

Ballyfeeny Green Energy Project



Environmental Impact Assessment Report Volume II

Chapter 11 – Landscape and Visual September 2025

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Acronyms

Term	Meaning
GCR	Grid Connection Route
TDR	Transport Delivery Route
EIAR	Environmental Impact Assessment Report
CEMP	Construction Environmental Management Plan
LVIA	Landscape and Visual Impact Assessment
MILI	Member of the Irish Landscape Institute
CEnv	Chartered Environmentalists
C.WEM	Chartered Water and Environmental Manager
ECOW	Environmental Clerk of Works
IEMA	Institute of Environmental Management and Assessment
GLIVA	Guidelines for Landscape and Visual Impact Assessment
EPA	Environmental Protection Agency
EU	European Union
EIA	Environmental Impact Assessment
DoHPLG	Department of Housing Planning and Local Government
DECLG	Department of Environment, Community and Local Government
EC	European Commission
WEDG	Wind Energy Development Guidelines
ELC	European Landscape Convention
ZTV	Zone of Theoretical Visibility
VRPs	Viewshed Reference Points
VP's	Viewpoints
SPPR2	Strategic Planning Policy Requirement 2
CPD	County Development Plan
LCT	Landscape Character Types
LCA	Landscape Character Areas
AOD	Above Ordnance Datum
KV	Key Views
SR	Scenic Route
SV	Scenic Views
LCV	Local Community Views
CP	Centres of Population
MR	Major Routes
AH	Tourism, recreational and heritage features
ha	Heactares
SE1	Site Entrance 1
T01	Turbine 1
T02	Turbine 2
T03	Turbine 3
T04	Turbine 4
T05	Turbine 5
T06	Turbine 6
HGV	Heavy Goods Vehicle
CEA	Cumulative Effects Assessment

11. Landscape and Visual

11.1 Introduction

This Chapter assesses the likely significant direct and indirect effects on the landscape context of the proposed Project and assesses the likely landscape and visual effects on the receiving environment, during the construction, operational and decommissioning phases. Although closely linked, landscape and visual effects are assessed separately.

The proposed Project includes six no. turbines and all associated infrastructure including Turbine Foundations, Turbine Hardstands, Site Access Tracks, Wind Farm Internal Cabling, Grid Connection Route (GCR), Relay Tower, Onsite Substation and works required along the public road network for the two Turbine Delivery Route (TDR) options to facilitate the delivery of turbine components. A full description of the proposed Project is provided in **Chapter 2 – Project Description**.

The Applicant is in receipt of a notification of opinion by the Local Authority on design flexibility. The notification is provided in **Appendix 1.5 – DFR-25-1 Notification of Opinion by Local Authority**. This opinion from the Local Authority confirmed that it was *‘appropriate that the proposed application be made and decided before the prospective applicant has confirmed certain details of the application’*.

Chapter 1 – Introduction, Section 1.6 Approach to Design Flexibility, outlines with respect to the notification of opinion by the Local Authority, the Applicant in this EIAR, proposes to assess three distinct Technology Options within the range outlined by the Local Authority and in accordance with the design flexibility parameters sought. **Chapter 1 – Introduction Table 1-3**, outlines the options and associated parameters that are used in the EIAR, comprising three potential turbines classified as Technology Option 1, 2 and 3. Further detail on the assessment of the Technology Options in this Chapter is provided in **Section 11.7.4**.

This Chapter is supported by the following appendices:

- **EIAR Volume 5 – Photomontages**
- **EIAR Volume 4 – EIAR Figures**
- **Appendix 11.1 – Assessment of Representative Viewpoints**
- **Appendix 11.2 – LVIA Mapping**
- **Appendix 2.1 – Construction Environmental Management Plan (CEMP)**

This assessment should be read in conjunction with:

- **Chapter 5 – Population and Human Health**
- **Chapter 13 – Archaeology, Architectural and Cultural Heritage**

- **Chapter 16 – Cumulative Effects** which considers other plans and projects that may act cumulatively with the proposed Project; and
- **Chapter 17 – Interrelated Effects**, which address the interactions between effects on different environmental aspects.

11.1.1 Statement of Authority

This Landscape and Visual Assessment (LVIA) chapter was prepared by Cian Doughan, Associate Director (BSc. Landscape Architecture and Member of the Irish Landscape Institute (MILI)) of Macro Works Ltd, with eight years of experience working on numerous wind farm applications (including 10+ SID Wind Farm application) and other renewable energy infrastructure. The Chapter was reviewed by Richard Barker (MSc. in Landscape Architecture and MILI) of Macro Works Ltd, who has 18 years of experience in the appraisal of effects from a variety of energy, infrastructure and commercial developments.

Denise Meade has reviewed this Chapter. Denise has over 20 years' experience working on both public and private sector developments. Her experience lies in the environmental co-ordination of large infrastructure projects across a range of industries including renewable energy, roads, water and wastewater. She has managed all aspects of planning applications, with a focus on the technical review and delivery of EIARs. She is a Chartered Environmentalist (CEnv) and Chartered Water and Environmental Manager (C.WEM) and hold an MSc in Applied Environmental Science and AdvDip in Planning & Environmental Law.

11.2 Legislation and Guidance

The LVIA adopts an approach that is founded in the following best practice guidance documents:

- Landscape Institute and the Institute of Environmental Management and Assessment (IEMA) publication entitled Guidelines for Landscape and Visual Impact Assessment, 2013 (GLVIA3);
- 'Photography and Photomontage in Landscape and Visual Impact Assessment', Landscape Institute Technical Guidance Note 06/2019; and
- Guidelines on the information to be contained in Environmental Impact Assessment Reports (hereafter referred to as the Environmental Protection Agency (EPA) Guidelines) (EPA, 2022).

The following sources were also consulted in the preparation of this Chapter:

- EU Directive 2011/92/EU (as amended by Directive 2014/52/EU) on the assessment of the effects of certain public and private projects on the environment (the EIA Directive);
- The Planning and Development Act 2000 (as amended);
- The Planning and Development Regulations, 2001 (as amended);
- Draft Revised Wind Energy Development Guidelines (Department of Housing Planning and Local Government (DoHPLG), 2019) (hereafter referred to as Draft WEDG 2019);
- Guidelines for Planning Authorities and An Bord Pleanála on Carrying Out Environmental Impact Assessment (Department of Environment, Community and Local Government (DECLG), August 2018);
- Environmental Impact Assessment of Projects – Guidance on the Preparation of the Environmental Impact Assessment Report (European Commission (EC), 2017);
- Wind Energy Development Guidelines (Department of the Environment, Heritage and Local Government, 2006 (hereafter referred to as WEDG 2006);
- Advice Notes on Current Practice in the Preparation of Environmental Impact Assessment Reports (EPA, 2018).
- Roscommon County Council. 2022. *Roscommon County Development Plan 2022–2028*. Adopted 8 March 2022; effective from 19 April 2022;
- Longford County Council. 2021. *Longford County Development Plan 2021–2027*. Adopted 19 October 2021; effective from 30 November 2021; and
- Leitrim County Council. 2023. *Leitrim County Development Plan 2023–2029*. Adopted 8 February 2023; effective from 21 March 2023.

11.3 Methodology

11.3.1 Scope of Assessment

This document uses the methodology as prescribed in the previously mentioned GLVIA3, which follows the European Landscape Convention (ELC) definition of landscape:

‘Landscape is an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors’ (Council of Europe, 2000). Thus, GLVIA-2013 covers all landscapes from “high mountains and wild countryside to urban and fringe farmland (rural landscapes), marine and coastal landscapes (seascapes) and the landscapes of villages towns and cities (townscapes)” - whether protected or degraded.

GLVIA3 establishes guidelines and not a specific methodology. The preface recognises that:

‘This edition concentrates on principles and processes. It does not provide a detailed or formulaic ‘recipe’ that can be followed in every situation – it remains the responsibility of the professional to ensure that the approach and methodology adopted are appropriate to the task in hand.’

The methodology for this assessment has therefore been developed specifically for this assessment to ensure that it is appropriate and fit for purpose. The LVIA Methodology can be summarised as undertaking the following key tasks:

Desktop Study

- Establishing an appropriate Study Area from which to study the landscape and visual impacts of the proposed wind farm;
- Review of a Zone of Theoretical Visibility (ZTV) map, which indicates areas from which the development is potentially visible in relation to terrain within the Study Area;
- Review of relevant County Development Plans, particularly with regard to sensitive landscape and scenic view/route designations and associated policies and objectives;
- Selection of potential Viewshed Reference Points (VRPs) from key visual receptors to be investigated during fieldwork for actual visibility and sensitivity;

Fieldwork

- Recording of a description of the landscape elements and characteristics within the Study Area; and
- Selection of a refined set of VRP's for assessment. This includes the capture of reference images and grid reference coordinates for each VRP location for the visualisation specialist to prepare photomontages.

Appraisal

- Consideration of the receiving landscape with regard to overall landscape character as well as the salient features of the Study Area including landform, drainage, vegetation, land use and landscape designations;
- Consideration of the visual environment including receptor locations such as centres of population and houses; transport routes; public amenities and facilities and; designated and recognised views of scenic value;
- Consideration of design guidance and planning policies;
- Consideration of potentially significant effects and the mitigation measures that could be employed to reduce such effects;
- Assessment of the significance of residual landscape effects;

- Assessment of the significance of residual visual effects aided by photomontages prepared at all of the selected VRP locations; and
- Assessment of cumulative landscape and visual effects in cumulation with other surrounding developments that are either existing, permitted or in the planning system and pending a decision from a planning authority. Projects that are at the pre-planning stage where information is available to the public are also be included in the cumulative impact assessment.

11.3.2 Approach to Design Flexibility

For the landscape and visual assessment, the pertinent aspect of the approach to design flexibility relates to the turbine dimensions used to prepare the photomontages, upon which, the visual impact assessment is based.

Macro Works has taken the approach of using the highest possible tip height and highest hub height combination. This is on the basis that a viewer who can see a hub rising above a skyline ridge is likely to feel they are seeing more of the turbine than when the hub is screened from view (i.e. in the case of a lower hub / longer blade combination). That premise is based on the hub being perceived as the key and central component of a turbine in a figurative sense.

In this instance, the photomontages were prepared using a turbine envelope of 136m rotor diameter, 92m hub height and 160m tip height (Technology Option 1), which represents the most potential for visibility of the hub and tip height combination.

Alternative Technology Options for turbine parameters is being proposed by the Applicant (Refer to **Chapter 1 – Introduction, Table 1-3**). it is important to note that the three turbine tip height options are for a 156m, 159m or-160m tip height turbine. The only other variation in the turbines relates to their potential rotor diameter and hub height. The comparative scenarios and range of turbine types considered which covers the three Technology Options are included below:

- Technology Option 1 - Rotor Diameter 136m – Hub Height 92m – Tip height 160m (maximum) – Base-case Scenario used and assessed in the LVIA
- Technology Option 2 - Rotor Diameter 133m – Hub Height 90m – Tip height 156m
- Technology Option 3 - Rotor Diameter 138m – Hub Height 90m – 159m

As can be seen from the comparative photomontages (included in **Volume 5 – Photomontage after VP25**) there is a relatively subtle difference in the perceived scale of the proposed turbines in all three scenarios which will be difficult to discern from even the nearest

visual receptors. Indeed, the visual presence of the turbines in all instances will be the same due to subtle variations in the turbine dimensions, and it is not considered that any of the turbine combinations proposed in the entire range will result in any contrasting landscape or visual effects than those already stated in the assessment above. Furthermore, the subtle variations in the turbine dimensions will be indiscernible beyond c. 2-3km from the proposed wind farm Site.

Regardless of whether the difference between the alternative turbine dimensions can be discerned or not, there will be no material difference in the level of visual impact between them, and certainly not a higher impact than the base-case outlined in the visual impact appraisal highlighted above. Furthermore, the alternative turbine dimensions will result in no material difference to the residual landscape effect outlined in **Section 11.7.2**. Thus, the submitted LVIA is deemed to completely assess the range of potential turbine dimension options proposed, and it is not considered necessary to prepare separate photomontages / assessments at all VP's for all possible turbine dimensions highlighted above.

In relation to Technology Option 1, Option 2 and Option 3, the residual landscape and visual effects are assessed as **Not Significant**.

11.3.3 Study Area

Both the WEDG 2006 and Draft WEDG 2019 specify radii for examining the ZTV of proposed wind farm projects. The extent of this search area is influenced by turbine height, as follows (the WEDG 2006 and Draft WEDG 2019 guidance is identical in relation to defining the radii for examining the ZTV of proposed wind farm projects):

- 15 km radius for blade tips up to 100m;
- 20 km radius for blade tips greater than 100m; and
- 25 km radius where landscape features of national and international importance exist.

In the case of this proposed Project, the height of the blade tips are 160m for Technology Option 1, 156m for Technology Option 2 and 159m for Technology Option 3 and, thus, the minimum ZTV radius recommended is 20km (refer to **Figure 11.1**) from the outermost turbines of the scheme.

There are not considered to be any sites of national or international importance between 20 – 25km and thus, the radius of the Study Area will remain at 20km, which is compliant with both the WEDG 2006 and Draft WEDG 2019. Notwithstanding the full 20km extent of the LVIA Study Area, there will be a particular focus on receptors and effects within the central Study Area where there is higher potential for significant effects to occur. When referenced within

this assessment, the 'immediate Study Area' is considered to be the wind farm Site and surrounding landscape, with <1km, whilst the 'central Study Area' is the landscape within <5km of the proposed wind farm Site and the wider Study Area represents the landscape from between 5 - 20km from the wind farm Site. The defined areas below are based on a combined 20+ years of experience assessing effects of wind energy development on the landscape and professional judgement. This approach has been accepted by local authorities across the country in addition to An Coimisiún Pleanála.

In relation to ancillary features of the proposed Project, such as the GCR and TDR, their Study Area relates to their immediate context and a 50m corridor either side of these linear features. This is principally due to the localised nature of potential effects.

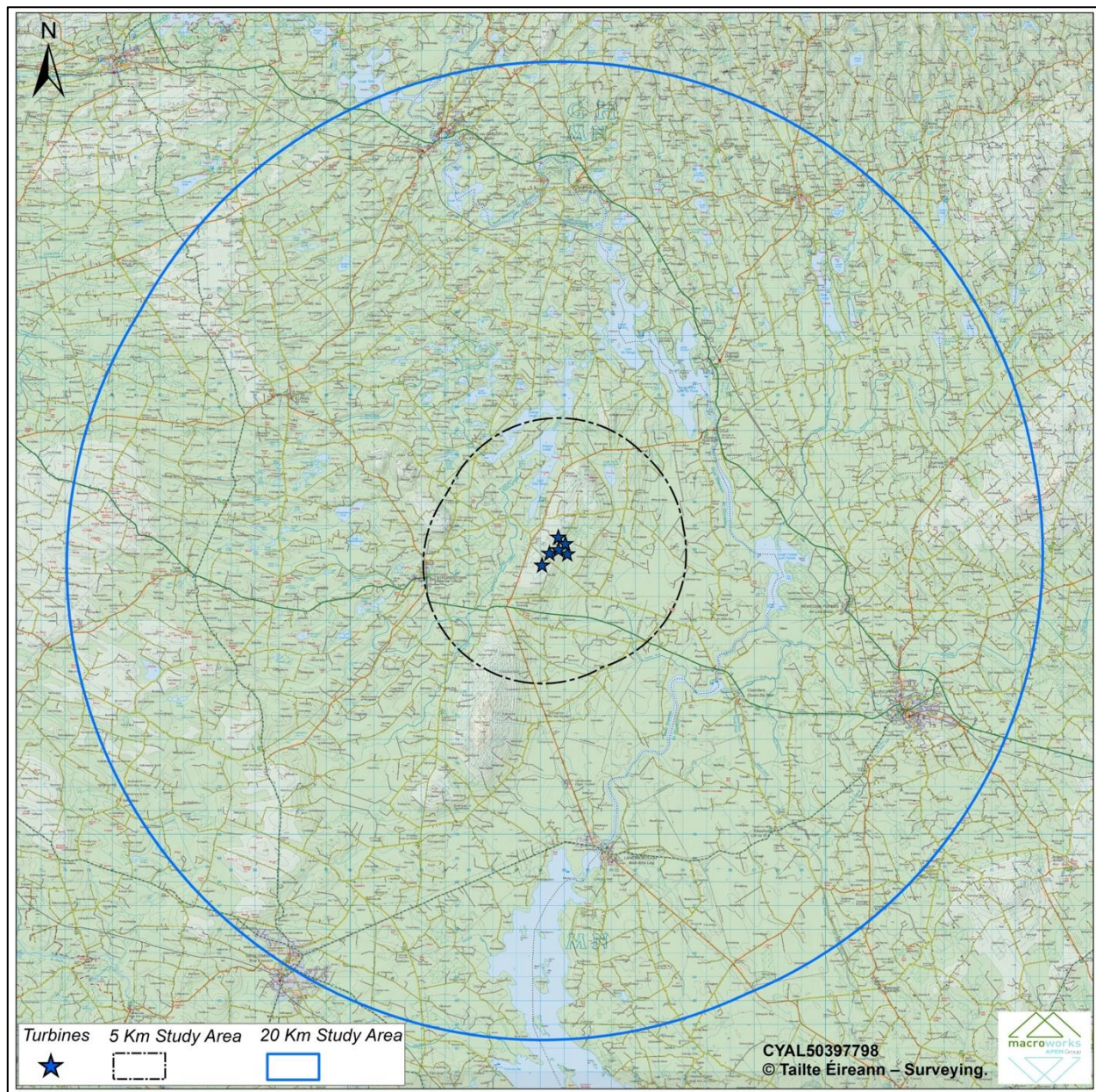


Figure 11-1 Full 20km extent of the Study Area (Ref: EIAR Figure 11-1 (Volume 4))

11.3.4 Consultation

Scoping and consultation have been carried out in support of the proposed Project and in line with the EIA Directive, together with the EPA Guidelines and with due regard for the *Environmental Impact Assessment of Projects: Guidance on Scoping (European Commission, 2017)*.

An EIA Scoping Report was issued to 48 statutory and non-statutory stakeholders via email in September 2024, of which 10 responded. Consultation also included meetings with key stakeholders. **Table 11-1** summarises issues raised during this consultation process and relevant to the LVIA.

Table 11-1: Consultation response relevant to the LVIA

Stakeholder Details	Stakeholder Comment	How comment has been addressed in the EIAR
Roscommon County Council Preplanning Meeting held on 27th February 2025 (PL/657/25)	The Rathcroghan Archaeological Complex (c. 18km west of the turbines) was noted during the consultation process as a sensitive receptor in terms of landscape and visual. The Landscape Character Area No. 28 - Tulsk and Rathcroghan plateau of the Roscommon CDP were also noted in the preplanning meeting.	Assessment of this sensitive receptor is included in this Chapter. The LVIA assessed VP11 and VP21, which represent the Tulsk and Rathcroghan Plateau's surrounding area.
Transport Infrastructure Ireland	TII has responded with a matter relating to visual impacts from existing national roads.	The LVIA has accounted for the surrounding road network. Numerous VP's were strategically selected along local, regional and national roads proximal to the wind farm Site (refer to Table 11-8). Visual effects are outlined throughout

this Chapter and summarised in **Table 11-9**.

11.3.5 Landscape Impact Assessment Criteria

It is important to assess how the introduction of the proposed Project will affect the physical features and fabric of the landscape, and then how the proposals influence landscape character with reference to published descriptions of character and an understanding of the contemporary character of the landscape as informed through desktop and site studies. When assessing the potential landscape effects of the proposed Project, the value and sensitivity of the landscape receptor is weighed against the magnitude of impact to determine the significance of the landscape effect. Criteria outlined in the following sections are used to guide these judgements.

