

11 LANDSCAPE AND VISUAL AMENITY

11.1 INTRODUCTION

11.1.1 Background and Objectives

This chapter of the EIAR assesses the effects of the Proposed Development on the landscape and visual amenity of the receiving environment. Where significant effects are predicted, the chapter identifies appropriate mitigation strategies therein. The assessment will consider the potential effects during the construction, operational, and decommissioning phases.

The Proposed Development refers to all elements of the application for the construction and operation of the proposed Gortloughra Wind Farm (refer to **Chapter 2: Project Description**). Common acronyms used throughout this EIAR can be found in the **Appendix 1.4**. Figures are included in Volume III of the EIAR. This chapter of the EIAR is supported by a portfolio of photomontages provided as a separate booklet, and the following Appendix provided in **Volume IV** of this EIAR:

- **Appendix 11.1:** Visual Impact Assessments at VPs

This Landscape and Visual Impact Assessment (LVIA) describes the landscape context of the Proposed Development and assesses the likely landscape and visual impacts of the scheme on the receiving environment. Although closely linked, landscape and visual impacts are assessed separately, in accordance with relevant guidance outlined in section 11.2.2 of this chapter:

Landscape Impact Assessment (LIA) relates to changes in the physical landscape brought about by the Proposed Development, which may alter its character, and how this is experienced by people. This requires a detailed analysis of the individual elements and characteristics of a landscape that go together to make up the overall landscape character of that area. By understanding the aspects that contribute to landscape character, it is possible to make judgements in relation to its quality (integrity) and to identify key sensitivities. This, in turn, provides a measure of the ability of the landscape in question to accommodate the type and scale of change associated with the Proposed Development without causing unacceptable adverse changes to its character.

Visual Impact Assessment (VIA) relates to assessing effects on specific views and the general visual amenity experienced by people. This deals with how the surroundings of individuals or groups of people may be specifically affected by changes in the content and character of views as a result of the change or loss of existing elements of the landscape and/or introduction of new elements. Visual impacts may occur from visual obstruction (blocking of a view, be it full, partial or intermittent) or Visual Intrusion (interruption of a view without blocking).

Cumulative landscape and visual impact assessment is concerned with additional changes to the landscape or visual amenity caused by the Proposed Development in conjunction with other developments (associated or separate from it).

11.1.2 Assessment Structure

In accordance with the Landscape Institute and the Institute of Environmental Management and Assessment publication entitled Guidelines for Landscape and Visual Impact Assessment – Third Edition (2013) (GLVIA3), the structure of this chapter will consist of separate considerations of landscape effects and visual effects in the following order:

- Assessment of landscape value and sensitivity
- Assessment of the magnitude of landscape effects within the Study Area
- Assessment of the significance of landscape impacts
- Assessment of visual receptor sensitivity
- Assessment of visual impact magnitude at representative viewpoint locations (using photomontages)
- Assessment of visual impact significance
- Assessment of cumulative landscape and visual impacts

11.1.3 Statement of Authority

This Landscape and Visual Assessment (LVIA) report was prepared by Cian Doughan (BSLA, MILI) Associate Director at Macro Works Ltd and reviewed by Richard Barker (MLA MILI) Divisional Director of Macro Works Ltd. Macro Works Ltd is a specialist LVIA company with over 20 years of experience in the appraisal of effects from a variety of energy, infrastructure and commercial developments. Relevant experience includes LVIA work on over 140+ onshore wind farm proposals throughout Ireland, including 20+ Strategic Infrastructure Development (SID) wind farms. Macro Works and its senior staff members are affiliated with the Irish Landscape Institute.

11.1.4 Description of the Proposed Development

This LVIA considers the impacts of activities and features relating to the construction, operation, and decommissioning stages of this eight-turbine wind farm. The 10-year planning permission being sought relates to a 40-year operational life from the date of commissioning.

A full description of the Proposed Development is provided in **Chapter 2: Project Description**.

11.2 ASSESSMENT METHODOLOGY AND SIGNIFICANCE CRITERIA

11.2.1 Assessment Methodology

Production of this Landscape and Visual Impact Assessment (LVIA) involved Baseline work in the form of desktop studies (review of relevant landscape and visual designations, policies and objectives) and fieldwork comprising professional evaluation by qualified and experienced Landscape Architects. This entailed the following:

11.2.2 Definition of Study Area

The Wind Energy Development Guidelines published by the Department of the Environment, Heritage and Local Government (DOEHLG) (2006 WEDG) and the 2019 Draft Revised Wind Energy Development Guidelines (2019 Draft) specify different radii for examining the zone of theoretical visibility of proposed wind farm projects (ZTV). As per the 2006 WEDG and 2019 Draft, the extent of this search area is influenced by turbine height, as follows:

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

In the case of this project, the blade tips are 175m high and, thus, the minimum ZTV radius recommended is 20 km from the outermost turbines of the scheme. This is considered to be appropriate in this instance on the basis that significant impacts are not predicted to occur beyond 20 km. Furthermore, there are not considered to be any sites of national or international importance between 20 – 25 km and thus, the radius of the Study Area will remain at 20 km. Notwithstanding the full 20 km 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 impacts to occur. When referenced within this assessment, the 'Central Study Area' is the landscape within 5 km of the Site.

The Study Area adopted is in accordance with both the 2006 WEDG and 2019 Draft, and is consistent with study areas employed for comparable wind energy applications throughout Ireland. It is considered a robust area on which to structure the LVIA, whilst being proportionate to the most notable effects.

11.2.2.1 Desktop Study

- Establishing an appropriate Study Area from which to study the landscape and visual impacts of the Development.
- 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.
- Selection of potential Viewshed Reference Points (VRPs) from key visual receptors to be investigated during fieldwork for actual visibility and sensitivity.

