Due to setback distance and screening from both existing vegetation within the intervening fields, in addition to the proposed planting proposals as discussed in the BMEP (Appendix 6-4) (and shown below), visibility of the proposed 110kV substation, once constructed and once the vegetation has reached maturity, whilst still visible, will be largely be limited to the residential receptors immediately to the west. Users of the L5536 local road will have momentary views through roadside screening (Figure 13-21), however, the proposed woodland and treeline/hedgerow planting and enhancement in addition to the line of mature boundary vegetation along the road will largely visually screen the proposed onsite 110kV substation from these road users and residences to the north and east (Plate 13-29). Any visual effects are likely to be highly localised, 'Long-term', 'Negative' and will be 'Slight'. On balance, these effects are not considered significant.

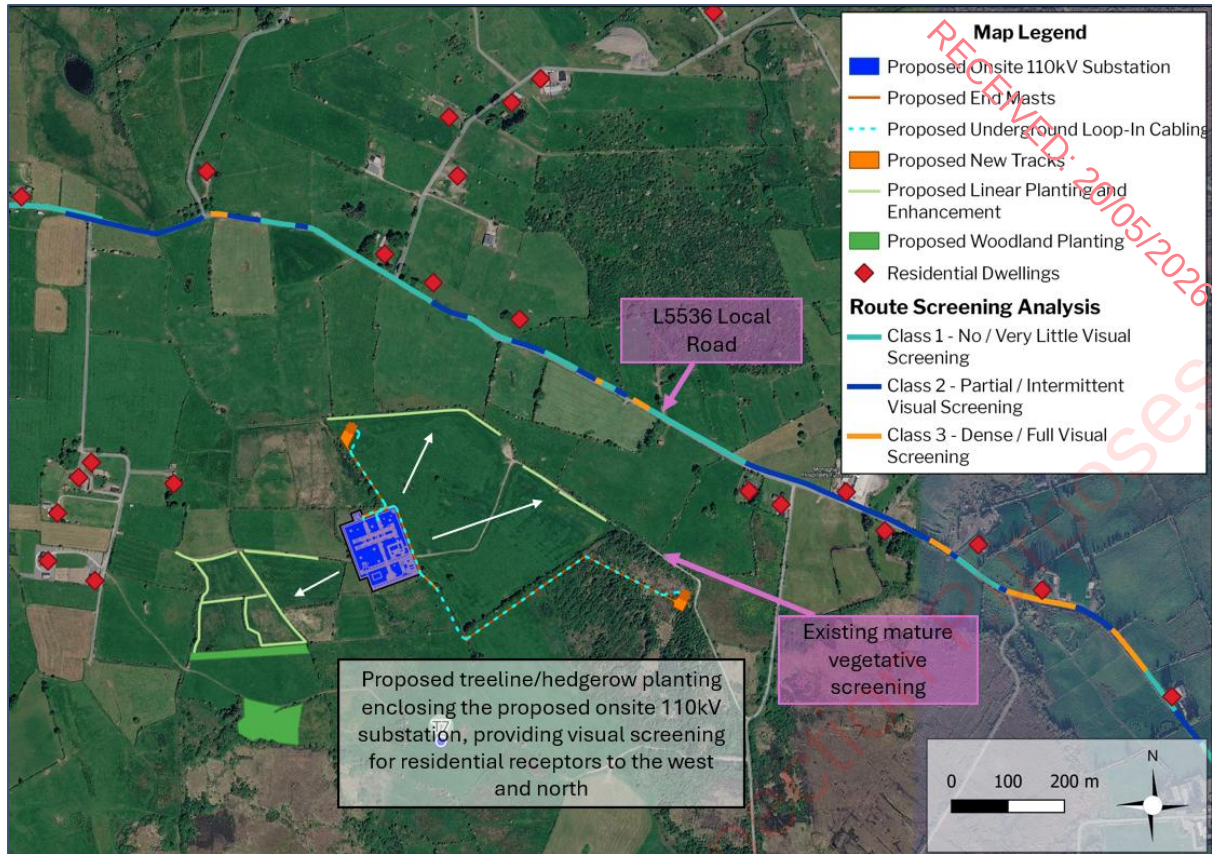


Figure 13-21 Location of proposed onsite 110kV substation, the proposed treeline/hedgerow and woodland planting locations, and locations of local receptors.