11.3.6 Landscape Sensitivity

The sensitivity of the landscape to change is the degree to which a particular setting can accommodate changes or new elements without unacceptable detrimental effects to its essential characteristics. In accordance with GLVIA3, the sensitivity of a landscape receptor (Landscape Character Area or feature) is derived from combining judgements in relation to its susceptibility to change and its value. The judgement reflects such factors as its quality, value, contribution to landscape character and the degree to which the particular element or characteristic can be replaced or substituted. Landscape Sensitivity is classified using the following criteria set out in **Table 11-2**.

Table 11-2: Landscape Value and Sensitivity

Sensitivity	Description
Very High	Areas where the landscape character exhibits a very low capacity for change in the form of development. Examples of which are high value landscapes, protected at an international or national level (World Heritage Site/National Park), where the principal management objectives are likely to be protection of the existing character.
High	Areas where the landscape character exhibits a low capacity for change in the form of development. Examples of which are high value landscapes, protected at a national or regional level (Area of Outstanding Natural Beauty), where the principal management objectives are likely to be considered conservation of the existing character.

Sensitivity	Description
Medium	Areas where the landscape character exhibits some capacity and scope for development. Examples of which are landscapes, which have a designation of protection at a county level or at non-designated local level where there is evidence of local value and use.
Low	Areas where the landscape character exhibits a higher capacity for change from development. Typically, this would include lower value, non-designated landscapes that may also have some elements or features of recognisable quality, where landscape management objectives include, enhancement, repair and restoration.
Negligible	Areas of landscape character that include derelict, mining, industrial land or are part of the urban fringe where there would be a reasonable capacity to embrace change or the capacity to include the development proposals. Management objectives in such areas could be focused on change, creation of landscape improvements and/or restoration to realise a higher landscape value.

11.3.7 Magnitude of Change - Landscape

The magnitude of change is a product of the scale, extent or degree of change that is likely to be experienced as a result of the proposed Project and to a lesser extent the duration and reversibility of that effect. The magnitude takes into account whether there is a direct physical impact resulting from the loss of landscape components and/or a change that extends beyond the immediate setting that may have an effect on the landscape character. **Table 11-3** outlines criteria used to inform this judgement.

Table 11-3: Magnitude of Change – Landscape

Criteria	Description
Very High	Change that would be large in extent and scale with the loss of critically important landscape elements and features, that may also involve the introduction of new uncharacteristic elements or features that contribute to an extensive change of the landscape in terms of character, value and quality.
High	Change that would be more limited in extent and scale with the loss of important landscape elements and features, that may also involve the introduction of new uncharacteristic elements or features that contribute to a considerable change of the landscape in terms of character, value and quality.

Criteria	Description
Medium	Changes that are modest in extent and scale involving the loss of landscape characteristics or elements that may also involve the introduction of new uncharacteristic elements or features that would lead to noticeable changes in landscape character, and quality.
Low	Changes affecting small areas of landscape character and quality, together with the loss of some less characteristic landscape elements or the addition of new features or elements that would lead to discernible changes in landscape character, and quality.
Negligible	Changes affecting small or very restricted areas of landscape character. This may include the limited loss of some elements or the addition of some new features or elements that are characteristic of the existing landscape or are hardly perceivable leading to no material change to landscape character, and quality.

11.3.8 Visual Impact Assessment Criteria

This part of the LVIA provides an assessment of how the introduction of the proposed Project will affect views within the landscape. It therefore needs to consider:

- Direct and indirect effects of the proposed Project upon views through intrusion or obstruction;
- The reaction of viewers who may be affected, e.g. residents, walkers, road users; and
- The overall impact on visual amenity.

It has been deemed appropriate to structure the assessment around a series of representative viewpoint locations. All VP's are located within the public domain and are representative of views available from main thoroughfares and pedestrian areas within the vicinity of the proposed Project. The selected VP's are considered to be comprehensive in communicating the variable nature of the visual effects.

When assessing the potential visual effects of the proposed Project, the sensitivity of the visual receptor is weighed against the magnitude of the visual impact to determine the significance of the visual effect. Criteria outlined below are used to guide these judgements.

11.3.9 Sensitivity of Visual Receptors

As with landscape sensitivity, the sensitivity of a visual receptor is categorised as Very High, High, Medium, Low, and Negligible. Unlike landscape sensitivity however, the sensitivity of visual receptors has an anthropocentric (human) basis. It considers factors such as the perceived quality and values associated with the view, the landscape context of the viewer,

the likely activity the viewer is engaged in and whether this heightens their awareness of the surrounding environment.

A list of the factors considered by the assessor in estimating the level of sensitivity for a particular visual receptor is outlined below to establish visual receptor sensitivity at each VP location.

Susceptibility of Visual Receptors to Change

In accordance with GLVIA3, visual receptors most susceptible to changes in views and visual amenity are:

- *“Residents at home;*
- *People, whether residents or visitors, who are engaged in outdoor recreation, including use of public rights of way, whose attention or interest is likely to be focussed on the landscape and on particular views;*
- *Visitors to heritage assets, or to other attractions, where views of the surroundings are an important contributor to the experience;*
- *Communities where views contribute to the landscape setting enjoyed by residents in the area;*
- *Travellers on road rail or other transport routes where such travel involves recognised scenic routes and awareness of views is likely to be heightened”.*
- *Visual receptors that are less susceptible to changes in views and visual amenity include;*
 - *People engaged in outdoor sport or recreation, which does not involve or depend upon appreciation of views of the landscape; and*
 - *People at their place of work whose attention may be focussed on their work or activity, not their surroundings and where the setting is not important to the quality of working life”.*

Values attached to Views

The value attached to a view is determined by considering the following:

- *Recognised scenic value of the view (Development Plan designations, guidebooks, touring maps, postcards etc). These represent a consensus in terms of which scenic views and routes within an area are strongly valued by the population because in the*

case of County Developments Plans, for example, a public consultation process is required;

- *Views from within highly sensitive landscape areas. These are likely to be in the form of Architectural Conservation Areas, which are incorporated within the Development Plan and therefore subject to the public consultation process. Viewers within such areas are likely to be highly attuned to the landscape around them;*
- *Primary views from residential receptors. Even within a dynamic city context, views from residential properties are an important consideration in respect of residential amenity;*
- *Intensity of use, popularity. This relates to the number of viewers likely to experience a view on a regular basis and whether this is significant at a national or regional scale;*
- *Provision of vast, elevated panoramic views. This relates to the extent of the view on offer and the tendency for receptors to become more attuned to the surrounding landscape at locations that afford broad vistas;*
- *Sense of remoteness and/or tranquillity. Receptors taking in a remote and tranquil scene, which is likely to be fairly static, are likely to be more receptive to changes in the view than those taking in the view of a busy street scene, for example;*
- *Degree of perceived naturalness. Where a view is valued for the sense of naturalness of the surrounding landscape it is likely to be highly sensitive to visual intrusion by distinctly manmade features;*
- *Presence of striking or noteworthy features. A view might be strongly valued because it contains a distinctive and memorable landscape / townscape feature such as a cathedral or castle;*
- *Historical, cultural and / or spiritual significance. Such attributes may be evident or sensed by receptors at certain viewing locations, which may attract visitors for the purposes of contemplation or reflection heightening the sense of their surroundings;*
- *Rarity or uniqueness of the view. This might include the noteworthy representativeness of a certain landscape type and considers whether the receptor could take in similar views anywhere in the broader region or the country;*
- *Integrity of the landscape character. This looks at the condition and intactness of the landscape in view and whether the landscape pattern is a regular one of few strongly related components or an irregular one containing a variety of disparate components;*

- *Sense of place. This considers whether there is special sense of wholeness and harmony at the viewing location; and*
- *Sense of awe. This considers whether the view inspires an overwhelming sense of scale or the power of nature.*

Those locations which are deemed to satisfy many of the above criteria are likely to be of higher sensitivity, and no relative importance is inferred by the order of listing.

It is recognised that a viewer's interpretation and experience of the landscape can have preferential and subjective components. Where relevant, judgements are made on those elements of the landscape that are considered to contribute more prominently and positively to the visual landscape resource as well as those elements that contribute negatively. Overall sensitivity may be a result of a number of these factors or, alternatively, a strong association with one or two in particular.

11.3.10 Magnitude of Change – Visual

The magnitude of change is again a product of the scale, extent, or degree of change that is likely to be experienced as a result of the proposed Project. This is directly influenced by its 'visual presence / prominence', as experienced by visual receptors in the landscape. These terms are somewhat quantitative in nature and essentially relate to how noticeable or 'dominant' the proposal is within a particular view. Aside from the obvious influence of scale and distance, a development's visual presence is influenced by the extent and complexity of the view, contextual movement in the landscape, the nature of its backdrop, and its relationship with other focal points or prominent features within the view. It is often, though not always, expressed using one of the following terms: Minimal; Sub-dominant; Co-dominant; Dominant; Highly dominant. Criteria used to inform judgements are provided in **Table 11-4**.

Table 11-4: Magnitude of Change – Visual

Criteria	Description
Very High	Complete or very substantial change in view, dominant, involving complete or very substantial obstruction of existing view or complete change in character and composition of baseline, e.g., through removal of key elements.
High	A major change in the view that is highly prominent and has a strong influence on the overall view. This may involve the substantial obstruction of existing views or a complete change in character and composition of baseline, e.g. through removal of key elements or the introduction of new features that would heavily influence key elements.

Criteria	Description
Medium	Moderate change in view: which may involve partial obstruction of existing view or partial change in character and composition of baseline, i.e., pre-development view through the introduction of new elements or removal of existing elements. Change may be prominent but would not substantially alter scale and character of the surroundings and the wider setting. View character may be partially changed through the introduction of features which, though uncharacteristic, may not necessarily be visually discordant.
Low	Minor change in baseline, i.e. pre-development view - change would be distinguishable from the surroundings whilst composition and character would be similar to the pre change circumstances.
Negligible	Very slight change in baseline, i.e. pre-development view - change would be barely discernible. Composition and character of view substantially unaltered.

11.3.11 Determining the Significance of Effect

The significance of a landscape or visual effect is based on a balance between the sensitivity of the receptor and the magnitude of change, and is categorised as Profound, Substantial, Moderate, Slight, or Imperceptible. Intermediate judgements are also provided to enable an effect to be more accurately described where relevant. 'No Effect' may also be recorded as appropriate where the effect is so negligible it is not noteworthy.

The significance category judgement is arrived at using the Significance Matrix at **Table 11.5** as a guide. This applies the principle of significance being a function of magnitude weighed against sensitivity but employs slightly different terminology that avoids the potentially confusing use of the term 'significant' (as recommended by GLVIA3 Statement of Clarification 1/13 (Landscape institute, 10th June 2013)).

Indicative criteria descriptions used in relation to the significance of effect category are presented at **Table 11-6** overleaf.

Table 11-5: Significance Matrix

Magnitude	Sensitivity of Receptor				
	Very High	High	Medium	Low	Negligible
Very High	Profound	Profound-substantial	Substantial	Moderate	Slight
High	Profound-substantial	Substantial	Substantial-moderate	Moderate-slight	Slight-imperceptible
Medium	Substantial	Substantial-moderate	Moderate	Slight	Imperceptible

Low	Moderate	Moderate-slight	Slight	Slight-imperceptible	Imperceptible
Negligible	Slight	Slight-imperceptible	Imperceptible	Imperceptible	Imperceptible

Table 11-6 Indicative significance of effect criteria description

	Landscape	Visual
Profound	There are notable changes in landscape characteristics over an extensive area or a very intensive change over a more limited area.	The view is entirely altered, obscured or affected.
Substantial	An effect which, by its character, magnitude, duration or intensity alters a sensitive aspect of the landscape. There are notable changes in landscape characteristics over a substantial area or an intensive change over a more limited area.	An effect which, by its character, magnitude, duration or intensity alters a sensitive aspect of the visual environment. The proposal affects a large proportion of the overall visual composition, or views are so affected that they form a new element in the physical landscape.
Moderate	An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends. There are minor changes over some of the area or moderate changes in a localised area.	An effect that alters the character of the visual environment in a manner that is consistent with existing and emerging trends. The proposal affects an appreciable segment of the overall visual composition, or there is an intrusion in the foreground of a view.
Slight	An effect which causes noticeable changes in the character of the landscape without affecting its sensitivities. There are minor changes over a small proportion of the area or moderate changes in a localised area or changes that are repairable over time.	An effect which causes noticeable changes in the character of the visual environment without affecting its sensitivities. The affected view forms only a small element in the overall visual composition or changes the view in a marginal manner.
Imperceptible	An effect capable of measurement but without noticeable consequences. There are no noticeable changes to landscape context, character or features.	An effect capable of measurement but without noticeable consequences. Although the development may be visible, it would be difficult to discern resulting in minimal change to views.

It is important that the likely effects of the proposals are transparently assessed and understood in order that the determining authority can bring a balanced, well-informed judgement to bear when making a planning decision.

As such, whilst the significance matrix and criteria provide a useful guide, the significance of an effect is ultimately determined by the landscape specialist using professional judgement, and also in the context of occasionally using hybrid judgements to account for nuance.

Effects assessed as 'Substantial' or greater (shaded cells in **Table 11-5**) are considered to be the most notable in landscape and visual terms and are deemed to be 'Significant' in EIA terms. Effects assessed as 'Substantial-moderate' or below are classified as 'Not Significant' in this assessment.

11.3.12 Quality of Effects

In addition to assessing the significance of landscape and visual effects, the quality of the effects is also determined. Within this LVIA, effects are described as negative/adverse, neutral, or positive/beneficial, and the following criteria has been used to guide these judgements.

- Positive/beneficial - A change which improves the quality of the environment, enhancing the existing view/landscape;
- Neutral - No effects or effects that are imperceptible, within normal bounds of variation e.g. will neither detract from nor enhance the existing view/landscape; and
- Negative/adverse - A change which reduces the quality of the environment, detracting from the existing view/landscape.

In the case of new energy / infrastructure developments within rural and semi-rural settings, the landscape and visual change brought about by an increased scale and intensity of built form is seldom considered to be positive / beneficial. Effects in these contexts are generally considered to be adverse in nature, or neutral, where the effect has little influence on the landscape/views.

11.3.13 Assumptions and Limitations

The assessment of effects has been derived through the use of publicly available information and site visits. In terms of the latter, whilst it is unfeasible to visit every single location from which the wind farm Site might be visible, the authors of the LVIA know the landscape well and have undertaken LVIA work previously within the Study Area. Whilst not feasible to visit every location within the study area where the turbines are theoretically visible, this is not considered a limitation to the assessment outcomes.

11.4 Overview of Landscape and Visual Policy & Guidance

11.4.1 The Department of Environment, Heritage and Local Government Wind Energy Development Guidelines (2006)

The WEDG 2006 and Draft WEDG 2019 provide guidance on wind farm siting and design criteria for a number of different landscape types. With regard to siting guidance on landscape types, this is consistent in both the WEDG 2006 and Draft WEDG 2019. The site of the proposed Project is considered to be located within the 'Hilly and Flat Farmland' landscape type, whilst the wider Study Area, especially to the east and south, encompasses the 'Flat Peatland' landscape type. The most relevant recommendations for the 'Hilly and Flat Farmland' landscape type are set out below, but with consideration of the guidance relating to other relevant landscape types considered thereafter. This guidance remains the same in both the WEDG 2006 and Draft WEDG 2019

Hilly and Flat Farmland:

Location – *“Location on ridges and plateaux is preferred, not only to maximise exposure, but also to ensure a reasonable distance from dwellings. Sufficient distance should be maintained from farmsteads, houses and centres of population in order to ensure that wind energy developments do not visually dominate them. Elevated locations are also more likely to achieve optimum aesthetic effect. Turbines perceived as being in close proximity to, or overlapping other landscape such as buildings, roads and power or telegraph poles and lines may result in visual clutter and confusion.”*

Spatial extent - *“This can be expected to be quite limited in response to the scale of fields and such topographic features as hills and knolls. Sufficient distance from buildings, most likely to be critical at lower elevations, must be established in order to avoid dominance by the wind energy development.”*

Spacing - *“The optimum spacing pattern is likely to be regular, responding to the underlying pattern field pattern. The fields comprising the site might provide the structure for spacing of turbines. However, this may not always be the case and a balance will have to be struck between adequate spacing to achieve operability and a correspondence to field pattern.”*

Layout - *“The optimum layout is linear, and staggered linear on ridges (which are elongated) and hilltops (which are peaked), but a clustered layout would also be appropriate on a hilltop. Where a wind energy development is functionally possible on a flat landscape a grid layout would be aesthetically acceptable.”*

Height - *“Turbines should relate in terms of scale to landscape elements and will therefore tend not to be tall. However, an exception to this would be where they are on a high ridge or*

hilltop of relatively large scale. The more undulating the topography, the greater the acceptability of an uneven profile, provided it does not result in significant visual confusion and conflict.”

Cumulative - *“It is important that wind energy development is never perceived to visually dominate. However, given that these landscapes comprise hedgerows and often hills, and that views across the landscape will likely be intermittent and partially obscured, visibility of two or more wind energy developments is usually acceptable.”*

It is considered that the siting and design of the proposed Project is generally consistent with the guidance noted above for the ‘Hilly and Flat Farmland’ landscape type. Overall, it is considered that the proposed Project is generally consistent in all material respects with the guidance set out above and is especially consistent with the ‘location’ guidance as the proposed Project is situated along an elevated ridge to the east of the River Scramoge valley. It is also considered that the relatively modest six turbine array responds well to the surrounding landscape context in terms of its spatial extent, whilst the height of the turbines is not considered excessive in the context of the broad underlying landforms and land uses

Siting in Relation to Individual Properties (‘Setback’)

Section 6.18 of the Draft WEDG 2019 refers to appropriate setback distances for visual amenity purposes. The guidelines outline a mandatory minimum setback distance of “500 meters” or the distance of “4 times the tip height” of the proposed turbines “between the nearest point of the curtilage of any residential property”. This is set out in **Strategic Planning Policy Requirement 2 (SPPR2)** which is included below:

SPPR 2: With the exception of applications where reduced setback requirements have been agreed with relevant owner(s) as outlined at 6.18.2 below, planning authorities and An Bord Pleanála (where relevant), shall, in undertaking their development planning and development management functions, ensure that a setback distance for visual amenity purposes of 4 times the tip height of the relevant wind turbine shall apply between each wind turbine and the nearest point of the curtilage of any residential property in the vicinity of the proposed development, subject to a mandatory minimum setback of 500 metres from that residential property. Some discretion applies to planning authorities when agreeing separation distances for small scale wind energy developments generating energy primarily for onsite usage. The Local Authority or An Bord Pleanála (where relevant), shall not apply a setback distance that exceeds these requirements for visual amenity purposes.

The nearest residential dwelling (receptor no. 35) is 599m from Turbine T02. The WEDG 2006 and the Draft WEDG 2019 state a minimum setback of 500m. Therefore, the proposed Project

exceeds the minimum for both guidelines. In the case of the 4 times tip height recommendation for visual amenity contained with Draft WEDG 2019, only one property falls within the maximum design envelope area of 640m. The Applicant has engaged with this homeowner, who has provided written consent to a reduced setback, which follows the guidance outlined in the Draft WEDG 2019, which states in “*reduced setback situations, the relevant parties must provide written confirmation to the satisfaction of the planning authority that they have agreed to a reduced setback and have no objection to the proposed wind energy development*”.

11.4.2 Roscommon County Development Plan 2022-2028

Landscape Character Assessment

A Landscape Character Assessment was carried out for County Roscommon and is included in the current County Development Plan (CDP). The landscape character assessment identifies 7 Landscape Character Types (LCTs) and 36 Landscape Character Areas (LCAs) within County Roscommon.