11.2.2.2 Fieldwork

- Recording of a description of the landscape elements and characteristics within the Study Area
- 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.
- Site visits were undertaken on multiple occasions during the Summer months of 2021 and then again during the Summer of 2024.

11.2.2.3 Appraisal

The process adopted in regard to the identification of landscape and visual effects (adopting the assessment criteria in 11.2.5 and 11.2.6 respectively) is summarised as follows:

- 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, tourism, recreation and heritage features and designated and recognised views of scenic value.
- Consideration of design guidance and planning policies.

- Consideration of potentially significant construction stage and operational stage effects and the mitigation measures that could be employed to reduce such effects.
- Consideration of the significance of residual landscape impacts.
- Consideration of the significance of residual visual impacts aided by photomontages prepared at all of the selected VRP locations.
- Consideration of cumulative landscape and visual effects in combination with other surrounding developments that are either existing or permitted.

11.2.3 Relevant Legislation and Guidance

This LVIA uses a methodology that is in accordance with that prescribed within the following guidance documents:

- Environmental Protection Agency (EPA) publication 'Guidelines on the Information to be contained in Environmental Impact Assessment Reports (2022) and the accompanying Advice Notes on Current Practice in the Preparation of Environmental Impact Assessment Reports;
- Landscape Institute and the Institute of Environmental Management and Assessment publication entitled Guidelines for Landscape and Visual Impact Assessment – Third Edition (2013) (GLVIA3);
- Department of the Environment, Heritage and Local Government Wind Energy Development Guidelines (2006) and Draft Revised Wind Energy Development Guidelines (2019);
- NatureScot: Assessing the cumulative landscape and visual impact of onshore wind energy developments (2021);
- Scottish Natural Heritage (SNH) Visual representation of wind farms: Best Practice Guidelines (version 2.2 - 2017); and
- Landscape Institute Technical Guidance Note (TGN) 06/19 Visual Representation of development proposals (2019).

The above guidance is widely recognised and used by landscape professionals in undertaking LVIA work in Ireland, and is considered to represent best practice in the absence of country-specific LVIA and visualisation guidance/standards.

11.2.4 Computer Generated Images, Photomontages and Wireframes

This LVIA is supported by a variety of computer-generated maps and graphics as well as verifiable photomontages that depict the Proposed Development within the views from a

range of represented visual receptor locations. These maps, graphics and visualisations consist of the following:

- Zone of Theoretical Visibility (ZTV) maps; and
- Photomontages consisting of existing views, wireframe views and proposed views.

11.2.5 Assessment Criteria for Landscape Effect

The classification system used by Macro Works to determine the significance of landscape and visual impacts is in accordance with GLVIA3. When assessing the potential impacts on the landscape resulting from a wind farm development, the following criteria are considered:

- Landscape character, value and sensitivity;
- Magnitude of likely impacts; and
- Significance of landscape effects.

The sensitivity of the landscape to change is the degree to which a particular landscape receptor (Landscape Character Area (LCA) or feature) can accommodate changes or new features without unacceptable detrimental effects on its essential characteristics. Landscape Value and Sensitivity is classified using the following criteria:

Table 11.1 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.
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.

Sensitivity	Description
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.

The magnitude of a predicted landscape impact is a product of the scale, extent or degree of change that is likely to be experienced as a result of the Proposed Development. 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 Site boundary that may have an effect on the landscape character of the area.

Table 11.2 Magnitude of Landscape Impacts

Sensitivity	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.
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.

The significance of a landscape impact is based on a balance between the sensitivity of the landscape receptor and the magnitude of the impact. The significance of landscape impacts is arrived at using the following matrix:

Table 11.3 Landscape Impact Significance Matrix

Scale/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

Note: Judgements deemed 'substantial' and above are considered to be 'significant effects' in EIA terms. Substantial-moderate judgements are considered near significant effects.

11.2.6 Assessment Criteria for Visual Effect

As with the landscape impact, the visual impact of the Proposed Development will be assessed as a function of receptor sensitivity versus magnitude. In this instance, the sensitivity of visual receptors, weighed against the magnitude of visual effects.

11.2.6.1 Visual Sensitivity

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.

Visual sensitivity is a two-sided analysis of receptor susceptibility (people or groups of people) versus the value of the view on offer at a particular location.

To assess the susceptibility of viewers and the amenity value of views, the assessors use a range of criteria and provide a four-point weighting scale to indicate how strongly the

viewer/view is associated with each of the criteria. Susceptibility criteria are extracted directly from the GLVIA3, whilst the value criteria relate to various aspects of a view that might typically be related to high amenity including, but not limited to, scenic designations. These are set out below:

- **Susceptibility of receptor group to changes in view.** This is one of the most important criteria to consider in determining overall visual sensitivity because it is the single category dealing with viewer susceptibility. In accordance with the GLVIA 3 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*
 - 1. *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*
 - 2. *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 typically associated the visual amenity

- **Recognised scenic value of the view** (County 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 Development Plans, at least, a public consultation process is required.
- **Views from within highly sensitive landscape areas.** Again, highly sensitive landscape designations are usually part of a county's Landscape Character Assessment, which is then incorporated with the County Development Plan and is therefore subject to the public consultation process. Viewers within such areas are likely to be highly attuned to the landscape around them.