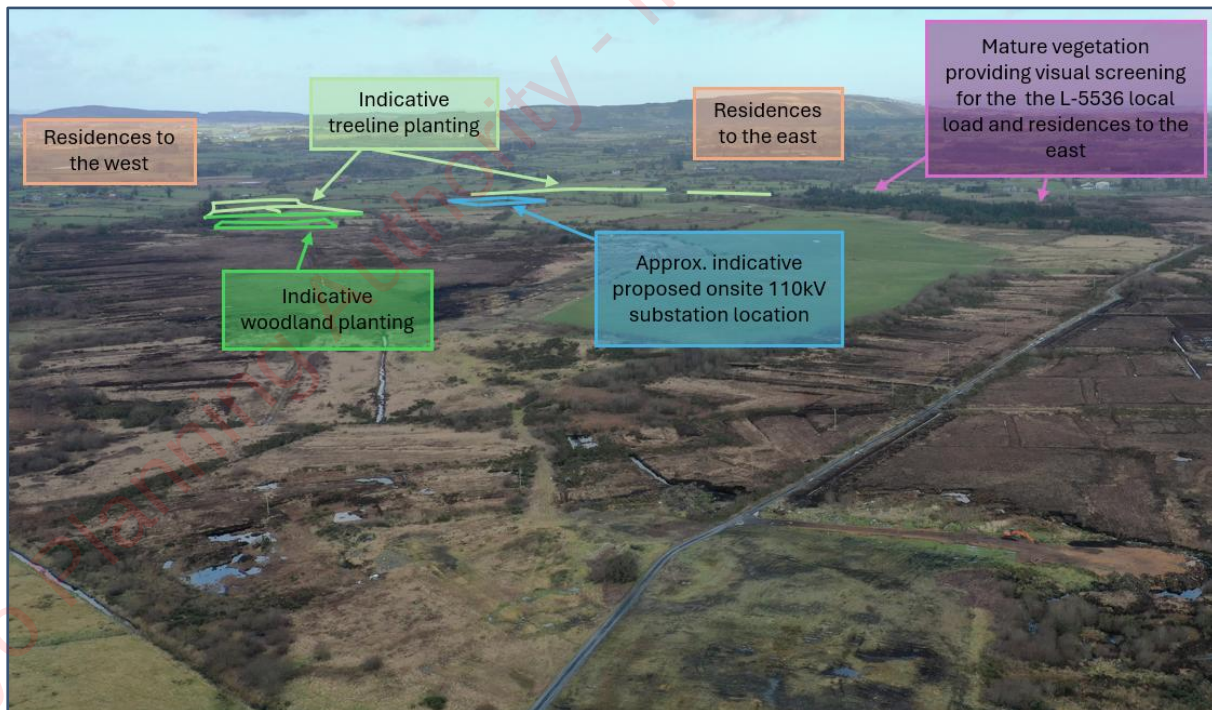


Plate 13-29 Drone imagery showing approximately locations of the proposed onsite 110kV substation, residences, existing mature vegetation, and proposed treeline/hedgerow planting.

Connection to the Existing Overhead Line

As discussed previously in Section 13.4.2, the existing overhead line will be broken by 2 no. end masts (lattice type towers) to facilitate the connection to the Proposed Wind Farm. Visual effects will occur as three existing 23m wooden poles and a section of the OHL will be removed and two new 16m lattice-type end-masts and underground cabling will be constructed to facilitate connection to the national grid. Due to the undulating, rural, and vegetated landscape of the Site, visibility of these towers will be localised, with greatest visual effects experienced by nearby residential receptors in the townlands of Cloonbaul and Knockaunakill, as well as local road users on the L5536. Any visual effects are likely to be localised, 'Long-term', 'Negative' and will be 'Not Significant'. On balance, these effects are not considered significant.

13.7.5.5 Discussion of Cumulative Visual Effects

There are many potential scenarios and interactions where cumulative visual effects may occur. These scenarios can include interactions between the Proposed Project, other energy developments (wind farms or grid infrastructure), as well as other man-made landscape features (quarries, transport networks, overhead telecommunication lines). Guidance for assessment of cumulative effects of onshore wind farms (SNH,2012) & (NatureScott, 2021) clearly states the following:

"At every stage in the process the focus should be on the key cumulative effects which are likely to influence decision making, rather than an assessment of every potential cumulative effect."

"The level of information generated can distract attention from the most significant cumulative effects which are likely to influence the consenting decision. Assessments should therefore focus on the most significant cumulative effects and conclude with a clear assessment of those which are likely to influence decision making."

Following this guidance, a primary focus is given to the cumulative effects likely to occur as a result of other wind turbines identified in the LVIA Study Area. The discussion of cumulative visual effects in this section uses the following terminology:

- **'In combination'** where the proposed turbines will be seen with other turbines from a particular vantage point representing visual receptors.
- **In combination 'simultaneous'** visual effects occur where the proposed turbines are seen with other cumulative turbines within the same or similar field of view.
- **In combination 'successional'** visual effects occur where the proposed turbines are seen with other turbines from the same viewpoint but in an alternative field of view where the receptor will need to turn to face a different direction to experience cumulative effects.