With regard to LCTs, five of the six turbines are contained within the LCT ‘Hills and Uplands’, whilst the eastern-most turbine (Turbine T03) is situated in the LCT ‘Bogland’. The central and wider Study Area within County Roscommon also includes several other contrasting LCTs, including the LCTs, ‘Drumlin Lakelands’, ‘Bog and Farmland Complex’ and ‘River Corridor’.

With regard to LCAs, the turbines are entirely contained within LCA 5 – ‘Slieve Bawn and Feorish Bogland Basin’ (refer to **Figure 11.2**). The area is described as:

“one of the largest character areas in the county stretching from Lanesborough in the south to Lough Bo Derg in the north.” In terms of landscape value, the “Slieve Bawn and Feorish Bogland Basin is considered to be Very High Value (2nd highest of 4 landscape value classifications). This LCA is one of the most varied in the entire county, comprising a major waterway, extensive bogland and forest upland. These elements are valuable amenity resources for locals and visiting tourists. The upland area is considered valuable for its recreation potential, with recently developed recreational facilities.”

The Landscape Character Assessment identifies key recommendations for this LCA and states,

“The past shaping of the landscape through now declining industrial scale peatland activity will continue to be evident in the landscape character for some time to come. The more recent development of a wind energy project has demonstrated the potential of the area to accommodate such developments from a landscape perspective, as well

as the sufficiency of wind resources in this area to make projects commercially viable. Any future applications for wind turbines should be considered in the context of the numbers already permitted and with regard to the national planning guidelines for wind energy developments.”

Other relevant LCAs within the Study Area and their associated landscape values are outlined below;

- LCA 3 – Lough Corry Drumlin Basin (Very High Value);
- LCA 4 – Kilglass Drumlin Lakelands (Very High Value);
- LCA 6 – Upper Lough Ree Bogland (Very High Value);
- LCA 19 – Elphin Drumlins (Moderate Value);
- LCA 29 – Strokestown Drumlin and Turlough Belt (Moderate Value);
- LCA 31 – Scramoge River Basin (Moderate Value); and
- LCA 32 – Roscommon Town and Hinterland (High Value).

Relevant policies in the CDP relating to the landscape are included below:

NH 10.25: Minimise visual impacts on areas categorised within the County Roscommon Landscape Character Assessment including “moderate value”, “high value”, “very high value” and with special emphasis on areas classified as “exceptional value” and where deemed necessary, require the use of Visual Impact Assessment where proposed development may have significant effect on such designated areas.

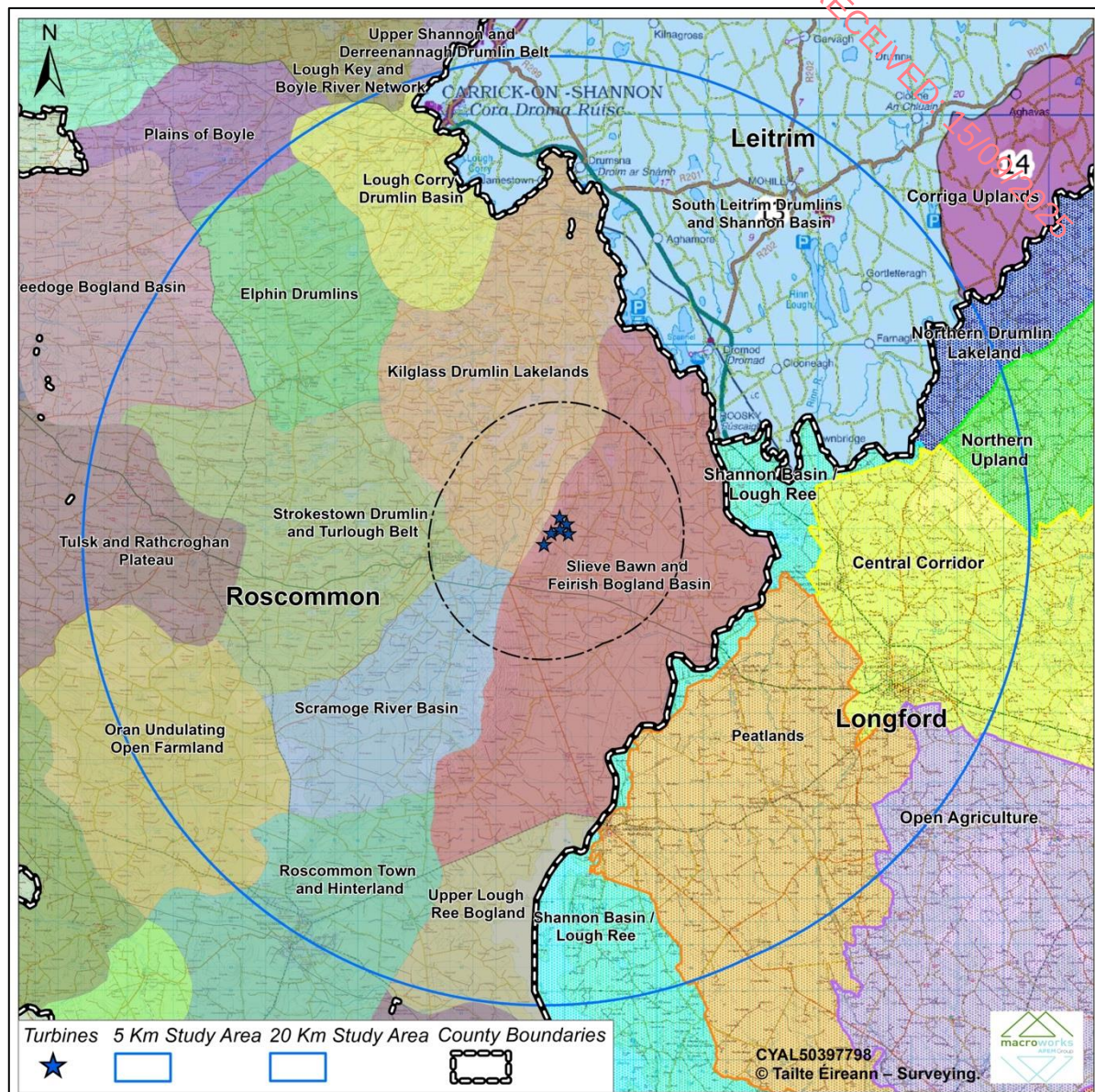


Figure 11-2: Location of proposed Project in relation to the Landscape Units in Roscommon, Leitrim and Longford (Ref: EIAR Figure 11-2 (Volume 4))

Landscape Character Assessment

A renewable energy strategy forms part of the Roscommon CDP 2022-2028. The renewable energy strategy outlines three wind energy policy areas within the county and includes:

- **Most Favoured** - Wind farm development will be considered favourably, subject to compliance with all necessary siting and design standards.
- **Less Favoured** - Wind farm development will be considered, but the sensitivities revealed in these areas would render exploitation more problematic and therefore these areas are less favoured for wind energy development.

- **Not Favoured** - Wind farm development will not be considered favourably in these areas.

As per Map 7 of the Renewable Energy Strategy (**Figure 11-3**), the proposed Project is contained within the '*Most Favoured*' classification. However, it is important to note that the proposed Project is also contained adjacent to a '*Less Favoured*' classification, which occurs directly to the west of the site.

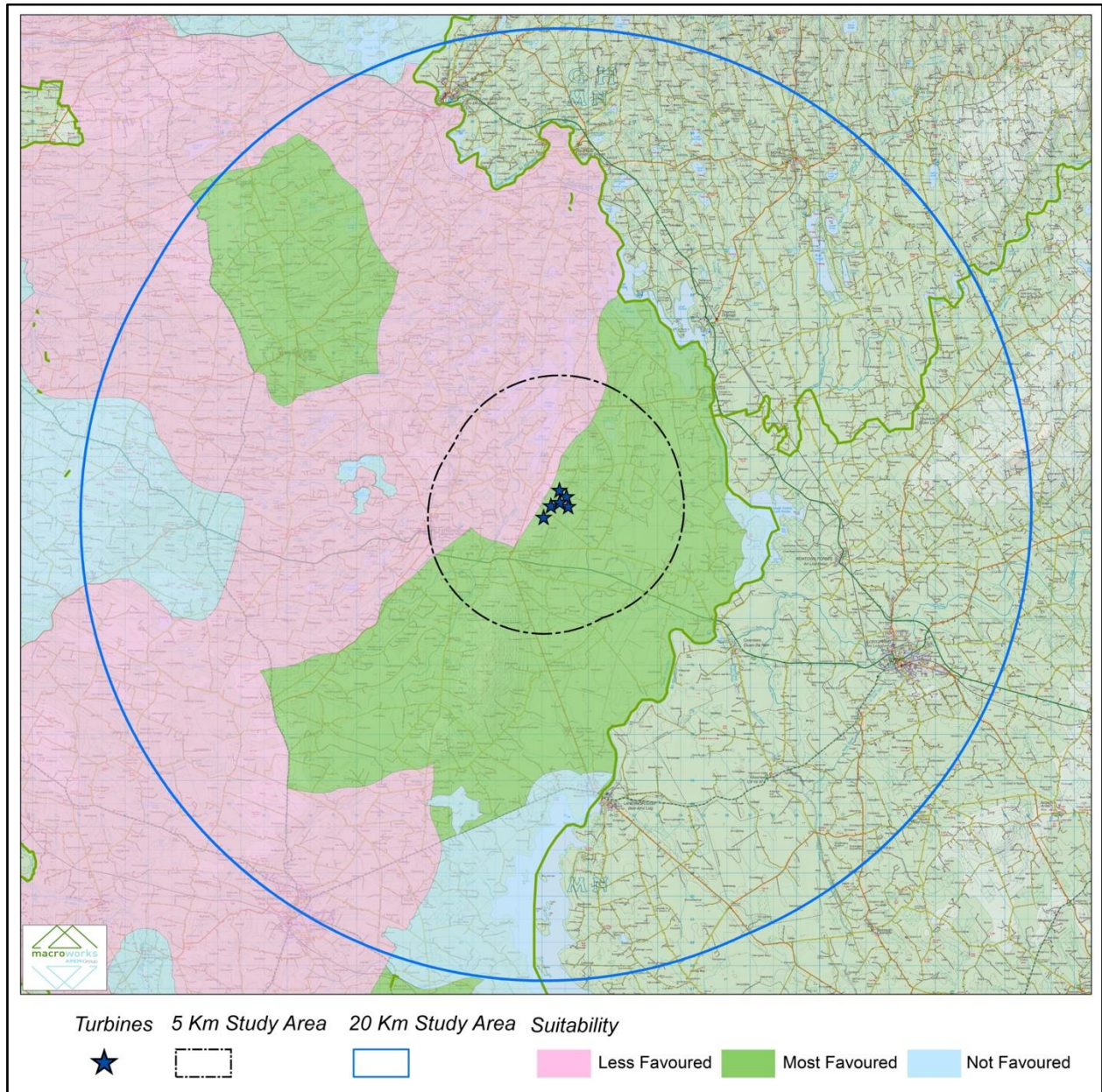


Figure 11-3: Excerpt from the current Roscommon Renewable Energy Strategy showing wind energy policy areas in relation to the proposed Project (Ref: EIAR Figure 11-3 (Volume 4))

11.4.3 Longford County Development Plan 2021 - 2027

Although the proposed Project is entirely located in County Roscommon, the eastern extent of the Study Area encompasses areas within County Longford. Thus, it is important to consider landscape-related policies and designations within County Longford.

Chapter 14 of the Longford CDP 2021 - 2027 relates to landscape character and includes a Landscape Character Assessment in subsection 14.4. The Longford CDP 2021 - 2027 sets out 7 no. broad LCAs within the county. Those located within the Study Area include Landscape Unit 3 – Shannon Basin Lough Ree, Landscape Unit 4 – Central Corridor, Landscape Unit 6 – Peatlands and Landscape Unit 7 – Open Agriculture.

The nearest of these is Landscape Unit 3 – Shannon Basin Lough Ree, located some 7km east of the proposed Project at its nearest point and is described as “located along the western boundary of the County forming the border with Counties Leitrim, Roscommon and Westmeath and taking in the Rivers Shannon, Inny and Rinn and Lough Forbes and Lough Ree. This unit has large amounts of water cover with inland marshes, bogland and tracts of deciduous forestry in the northern section around Lough Forbes.” In terms of sensitivity, this landscape unit ranges “from MEDIUM - along the south-eastern border of the unit - to HIGH sensitivity - along the shores of the lake, islands, the riverbanks, and in the vicinity of the Aquifer.”

11.4.4 Leitrim County Development Plan 2023-2029

Although the proposed Project is entirely located in County Roscommon, the north-eastern extent of the Study Area is contained in County Leitrim. Thus, it is important to consider landscape related policies and designations within County Leitrim, noting that the nearest areas in County Leitrim to the proposed wind farm Site are over c. 7km to the northeast.

A Landscape Character Assessment (LCA) for County Leitrim is included in Appendix VII of the current Leitrim CDP. The LCA review identifies 17 contrasting LCTs within County Leitrim and a further 14 LCAs. Within the northern extent of the Study Area in County Leitrim are several LCTs, including LCT 11 – Drumlin Loughs and Stream Margins, LCT 12 – River Floodplain, LCT 14 – Drumlin Farmland with Peat Bogs, and LCT 15 – Undulating Hill Farmland. With regard to LCAs, two of these occur within the areas of Leitrim contained within the Study Area and include LCA 13 – South Leitrim Drumlins and Shannon Basin and LCA 14 – Corrida Uplands.

The Landscape Assessment for Leitrim also includes landscape designations throughout the county, which include ‘Areas of Outstanding Natural Beauty’ and ‘Areas of High Visual Amenity’. Two ‘Areas of High Visual Amenity’ occur within County Leitrim and include B11 –

River Shannon, Derrycame and Environs and B12 – Lough Rynn, Lough Sallagh, Lough Errew and environs’.

11.5 Baseline Environment

A desk-study has been carried out to determine the baseline environment of the proposed Project area and its environs.

11.5.1 Landscape Baseline

The landscape baseline represents the existing landscape context and is the scenario against which any changes to the landscape brought about by the proposal will be assessed. This also includes reference to any relevant landscape character appraisals and the current landscape policy context (both are generally contained within CDPs).

A description of the landscape context of the proposed wind farm Site and Study Area is provided below under the headings of landform and drainage and vegetation and land use. Centres of population, transport routes and tourism, recreation and heritage features form part of the visual baseline and are dealt with in **Section 11.4.2**.

Landform and Drainage

The proposed Project is situated on locally elevated terrain to the west of the Scramoge River, one of the more notable watercourses in relation to the site, located approximately 1.3km from the nearest turbine (T01) at its closest point. Refer to **Chapter 8 – Water, Hydrology (Flood Risk Assessment) and Hydrogeology** for a full list of relevant watercourses within the Study Area. The wind farm Site is primarily positioned along a low ridge running in a north-south direction. Elevations within the wind farm Site range from approximately 70m to 124m above ordnance datum (AOD). To the south, Sliabh Bawn rises, with its summit located around 6km south of the wind farm Site. To the west of the Site, the terrain descends towards the Scramoge River Valley and further areas of low, rolling, non-distinctive terrain. Similarly, to the east, the terrain gradually descends towards broad areas of flat land, characteristic of the midlands of Ireland.

Kilglass Lough, one of the largest lakes in the central Study Area, lies approximately 1.3km to the northwest of the wind farm Site. Grange Lough is situated just under 5km to the northwest, while the smaller Lough Acrick is located around 3.1km to the northeast. The Feorish River also meanders through the terrain in the southeast quadrant of the central Study Area and empties into the River Shannon, situated outside the central Study Area within the wider Study Area.

The wider Study Area is predominantly characterised by the gentle undulations and flat topography typical of the Irish midlands. The area forms part of the broader River Shannon basin, with much of the terrain being low-lying and relatively flat. The River Shannon is the most prominent watercourse within the Study Area and is located approximately 7.8km southeast of the proposed wind farm Site. A section of the Royal Canal is also located within the southeast quadrant of the Study Area and is some 9km from the proposed wind farm Site at its nearest point. Sliabh Bawn is one of the most elevated parts of the Study Area, rising to a height of 262m AOD. The southern extent of the Study Area is characterised by broad areas of flat terrain, highlighted by numerous extensive peat bogs, while the northern extent of the Study Area encompasses a distinct agglomeration of drumlins and small lakes.

Vegetation and Land Use

The principal land use within the Study Area is pastoral farmland (refer to **Figure 11-4**), comprising small to medium-sized fields bound by networks of mixed hedgerow vegetation. While the proposed Project is predominantly situated in areas of pastoral farmland, localised parts the proposed wind farm Site are located within coniferous forest plantations, which are also a characteristic land use within the central and wider Study Area and typically occupy more elevated parts of the surrounding landscape. A large active quarry is one of the predominant single land uses in the immediate vicinity of the Site and is located immediately west of the proposed wind farm Site. The eastern extent of the central Study Area is also occupied by broad areas of peatland, with transitional scrub often occupying the perimeter of these peatlands.

Many of the streams and watercourses within the Study Area are bordered with linear swathes of mature riparian vegetation. The N5 National Primary Route is also a prominent linear land use within the southern extent of the central Study Area, located approximately 1.8km south of the wind farm Site.

The Study Area shares similar land use characteristics with the central Study Area, although there is a more notable concentration of extensive areas of peatland, particularly in its eastern and southern extents. Several large settlements are also situated throughout the Study Area, many of which include a variety of anthropogenic land uses, such as residential development, commercial and industrial premises, and major transport corridors. Additionally, several large demesne landscapes within the Study Area account for some of the most notable areas of broadleaf woodland within the region.



Figure 11-4: Landscape context of the immediate and central Study Area

Visual Baseline

Only those parts of the Study Area that potentially afford views of the proposed Project are of interest to this part of the assessment. Therefore, the first part of the visual baseline is establishing a ZTV and subsequently, identifying important visual receptors from which to base the visual impact assessment.

Zone of Theoretic Visibility

A computer-generated ZTV map has been prepared to illustrate from where the proposed Project is potentially visible. The ZTV is based on a tip height of 160m as the greatest potential

for visibility within the Study Area (i.e. there will be no increase in areas of potential turbine visibility with regard to the three Technology Options and associated parameters outlined in **Chapter 1 – Introduction Table 1-3** and in **Section 11.7.4**, and therefore, the below visibility analysis represents an assessment of the full range of turbine parameters proposed. It is not considered necessary to include ZTVs for all potential turbine scenarios as the difference in visibility between a 160m turbine and a 156m turbine is considered to be negligible). A large scale map of a ZTV showing the potential visibility up to the highest possible hub height of the turbines is also included in **Appendix 11.2 – LVIA Mapping**.

The ZTV map is based solely on terrain data (bare ground visibility), and ignores features such as trees, hedges or buildings, which may screen views. Given the complex vegetation patterns within this landscape, the main value of this form of ZTV mapping is to determine those parts of the landscape from which the proposed Project will definitely not be visible, due to terrain screening within the 20km Study Area.