- **Intensity of use, popularity.** Whilst not reflective of the amenity value of a view, this criterion relates to the number of viewers likely to experience a view on a regular basis and whether this is significant at county or regional scale.
- **Connection with the landscape.** This considers whether or not receptors are likely to be highly attuned to views of the landscape i.e. commuters hurriedly driving on busy national route versus hill walkers directly engaged with the landscape enjoying changing sequential views over it.
- **Provision of 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.** Remote and tranquil viewing locations are more likely to heighten the amenity value of a view and have a lower intensity of development in comparison to dynamic viewing locations such as 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 obvious human interventions.
- **Presence of striking or noteworthy features.** A view might be strongly valued because it contains a distinctive and memorable landscape feature such as a promontory headland, lough or castle.
- **Historical, cultural or spiritual value.** Such attributes may be evident or sensed at certain viewing locations that 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 other similar views might be afforded in the local or the national context.
- **Integrity of the landscape character in view.** This criterion considers 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 criterion considers whether there is special sense of wholeness and harmony at the viewing location.
- **Sense of awe.** This criterion considers whether the view inspires an overwhelming sense of scale or the power of nature.

Those locations where highly susceptible receptors or receptor groups are present, and which are deemed to satisfy many of the view value criteria above are likely to be judged to have a high visual sensitivity and vice versa.

11.2.6.2 Visual Impact Magnitude

The magnitude of visual effects is determined on the basis of two factors: the visual presence of the proposal and its effect on visual amenity.

Visual presence is a somewhat quantitative measure relating to how noticeable or visually dominant the proposal is within a particular view. This is based on a number of aspects beyond simply scale in relation to distance. Some of these include the extent of the view as well as its complexity and the degree of existing contextual movement experienced such as might occur where turbines are viewed as part of/beyond a busy street scene. The backdrop against which the Proposed Development is presented and its relationship with other focal points or prominent features within the view is also considered. Visual presence is essentially a measure of the relative visual dominance of the proposal within the available vista and is expressed as such i.e. minimal, sub-dominant, co-dominant, dominant, highly dominant.

For wind energy developments, a strong visual presence is not necessarily synonymous with adverse impact, specifically being 'noticed' by viewers and contributing memorably to the experience of that view or location – positive or negatively. Instead, the 2018 Fáilte Ireland survey entitled 'Report on Visitor Awareness and Perceptions of the Irish Landscape' summarised results as below:

- *"The majority of visitors appear not to notice the majority of development – even very large and visually prominent structures such as wind turbines and powerlines"*
- *It appears that there are significant divergences between the what can be seen and what is noticed*
- *The majority of visitors expressed very limited desire to change developments that they do notice*
- *The visibility of developments of all types give rise to significantly less adverse effects on the impression of landscape than may often be assumed in the decision-making process*

- *The majority of visible development does not appear to have any adverse effects on the impression of the quality of the landscape”*

With specific regard to wind farms, the following is mentioned within the main report:

- *“Visibility at Locations - Windfarms or Wind Turbines were visible from four locations, they were mentioned by visitors at one location – Cobh. At this site 11% of visitors mentioned noticing wind energy projects*
- *Visibility en-route to locations - Wind Energy projects were mapped as being visible en-route to six sites, they were mentioned by less than 5% of all visitors.”*

The purpose here is not to suggest that turbines are unlikely to be noticed, regardless of the visual presence, but rather to highlight that the assessment of visual impact magnitude for wind turbines is more complex than just the degree to which turbines occupy a view. Furthermore, a clear and comprehensive view of a wind farm might be preferable in many instances to a partial, cluttered view of turbine components that are not so noticeable within a view. On the basis of these reasons, the visual amenity aspect of assessing impact magnitude is qualitative and considers such factors as the spatial arrangement of turbines both within the scheme and in relation to surrounding terrain and land cover. It also examines whether the project contributes positively to the existing qualities of the vista or results in distracting visual effects and disharmony.

It should be noted that as a result of this two-sided analysis, a high order visual presence can be moderated by a low level of effect on visual amenity and vice versa. Given that wind turbines do not represent significant bulk, visual impacts result almost entirely from visual ‘intrusion’ rather than visual ‘obstruction’ (the blocking of a view). The magnitude of visual impacts is classified in the following table derived from the GLVIA 3:

Table 11.4 Magnitude of Visual Impacts

Sensitivity	Description
Very High	The proposal obstructs or intrudes into a large proportion or critical part of the available vista and is without question the most noticeable element. An extensive degree of visual change will occur within the scene completely altering its character, composition and associated visual amenity
High	The proposal obstructs or intrudes into a significant proportion or important part of the available vista and is one of the most noticeable elements. A considerable degree of visual change will occur within the scene substantially altering its character, composition and associated visual amenity
Medium	The proposal represents a moderate intrusion into the available vista and is a readily noticeable element. A noticeable degree of visual change will occur within the scene perceptibly altering its character, composition and associated visual amenity
Low	The proposal intrudes to a minor extent into the available vista and may not be noticed by a casual observer and/or the proposal would not have a marked effect on the visual amenity of the scene
Negligible	The proposal would be barely discernible within the available vista and/or it would not influence the visual amenity of the scene

11.2.6.3 Visual Impact Significance

As stated above, the significance of visual impacts is a function of visual receptor sensitivity and visual impact magnitude. This relationship is expressed in the significance matrix in **Table 11.3** above.

11.2.6.4 Quality and Duration of Effects

In addition to assessing the significance of landscape/townscape effects and visual effects, EPA Guidance requires that the quality of the effects is also determined. This could be negative/adverse, neutral, or positive/beneficial.

- Positive Effects: A change which improves the quality of the environment;
- Neutral and/or balanced Effects: No effects, or effects that are imperceptible, within normal bounds of variation or within the margin of forecasting error; and
- Negative/adverse Effects: A change that reduces the quality of the environment.

The same EPA guidelines also set out categories of impact duration:

- Temporary – Lasting for one year or less;
- Short Term – Lasting one to seven years;
- Medium Term – Lasting seven to fifteen years;
- Long Term – Lasting fifteen years to sixty years; and

- Permanent – Lasting over sixty years.