Within the LVIA Study Area, all other wind energy developments are located beyond 5km from the proposed turbines. Cumulative visual effects as experienced by visual receptors, including residential receptors, local road users, and users of recreational walking trails and designated scenic routes are primarily confirmed to occasional, elevated vantage points within the wider LVIA Study Area. In these instances, the proposed turbines would be visible in the distant background, where they would be perceived as small-scale elements relative to the receiving landscape, largely screened by intervening vegetation and the undulating drumlin landscape. This is illustrated in the photomontages presented in the Photomontage Booklet, discussed in detail in *Appendix 13-3*, and a summary is provided below:

- **VP11:** Visual receptors, including walkers on the Cruispullagadaun Loop Trail, will experience some in combination 'Simultaneous' cumulative visual effects as the existing Ballykinava, Cloontooa, Mace Upper, and Magheramore wind farms are seen in the same field of view as the proposed turbines. The view of the landscape from the trail is large scale and expansive, capable of absorbing the proposed and existing turbines.
- **VP16:** Visual receptors, including commuters on the N17 National Road, would experience in combination 'Simultaneous' visual effects as the Mace Upper Wind Farm is seen in combination

with the proposed turbines and would be visible as they travel along the route. The existing Mace Upper turbines and the proposed turbines are at different set back distances, with the proposed turbines barely visible in comparison to the more prominent Mace Upper Wind Farm.

13.7.6 Decommissioning Phase Effects

The landscape and visual effects during the Decommissioning Phase are anticipated to be of a similar nature as those occurring during the construction phase.

The important elements of decommissioning from an LVIA perspective are the dismantling and removal of the wind turbines and mast components. This will occur for a limited period of time and will predominately involve cranes adjacent to the turbines during the dismantling process. Upon decommissioning of the Proposed Project, the turbines will be disassembled in reverse order to how they were erected. The turbines will be disassembled with a similar model of crane that was used for their erection. The turbines will likely be removed from the Proposed Wind Farm using the same transport methodology adopted initially for delivery to the Site.

Turbine foundations would remain in place underground and would be covered with earth and reseeded as appropriate. This naturalisation process shall revert the landscape of the Proposed Project back to a condition similar to the landscape baseline.

The Proposed Grid Connection underground electrical cabling and proposed 110kV substation will remain in place as it will be part of the Electricity Grid under the ownership and control of ESB Networks and Eirgrid.

Removal of the turbines and ancillary infrastructure (except the proposed 110kV substation, access tracks and hardstanding areas) from the Site during decommissioning will result in 'Short-Term', 'Slight', 'Negative' visual effects. On balance, these effects are not considered significant. A Decommissioning Plan has been prepared (Appendix 4-6 of this EIAR), the details of which will be agreed upon with the Local Authority prior to any decommissioning. The Decommissioning Plan will be updated prior to the end of the operational period in line with decommissioning methodologies that may exist at the time and will be agreed upon with the competent authority at that time.

13.7.7 EIA Classification Summary

Please see the below table for a summary of all identified impacts for the Proposed Project relating to LVIA.

Table 13-8 Impact Assessment Classification Summary

Topic	Impact Assessment Discussion Section Reference	Residual Effect	Significance
Construction Phase			
Proposed Project	Section 13.7.2.1	Short-Term, Negative, Moderate	not significant
Nearby Visual Receptors	Section 13.7.2.2	Temporary to Short-Term, Negative effects within the following range: Not Significant, Slight	not significant
Operational Phase – Landscape Effects			
Proposed Project	Section 13.7.3.1.1	Long-Term, Negative effects	not significant

		Imperceptible, Moderate	
LCA's	Section 13.7.3.1.2	Long-Term, Negative effects, within the following range: Not Significant, Slight	not significant
Other Landscape Receptors (Vulnerable Features)	Section 13.7.3.1.3	Long-Term, Negative effects, within the following range: Not Significant, Slight, Moderate	not significant
Operational Phase – Visual Effects			
Designated Scenic Routes and Scenic Routes with Views	Section 13.7.4.2.1 Section 13.7.4.2.2	Long-Term, Negative effects, within the following range: Not Significant, Slight	not significant
Settlements	Section 13.7.4.2.4	Long-Term, Negative effects, within the following range: Imperceptible, Slight	not significant
Recreational Routes	Section 13.7.4.2.5	Long-Term, Negative effects, within the following range: Imperceptible, Not Significant, Slight, Moderate	not significant
Recreational Destinations, Cultural Heritage and Tourism Destinations	Section 13.7.4.2.3	Long-Term, Negative effects, within the following range: Moderate, Slight, Not Significant, Imperceptible	not significant
Major Transport Routes	Section 13.7.4.2.6	Long-Term, Slight, Negative	not significant
Residential Receptors	Section 13.7.4.3	Long-Term, Negative effects, within the following range: Imperceptible, Not Significant, Slight, Moderate	not significant
Decommissioning Phase			
Proposed Project	Section 13.7.5	(same as construction phase effects)	not significant