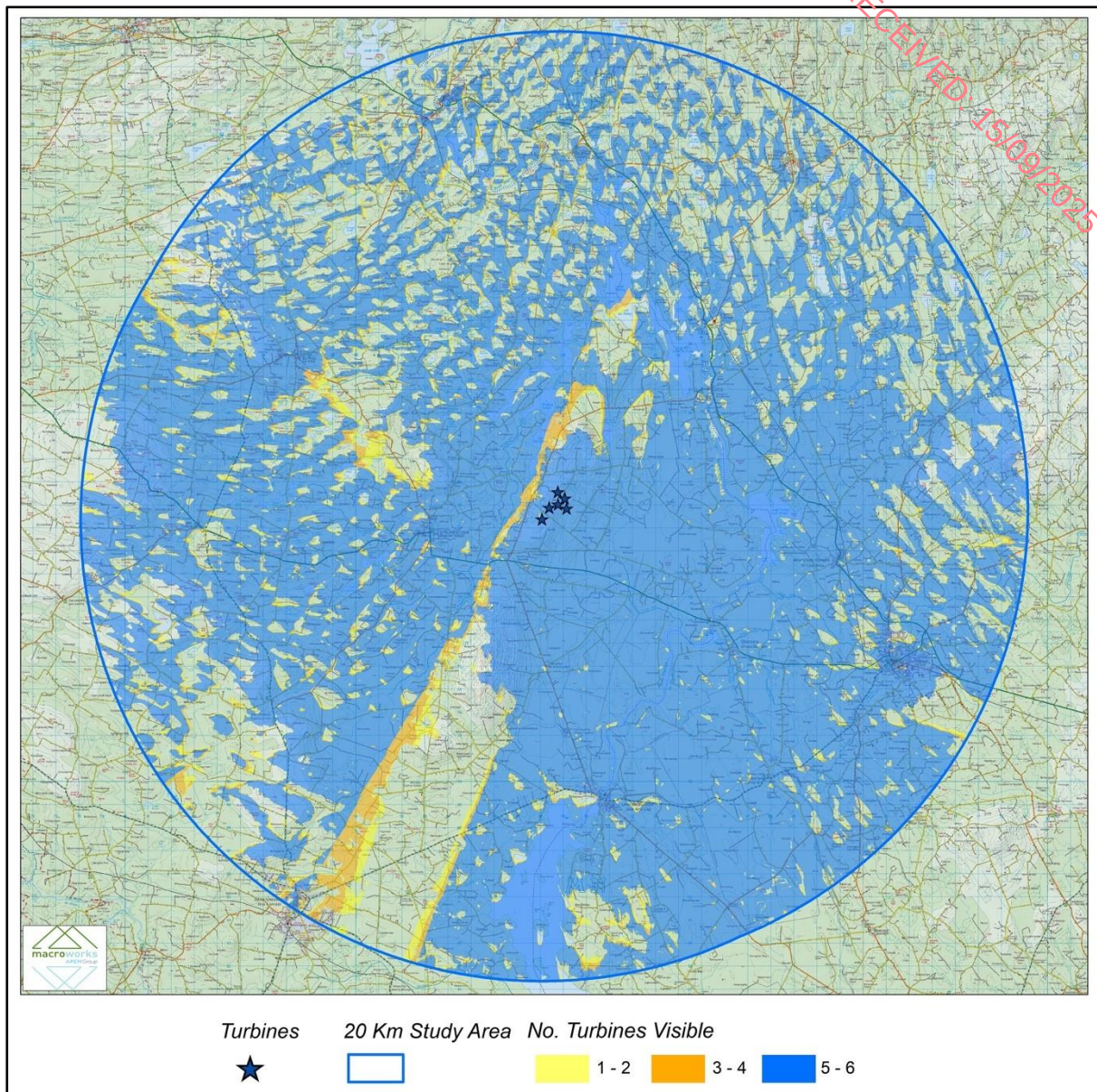


Figure11-5: Bare-ground ZTV based on a turbine tip height of 160m (Appendix 11.2 LVIA Mapping.)

The following key points are illustrated by the 'bare-ground' ZTV map:

The ZTV pattern is relatively consistent throughout the central Study Area, except to the west, where the rolling plateau ridge along which the site is situated will result in a partially screened view of the turbines, particularly along the sloping lands immediately east of the Scramoge River. Some localised areas in the northern extent of the central Study Area will also be fully screened from the turbines due to locally rolling hills located immediately north of the proposed array.

Within the Study Area to the east and southeast, the ZTV pattern is relatively consistent, with comprehensive visibility (blue pattern) of all six turbines occurring throughout the majority of this part of the Study Area. To the southeast, the pattern is more consistent, reflecting the flat nature of the terrain, whereas to the northeast, the pattern presents a 'sand ripple' effect, indicating the presence of low, rolling drumlin hills, where the turbines will typically be screened on the opposite side of the hills from the proposed Project.

While the western half of the wider Study Area has a less consistent visibility pattern than the eastern half, a large proportion of this part of the Study Area still has theoretical potential for comprehensive visibility (blue pattern) of all six turbines. As with the northeast quadrant of the Study Area, the wider western half presents a 'sand-ripple' pattern, albeit with broader rolling hills, identified by the presence of larger areas with no visibility pattern. The most notable area of no visibility occurs in the wider southwest quadrant of the Study Area, which relates to Slieve Bawn, rising to the southwest of the proposed Project and screening receptors in the wider south-western quadrant of the Study Area.

Almost all settlements within the Study Area have the potential to afford some degree of turbine visibility. However, some of the settlements in the wider periphery of the Study Area have limited potential for visibility, with only small areas of the ZTV pattern occurring across these settlements.

Views of Recognised Scenic Value

Views of recognised scenic value are primarily indicated within CDPs in the context of scenic views/routes designations, and these same views might also be indicated on touring maps, guidebooks, roadside rest stops or on post cards that represent the area.

All of the scenic routes and views in both Roscommon, Longford and Leitrim that fall inside the ZTV pattern (see **Table 11-7**) were investigated during fieldwork to determine whether actual views of the wind farm Site might be afforded. Where visibility may occur, a VP has been selected for use in the visual impact appraisal later in this Chapter. In some instances, a single VP is selected to represent a stretch of designated scenic route or a cluster of designated scenic views, particularly distant ones.

Table 11-7: Rational for selection of scenic designations within relevant County Development Plans

Scenic View ref:	Relevance to visual impact appraisal?	VP ref no. herein
Roscommon CDP 2022-2028 – Scenic Route		
R4 (oriented west)	Yes Relevant – whilst the scenic route is oriented in the opposite direction to the proposed Project, the scenic route is located some 5km north of the wind farm Site. Thus, it is important to consider the potential visual impact of the proposed Project from here.	VP4
R5 (oriented west)	Yes Relevant – whilst the scenic route is oriented in the opposite direction to the proposed Project, the scenic route is located less than 1km west of the nearest turbine	VP9
R7 (oriented south)	Not relevant – scenic view oriented in the opposite direction to the proposed Project. Thus, a representative view from here was not included for assessment	-
Roscommon CDP2022-2028 – Scenic Views		
V8 (oriented west)	Not relevant – scenic view oriented in the opposite direction to the proposed Project. Thus, a representative view from here was not included for assessment	-
VP9 (oriented southeast)	Not relevant – scenic view located over 16.5km from the proposed wind farm Site and has limited potential for visibility of the proposed turbines due to the combined rolling nature of terrain here and layers of stacked intervening vegetation in the local surrounding landscape. Thus, a representative view from here was not included for assessment	-
V10 (oriented west)	Not relevant – scenic view oriented in the opposite direction to the proposed Project. Thus, a representative view from here was not included for assessment.	-
V12 (oriented north)	Not relevant – scenic view oriented to the north, whereas the proposed Project is located to the east. Thus, a representative view from here was not included for assessment.	-
V13 (oriented south)	Yes relevant – whilst the scenic view is oriented to the south, it represents a publicly accessible heritage receptor.	VP11
V16 (oriented southeast)	Yes relevant – potential for visibility of the proposed Project	VP21
V17 (oriented northwest)	Not relevant – scenic view is located over 19km south of the proposed wind farm Site and is oriented offset from the direction of the proposed development. Thus, a representative view from here was not included for assessment	-
Longford CDP 2021-2027		
F.S.2	Not relevant – scenic view is located over 18km east of the proposed wind farm Site. Whilst the turbines have the potential to be visible from here, they will likely have a limited visual effect from this distance and will result in no notable detractor to the degree of scenic amenity afforded from here. Thus, a representative view from here was scoped out.	-
F.S.18	Yes relevant – potential for visibility of the proposed Project	VP25
I.S.10	Not relevant – scenic view is located over 18km east of the proposed wind farm Site. Whilst the turbines have the potential to be visible from here, they will likely have a limited visual effect from this distance. Indeed, from	-

Scenic View ref:	Relevance to visual impact appraisal?	VP ref no. herein
	distances of over 18km the proposed turbine will result in no notable detracting in the scenic amenity afforded from here. Thus, a representative view from here was not included for assessment.	
I.S.11	Not relevant – scenic view is located over 18km east of the site. Whilst the turbines have the potential to be visible from here, they will likely have a limited visual effect from this distance. Indeed, from distances of over 18km the proposed turbine will result in no notable detracting in the scenic amenity afforded from here. Thus, a representative view from here was not included for assessment.	-
I.S.12	Yes relevant – potential for visibility of the proposed Project	VP23
Leitrim CDP2023-2029		
V26	Not relevant – scenic route/view oriented in the opposite direction of the proposed Project. Thus, a representative view from here was not included for assessment.	-

Policy relating to scenic designations in Roscommon, Leitrim and Longford CDP is included below;

Roscommon CDP 2022-2028

NH 10.26: Protect important views and prospects in the rural landscape and visual linkage between established landmarks, landscape features and views in urban areas.

Longford CDP 2021-2027

CPO14.37: Preserve the views and prospects listed in Table 14.2 and 14.3 and detailed in Appendix 9: Landscape Character with accompanying maps and to protect these views from development which would interfere unduly with the character and visual amenity of the landscape.

Leitrim CDP 2023-2029

LD POL 1: To safeguard the protected views and prospects contained in Table 11.8 and identified on Map No. 12 (Volume III - Book of Maps) from intrusive development which would interfere unduly with the character and visual amenity of the landscape.

Centres of Population

The nearest settlement to the proposed Project is the small village of Scramoge, which is situated to the north of the N5 National Primary Route and located approximately 1.8km southwest of the nearest turbine. The principal centre of population within the central Study Area is Strokestown, which is also located along the corridor of the N5 and is approximately 4.5km northeast of the wind farm Site. Aside from these two settlements, much of the central Study Area comprises a mix of small linear clusters of dwellings, crossroads settlements, and

isolated farmsteads. In terms of the immediate context of the site, many of the surrounding local and regional roads feature a scattered arrangement of rural dwellings, with the more notable clusters generally occurring along the R371 regional road to the west of the proposed wind farm Site.

The Study Area encompasses several larger settlements, including Carrick-on-Shannon, which is situated approximately 17km northwest of the wind farm Site, and Longford Town, located just under 15km to the east. The most prominent centres of population tend to be located along or in the immediate vicinity of major route corridors, such as Roscommon and Lanesborough. Roscommon is located just under 19km south of the wind farm Site, while Lanesborough is situated approximately 12km southeast. The settlement of Elphin is located at the intersection of the R368 and R369, about 12.5km northwest of the wind farm Site, while the small village of Tulsk is positioned along the N5 National Primary Route, approximately 14.5km west of the site. The northeast quadrant of the Study Area also includes several small settlements, such as Roosky, Dromod, and Drumsna, all of which are located near the River Shannon corridor. Both Mohill and Drumlish are found in the wider northeast quadrant of the Study Area, situated 17km and 14km northeast of the wind farm Site, respectively.

Transport Routes

The principal transport route in relation to the proposed Project is the N5, which runs through the Study Area in a general east–west orientation and is located approximately 1.8km south of the Site at its nearest point. The nearest major route receptor to the wind farm Site is the R371, which runs through the central Study Area in a north–south direction and is located approximately 750m west of the nearest turbine at its closest point. The R368 briefly enters the central Study Area at the settlement of Strokestown and is just under 5km west of the wind farm Site at its nearest point. The wind farm Site is also bordered by a network of crisscrossing local roads, the nearest of which are located to the north, east, and south of the turbines.

The wider Study Area also encompasses several notable major route corridors. The N4 National Primary Route runs through the northern and eastern extents of the wider Study Area and is situated approximately 7.8km northeast of the wind farm Site at its nearest point. The N63 passes through the southern and southeastern quadrants of the wider Study Area, connecting the settlements of Longford, Lanesborough, and Roscommon, and is located approximately 11.6km southeast of the proposed Project at its nearest point. The N61 extends through the western extent of the Study Area in a general north–south direction and is located approximately 13km west of the nearest turbine at its closest point. The Study Area also includes a network of interconnecting local and regional roads that link many of the smaller

towns and village settlements. Further details on transport routes relevant to the proposed Project are provided in **Chapter 12 - Traffic and Transportation**.

Tourism, Recreational and Heritage Features

The National Famine Way is a 165km waymarked walking trail that traces the footsteps of the Strokestown tenants—men, women, and children—who were marched from Roscommon to Dublin in 1847 after they failed to pay their rent. The trail commences at the settlement of Strokestown and follows a network of local roads within the central Study Area, passing just over 1.3km south of the wind farm Site at its nearest point. Strokestown Park House and Gardens is also a notable amenity and heritage site in the central Study Area and is open to the public.

The central Study Area also encompasses several loughs, the nearest of which is Kilglass Lough, which includes a small marina located 1.8km northwest of the proposed Project. Sliabh Bawn Recreational Area is located along the periphery of the 5km Study Area and comprises several loop walks, picnic areas, and local heritage features. One of the more notable features at Sliabh Bawn is the existing wind farm development located across the more elevated lands of the hill.

The central Study Area also includes several local amenities, such as sports pitches, while numerous local heritage features are scattered throughout the surrounding landscape.

A more varied mix of amenity and heritage features is located within the Study Area. The Royal Canal Way and Greenway follow a section of the Royal Canal corridor in the southeast quadrant of the Study Area. The Study Area also has a strong association with water-based recreation due to the presence of the River Shannon and Lough Ree, the largest lake along the River Shannon corridor. The River Shannon itself is a key feature for outdoor recreation, with walking, cycling, and water sports being popular along its banks.

Located near Tulsk, about 18km west of the proposed wind farm Site, the Rathcroghan Archaeological Complex is an important archaeological and heritage site, featuring a series of ancient burial mounds, ceremonial sites, and Iron Age settlements.

The wider Study Area encompasses an array of local heritage features, including church ruins, graveyards, cairns and demesne landscapes. Castleforbes Demesne, one of the largest demesne landscapes within the Study Area, is situated along the banks of the River Shannon, approximately 10km east of the site.

11.5.2 Identification of Viewpoints as a Basis for Assessment

The results of the ZTV analysis provide a basis for the selection of VP's, which are the locations used to study the landscape and visual impact of the proposed Project in detail. It is not warranted to include each and every location that provides a view of this development as this would result in an unwieldy report and make it extremely difficult to draw out the key impacts arising from the proposed Project. Instead, a variety of receptor locations were selected that provide representative views of the proposed wind farm Site from different distances, different angles and different contexts.

The visual impact of a proposed Project is assessed using up to 6 categories of receptor type as listed below:

- Key Views (from features of national or international importance) (KV);
- Designated Scenic Routes and Views (SR/SV);
- Local community views (LCV);
- Centres of population (CP);
- Major routes (MR); and
- Tourism, recreational and heritage features (AH);

Where a VP might have been initially selected for more than one reason it will be assessed according to the primary criterion for which it was chosen. The characteristics of each receptor type vary as does the way in which the view is experienced. These are described below.

Key Views (KV)

These VPs are at features or locations that are significant at the national or even international level, typically in terms of heritage, recreation or tourism. They are locations that attract a significant number of viewers who are likely to be in a reflective or recreational frame of mind, possibly increasing their appreciation of the landscape around them. The location of this receptor type is usually quite specific.

Designated Scenic Routes and Views (SR/SV)

Due to their identification in the CDP (Roscommon, Leitrim and Longford CDPs) this type of VP location represents a general policy consensus on locations of high scenic value within the Study Area. These are commonly elevated, long distance, panoramic views and may or may not be mapped from precise locations. They are more likely to be experienced by static viewers who seek out or stop to take in such vistas.

Local Community Views (LCV)

This type of VP represents those people who live and/or work in the locality of the proposed Project, usually within a 5km radius of the wind farm Site. Although the VPs are generally located on local level roads, they also represent similar views that may be available from adjacent houses. The precise location of this VP type is not critical; however, clear elevated views are preferred, particularly when closely associated with a cluster of houses and representing their primary views. Coverage of a range of viewing angles using several VPs is necessary in order to sample the spectrum of views that would be available from residential receptors.

Centres of Population (CP)

VPs are selected at centres of population primarily due to the number of viewers that are likely to experience that view. The relevance of the settlement is based on the significance of its size in terms of the Study Area or its proximity to the wind farm Site. The VP may be selected from any location within the public domain that provides a clear view either within the settlement or in close proximity to it.

Major Routes (MR)

These include national and regional level roads and are relevant VP locations due to the number of viewers potentially impacted by the proposed project. The precise location of this category of VP is not critical and might be chosen anywhere along the route that provides clear views towards the proposal site, but with a preference towards close and/or elevated views. Major routes typically provide views experienced whilst in motion and these may be fleeting and intermittent depending on screening by intervening vegetation or buildings.

Tourism, Recreational and Heritage Features (AH)

These views are often one and the same given that heritage locations can be important tourist and visitor destinations and amenity areas or walking routes are commonly designed to incorporate heritage features. Such locations or routes tend to be sensitive to development within the landscape as viewers are likely to be in a receptive frame of mind with respect to the landscape around them. The sensitivity of this type of visual receptor is strongly related to the number of visitors they might attract and, in the case of heritage features, whether these are discerning experts or lay tourists. Sensitivity is also heavily influenced by the experience of the viewer at a heritage site as distinct from simply the view of it. This is a complex phenomenon that is likely to be different for every site. Experiential considerations might relate to the sequential approach to a castle from the car park or the view from a hilltop monument reached after a demanding climb. It might also relate to the influence of contemporary features within a key view and whether these detract from a sense of past times. It must also be noted

that the sensitivity rating attributed to a heritage feature for the purposes of a landscape and visual assessment is not synonymous with its importance to the Archaeological or Architectural Heritage record (Refer to **Chapter 5 – Population & Human Health** and **Chapter 13 – Archaeology, Architecture & Cultural Heritage**).

The VP's selected in this instance are set out in **Table 11-8** and **Figure 11-6**.