In the case of commercial wind energy developments and the associated introduction of new moving structures within rural and upland areas, the quality of the landscape and visual effects will almost always be negative, rather than positive or even neutral. Unless otherwise stated, the quality of the landscape and visual effect judgements herein can be taken as negative.

In terms of duration, the proposed turbines will have a long-term impact, as permission is being sought for a 40 year period after which the turbines will be decommissioned. Some other elements of the Proposed Development relating to access tracks, enhanced amenity trails and elements of the grid connection will likely remain in perpetuity and will therefore have Permanent effects.

11.2.7 Assessment Criteria for Cumulative Effects

NatureScot's 'Guidance – Assessing the Cumulative Effects of Onshore Wind Farms' (2021) is considered a key reference with regard to cumulative landscape and visual impacts. GLVIA3 provides comparable guidance in relation to cumulative issues, whilst recognising that it is an emerging area of study.

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 subsequent consideration of cumulative impacts with other forms of development (existing, permitted or proposed).

In relation to cumulative landscape impacts, the NatureScot guidance states:

“Cumulative landscape impacts can change either the physical fabric or character of the landscape, or any special values attached to it. For example:

- *Cumulative impacts on the physical fabric of the landscape arise when two or more developments affect landscape components such as woodland, dykes, rural roads or hedgerows. Although this may not significantly affect the landscape character, the cumulative effect on these components may be significant – for example, where the last remnants of former shelterbelts are completely removed by two or more developments.*
- *Cumulative impacts on landscape character arise when two or more developments introduce new features into the landscape. In this way, they can change the*

landscape character to such an extent that they create a different landscape character type, in a similar way to large scale afforestation. That change need not be adverse; some derelict or degraded landscapes may be enhanced as a result of such a change in landscape character, especially where opportunities for new woodland planting, or peatland restoration are maximised, for example.”

In relation to cumulative visual impacts, the NatureScot guidance states:

Cumulative impacts on visual amenity can be caused by ‘combined visibility’ and/or ‘sequential impacts’:

- *Combined visibility occurs where the observer is able to see two or more developments from one viewpoint. Assessments should consider the combined effect of all wind farms which are (or would be) visible from relevant viewpoints. 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 impacts occur when the observer has to move to another viewpoint to see different developments. Sequential impacts should be assessed for travel along regularly-used routes like major roads, railway lines, ferry routes, popular paths, etc. The magnitude of sequential effects will be affected by speed of travel and distance between viewpoints’*

The 2006 WEDG describes a cumulative effect as “*the perceived effect on the landscape of two or more wind energy developments visible from any one place*”, and provides guidance as to the aesthetic effects of multiple turbine developments in various landscape contexts. It also requires that cumulative effects are represented using Zone of Theoretical Visibility maps that show other wind energy developments.

Based on both sets of guidance (NatureScot and 2006 WEDG), cumulative impacts 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 with 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 wind farm 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 11.5 provides Macro Works' criteria for assessing the magnitude of cumulative impacts. The approach adopted is informed by the NatureScot Guidelines (2021) and GLVIA3, but adopts a study area (20 km) that is consistent with the main assessment to retain a proportionate focus on the most notable effects. As industry-specific guidance for the assessment of cumulative landscape and visual effects, this guidance is widely adopted for LVIA work and is considered best practice in Ireland, and the approach adopted in relation to many other schemes across Ireland.

Other wind energy developments are the most relevant type of development in a cumulative LVIA assessment given the comparable characteristics. In this regard, small and domestic-scale wind turbines are generally not considered relevant given their proportions and potential to generate notable cumulative effects. Given the potentially extensive scope of including all other types of development within a cumulative LVIA, a proportionate level of consideration is given to schemes that are considered to have the potential to significantly alter the cumulative landscape and visual Baseline environment. Factors such as scale and proximity of a proposed development are important factors, in addition to the characteristics of the development in question.

Table 11.5 – Magnitude of Cumulative Impacts

Criteria	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.

11.3 BASELINE DESCRIPTION

11.3.1 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 Project will be assessed. This also includes reference to any relevant landscape character appraisals and the current landscape policy context (both are generally contained within County Development Plans).

A description of the landscape context of the proposed wind farm Site and Wider Study Area is provided below under the headings of landform and drainage, vegetation and land use, centres of population, transport routes and public amenities and facilities as well as the immediate site context.

Additional descriptions of the landscape, as viewed from each of the selected viewpoints, are provided under the detailed assessments later using a similar structure. Although this description forms part of the landscape Baseline, many of the landscape elements identified also relate to visual receptors i.e. places and transport routes from which viewers can potentially see the proposed development. The visual resource will be described in greater detail below. **Figure 11.2** shows the site and its immediate surrounding landscape context.

11.3.2 Landform and Drainage

This is a varied and dynamic landscape that comprises a multitude of landforms and landscape features. Indeed, much of the study area comprises elevated rolling hills, ridges and rocky outcrops, with the Site situated along an elevated ridge that extends in a general east–west direction southwest of the summit of Shehy More. Shehy More rises to a maximum elevation of c. 545.6m AOD and is one of the most elevated parts of the Central Study Area, whilst the most elevated part of the Site rises to a height of c. 446m AOD. In terms of watercourses, several small streams descend from the elevated lands that contain the site in all directions. Several of these flow into the Ouvane River, which is the nearest notable watercourse to the site and flows in the southwesterly direction some c. 3.5 km northwest of the Site. Lough Nambrackderg is a small upland lough located less than c. 1km north of the Site, whilst Lough Allue is the largest inland waterbody within the Study Area and is situated just over c.5 km from the proposed turbines at its nearest point. Other notable watercourses and lakes within the study area include the River Lee, which flows out from Gouganebarra Lake in the northern half of the study area and is located c. 6km north of the site at its nearest point. The Gougane Barra complex is a highly distinctive glacial landform that comprises a broad lake enclosed by steep escarpments and surrounding elevated ridges and is located some c. 7km northwest of the site. Numerous other elevated hills, upland ridges and mountaintop summits occur throughout the Wider Study Area, most notably within its northwest quadrant along the Kerry – Cork County border. The westernmost extent of the study area also comprises an area of coastline encompassing broad bays, coastal inlets and small islands.