13.8 Conclusion

This chapter assesses the likely significant landscape and visual impacts arising as a result of the Proposed Project. Although all elements of the Proposed Project are assessed, this chapter focusses upon the proposed turbines, as they are deemed to be the primary essential aspects of the proposal under assessment from a landscape and visual perspective. This chapter also assesses the proposed onsite 110kV substation that forms part of the Proposed Grid Connection. This chapter describes the baseline landscape and assesses the direct effects on the landscape of the Proposed Wind Farm, as well as effects on landscape character and the impact on sensitive landscape receptors (i.e. designated Vulnerable Features). Visibility of the proposed turbines was assessed from receptors within an LVIA Study Area extending 20km from the proposed turbines; and visual effects were determined from information gathered during multiple site visits as well as other tools such as ZTV mapping, photomontages and photowires.

The Proposed Project site is located within the sparsely populated, undulating landscape within the plains of County Mayo, characterised by a network of agricultural fields, cutover bogs, and commercial forestry. It is a landscape which has undergone a degree of human modification. The proposed turbines are located within Policy Area 4, designated as Medium sensitivity to wind in the Landscape Appraisal for County Mayo (LACM), which is the lowest sensitivity classification for this development type. The proposed turbines are not located within any protected landscapes within any local landscape policy, and no sensitive landscape designations (designated Vulnerable Features) fall on the proposed turbines. Furthermore, the Proposed Project is located with an area classified as 'Tier 1 – Preferred' for wind farm developments within the MCDP RES 2011-2020. The landscape sensitivity of the Proposed Project is deemed 'Low'.

In terms of location, spatial extent, spacing and layout, the siting and design of the Proposed Project adheres to the guidance for the siting of wind farms in 'Hilly and Flat Farmland' as set out in the Guidelines (DoEHLG, 2006) and the Draft Guidelines (DoHPLG, 2019). As discussed in Section 13.7.4 of this chapter, residual effects upon the landscape in which the proposed turbines are located is deemed to be 'Long-term', 'Negative' and 'Moderate'. On balance, these effects are not considered significant.

On-site visibility appraisals, ZTV mapping, a Route Screening Analysis and photomontage viewpoint locations determined that visibility of the proposed turbines will be very limited from locations beyond 5 km from the Proposed Project site. Siting of the proposed turbines within a relatively flat landscape with localised undulations (arising from the drumlin landscape) largely restricts visual exposure in the wider landscape. Visibility of the proposed turbines beyond the immediate landscape setting of the Proposed Project site is limited to localised areas of high elevation where open views across the flat and highly vegetated landscape are available from elevated vantage points.

Photomontages were used to assess the visual effects arising as a result of the Proposed Project from 19 no. viewpoint locations. The assessment concluded that no 'Significant', 'Very Significant', or 'Profound' effects occurred at any of the 19 photomontage viewpoints. In all instances, the Proposed Project exceeds the recommended 500m set back distance in the Guidelines (DoEHLG, 2006) and also is in line with the 4 times tip height set-back distance set out for residential visual amenity prescribed by the Draft Guidelines (DoHPLG, 2019). Residual 'Moderate' effects occurred at 5 of the 19 No. viewpoints. All other viewpoints were assessed as resulting in 'Imperceptible' (1), 'Not Significant' (5), and 'Slight' (8) residual effects. Cumulative visual effects have greatest potential to arise with other existing developments. However, given the setting of the Proposed Project and limited visibility with the extensive flat landscape, cumulative effects are only mostly limited to elevated vantage points within the LVIA Study Area.

Mayo Abbey Church and Ruins is located 2km northwest from the nearest proposed turbine, however, as discussed throughout this chapter and the accompanying appendices, the Proposed Project will not alter the physical fabric or key features of the monuments, and any change will be limited to the wider landscape setting, where the proposed turbines will be seen beyond the immediate visual context of the Mayo Abbey Church and Ruins.

Overall, this chapter determined that no significant landscape and visual effects were identified. Overall, the Proposed Project is effectively accommodated within the landscape without any Significant effects on the key scenic or landscape sensitivities of receptors identified in the 20km LVIA Study Area. The Proposed Project is appropriately designed and suitably scaled, and it has been demonstrated that no significant landscape and visual effects are likely to arise.