Table 11-8 Outline description of selected Viewpoints (VPs)

VP No.	Location	Distance to nearest turbine	Representative of	Direction of view
VP1	N4 at Carrick-On-Shannon	17.5km (T06)	CP, AH, MR	S
VP2	L1601 local road at Furnace, north Dromod	10.5km (T06)	AH, MR CP	SW
VP3	L1031 local road east of Elphin	12.5km (T06)	CP	SE
VP4	Local road at Carrigeen	5.5km (T06)	SR	S
VP5	R371 east of the Shannon at Roosky	7.7km (T05)	CP, AH, MR	SW
VP6	Local road at Clooneen (Blakeny)	2.9km (T06)	LCV	SE
VP7	Kilglass Marina	1.8km (T06)	AH, LCV	SE
VP8	L1411 at Killastalliff	1.1km (T06)	LCV	S
VP9	R371 and L1411 intersection at Glen	1.0km (T06)	SR, MR, LCV	SE
VP10	Local road at Clooneen (Hartland)	2.5km (T02)	LCV	E
VP11	Rathcroghan Mound	18.2km (T01)	AH, SV	E
VP12	Local road at Ballyfeeny	1.5km (T02)	LCV	E
VP13	Local road Laneway at Culleenaghmore	0.6km (T03)	LCV	W

VP No.	Location	Distance to nearest turbine	Representative of	Direction of view
VP14	Local road at Caul	2.0km (T03)	LCV	W
VP15	Local road at Ballyfeeny east of the R371	0.6km (T02)	LCV	E & S
VP16	R368 at Strokestown	4.7km (T01)	CP, AH, LCV, MR	NE
VP17	Local road at Moneenacully	1.0km (T03)	LCV	N
VP18	R371 at Bellanamulia north of Scramoge	1.6km (T01)	CP, LCV, MR	NE
VP19	Local road at Killinordanbeg	1.4km (T01)	AH, LCV	N
VP20	R371 at Tooreen	3.5km (T01)	MR, LCV	N
VP21	Local road north of Carnfree Mound	15.8km (T01)	AH, SV	NE
VP22	N5 west of Termonbarry	7.3km (T03)	MR, CP, AH	NW
VP23	L1127 at Ballymacormack Cemetery south of Longford Town	15.7km (T03)	SR, CP, AH	NW
VP24	R371 north of Lanesborough	11.5km (T01)	MR, CP	NW
VP25	Local road at Rathcline east of Lough Derg	14.6km (T01)	SR, AH	N

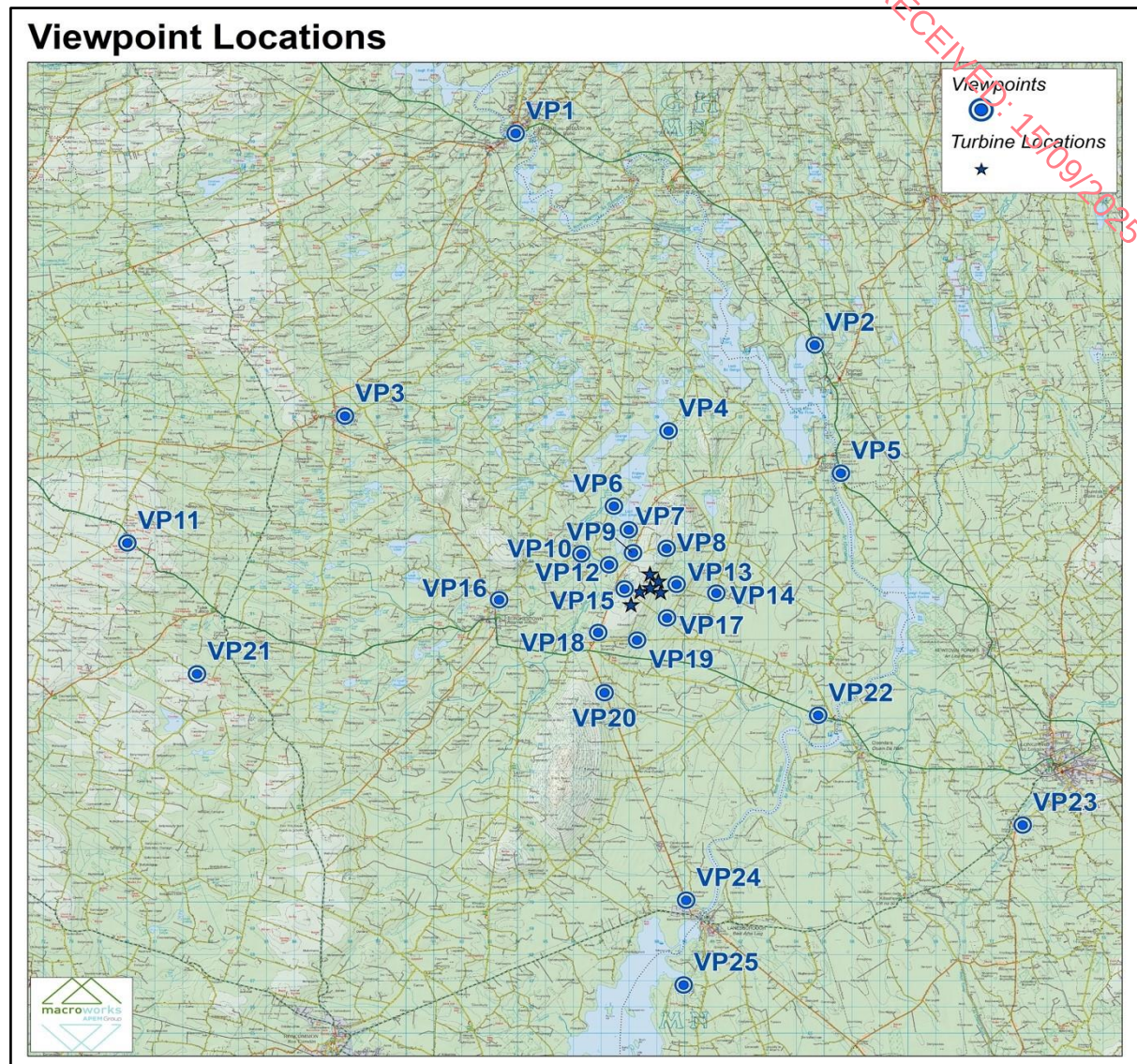


Figure 11-6: Map of Viewpoint Locations (Ref: EIAR Figure 11-6 (Volume 4))

11.6 Embedded Mitigation

Through the development of the proposed Project, measures have been adopted as part of the evolution of the design to avoid or reduce adverse effects on the environment. These measures are referred to as 'embedded mitigation' and are effectively built into the impact assessment. Embedded mitigation relevant to LVIA is set out below.

With regard to LVIA, all mitigation measures are embedded in the design of the proposed Project. In this instance the main embedded mitigation measures are set out below and discussed in further detail in **Section 11.9** below:

- Consideration of WEDG 2006 and Draft WEDG 2019 in terms of design guidance for landscape types and visual amenity offsets from surrounding residential receptors (refer to **Section 11.4**);
- Buffering from residential receptors;
- The turbine colour will be industry standard off-white/light grey semi-matt non-reflective finish;
- Electricity lines between individual turbines and the onsite substation, and the GCR infrastructure, will be placed underground; and
- Special care will be taken to preserve any features, insofar as possible, which contribute to the landscape character of the Study Area.

11.7 Assessment of Effects

Based on the assessment criteria employed herein, potential significant effects are considered most likely to occur in instances where highly sensitive landscape and visual receptors coincide with high order landscape and visual effects (see descriptions **Table 11.3**, **Table 11.4** and **Table 11.5**).

From previous extensive experience of this type of project in a rural / transitional foothill setting, it is considered that potentially significant landscape and visual effects have the potential to occur in the following ways:

Landscape Effects

- a. Irreversible physical effects on sensitive landscape features
- b. Disruption of sensitive land cover and/or land use patterns
- c. Substantial and incongruous change to areas of sensitive landscape character

Visual Effects

- a. A sense of spatial dominance as seen from highly sensitive receptor locations. This is most likely to occur within 3km of the proposed Project.
- b. Visual clutter and ambiguity as seen from highly sensitive receptor locations. This can occur at any distance but tends to occur beyond 2-3km as turbines become stacked in perspective and a more two-dimensional layout is perceived.
- c. A combination of both of the above effects.

From baseline studies and early-stage assessments specific to the proposed Project, some of the most susceptible landscape receptors within the central Study Area are considered to be

the loughs to the northwest of the wind farm Site and the corridor of the Scramoge River in the western extent of the central Study Area. Sensitive landscape features in the Study Area also tend to relate to loughs and waterways, such as the River Shannon, Royal Canal, Lough Derg, Lough Forbes, and the cluster of loughs in the northeast quadrant of the Study Area. There are also some locally elevated lands that have strong heritage associations and provide a notable sense of scenic amenity, such as the Rathcroghan Mound in the wider Study Area.

In this instance, the most sensitive visual receptors are the local residential receptors located along the local road network within the immediate vicinity of the Site, the scenic routes to the northwest of the wind farm Site, and views from the amenity and heritage receptors in the southern and southwestern extent of the Study Area (Strokestown House and Gardens & National Famine Way).

11.7.1 Do-nothing Scenario

In a Do-Nothing scenario the existing conifer plantation at the Site would continue to be managed through rotations of commercial conifer planting and harvesting, whilst the areas of pastoral farmland would likely continue to be managed as a traditional rural land uses.

If the proposed Project were not to proceed, the opportunity to capture part of Roscommon's valuable renewable energy resource 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". The RCDP 2022-2028, supports the concept of generating renewable energy at 'local' level and the significant contribution that wind energy can make as a clean sustainable solution to energy requirements.

However, the intensification of wind farm development would also likely continue, with applications for wind farm developments likely arising throughout the Study Area due to its favourable wind energy policy designations and wind energy targets in the Climate Action Plan 2024 and 2025.

11.7.2 Landscape Character, Value, Sensitivity

Effects on landscape character will be considered at both the localised scale of the wind farm Site and its immediately surrounding landscape as well as the broader scale of the Study Area.

Central Study Area (<c.5km from the nearest turbine)

Although the central Study Area is diverse in nature, it is not regarded as particularly rare or distinctive. The landform within this area is primarily shaped by the course of the Scramoge River, which runs along its western extent. To the east of the river, the terrain rises relatively quickly towards a low ridge that contains the proposed wind farm Site. On the western side of the river corridor, the land is more uniform, consisting mainly of flat terrain interspersed with occasional low, rolling hills or ridges, a characteristic feature of this part of the Irish midlands. In the northern and north-western portions of the Study Area, a series of loughs provide a sense the naturalistic and a degree of scenic amenity. As one moves east and south-east, the landscape becomes more typical of the Irish midlands, with broad expanses of peat bog, surrounded by transitional scrubland and areas of pastoral farmland.

In terms of landscape designations, the wind farm Site is contained within LCA 5 – ‘Slieve Bawn and Feorish Bogland Basin’, which is classified with a Very High Value (the second highest of four landscape value classifications). The transition in the formation of the terrain to the west of the wind farm Site is further reinforced here, as just west of the wind farm Site, where the terrain dips towards the Scramoge River, is a contrasting LCA known as ‘LCA 3 – Kilglass Drumlin Lakelands’, while LCA 31 – Scramoge River Basin is situated in the southwest quadrant of the Study Area. LCA 3 is classified with a ‘Very High Value’, whilst LCA 31 is classified with a ‘Moderate Value’.

The delineation in the landscape formed by the terrain to the east of the Scramoge River is also reflected in the Roscommon Renewable Energy Strategy that accompanies the Roscommon CDP 2022-2028, where the landscape to the west of the ridge that contains the site is classified as ‘Less Favoured’ in relation to wind energy development, whereas the landscape to the east of this ridge, which contains the wind farm Site and the entire eastern extent of the Study Area within Roscommon, is classified as ‘Most Favoured’, reflecting the robust nature of the landscape in this part of the Study Area.

With regard to designated scenic amenity within the central Study Area, this is most associated with the Scramoge River corridor and the lake lands in the northwest quadrant of the central Study Area. Two scenic routes occur to the west of the proposed wind farm Site and are situated here to benefit from the locally elevated views afforded to the west across the Scramoge River and Kilglass Lough. Indeed, both designated views within the central Study Area are highlighted in the current CDP as views to the west. No other designated views are contained within the central Study Area.

The central Study Area also possesses landscape values associated with heritage and amenity. Both Kilglass Lough and Grange Lough feature small marinas, while Strokestown House and Gardens, a notable heritage site, lies in the western part of the Study Area. It

serves as the starting point for the Famine Way National Waymarked Trail, which runs through the southern portion of the Study Area. Further to the south, on the southern edge of the central Study Area, lies Sliabh Bawn, which is home to several looped walking trails that follow forestry tracks across the hillside. The summit of Sliabh Bawn is also home to Sliabh Bawn Wind Farm, a 20 turbine existing wind energy development.

In summary, the central Study Area presents a varied landscape in terms of landform and land use. While certain areas may reflect values related to tourism, natural beauty, or scenic appeal, the dominant character of the area is that of a working rural landscape. This is evident in the widespread agricultural activity and the classification of much of the area as a 'Most Favoured' zone for wind energy development, particularly in the eastern half of the Study Area.

On balance of the reasons outlined above and with regard to **Table 11-2**, the landscape sensitivity of the central Study Area is deemed Medium-low, with localised areas of higher sensitivity, principally in the immediate surrounds of watercourses and lakes where there is a more notable sense of scenic amenity.

Wider Study Area (c.5-20km)

The Study Area presents similar landscape values to the central Study Area, albeit with much greater variation in terms of land uses. The most notable difference in the wider Study Area is the corridor of the River Shannon, the principal landscape feature throughout the entire area. The river feeds several large loughs, the most prominent of which is Lough Derg, situated in the southern part of the wider Study Area, south of Lanesborough. A notable agglomeration of loughs also occurs along its path throughout the wider eastern and northern extents of the Study Area, where several medium to large-sized settlements are located, including Carrick-on-Shannon, Termonbarry, and Roosky. The wider eastern and southern portions of the Study Area present as a typical midlands landscape, with a mix of farmland and extensive peat bogs being the primary land uses. To the north, the terrain transitions from the more uniform flat lands to rolling drumlin hills and inter-drumlin hollows. The wider western extent of the Study Area shares similar rolling characteristics, with some locally elevated areas of terrain situated in the western periphery.

In terms of landscape designations, the areas surrounding the Shannon Corridor and its wider lakelands are among the most sensitive parts of the Study Area and are considered most susceptible to change. This is reflected in many of the landscape units within each of the CDPs with the most relevant landscape unit in Longford being 'Unit 3 – Shannon Basin and Lough Ree'. This unit is described as having sensitivity ranging "from MEDIUM – along the south-eastern border of the unit – to HIGH sensitivity – along the shores of the lake, islands, the

riverbanks, and in the vicinity of the Aquifer". The sensitive nature of this landscape is further emphasised by the numerous scenic views, routes, and amenity and heritage features located along the riverbanks and in its immediate surroundings. The wider western extent of the Study Area also comprises several scenic views in County Roscommon, many of which are associated with prominent heritage features such as the Rathcroghan Archaeological Complex and Carnfree Cairn both represented by scenic view designations in the Roscommon CDP 2022 - 2028.

Despite this, the Study Area also exhibits a strong historical imprint of human activity, particularly in the southern and eastern parts of the area, where numerous peat bogs reflect the area's industrial past. Furthermore, the Study Area is intersected by several major transport corridors, which connect the various settlements within the landscape. A large existing wind farm (Sliabh Bawn Wind farm) also cloaks Sliabh Bawn in the southern part of the wider Study Area, while commercial and industrial development is common along the peripheries of towns and villages within the area.

On balance, it is considered that the Study Area is a complex and varied landscape, with contrasting landscape values and sensitivities. The areas surrounding the River Shannon corridor and the numerous loughs it feeds are regarded as having High sensitivity, and in some cases, Very High sensitivity. However, this applies primarily to the immediate surroundings of the River Shannon and its associated lakes. Outside of this, the Study Area presents a robust working landscape with notable anthropogenic features that have influenced the surrounding landscape character. As such, the overall sensitivity of the landscape within the wider Study Area is deemed Medium-low, with localised areas of High and Very High sensitivity, most notably around the River Shannon corridor.

11.7.3 Magnitude of Landscape Effects

The physical landscape as well as the character of the proposed Project and its central Study Area (<5km) is affected by the turbines as well as ancillary development such as the Site Access Tracks, Turbine Hardstands, Wind Farm Internal Cabling, GCR, installation of the Relay Tower, Onsite Substation and works along the public road network for the two TDR) options.

By contrast, for the wider landscape of the Study Area, landscape impacts relate exclusively to the influence of the turbines only on landscape character. The aspects of the proposed Project that are likely to have an impact on the physical landscape and landscape character are described in **Chapter 2 – Project Description** with construction processes described in **Appendix 2-1– CEMP**).

Construction Phase - Effects on the Physical Landscape

It is considered that the proposed Project will have a modest physical impact on the landscape within the proposed wind farm Site as none of the proposed Project features have a large 'footprint' and land disturbance/vegetation clearing will be relatively limited. The topography and land cover will remain largely unaltered with construction being limited to Site Access Tracks, Wind Farm Internal Cabling, the GCR, Turbine Hardstands, Onsite Substation, temporary site compounds for construction and the erection of a permanent Relay Tower.

There will be localised areas of land disturbance on the public road network for works along the TDR and the GCR.

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

The Site Access Track layout has been designed to avoid environmental constraints where possible, and every effort has been made to minimise the length of necessary track by utilising and upgrading existing forestry tracks. Furthermore, the Site Access Track layout has been designed to follow the natural contours of the land wherever possible reducing potential for areas of excessive 'cut and fill'. There will be an intensity of construction stage activity associated with the Site Access Tracks and Turbine Hardstands consisting of the movement of heavy machinery and materials, but this will be temporary/short term in duration and transient in location. There will also be construction phase landscape effects along the surrounding road networks, which relate to the temporary modifications to surrounding local and national roads and localised removal of roadside vegetation to facilitate turbine deliveries. The construction phase effects on landscape character from these familiar and dispersed surface activities will be minor.

There will be one 38kV Onsite Substation constructed to collect the generated power from the proposed wind farm. The Onsite Substation will be located in an area of existing pastoral farmland and is located to the north of an existing farm shed and the Ballyfeeny water reservoir managed by Uisce Éireann. The dimensions of the Onsite Substation compound will be 55.3m in length by 30.8m in width and will comprise one control building with a pitched roof and will have a concrete render finish (20.6m x 7.4m and 6.2m in height) and electrical components necessary to export generated power from the wind to the transmission system. The compound of the Onsite Substation will be surrounded by steel palisade fencing which will be 2.6m in height. The most notable construction stage landscape impacts resulting from the

Onsite Substation relate to the construction of concrete foundations to facilitate that substation building. Overall, these construction stage effects are relatively minor and compare to the construction of an industrial farm shed.

All Wind Farm Internal Cabling will be underground and will be run in cable ducts up to 1m below the ground surface located off site Access Tracks. Indeed, the land cover of the proposed wind farm Site will only be interrupted as necessary to build the structures of the wind farm and to provide access. Impacts from land disturbance and vegetation loss at the site are considered to be modest in the context of this broad landscape setting which is cloaked in some notable blocks of conifer forest. As part of the proposed Project, there will be a requirement to fell some of this forestry in the areas immediately around the footprint of the wind farm infrastructure. The total area of conifer plantation to be felled is estimated to be between approximately 9.32ha and 9.72ha and 0.4ha of other woodland are proposed to be removed during the construction phase (Refer to **Chapter 6 – Biodiversity**). As a commercial crop and due to the recent storm damage (Storm Eoghan (January 2025)), this forestry is scheduled to be felled and replanted in the future regardless of the proposed wind farm being constructed or not. Whilst the removal of small areas of forestry will generate some landscape impacts, these are not considered to be significant. All forestry that is removed will be subject to forest replanting provisions.

One Relay Tower will be erected on site and will comprise of a 33m high lattice steel mast with a shallow concrete foundation. The tower will be a slender, free-standing structure and will be constructed on a small hardstanding area. The most notable construction stage effects, relate to the minor amount of ground excavation required to facilitate the shallow foundations for the steel mast structures.

During the construction phase, there will also be some areas of land and vegetation disturbance along the public road network for the GCR and TDR. This will result in the loss of some localised areas of vegetation and localised areas of ground disturbance to facilitate the excavation works related to the laying of the grid connection cabling. It is important to note that both the GCR and TDR will result in very minor and localised landscape effects. It is also important to note, with regard to both the GCR and TDR, that any areas of disturbed ground or removed vegetation will be fully reinstated post-construction completion.

Site activity will be at its greatest during the construction phase due to the operation of machinery and movement of heavy vehicles to and from the proposed Project. This phase will have a more notable impact on the character of the wind farm Site than the operational phase, but it is a 'short-term' impact that will cease as soon as the proposed Project is constructed

and becomes operational (approximately 24 months from starting onsite to completion of commissioning of the turbines).

There will be some long term/permanent construction stage effects on the physical landscape in the form of Turbine Foundations and Turbine Hardstand, Site Access Tracks and the Onsite Substation. The Onsite substation and grid connection will remain in perpetuity as part of the national grid network. With the exception of some residually useful Site Access Tracks and subsurface foundation elements, it is proposed that all other development features will be removed from the proposed wind farm Site, and it will be reinstated to upland heath and forestry use upon decommissioning (refer to **Appendix 2.1.4 – Decommissioning Management Plan**). Thus, the construction stage landscape effects of the proposed Project are largely reversible.