11.3.3 Vegetation and Land use

In terms of land use, the Central Study Area generally comprises extensive areas of mountain moorland and sizeable commercial conifer forests. Jagged rocky outcrops and areas of scrubby vegetation are also typical in the most elevated upland parts of the study area, whilst the lower winding valleys are characterised by pastoral farmland and areas of transitional scrub. Due to the site's relatively remote location, there are no notable settlements within the Central Study Area. Nonetheless, the Wider Study Area comprises several notable settlements, including Bantry, Drimoleague and Dunmanway. The central and wider study also

encompasses numerous existing wind farm developments, the nearest of which is Shehy More Wind Farm (c. 180 m northwest), which is situated immediately north of the site and extends across the northern extents of Shehy More Mountain. Wind Energy development can be found throughout the Wider Study Area's northern and southern extent. Other notable land uses include the N22 and N71 national route corridors, which are situated in the wider northeast and southwest periphery of the study area, respectively.

11.3.4 Landscape Policy Context and Designations

11.3.4.1 The Department of Environment, Heritage and Local Government Wind Energy Development Guidelines (2006/2019 revision)

The Wind Energy Development Guidelines (2006/2019 draft revision) provide guidance on wind farm siting and design criteria for a number of different landscapes types. The site of the Proposed Development is considered to be located within a relatively complex and dynamic landscape setting that is most consistent with the 'Mountain Moorland' type from the Wind Energy Development Guidelines. However, the wider context does encompass characteristics from a mix of the landscape types including, 'Transitional Marginal Landscapes' and 'Hilly and Flat Farmland'.

The most relevant recommendations for the 'Mountain Moorland' Landscape type are set out below, but with consideration of the guidance relating to other relevant landscape types considered thereafter.

Mountain Moorland:

Location –	<i>“Ridges and saddles are generally acceptable.”</i>
Spatial extent -	<i>“Tend towards large, depending on scale of actual context”</i>
Spacing -	<i>“Any spacing may be acceptable, but regular spacing may be best on a simple ridge or on broad sweeping areas.”</i>
Layout -	<i>“Any layout may be acceptable, but random or clustered may be best on ridges and hilltops, respectively, and grid on broad sweeping areas”</i>
Height -	<i>“There would generally be no height restrictions on mountain moorlands as the scale of the landscape is so great.....Profile, whether even or uneven is dependent on topography: the more rugged and undulating the more uneven it will be”</i>

Cumulative - *“The open expanse of such landscapes can absorb a number of wind energy development, depending on their proximity. The cumulative impact will also depend on the actual visual complexity of landform, whether steeply rolling, undulating or gently sweeping.”*

It is considered that the siting and design of the Proposed Development is generally consistent with the guidance noted above for the 'Mountain Moorland' landscape type. In combination with the recommendations for 'Mountain Moorland' landscape type, the siting and design recommendations for the 'Transitional Marginal Landscapes' and 'Hilly and Flat Farmland' landscape types have also been considered when designing the turbine layout for the proposed Gortloughra Wind Farm as a result of the varied nature of the landscape within the Central and Wider Study Area. Most design options appear to be appropriate for 'Mountain Moorland' and vary depending on the specific site. The design of the Proposed Development is in keeping with the Wind Energy Development guidance, which states *“Ridges and saddles are generally acceptable”*, whilst the 175m tip height turbines are considered appropriate in this instance and are consistent with the guidance which states *“There would generally be no height restrictions on mountain moorlands as the scale of the landscape is so great”*.

Siting in Relation to Individual Properties ('Setback')

Section 6.18 of the Draft Revised Wind Energy Development Guidelines (December 2019) refers to appropriate setback distances for visual amenity purposes. It is important to note that there are no setback distance for visual amenity purposes outlined in the current 2006 WEGs. The guidelines (Draft 2019) 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 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 planning 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 to any of the proposed turbines is approximately 486m from the nearest turbine (T8), although this property is involved in the Project. All other receptors exceed the setback distance outlined in the both the current 2006 Guidelines and the Draft Revised Guidelines (2019).

11.3.5 Cork County Development Plan 2022-2028

The Cork County Development Plan 2022-2028 (Volume 1) includes Chapter 14 'Green Infrastructure and Recreation', within which sub-section 14.7 relates to landscape. A number of general objectives relating to landscape are noted within this chapter and are included below:

GI 14-9: Landscape

- a) *"Protect the visual and scenic amenities of County Cork's built and natural environment.*
- b) *Landscape issues will be an important factor in all land-use proposals, ensuring that a pro-active view of development is undertaken while maintaining respect for the environment and heritage generally in line with the principle of sustainability.*
- c) *Ensure that new developments meets high standards of siting and design.*
- d) *Protect skylines and ridgelines from development.*
- e) *Discourage proposals necessitating the removal of extensive amounts of trees, hedgerows and historic walls or other distinctive boundary treatments."*

GI 14-10: Draft Landscape Strategy

"Ensure that the management of development throughout the County will have regard for the value of the landscape, its character, distinctiveness and sensitivity as recognised in the Cork County Draft Landscape Strategy and its recommendations, in order to minimize the visual and environmental impact of development, particularly in areas designated as High Value Landscapes where higher development."

A Landscape Character Assessment was undertaken as part of the Draft Cork Landscape Strategy (2007). This has been incorporated within the Cork County Development Plan (2022-2028) and divides the county into 16 No. Landscape Character Types (LCTs) – refer to **Figure 11.4** The Proposed Development is situated entirely within the Landscape Character Type '15a Ridge and Peaked Upland', which is classified with a; 'High' landscape sensitivity; 'High' Landscape Value; and 'Local' level Landscape Importance (**Figure 11.5 refers**). The Central Study Area also encompasses two other contrasting LCTs and includes 'LCT 12b - Rolling Marginal and Forested Middleground' located immediately to the east of the site and 'LCT 16b – Glaciated Cradle Valleys' located c. 2km south of the nearest proposed turbine. LCT12b is classified with a 'Medium' landscape sensitivity; 'Medium' Landscape Value; and 'Local' level Landscape Importance, whilst LCT16b is classified with a 'Low' Landscape Sensitivity; 'Medium' Landscape Value; and 'Local' level Landscape Importance.

Within the draft Cork Landscape Strategy (2007), LCT 15a *"flanks much of the mid-western boundary of County Cork, from the vicinity of Bantry in the south to Millstreet in the north. This landscape type has been glaciated and comprises a fairly rugged and rolling mountainous topography at a relatively high elevation. The area around the Cousane Gap provides a good example of this landscape type which is inclined towards the rugged whereas the southern slopes of the Boggeragh Mountains further to the north in type 15B are a somewhat smoother example, thus adding to the openness of the moorland. These are often delineated by tight gorse hedgerows, walls, banks or post and wire fencing and punctuated by coniferous or broadleaf shelterbelts around small farmsteads. The landscape, with its rapid and steep rising and falling, seems to tumble down along the valleys. The rugged and diverse landcover, involving moorland, heath and scrub, lends a strong sense of the naturalistic."*

LCTs within the Wider Study Area include, 'LCT4 - Rugged Ridge Peninsulas', 'LCT6a – Broad Fertile Lowland Valleys', 'LCT8 – Hilly River and Reservoir Valleys', 'LCT9 – Broad Marginal Middleground and Lowland Basin', 'LCT10a – Fissured Fertile Middleground', 'LCT12a – Rolling Marginal Middleground', 'LCT13a – Valleyed Marginal Middleground', 'LCT15b – Ridged and Peaked Upland', 'LCT16a and LCT16c Glaciated Cradle Valleys'.

The value of the landscape in county Cork *"is defined as the environmental or cultural benefits, including services and functions, which are derived from various landscape attributes. Value is evaluated using criteria ranging from Very High to Low"*. The current CDP defines High Value Landscapes as *"Landscape Character Types which have a very high or high landscape value and high or very high landscape sensitivity and are of county or national*

importance are considered to be our most valuable landscapes and therefore are designated as High Value Landscapes (HVL)” It should be noted that the Proposed Development is not situated in an area recognised as HVL, however and the nearest HVL designation is located some c. 6.1km northwest of the site and relates to ‘LCT16a – Glaciated Cradle Valleys’ (refer to Error! Reference source not found.).

A number of general recommendations are outlined in the Draft Cork County Landscape Strategy regarding LCT15a, some of which relate to the Proposed Development:

LCT 15a – Ridged and Peaked Upland (Mullaghanish to Millstreet)

- *“Protect the unique setting and character of villages like Ballingeary and Inchigeelagh.*
- *Recognise the scenic value of the Cousane Gap as a valuable tourist attraction in this LCT.*
- *Recognise the value of Lough Allua as a valuable amenity for tourism and recreational activities.*
- *Recognise the value of the upland areas (Shehy Mountains) in this LCT particularly as a tourism resource for hill walking.*

11.3.5.1 Cork County Development Plan 2022-2028 – Wind Energy Policy

Section 13.6 of the Cork County Development Plan 2022-2028 covers onshore wind energy within County Cork. A number of objectives relating to the Proposed Development are outlined therein:

County Development Plan Objective ET 13-4: Wind Energy - *In order to facilitate increased levels of renewable energy production consistent with national targets on renewable energy and climate change mitigation as set out in the National Energy and Climate Plan 2021-2030, the Climate Action Plan 2021, and any updates to these targets, and in accordance with Ministerial Guidelines on Wind Energy Development, the Council will support further development of on-shore wind energy projects including the upgrading, repowering or expansion of existing infrastructure, at appropriate locations within the county in line with the Wind Energy Strategy and objectives detailed in this chapter and other objectives of this plan in relation to climate change, biodiversity, landscape, heritage, water management and environment etc.*

County Development Plan Objective ET 13-5: Wind Energy Projects (b) - *On-shore wind energy projects should focus on areas considered ‘Acceptable in Principle’ and ‘Areas Open to Consideration’ and generally avoid “Normally Discouraged” areas as well as sites and locations of ecological sensitivity.*

Figure 13.2 of the Cork County Development Plan 2022-2028 shows a map with policy considerations for wind energy projects (**Figure 11.8** refers) and identifies areas likely to be most suitable for wind energy developments. Whilst the site is not situated within one of the areas identified as '*likely to be most suitable*', nor is it situated in areas designated as important landscape (Medium or High).

Section 13.6 of the Cork County Development Plan 2022-2028 covers onshore wind energy within County Cork. A number of objectives relating to the Proposed Development are outlined therein:

development in relation policy considerations for wind energy projects.

Figure 9.3 of the County Development Plan identifies areas of the county where wind energy developments are '*Accepted in Principle*', '*Open to consideration*' and '*Normally discouraged*' (Figure 11.9 refers).