Overall, the magnitude of construction stage landscape effects within the site and its immediately surrounding context is deemed to be **High-medium** and of an **Adverse** quality, but of a **Short-term** duration. Beyond 5km from the site, the magnitude of landscape effect is deemed to reduce to low and negligible at increasing distances as the construction activities relating to the proposed project becomes a proportionately smaller component of the overall landscape fabric.

It is important to note that this impact assessment applies across all Technology Option for the turbines highlighted in **Section 11.7.4**.

Operational Phase - Effects on the Landscape Character

For most commercial wind energy developments, the greatest potential for landscape impacts to occur is as a result of the change in character of the immediate area due to the introduction of tall structures with moving components. Thus, turbines that may not have been a characteristic feature of the area become a new defining element of that landscape character. In this instance, an existing notable scale wind farm development is located within the wider southern half of the Study Area. Thus, whilst the proposed wind farm Site represents a new form of development within the central Study Area, on a broader scale, it represents the continuation of an established land use in County Roscommon and the wider midlands landscape context.

In terms of scale and function, the scale of the wind farm Site responds well to its landscape context. This is due to the broad scale of the landform, landscape elements and land use patterns. These attributes prevent the proposed turbine height and overall wind farm extent from causing the type of scale conflict that can occur in more intricate landscape areas. Whilst there is some localised sense of the naturalistic along surrounding watercourses, the site and

much of the surrounding landscape is considered a working robust landscape heavily influenced by typical rural land uses such as pastoral farmland and commercial conifer forestry. The robust nature of this landscape context is also further reinforced by an existing quarry facility, which is situated immediately west of the proposed wind farm Site, whilst existing extensive areas of peat bogs highlight the historical working nature of the surrounds wider landscape context. Although the proposed Project represents a stronger human presence and an increased level of built development than currently exists on the proposed wind farm Site, it will not detract significantly from the productive transitional foothill setting.

It is important to note that in terms of duration, this development proposal represents a long term, but not permanent impact on the landscape and is reversible. The lifespan of the proposed Project is 35 years from the date of full commissioning, after which time it will be substantially dismantled and the landscape reinstated to prevailing conditions. Within 2-3 years of decommissioning there will be little evidence that a wind farm ever existed on the site, albeit the proposed Onsite Substation and GCR will remain in perpetuity as part of the national grid infrastructure, in addition to residually useful access tracks.

In summary, there will be physical impacts on the land cover of the proposed wind farm Site as a result of the proposed Project during the operational phase, but these will be relatively minor in the context of this working landscape that comprises extensive areas of commercial conifer forestry, existing productive agricultural lands and an extensive active quarry. Whilst the proposed wind farm development will result in a distinct increase in the intensity of development in this immediate landscape context, the scale of the proposed Project is well assimilated without undue conflicts of scale with underlying landform and land use patterns. For these reasons the magnitude of the landscape impact is deemed to be **Medium** at the proposed wind farm Site and within the central Study Area. Beyond 5km from the proposed wind farm Site, the magnitude of landscape impact is deemed to reduce to **Low** and **Negligible** at increasing distances as the wind farm becomes a proportionately smaller component of the overall landscape fabric.

It is important to note that this impact assessment applies across all turbine ranges highlighted in **Section 11.7.4**.

Decommissioning Phase Effects on Landscape Character

The decommissioning phase will have similar temporary impacts as the construction phase with the movement of large turbine components away from the proposed wind farm Site. There may be a minor loss of roadside and trackside vegetation that has grown during the operation

phase of the proposed Project, but this can be reinstated upon completion of decommissioning.

Works in this phase will primarily involve disassembling the turbines and removing off-site. The Site Access Tracks, Turbine Foundations or the GCR will not be removed. The Site Access Tracks will remain for forestry/agricultural access while the hardstand material and Turbine Foundations will be covered in topsoil and left to revegetate naturally. The Onsite Substation and GCR will form part of the permanent national grid network. A Decommissioning Management Plan is contained within **Appendix 2.1.4**.

Overall, the magnitude of decommissioning phase landscape effects within the proposed wind farm Site and its immediately surrounding context is deemed to be **High-medium** and of a **Adverse** quality, but of a **Short-Term** duration. Beyond 5km from the Site, the magnitude of landscape effect is deemed to reduce to Low and Negligible at increasing distances as the decommissioning related activities become a proportionately smaller component of the overall landscape fabric.

It is important to note that this impact assessment applies across all Technology Options for the turbines, highlighted in **Section 11.7.4**.

11.7.4 Significance of Potential Landscape Effects (Construction, Operational and Decommissioning Phases)

The significance of landscape effects is a function of landscape sensitivity weighed against the magnitude of landscape impact. This is derived from the significance matrix (**Table 11.5**) used in combination with professional judgement.

Based on a Medium-low sensitivity judgement and a High-medium magnitude of construction and decommissioning stage landscape impact, the significance of effect is considered to be **Substantial-moderate / Adverse / Short-term** within and immediately around the Site during construction and decommissioning phases but reducing quickly with distance and broader context. Thus, landscape effects during the construction and decommissioning phases are assessed as **Not Significant**, in EIA terms.

Based on a Medium-low sensitivity judgement and a Medium magnitude of operational phase landscape effect the significance of effect is considered to be **Moderate, Adverse, Long-term** within and immediately around the proposed wind farm Site. Thereafter, significance will reduce to **Slight** and **Imperceptible** at increasing distances as the proposed Project becomes a progressively smaller component of the wider landscape fabric even in the context of higher

sensitivity landscape units / features. Thus, landscape effects during the operational phase are assessed as **Not Significant** in EIA terms.

It is important to note that the residual significance of landscape effects applies across all Technology Options for the turbines, highlighted in **Section 11.7.4**.

11.8 Visual Effects

11.8.1 Construction Phase Visual Effects

During construction, the main visual impacts will arise from frequent heavy vehicle movements and worker vehicles travelling to and from the proposed Project and using the main site entrance (SE1) from the R371. There will be construction machinery on site, which may rise above intervening vegetation and buildings. In addition to construction activities at the proposed wind farm Site, the proposed Project will also generate some localised visual impacts during the construction phase along the GCR and TDR. Some of the most notable construction stage visual impacts will result from the erection of the turbines using tower cranes. There will also be stockpiles of stripped topsoil as well as construction materials awaiting use. However, a large part of this short-term activity within the Site will remain screened from view by the hedgerows and mature conifer plantations that surround the site and its immediate landscape context. Furthermore, construction-related activity is short-term in nature and will cease once the development becomes fully operational.

For these reasons, the magnitude of visual impact at the construction stage is deemed to be no greater than High/High-medium at the nearest surrounding receptors, however, this reduces swiftly at greater distances from the wind farm Site, especially within the Study Area, where the magnitude of visual impact is considered to be no greater than Low/Low-negligible. Combined with a High-medium/Medium/Medium-low sensitivity for receptors within the immediate Study Area (<1km from the site), the significance of visual effect will be not greater than **Substantial-moderate/Moderate** and of an **Adverse** quality. Thereafter, the significance of effect will reduce to **Moderate/Moderate-Slight** throughout the central Study Area and **Slight** and **Imperceptible** at increasing distances within the wider Study Area as the development becomes a progressively smaller component in the afforded view.

Thus, construction phase visual effects are assessed as **Not Significant**, in EIA terms.

11.8.2 Operational Phase Visual Effects

Table 11.8 summarises the full textual assessment of visual effects for each VP contained in **Appendix 11.1 – Assessment of Representative Viewpoints** and **Volume 5 - Photomontage**). Whilst the 'receptor sensitivity analysis table' and full textual assessment for

each VP is normally contained within the Landscape and Visual Chapter, in this instance, given the considerable number of VPs, it is considered more prudent to place this material in a separate appendix and focus herein on the significance of the findings.

The left-hand side of the table incorporates statistical data associated with the view of turbines, whilst the right hand side contains professional judgements in respect of the view. It is important to note that the professional judgements are based on the effects experienced in relation to the view and are not directly influenced by the statistical data (i.e. the distance to the nearest turbine).

These aspects are only combined within **Table 11-9** in order to identify patterns of effect to better inform the conclusions of this assessment.

Table 11-9: Summary of Operational Phase Visual Effects at Viewpoints (VP's)

VP No.	Distance to nearest turbine	Visual receptor Sensitivity (see Appendix 11.1)	Visual Impact Magnitude	Significance of Visual effect
VP1	17.5km (T06)	High-medium	Negligible	Imperceptible / Neutral / Long-term
VP2	10.5km (T06)	High-medium	Low	Slight / Adverse / Long-term
VP3	12.5km (T06)	Medium	Low-negligible	Slight-imperceptible / Adverse / Long-term
VP4	5.5km (T06)	Medium	Low	Slight / Adverse / Long-term
VP5	7.7km (T05)	Medium-low	Low	Slight / Adverse / Long-term
VP6	2.9km (T06)	Medium	Medium-low	Moderate-slight / Adverse / Long-term
VP7	1.8km (T06)	Medium	Low	Slight / Adverse / Long-term
VP8	1.1km (T06)	Medium-low	Medium	Moderate / Adverse / Long-term
VP9	1.0km (T06)	Medium	Medium	Moderate / Adverse / Long-term
VP10	2.5km (T02)	Medium	Medium-low	Moderate-slight / Adverse / Long-term
VP11	18.2km (T01)	High	Negligible	Imperceptible / Neutral / Long-term
VP12	1.5km (T02)	Medium-low	Medium-low	Moderate-slight / Adverse / Long-term
VP13	0.6km (T03)	Medium-low	High	Substantial-moderate / Adverse / Long-term
VP14	2.0km (T03)	Medium-low	Medium-low	Moderate-slight / Adverse / Long-term
VP15	0.6km (T02)	Medium-low	High	Substantial-moderate / Adverse / Long-term
VP16	4.7km (T01)	Medium	Low	Slight / Adverse / Long-term
VP17	1.0km (T03)	Medium-low	Medium	Moderate / Adverse / Long-term
VP18	1.6km (T01)	Medium-low	Medium-low	Moderate-slight / Adverse / Long-term

VP No.	Distance to nearest turbine	Visual receptor Sensitivity (see Appendix 11.1)	Visual Impact Magnitude	Significance of Visual effect
VP19	1.4km (T01)	Medium-low	Medium-low	Moderate-slight / Adverse / Long-term
VP20	3.5km (T01)	Medium	Low	Slight / Adverse / Long-term
VP21	15.8km (T01)	High-medium	Low-negligible	Slight-imperceptible / Adverse / Long-term
VP22	7.3km (T03)	Medium-low	Low	Slight / Adverse / Long-term
VP23	15.7km (T03)	High-medium	Low-negligible	Slight-imperceptible / Adverse / Long-term
VP24	11.5km (T01)	Medium-low	Low-negligible	Slight-imperceptible / Adverse / Long-term
VP25	14.6km (T01)	High-medium	Negligible	Imperceptible / Neutral / Long-term

Note: It is important to note that the residual significance of visual effects apply across all Technology Options for turbines as highlighted in **Section 11.7.4**.

Effects at Local Community Receptors

Local Community views are considered to be those experienced by people who live, work and move around the area within approximately 5km of the proposed wind farm Site. These are generally the people that are most likely to have their visual amenity affected by a wind energy proposal due to proximity to the turbines, a greater potential to view turbines in various directions, or having turbines as a familiar feature of their daily views.

Local community receptors are represented by 14 VP's (VP6, VP7, VP8, VP9, VP10, VP12, V13, VP14, VP15, VP16, VP17, VP18, VP19 and V20) within the central Study Area, some of which are representative of several receptor types. The residual significance of visual effect at local community receptors ranged between '**Slight**' and '**Substantial-moderate**', with those receptors typically within 1km of the proposed Project experiencing the most notable visual effects.

Two VP's (VP13 and VP15) are classified with a residual significance of visual effect of '**Substantial-Moderate**', both of which are located approximately 600m from the nearest turbines and are situated within and adjacent to the locally elevated ridgetop plateau that contains the site.

VP15 represents the nearest local residential receptor (receptor no. 35) along the road that bisects the proposed wind farm Site, where there is the potential for prominent views of the turbines, albeit often filtered through a veil of roadside vegetation. The proposed Onsite Substation also has the potential to be visible from sections of this local road, although it will be fully screened from the nearest residential receptors. It should also be noted that the

nearest residential receptor (receptor no. 35) to the turbines along this road is located to the west and affords broad views across the Scramoge River Valley, in the opposite direction to the turbines.

VP13 affords a view of the proposed Project from a similar distance to VP15; however, VP13 provides a much clearer view of the proposed Project in its entirety. Indeed, while the proposed turbines will present a dominant visual presence from this near distance, they appear well integrated in terms of scale and function within the landscape, which is influenced by other typical working land uses such as agriculture and forestry. Furthermore, it is not considered that the proposed turbines block or noticeably obstruct views in either VP13 or VP15. Instead, the loose spacing of the proposed turbine array allows a strong degree of visual permeability, while the variation in the perceived scale of the turbines generates a strong sense of perspective and highlights the depth and dispersion of the array along this locally elevated ridge plateau.

VP8, VP9, and VP17 were all classified with a residual significance of visual effect of **'Moderate'** and are all slightly offset from the turbine array in comparison to VP13 and VP15 discussed above. VP8 represents one of the nearest views afforded of the turbines from the north, where the proposed Project is set back by several pastoral fields. Whilst the turbines will be a noticeable feature from this representative view, they will neither appear over-scaled nor out of place in the context of this robust working setting. VP17 affords a view of the turbines from a similar distance to the southeast. In similar circumstances to VP8, the rotating turbine components will draw the eye here as one of the most prominent built features; however, the proposed Project does not appear excessive in terms of its overall scale and the extent. VP9 was selected to represent the nearest scenic view designation but also reflects local community receptors. A summary of effects at this view is included in the section below addressing designated views.

(Other local community receptors within the Study Area were classified with a residual visual effect significance ranging from **'Moderate-slight'** to **'Slight'**, with some local community receptors affording clear views of the turbines, whilst others afford only a partial view of the blade sets. Nonetheless, the turbines tend to present in a relatively unambiguous manner in this landscape context and are principally viewed away from the main aspects of visual amenity afforded within the surrounding local landscape context. Where visible, the proposed turbine array appears to respond well to this robust landscape context in terms of its overall scale and function.

In summary, there will be some prominent views of the turbines at some of the nearest surrounding local community receptors, where they will result in a notable degree of visual

change but will not appear incongruous in the context of the surrounding robust working landscape.

Nonetheless, visual effects are assessed as **Not Significant** in EIA terms, as the turbines are offset from the nearest residential receptors. It should be noted that the setbacks are in line with the minimum 'setback' distance outlined in the WEDG 2006 and Draft WEDG 2019. Furthermore, aside from receptor no. 35 (which is an involved landowner and has provided written agreement with the project development), all residential dwellings within the Study Area are outside of the 4 x tip height visual amenity offsets outlined in the Draft WEDG 2019.

Effects on Designated Views

Several scenic designations occur throughout the central and wider Study Area across all three counties. Six VP's (VP4, VP9, VP11, VP21, VP23 and VP25) were selected to represent scenic designations within the Study Area. As VP11 is principally representative of a heritage feature, it will be summarised under the heading of 'Impacts on Heritage and Amenity Features' below.

Only one scenic designation (R5) is located within the central Study Area, and this relates to a scenic route situated along the R371 regional road, located to the northwest of the site and to the east of Kilglass Lough and the Scramoge River Valley. As highlighted in the Roscommon CDP 2022-2028, this scenic designation relates to views to the west across the Lough and wider river valley context, which is in the opposite direction to the proposed wind farm Site. It is important to note that much of this scenic route, directly due west of the proposed Project, is heavily contained by roadside vegetation along its eastern verge, which significantly limits any potential for views to the east.

VP9 was included as a representative view for this scenic route and affords a partial view of the turbines, where they present to the southeast, in the opposite direction to the main aspect of scenic amenity. Whilst the turbines appear in a somewhat ambiguous manner here—due to the intervening rolling terrain and vegetation, which partially screen the turbine towers, resulting in only partial views of the rotating blade sets—they do not appear over-scaled, nor will they generate any sense of being overbearing. Overall, whilst the turbines will generate an increase in the intensity of development in this area, they do not obstruct or block the most sensitive viewing aspect, which is to the west. Thus, the significance of visual effect was deemed '**Moderate**' at this receptor, which is also influenced by the sensitivity of the visual receptor due to its location along a scenic route designation.

All other scenic designations are located throughout the wider surrounding Study Area. The nearest of these (scenic route R4) is just over 5km northwest of the proposed wind farm Site

and is an extension of the scenic route (R5) within the central Study Area, affording similar pleasant views across Kilglass Lough to the west. VP4 was selected to represent this scenic route receptor, where there is potential to afford brief views of the rotating turbine blade sets along a locally elevated ridgeline to the southeast. Whilst not an ideal aesthetic, the turbines are considerably offset from this viewing context and are only partially visible here. The turbines will be viewed in the opposite direction to the scenic designation and will have a very limited effect on the visual amenity afforded from here. Thus, the significance of visual effect was deemed **Slight**.

All other scenic designations within the wider Study Area are located more than 14km from the proposed wind farm Site at their nearest point. Whilst there is potential for brief views of the turbines from these distant receptors, the visual presence of the development is deemed to be no greater than minimal. The residual visual effect at these receptors ranged between '**Slight-imperceptible**' and '**Imperceptible**', which is principally due to the considerable viewing distances.

On balance, and for the reasons outlined above, it is not considered that the proposed Project will result in a significant detracting of scenic amenity afforded from scenic designations within the central or wider Study Area. Whilst there will be some visibility of the proposed wind farm Site from the nearest scenic designation the turbines will be viewed in the opposite direction to the scenic designation and will be partially screened by the sloping terrain and intervening vegetation. Thus, visual effects are assessed as **Not Significant** in EIA terms, at scenic designations within the Study Area.

Impacts on Centres of Population

Due to the settled nature of the Study Area, eight VP's were selected (VP1, VP2, VP3, VP5, VP16, VP18, VP23, and VP24) to represent centres of population within the Study Area. Centres of population are generally considered to be in the mid to low range of visual receptor sensitivity because they tend to be busy built environments where visual change is relatively commonplace. However, in this instance, some of the centres of population throughout the Study Area are located in scenic areas, such as along rivers or lakes, and thus the receptor sensitivity is sometimes slightly higher than in typical settlements.

The nearest centre of population to the proposed Project is the small village of Scramoge, located to the north of the N5 primary route in the southern extent of the central Study Area. VP18 is located just north of the crossroads settlement and affords a partial view of the southernmost turbines in the proposed wind farm Site. The remaining turbines are all heavily screened here by a combination of terrain and intervening vegetation. Even from this distance

of just over 1.6km from the nearest turbines, the proposed Project is only considered to present a sub-dominant visual presence. Indeed, whilst the visible rotating turbines will draw the eye, they do not appear over-scaled or generate any sense of being overbearing. Furthermore, views of existing turbines are not uncommon in this settlement, where visibility of the existing Sliabh Bawn turbines is afforded from the central and southern parts of this small settlement. Thus, the residual significance of visual effect is deemed '**Moderate-slight**', with some parts of the settlement affording a much more limited view of the turbines.

The only other notable centre of population within the central Study Area is Strokestown, which is located along locally elevated terrain in the western extent of the central Study Area. VP16 was selected to represent this settlement and affords a veiled view of the proposed Project, where intervening built development and surrounding mature vegetation along the outskirts of the settlement will partially screen and soften the visual presence of the proposed Project. Whilst clearer views of the proposed Project could be afforded from some parts of the eastern outskirts of the settlement, much of the turbine visibility within the settlement will be intermittent and often screened by intervening built development. In all instances, the visible turbines will be viewed well offset from the settlement and are contextually separated from it by the Scramoge River valley to the east. Thus, the residual significance of effect at the settlement of Strokestown is deemed '**Slight**'.