The Proposed Development is entirely situated in an area designated as '*Open to Consideration*'. These areas are "*locations that may have potential for wind farm developments but there are also some environmental issues to be considered. This area has variable wind speeds and some access to the grid. Urban areas, metropolitan/town green belts, and Natural Heritage Areas (NHA's) within this area are not generally considered suitable for wind farm developments*". Objectives outlined within the Cork County Development Plan relating to areas identified as '*open to consideration*' are included below:

"County Development Plan Objective ED 13-7: Open to Consideration - Commercial wind energy development is open to consideration in these areas where proposals can avoid adverse impacts on:

- *Residential amenity particularly in respect of noise, shadow flicker and visual impact;*
- *Urban areas and Metropolitan/Town Green Belts;*
- *Natura 2000 Sites (SPA and SAC), Natural Heritage Areas (NHA's) or adjoining areas affecting their integrity.*
- *Architectural and archaeological heritage;*
- *Visual quality of the landscape and the degree to which impacts are highly visible over wider areas."*

The nearest '*normally discouraged*' wind energy designation is situated outside of the Central Study Area some c. 6.1km to the northwest of the site and relates to the 'LCT16a – Glaciated Cradle Valleys'. The nearest '*Acceptable in Principle*' designation is located a similar distance

to the south of the site and is associated with 'LCT 9 – Broad Marginal Middleground and Lowland Basin'.

11.3.6 Kerry County Development Plan 2022 – 2028

Section 11.6 of this relates to the landscapes and refers to a landscape review for the County Kerry, where “the landscapes of the county are described in terms of their type, the impact of various types of development on these landscapes are assessed, landscape areas are defined, with the visual sensitivity of these then determined”. The landscape review identifies 40 landscape character areas throughout County Kerry. The most relevant of these include LCA 38: Owbaun, Slaheny and Roughty River Valleys and LCA 40: Upper Sheen River Valley, both of which are classified with a 'Medium/High' landscape sensitivity. It is also important to note that almost the entirety of the landscape of Kerry in the northwest quadrant of the Wider Study Area is classified as 'Visually Sensitive Areas'. These areas are described as *“the outstanding landscapes throughout the County which are sensitive to alteration. Rugged mountain ranges, spectacular coastal vistas and unspoilt wilderness areas are some of the features within this designation.”*

11.3.7 Visual Baseline

11.3.7.1 Zone of Theoretical Visibility (ZTV)

Only those parts of the Study Area that potentially afford views of the Proposed Development are of interest to this part of the assessment. Therefore, the first part of the visual Baseline is establishing a 'Zone of Theoretical Visibility' and subsequently, identifying important visual receptors from which to base the visual impact assessment.

A computer generated Zone of Theoretical Visibility (ZTV) map has been prepared to illustrate where the Proposed Development is potentially visible from. 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 Development will definitely not be visible, due to terrain screening within the 20 km Study Area.

The following key points are illustrated by the 'bare-ground' ZTV map (**Figure 11.10** refers):

- The key point to note from the ZTV is that due to the heavily rolling nature of the terrain within the surrounding landscape, over half of the study area will afford no visibility of the proposed turbines.

- With regard to the Central Study Area, the most notable potential for comprehensive theoretic visibility relates to its southern half, where theoretic visibility of all 8 turbines has the potential to be afforded along sections of the R585 regional road and along the rolling hills further to the south.
- Within the eastern extent of the Central Study Area a splay of theoretic potential visibility where views of up to 8 turbines have the potential to be afforded.
- In the northern and western extents of the Central Study Area, the theoretical potential for visibility ranges between views of one to eight turbines, with the most elevated locations affording theoretical visibility of a higher number of turbines than the lower winding valleys.
- The wider southeast quadrant of the Study Area accounts for the most notable area of comprehensive theoretic visibility throughout the full 20 km Study Area, although it is important to note that broad areas of no visibility are also located within this quadrant of the Study Area.
- In contrast to the southeast quadrant, the southwest quadrant accounts for the most notable area of no turbine visibility, with the only notable areas of theoretic visibility occurring in the surrounds of the coastal settlements of Bantry and Ballylicky.
- In the northern half of the Wider Study Area, there are some sporadic areas of theoretic visibility ranging from views of all eight turbines to views of up to two turbines. These areas are principally associated with elevated hills, ridges and mountaintop summits. The northern extent of the Wider Study Area, especially northwest of the Kerry County bounds has very limited potential for visibility of the proposed turbines due to the high degree of terrain screening in this aspect of the study area. Whilst there will be some potential for theoretical visibility of the proposed turbines on the local access roads to Gougane Barra, there will be no potential for turbine visibility from the immediate surrounds of the Lough, which is a highly sensitive receptor.
- Within the Wider Study Area, there will be no or limited visibility of the proposed turbines at the centre of the settlements of Drimoleague, Ballygeary, Ballyvourney and Ballineen.

11.3.7.2 Views of Recognised Scenic Value

Views of recognised scenic value are primarily indicated within County Development Plans in the context of scenic views/routes designations, but they might also be indicated on touring maps, guidebooks, road-side rest stops or on post cards that represent the area.

All of the scenic routes and views in both Cork and Kerry that fall inside the ZTV pattern (**Figure 11.10**) were investigated during fieldwork to determine whether actual views of the Proposed Development might be afforded. Where visibility may occur, a viewpoint has been selected for use in the visual impact appraisal later in this chapter (representative viewpoints are highlighted on Figure 11.11 below and in the accompany photomontage booklet).