All other centres of population are located outside the central Study Area, and the residual significance of effect ranges between '**Slight**' and '**Imperceptible**', with the larger settlements situated along the wider periphery of the 20km Study Area affording very limited visibility of the turbines. Indeed, even where visible from centres of population in the wider Study Area, the turbines will appear as small-scale, distant background features and will have a minimal visual presence.

On balance, for the reasons outlined above, visual effects at centres of population within the Study Area are assessed as **Not Significant**, in EIA terms.

Impacts on Major Routes

Major route receptors within the Study Area are represented by 9 VP's (VP1, VP2, VP5, VP9, VP16, VP18, VP20, VP22 and VP24) within the Study Area. Several notable major route corridors traverse the Study Area including the N4, N5, N61 and N63. The Study Area also encompasses a web of interconnecting regional roads, the nearest of which passes a short distance to the west of the site. Indeed, many of the VP's selected to represent road receptor have also been selected to represent settlements, scenic designations and local community receptors, and have been discussed in the sections above.

The most notable major routes within the Study Area include the N4 and N5. The N5 is the nearest of the two and briefly passes through the central Study Area. Nevertheless, many of the nearest sections of this major route receptor are heavily contained by dense, mature roadside vegetation, and as such, will have very limited potential to afford any clear visibility of the proposed Project. VP22 was selected as a representative view from the N5 as it heads west from the settlement of Termonbarry. A partial view of the turbines is afforded from here, where layers of roadside and intervening vegetation result in only intermittent views of the turbines. Indeed, the turbines are well offset from this section of the major route and will result in only a modest increase in the intensity of development here. Thus, the residual significance of visual effect is deemed '**Slight**'. The N4 is represented by several VP's, including VP1, VP2, and VP5. Whilst some of these VP's are not located directly along the N4 corridor, they are situated in its immediate surrounds and are therefore representative of the potential visibility from this route. The significance of visual effect ranged between '**Slight**' and '**Imperceptible**' at these VP's, with the more notable effects relating to the nearest potential views of the development from the N4. Overall, visibility of the proposed Project from the N4 will be fleeting, as the route is often lined with dense areas of roadside hedgerow.

Overall, the residual significance of visual effect at major route receptors ranged from Moderate to Imperceptible, with the nearest major route receptor to the site (the R371) affording the closest and most prominent views of the proposed turbines compared to all other major route receptors within the Study Area. Nonetheless, visual effects at major route receptors within the Study Area are assessed as **Not Significant** in EIA terms.

Impacts on Heritage and Amenity Features

Tourism, heritage, and amenity receptors were represented by 11 VP's (VP1, VP2, VP5, VP7, VP11, VP16, VP19, VP21, VP22, VP23, and VP25) within the Study Area, several of which are also representative of scenic designations, centres of population, and local community views. Tourism, heritage, and amenity receptors in the Study Area range from walking trails to heritage assets, the majority of which are located outside the central Study Area. The surrounding loughs are also notable amenity features, utilised for water-based recreation such as boating and fishing.

One of the more notable linear heritage and amenity features is the National Famine Way, which extends east from the settlement of Strokestown, passing through the southern extent of the central Study Area and through the southeast quadrant of the wider Study Area. The entirety of the route in the central Study Area follows the public road network before passing along the corridor of the Royal Canal in the southeast quadrant of the Study Area. VP16, VP19, and VP22 were all included as representative VP's from sections of this linear amenity

and heritage receptor. VP19 is the nearest of these and is located along a section of local road south of the site and east of the settlement of Scramoge. While the turbines are partially screened in the depicted view, intermittent views of the turbines could be afforded through gaps in the intervening vegetation to the north along other sections of the local road within the central Study Area. While the turbines will not present as dominant features from here, they will increase the perceived intensity of built development along this enclosed local rural road. Overall, the significance of the visual effect was deemed no greater than **Moderate-Slight** along this section of the amenity and heritage receptor, while the two other representative views were classified with a residual significance of visual effect of Slight due to their additional offsets from the proposed wind farm Site.

Other notable heritage assets are located within the wider Study Area, including Rathcroghan Mound (VP11) and Carnfree (VP21), both of which are also represented by scenic designations and are discussed above. VP11, representing Rathcroghan Mound, will be entirely screened from the proposed Project, and thus was classified with an **Imperceptible** significance of visual effect. VP21, representing Carnfree, will afford distant views of the turbines, situated over 15km from the heritage receptor. Thus, VP21 was classified with a residual significance of visual effect of **Slight-Imperceptible**. In similar circumstances, VP25 was included to represent Rathcline Castle and a scenic designation, both of which are situated over 14 km south of the proposed wind farm Site. The proposed Project will be fully screened from here due to the dense vegetation along the banks of Lough Ree; therefore, the residual significance of visual effect was deemed **Imperceptible**.

Overall, while some heritage and amenity receptors are located within the central Study Area, the predominance of landscape values and visual receptors associated with heritage and amenity relate to areas outside the central Study Area that are well offset from the proposed Project. Thus, visual effects on tourism, heritage, and amenity receptors within the Study Area are assessed as **Not Significant** in EIA terms.

Summary of Operational Stage Visual Effects

Based on the visual impact assessment outlined in this Section, the significance of visual effects range between **Substantial-moderate** to **Imperceptible**. Indeed, the most notable visual effects (**Substantial-Moderate**) will occur at the nearest visual receptors, which in this instance are local community receptors, principally those nearest to the south and east. Receptors to the north are afforded a greater separation distance from the proposed Project, while the locally elevated ridge to the west will partially or fully screen many of the nearest local community receptors to the west of the proposed array. Overall, even where visible from the nearest surrounding local community receptors, it should be noted that the turbines

present in a relatively clear and legible manner and do not appear over-scaled, nor will they generate any sense of overbearing. In the context of this robust working landscape, characterised by typical land uses such as agriculture and commercial conifer forestry, in addition to a sizable active quarry, it is not considered that the proposed Project represents an incongruous form of built development, nor will it significantly detract from the more sensitive aspects of the central Study Area. Furthermore, the proposed Project responds well to the current guidance for 'Hilly and Flat Farmland' in the WEDG 2006 and has due regard to the visual amenity offsets outlined in the Draft WEDG 2019.

In terms of surrounding scenic designations, the proposed Project is either viewed in the opposite direction to the main aspect of visual amenity, is partially or fully screened, or is seen as a distant background feature. As such, it is not considered that the proposed Project will result in a significant detraction in scenic amenity at surrounding scenic designations. In fact, residual effects at surrounding scenic designations tend to be in the Moderate to lower order of effect.

Overall, the proposed Project represents a well-sited wind farm located in a relatively robust landscape context, which can accommodate a wind energy development of this scale. This is further supported by the wind energy zoning for this part of the Study Area, which is classified as 'Most Favoured'. In fact, wind energy development is a familiar feature within this landscape context, with the existing, larger Sliabh Bawn wind farm located in the southern half of the Study Area.

On balance, for the reasons outlined above, visual effects at surrounding visual receptors within the Study Area are assessed as **Not Significant**, in EIA terms.

11.8.3 Decommissioning Phase Visual Effects

Visual impacts at the decommissioning phase will be very similar to the construction phase and will arise from frequent heavy vehicle movements and worker vehicles travelling to and from the site and using the site entrance. As with the construction stage, there will be HGVs travelling to and from the proposed wind farm Site, removing built features that formed part of the proposed Project. Whilst the most notable visual impacts will still arise from the erection of large tower cranes to remove the turbine structures, there will be a slightly less intensity in construction related activities as the Onsite Substation will not be removed at the end of the useful life of the wind farm as it will form part of the national electricity network. Therefore, the Onsite Substation will be retained as a permanent structure and will not be decommissioned. There will also be no requirement for large excavation works as the Turbine Foundations,

Turbine Hardstands will be let revegetate naturally and the Site Access Tracks will be left in place for forestry/agricultural access.

For these reasons, the magnitude of visual impact at the decommissioning phase is deemed to be no greater than High/High-medium at the nearest surrounding receptors, however, this reduces swiftly at greater distances from the site, especially within the wider Study Area where the magnitude of visual impact is considered to be no greater than Low/Low-negligible. Combined with a High-medium/Medium/Medium-low sensitivity for receptors within the immediate Study Area (<1km from the proposed wind farm Site), the significance of visual effect will be not greater than **Substantial-moderate/Moderate** and of a **Adverse** quality. Thereafter, the significance of effect will reduce to **Moderate/Moderate-Slight** throughout the central Study Area and **Slight** and **Imperceptible** at increasing distances within the wider Study Area as the development becomes a progressively smaller component in the afforded view.

Thus, visual effects at the decommissioning phase are assessed as **Not Significant**, in EIA terms.

11.9 Mitigation Measures

Given the highly visible nature of commercial wind energy developments, it is not generally feasible to screen them from view using on-site measures as would be the primary form of mitigation for many other types of development. Instead, landscape and visual mitigation for wind farms must be incorporated into the early-stage site selection and design phases. It should be noted that no mitigation measures other than the embedded mitigation used as part of the project design are proposed for the construction, operational and decommissioning phases.

In this instance, the two main forms of landscape and visual mitigation employed were:

- Mitigation by avoidance and design; and
- Buffering of Residential Receptors

11.9.1 Mitigation by Avoidance and Design

The main mitigation in this instance was the siting of the proposed Project in a relatively robust part of the surrounding landscape that is not heavily constrained by landscape and visual designations and is contained within a wind energy classification deemed 'Most Favoured' in relation to wind energy development. Indeed, the site of the proposed Project is located within a locally elevated, robust, working setting that comprises an array of working land uses, such as commercial forestry, mineral extraction, and extensive areas of pastoral farmland. In this

regard, the addition of the proposed Project will not present as an incongruous built feature, which is further supported by the existing wind farm development located just over 5km to the south of the proposed wind farm Site.

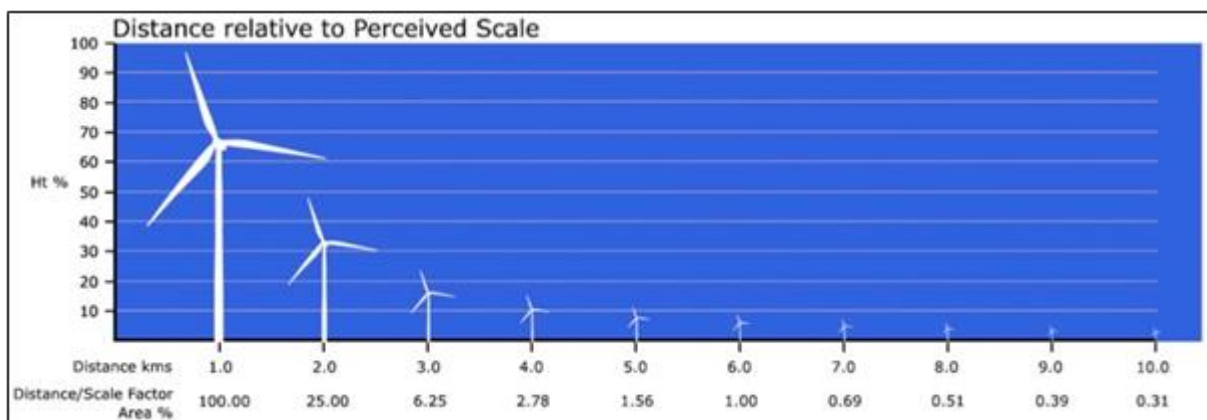
In addition to mitigation by avoidance measures, mitigation by design measures were included during the early stages of the Project prior to initial assessments of wireframe montages. Based on commentary provided by the LVIA consultant, the applicant micro sited turbines T01 & T02 to reduce the sense of turbines presenting as outliers to the array. Overall, this results in a much more visually cohesive final turbine layout.

11.9.2 Buffering of Residential Receptors

For the proposed Project, the closest residential receptor (receptor no. 35) is located 599m from turbine (T02), which is in excess of the WEDG 2006 and Draft WEDG 2019 minimum setback of 500m and greater than the setback distance of 4 times the tip height of the turbines. In this instance and having due regard to the Draft WEDG 2019, the setback distance for visual amenity purposes is 640m from residential receptors on the basis of the 160m high turbines (this represents the greatest potential setback distance with regard to all potential turbine ranges and is in line with industry best practice).

Variation in residential buffer distances within the nearest kilometre has a much more noticeable effect on perceived turbine scale than when it occurs in the context of more distant views. This is due to the principal of perspective¹ – that doubling the distance to an object halves its perceived height.

The reduction factor is even more pronounced when considered in the context of the 'swept area' of turbine blades and not just their tip height. This exponential 'scale in relation to distance' scenario is illustrated in **Figure 11-7**.



¹ Goldstein, E. B. (2014). *Sensation and Perception* (9th ed.). Cengage Learning

Figure 11-7: Turbine ‘scale in relation to distance’ relationship

11.10 Residual Effects

As there are no additional mitigation measures, the predicted landscape and visual effects that are described in **Section 11.8** and **Section 11.9** are residual effects in this assessment.

11.11 Unplanned Events (Accidents or Major Disasters)

This section considers the vulnerability of the proposed Project to major accidents and/or disasters, the risk of those major accidents and/or disasters occurring and the potential for any significant adverse effects from a landscape and visual perspective.

According to EPA Guidelines, these unplanned events can include ‘spill from traffic accidents, floods or landslides affecting the site, fire, collapse or equipment failure on site’. Additionally, the EIA Directive requires “major accidents, and/or natural disasters (such as flooding, sea level rise or earthquakes)” be addressed.

The Environmental Impact Assessment of Projects: Guidance on the preparation of the Environmental Impact Assessment Report (European Commission, 2017) requires the consideration of major hazards in the context of the SEVESO III Directive. It is noted that the proposed Project will not come under the Control of Major Accident Hazards (COMAH) Regulations and the closest COMAH establishment is c. 37km west of the development.

There are no accidents or disasters associated with the construction, operation or decommissioning phases of the proposed Project, that would result in significant effects in terms of landscape or visual. Therefore, an effects in relation to unplanned events during all phases of the proposed Project are considered **Not Significant** in EIA terms.

11.12 Cumulative Effects

This section presents the findings for the Cumulative Effects Assessment (CEA). Full details on the approach to the assessment of cumulative effects are provided in **Chapter 16 - Cumulative Effects**. A list of other projects relative to the proposed Project was compiled by the project team and is provided in **Appendix 16.1 - Long list of other projects for the cumulative effects assessment**

The NatureScot Guidance relating to ‘Assessing the Cumulative Landscape and Visual Impact of Onshore Wind Energy Developments (2021)’ identify that cumulative effects on visual amenity consist of combined visibility and sequential effects. The same categories have also been subsequently adopted in the Landscape Institute’s 2013 revision of the Guidelines for Landscape and Visual Impact Assessment (GLVIA3). The principal focus of wind energy

cumulative impact assessment guidance relates to other wind farms - as opposed to other forms of development. This will also be the main focus herein, albeit with a subsequent consideration of cumulative effects with other forms of notable development (existing, permitted or pending a decision from a planning authority), particularly within the Central Study Area.

‘Combined visibility occurs where the observer is able to see two or more developments from one viewpoint. Combined visibility may either be in combination (where several wind farms are within the observer’s arc of vision at the same time) or in succession (where the observer has to turn to see the various wind farms).

Sequential effects occur when the observer has to move to another viewpoint to see different developments. The occurrence of sequential effects may range from frequently sequential (the features appear regularly and with short time lapses between, depending on speed of travel and distance between the viewpoints) to occasionally sequential (long time lapses between appearances, because the observer is moving very slowly and / or there are large distances between the viewpoints.)’

Cumulative effects of wind farms tend to be adverse as they relate to the addition of moving manmade structures into a landscape and viewing context that already contains such development, and thus, result in an intensification of development. Based on guidance contained within the NatureScot Guidelines relating to the Cumulative Effects of Wind Farms (2012) and the WEDG 2006 and Draft WEDG 2019, cumulative effects can be experienced in a variety of ways. In terms of landscape character, additional wind energy developments might contribute to an increasing sense of proliferation. A new wind farm might also contribute to a sense of being surrounded by turbines with little relief from the view of them.

In terms of visual amenity, there is a range of ways in which an additional wind farm might generate visual conflict and disharmony in relation to other wind energy developments. Some of the most common include visual tension caused by disparate extent, scale or layout of neighbouring developments. A sense of visual ambivalence might also be caused by adjacent developments traversing different landscape types. Turbines from a proposed project that are seen stacked in perspective against the turbines of nearer or further developments tend to cause visual clutter and confusion. Such effects are exacerbated when, for example, the more distant turbines are larger than the nearer ones and the sense of distance is distorted.

Table 11-10 provides Macro Works criteria for assessing the magnitude of cumulative effects, which are based on NatureScot Guidelines (2012).

Table 11-10 Magnitude of Cumulative Effect

Magnitude of Effect	Description
Very High	The proposed wind farm will strongly contribute to wind energy development being the defining element of the surrounding landscape. It will strongly contribute to a sense of wind farm proliferation and being surrounded by wind energy development. Strongly adverse visual effects will be generated by the proposed turbines in relation to other turbines.
High	The proposed wind farm will contribute significantly to wind energy development being a defining element of the surrounding landscape. It will significantly contribute to a sense of wind farm proliferation and being surrounded by wind energy development. Significant adverse visual effects will be generated by the proposed turbines in relation to other turbines.
Medium	The proposed wind farm will contribute to wind energy development being a characteristic element of the surrounding landscape. It will contribute to a sense of wind farm accumulation and dissemination within the surrounding landscape. Adverse visual effects might be generated by the proposed turbines in relation to other turbines.
Low	The proposed wind farm will be one of only a few wind farms in the surrounding area and will be viewed in isolation from most receptors. It might contribute to wind farm development becoming a familiar feature within the surrounding landscape. The design characteristics of the proposed wind farm accord with other schemes within the surrounding landscape and adverse visual effects are not likely to occur in relation to these.
Negligible	The proposed wind farm will most often be viewed in isolation or occasionally in conjunction with other distant wind energy developments. Wind energy development will remain an uncommon landscape feature in the surrounding landscape. No adverse visual effects will be generated by the proposed turbines in relation to other turbines.

11.12.1 Cumulative Effects Assessment

There is one operational wind farm and one consented wind farm contained within the Study Area. One in-planning development is also contained within the study area. These are set out in **Table 11-11** and in **Chapter 16 – Cumulative Effects**.

Table 11-10 Cumulative wind farms within the Study Area

Wind Farm Name	Number of Turbines	Distance and Direction from proposed turbine to the nearest cumulative turbine	Status
Sliabh Bawn Wind Farm	20	4.2km south	Operational
Derryadd Wind Farm	22	11.2km southeast	In Planning
Derrane Wind Farm	2	16km southwest	Consented

The appraisal of cumulative effects with other wind energy developments is based on the cumulative ZTV maps **Appendix 11.2 – LVIA Mapping** and wireframes provided in the photomontage booklet (**Volume 5**).

A further discussion on potential cumulative effects is included in the subsequent section. It should be noted that cumulative effects are separated into current cumulative scenario and the potential future cumulative scenario. The current cumulative scenario depicts all existing and consented development within the study area, with the potential future cumulative scenario depicting existing, consented and in-planning wind farm development within the study area.

Nature of Cumulative Visibility

The nature of cumulative visibility within the Study Area is analysed below using the cumulative wireframe views contained in the photomontage booklet (refer **Volume 5**) and the cumulative ZTVs (**Appendix 11.2 – LVIA Mapping**).

Although the photomontages (refer to **Volume 5**) and cumulative ZTV map in **Appendix 11.2** relates principally to cumulative visual effects (i.e. utilising the selected VP set), it also informs the closely related assessment of cumulative landscape effects, particularly those relating to cumulative effects on the overall landscape character of the Study Area. The assessment below, therefore, relates to both cumulative visual effects and cumulative landscape effects.

In terms of cumulative construction and decommissioning phase effects, it is unlikely that the construction or decommissioning of two/three wind farm developments within the Study Area will occur in tandem. Should the construction or decommissioning of the proposed Project and another consented development (Derrane Wind Farm) occur at the same time, there is the potential for an increase in the intensity of construction/decommissioning activity within the Study Area. This includes the movement of HGVs along the surrounding road networks, storage of working vehicles and machinery, and the erection of tower cranes to construct/remove the turbine components. It is highly unlikely that the decommissioning of the four wind farms would occur in tandem as each development is currently at a different stage (i.e. consented, pre planning and in-planning). However, should this occur, there would be an increase in HGVs on the surrounding road network. However, effects are deemed Not Significant due to the notable offsets between each individual development.

However, as the two consented and existing developments are well offset from the proposed Project, it is not considered that these will generate any notable cumulative effects. Overall, the cumulative construction or decommissioning effects with other wind farm developments is deemed **Not Significant**.

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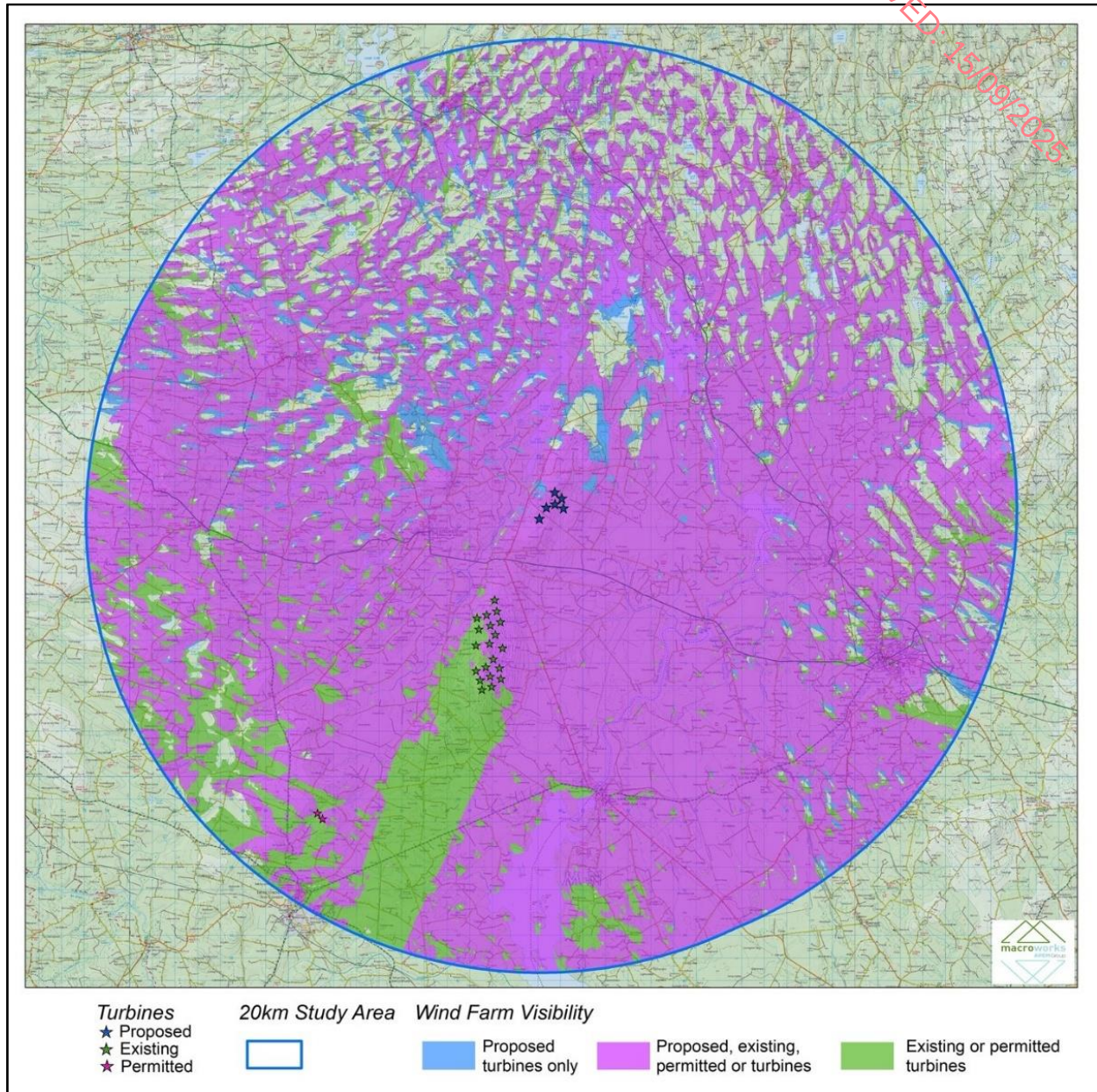


Figure 11-8: Current cumulative ZTV Map (Tip Height (160m) – represents a worst case scenario in terms of potential turbine visibility with regard to the variation in turbine dimensions) for Ballyfeeny Green Energy Project identifying the potential intervisibility of the proposed wind farm and all other existing and consented wind farms within the Study Area (See Appendix 11.2 for larger version)

Current Cumulative Scenario

The current cumulative ZTV map shows the potential for cumulative visibility between the turbines and all other existing and consented wind farm developments within the 20km Study Area.

At present, there is one operational wind farm and one consented wind farm development within the 20km Study Area. Of most relevance to the proposed Project is the existing Sliabh Bawn wind farm situated just under 4.2km south of the site. This 20-turbine array is contained along elevated terrain in the southern half of the Study Area and will be visible throughout both the central and much of the southern half of the Study Area, as highlighted in the baseline imagery in the photomontage booklets.

The cumulative ZTV map (based on a bare-ground scenario – see **Figure 11.8** and **Appendix 11.2 – LVIA Mapping**) identifies that the proposed Project will be visible in isolation for only 4.1% of the Study Area. These areas are principally located in the northern extent of the Study Area where the ‘sand ripple’ effect in the ZTV pattern identifies the presence of rolling drumlin hills. It is also important to note that over 14.9% of the Study Area will have no visibility of the existing Sliabh Bawn, consented Derrane or the proposed Projects turbines, and furthermore, this is based on a bare earth scenario, which doesn’t include for intervening screening in the form of existing vegetation and built development and will result in a much lesser degree of actual visibility. The majority of these areas are also located in the northern extent of the Study Area and are situated to the north of the rolling drumlin hills where the terrain will have the most notable screening effect.

Overall, 70.1% of the Study Area has the potential to afford a combined view of the proposed Project and other existing and consented turbines. While the combined visibility ZTV pattern (purple colour) is present across all aspects of the Study Area, the most notable potential for cumulative visual effects will be within the central Study Area and to the south of the proposed Project and north of the existing Sliabh Bawn turbines.

Nevertheless, there is a clear separation of over 4.2km between the proposed Project turbines and the existing Sliabh Bawn turbines, which are clearly contained along Sliabh Bawn cloaked in extensive areas of conifer forestry, whereas the proposed Project is located on rolling lands further to the north. Thus, while there will be a noticeable increase in the intensity of wind farm development where the two developments are visible, they will clearly be perceived as two distinctly separate developments. It should be noted that, as the Sliabh Bawn turbines are existing, they form part of the baseline photography; therefore, any potential cumulative visual effects are discussed in the VP appendix for each of the relevant VP’s.

With regard to the consented Derrane Wind Farm, there is limited potential for any notable cumulative landscape and visual effects to occur in respect of the proposed Project, as the two developments are separated by a distance of over 16km.

In terms of sequential effects, the proposed Project turbines and the consented and existing developments have the potential to be viewed from several major route receptors and linear amenity features within the Study Area. In terms of sections of the National Famine Way within the central Study Area, the proposed Project turbines and existing Sliabh Bawn turbines will be visible to the north and south of this linear route receptor, respectively. While combined views of the developments will be afforded from sections of this linear route, both developments are well set back from its immediate surrounding local landscape context and will not present as highly prominent features. Furthermore, sections of this route within the central Study Area are primarily located along public roads, which are already influenced by existing built development, and it is not considered that these sections of the route are highly distinctive, nor are they considered to be particularly scenic. Thus, the cumulative effects along this route relate more to an increase in the intensity of wind turbine development, rather than to highly prominent views of turbines or notable negative aesthetic effects.

With regard to the scenic route designations within the central Study Area, there is very limited potential for combined visibility of the proposed Project turbines, existing, and consented developments, as much of the open visibility along these routes relates to views to the west, while the existing and consented developments are viewed to the south, and the proposed Project is viewed to the east.

On balance, for the reasons outlined above, it is considered that the proposed Project will contribute to a cumulative landscape and visual effect in the order of Low in respect of the cumulative scenario, as the proposed Project turbines are well offset from all other existing and consented wind farm developments, and will often be viewed in isolation, especially at the nearest local community receptors.

It should be noted that the N5 Ballaghaderreen to Scramoge Project traverses the western extent of the central and wider Study Area. Whilst there will be some cumulative effects generated in combination with the proposed Project with regard to the intensity of built development within the Study Area, the two development types are not interrelated, which diminishes the potential for any notable cumulative landscape and visual effects to occur. Overall, the main cumulative effects will result in the potential for clearer views of the proposed turbines to be afforded from areas of the surrounding landscape that are not currently publicly accessible. However, the updated N5 alignment will be located some 3km southwest of the proposed turbine array at its nearest point. Thus, whilst there will be some combined views of the proposed Project afforded, these are deemed to be **Not Significant**.

Strokestown Public Realm Enhancement Scheme is another cumulative development within the Study Area, however, this is not a form of development that would generate any notable

cumulative landscape and visual effects in relation to a wind energy development. Thus, cumulative effects in relation to the Strokestown Amenity Plan are deemed **Not Significant**.

Chapter 16 – Cumulative Effects sets out other forms of cumulative development within the study area. It was not considered that any other of these developments were relevant to the proposed Project in terms of cumulative landscape and visual effects.

Thus, cumulative landscape and visual effects with regard to the current cumulative wind farm scenario or any other forms of built development are assessed as **Not Significant**, in EIA terms.

Potential Future Cumulative Scenario

Whilst still currently in planning, it is important to consider the potential cumulative effects of the proposed project in combination with the proposed Derryadd Wind Farm, situated over 11 km to the southeast of the site. The proposed Derryadd Wind Farm comprises up to 22 turbines and is located across a flat peatland context, considerably offset from the proposed Project.

Indeed, whilst the addition of 22 turbines to the study area will result in an increase in wind energy development within the wider landscape, the potential for the proposed project and the proposed Derryadd Wind Farm to generate any notable cumulative visual effects is limited due to the separation distances between the two developments and the flat nature of the terrain that separates them.

Furthermore, as the proposed Derryadd Wind Farm is also contained within the southern half of the study area – the same half as the other two cumulative wind farm developments – the potential for it to result in a notable increase in visibility of wind farm development throughout the study area is limited. This is reinforced in the potential future cumulative ZTV map (refer to **Figure 11-9** below), where the potential for intervisibility of proposed, consented, existing, and in-planning developments will only increase from 70.1% of the study area to 71.2%.

Overall, the main cumulative effects generated by the addition of the proposed Derryadd Wind Farm relate to the increased quantum of wind turbines within the 20 km study area. However, as noted above, there is very limited potential for clear combined views of the proposed Derryadd Wind Farm and the proposed project.

Thus, cumulative landscape and visual effects with regard to the potential future cumulative scenario are assessed as **Not Significant**, in EIA terms.

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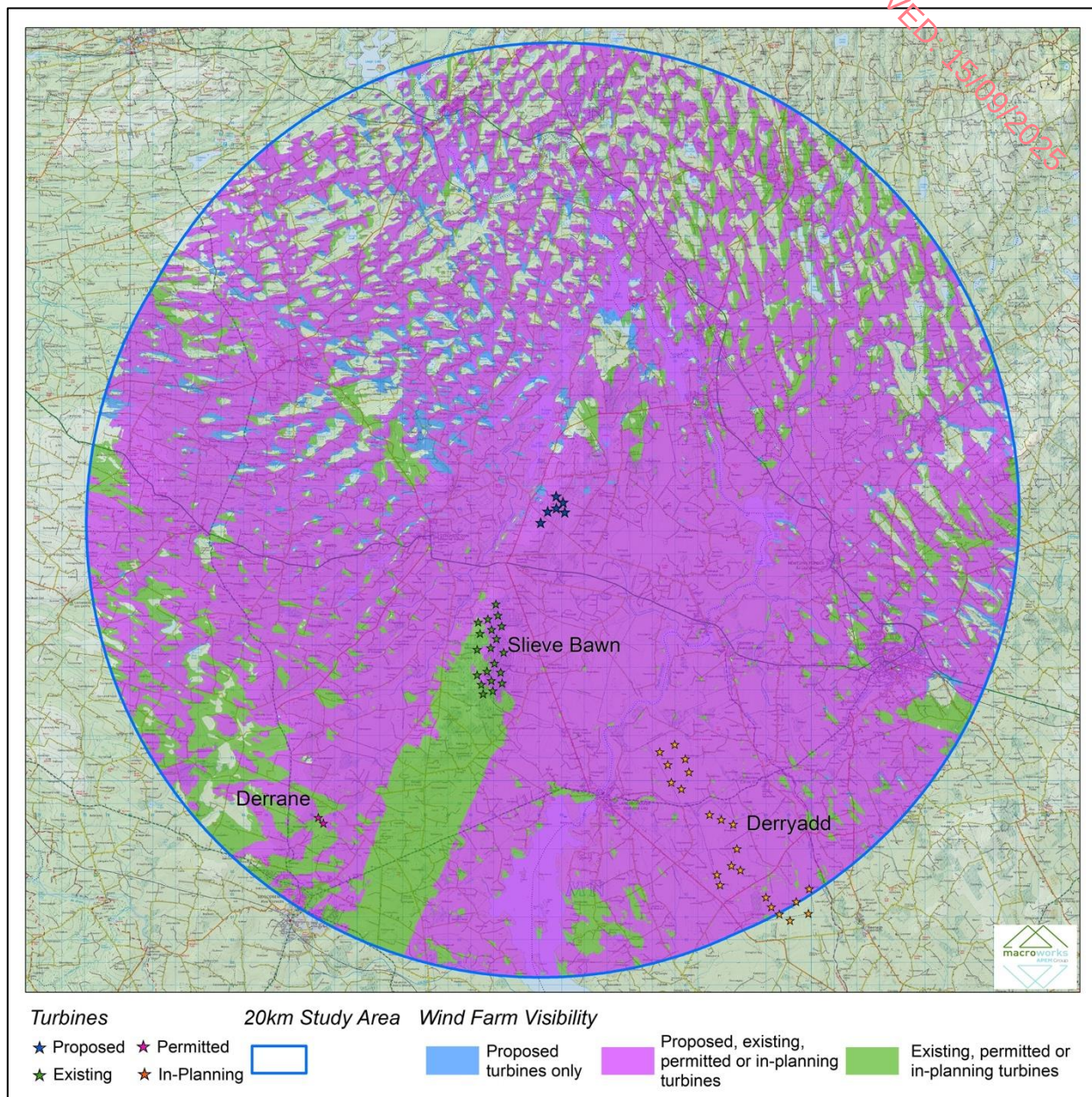


Figure 11-9: Potential Future Cumulative ZTV Map (Tip Height (160m) – represents a worst case scenario in terms of potential turbine visibility with regard to the variation in turbine dimensions) for Ballyfeeny Green Energy Project identifying the potential intervisibility of the proposed wind farm and all other existing and consented wind farms within the Study Area (See Appendix 11.2 for larger version)

11.13 Inter-Related Effects

The topics addressed in this EIAR do not exist separately from one another, and therefore, any effect on a specific element of the environment has the potential to impact another. The interactions between effects on various factors throughout the EIAR, are described, in **Chapter 17 – Interrelated Effects**.

11.14 Monitoring

Monitoring is not relevant to the LVIA in this instance.

11.15 Summary of Effects

A key consideration in respect of the proposed Project is the 'Most Favoured' wind energy designation, within which the proposed Project is located in the current Roscommon CDP. This designation refers to areas where "*wind farm development will be considered favourably, subject to compliance with all necessary siting and design standards.*"

In terms of LVIA, the proposed Project is considered to be sited in an appropriately robust rural context and will not significantly impact the nearest sensitive surrounding landscape and visual receptors, which in this case relate to local community receptors and a nearby scenic designation. Furthermore, the design and layout of the turbine array is generally consistent with all the guidance recommendations set out in the current WEDG 2006, especially with regard to the 'location' guidance as the proposed Project is situated along an elevated ridge to the east of the River Scramoge valley. It is also considered that the relatively modest six turbine array responds well to the surrounding landscape context in terms of its spatial extent, whilst height of the proposed turbines (156m, 159m add 160m) is not considered excessive in the context of the broad underlying landforms and land uses.

Furthermore, with regard to SPPR2 set out in the Draft WEDG 2019, the turbine array has due regard, in accordance with industry best practice, the setback distance identified for the proposed turbines specifications, with the exception of one dwelling. Indeed, the nearest residential dwelling (receptor no. 35) to the site exceeds these minimum setback distances, with all other residential dwellings exceeding the 4 x tip height detailed in the Draft WEDG 2019 guidance.

In relation to landscape effects, the proposed Project will result in an increase in the intensity of built development in the local landscape and will become one of the principal, built features at the nearest surrounding receptors. The proposed Project will also result in some physical landscape impacts; however, these will be confined to localised areas within the Site. Overall, the significance of landscape effect during the operational phase is considered to be **Moderate/Adverse/Long-term** within and immediately around the Site. Thereafter, the significance will reduce to **Slight** and **Imperceptible** at increasing distances, as the development becomes a progressively smaller component of the wider landscape fabric, even in the context of higher-sensitivity landscape units/features. Therefore, landscape effects generated by the proposed Project are deemed **Not Significant**, in EIA terms.

In terms of the residual visual effect, the operational phase visual effects generated by the proposed Project will result in some localised **Substantial-Moderate** residual visual effects. However, these are not considered to reach the Significant threshold. While the proposed Project will present a dominant visual presence from some of the nearest receptors, the design of the proposed wind farm Site directly responds to the guidance for the 'Hilly and Flat Farmland' landscape type in the current WEDG 2006, which helps the development assimilate into this robust, rolling rural landscape context. Furthermore, the proposed Project does not conflict with any landscape and visual related policies or objectives within the relevant CDPs within the Study Area.

With regard to cumulative effects, the proposed Project is well offset from existing and consented development within both the central and wider Study Area, and whilst it will contribute to an increase in the intensity of wind farm development within the Study Area, cumulative landscape and visual effects generated by the proposed Project are deemed **Not Significant**, in EIA terms.

11.16 References

- Landscape Institute and the Institute of Environmental Management and Assessment (IEMA) publication entitled Guidelines for Landscape and Visual Impact Assessment, 2013 (GLVIA3).

- Environmental Protection Agency (EPA) publication 'Guidelines on the Information to be contained in Environmental Impact Statements (2022);
- 'Photography and Photomontage in Landscape and Visual Impact Assessment', Landscape Institute Technical Guidance Note 06/2019.
- Department of the Environment, Heritage and Local Government, 2006. *Wind Energy Development Guidelines*. Dublin: Department of the Environment, Heritage and Local Government
- Department of the Environment, Heritage and Local Government, 2019 Draft Revision. *Wind Energy Development Guidelines*. Dublin: Department of the Environment, Heritage and Local Government
- Roscommon County Council. 2022. *Roscommon County Development Plan 2022–2028*. Adopted 8 March 2022; effective from 19 April 2022.
- Longford County Council. 2021. *Longford County Development Plan 2021–2027*. Adopted 19 October 2021; effective from 30 November 2021.
- Leitrim County Council. 2023. *Leitrim County Development Plan 2023–2029*. Adopted 8 February 2023; effective from 21 March 2023.