Table 11.6 Rational for selection of scenic designations within the relevant County Development Plans

Scenic View or Route Reference (CDP):	Relevance to visual impact appraisal?	Represented herein by VRP No.
Cork County Development Plan 2022-2028 – Scenic Routes		
S23	Not relevant – Limited potential for any clear turbine visibility from this heavily contained section of the N22	-
S24	Not relevant – Located outside of ZTV	-
S25	Yes relevant – Potential for distant views of the proposed turbines	VP1
S26	Yes relevant – Potential for distant views of the proposed turbines	VP1
S27	Yes relevant – Potential for distant views of the proposed turbines	VP2 & VP5
S28	Yes relevant – Potential for views to be afforded of the proposed development	VP13
S29	Yes relevant – Potential for views to be afforded of the proposed development	VP20, VP22, VP23, VP24
S30	Yes relevant – Potential for views to be afforded of the proposed development	VP27
S31	Yes relevant – Potential for distant views of the proposed turbines	VP29
S32	Yes relevant – Potential for distant views of the proposed turbines	VP8, VP12
S33	Yes relevant – Potential for distant views of the proposed turbines	VP8
S34	Yes relevant – Potential for distant views of the proposed turbines	VP6, VP3

Scenic View or Route Reference (CDP):	Relevance to visual impact appraisal?	Represented herein by VRP No.
S35	Yes relevant – Potential for distant views of the proposed turbines	V4
S36	Yes relevant – Potential for distant views of the proposed turbines	VP9
S92	Not relevant – Located outside of ZTV	
S111	Yes relevant – Potential for distant views of the proposed turbines	VP30
Kerry County Development Plan 2022-2028 – Protected Views		
Note: the current Kerry County Development Plan includes a selection of scenic views and prospects in Volume 4. Nonetheless, none of these located within the wider northern aspects of the study area are located within ZTV. Thus, these protected views and prospects are not considered relevant to the proposed development.		

Policy relating to scenic designations in both the Cork and Kerry County Development Plans is included below;

Cork CDP

GI 14-12: General Views and Prospects - Preserve the character of all important views and prospects, particularly sea views, river or lake views, views of unspoilt mountains, upland or coastal landscapes, views of historical or cultural significance (including buildings and townscapes) and views of natural beauty as recognized in the Draft Landscape Strategy.

GI 14-13: Scenic Routes - Protect the character of those views and prospects obtainable from scenic routes and in particular stretches of scenic routes that have very special views and prospects identified in this Plan. The scenic routes identified in this Plan are shown on the scenic amenity maps in the CDP Map Browser and are listed in Volume 2 Heritage and Amenity Chapter 5 Scenic Routes of this Plan.

GI 14-14: Development on Scenic Routes -

Require those seeking to carry out development in the environs of a scenic route and/or an area with important views and prospects, to demonstrate that there will be no adverse

obstruction or degradation of the views towards and from vulnerable landscape features. In such areas, the appropriateness of the design, site layout, and landscaping of the proposed development must be demonstrated along with mitigation measures to prevent significant alterations to the appearance or character of the area.

Encourage appropriate landscaping and screen planting of developments along scenic routes (See Chapter 16 Built and Cultural Heritage).

Kerry CDP

KCDP 11-79: *Preserve the views and prospects as defined on Maps contained in Volume 4.*

KCDP 11-80: *Facilitate the sustainable development of existing and the identification of new Viewing Points along the route of the Wild Atlantic Way in conjunction with Fáilte Ireland, while ensuring the protection of environmental attributes in the area through the implementation of environmental protection objectives, standards and guidelines of this Plan.*

KCDP 11-81: *Prohibit developments that have a material effect on views designated in this plan from the public road or greenways towards scenic features and/or public areas.*

11.3.7.3 Centres of Population and Houses

Due to the remote character of much of the Central Study Area, which comprises upland hills, ridges and mountaintop summits, there is a relatively modest rural population density. With regard to settlements, the only settlement within the Central Study Area is Togher Village, which is located c. 4.7km southeast of the nearest turbine. Aside from this, the only other notable centres of population are small linear clusters of dwellings and cross-road settlements.

Whilst the Wider Study Area shares similar characteristics to the Central Study Area, there is a more notable agglomeration of settlements. The most notable of these is the coastal town of Bantry, located some 16km southwest of the site at its nearest point. Other notable settlements in the Wider Study Area include the towns and villages of Ballingeary (c. 7km north), Inchigeelagh (c. 8.5 km northeast), Kealkill (c. 9km southwest), Dunmanway (c. 9.5 km southeast) and Drimoleague (c. 12.5 km south). Several other small settlements are also located along the wider periphery of the Study Area and include Ballylickey, Drinagh, Ballyvourney and Kilgarvan.

11.3.7.4 Transport Routes

The most notable major transport route in relation to the Proposed Development is the R585 regional road, which traverses the Study Area in an east-west direction through the Cousane Gap and is located some c. 1.3km south of the turbine array at its nearest point. The R584 is the only other major route within the Central Study Area, some 3.5 km northwest of the Site. Aside from these routes, the Central Study Area also encompasses several local roads, the nearest of which is the L8776 local road, which traverses east-west through the Study Area and is some c. 750 m north of the nearest turbine in the array at its nearest point. A network of crisscrossing local roads also traverses the Central Study Area, most of which are contained in its eastern half.

Within the Wider Study Area, the most notable major routes include the N22 national primary route and N71 national secondary route, which are located some c. 17km northeast and c. 14.4km southwest of the Site. The Wider Study Area also encompasses a web of interconnecting local and regional roads.

11.3.7.5 Tourism, Recreational and Heritage Features

Due to the complex and varied nature of the landscape within the Study Area, there are several notable tourism and recreational features that pass through the surrounding landscape context.

The Wild Atlantic way is a popular tourist driving route, which occurs along the western coastline of Ireland stretching from Derry at the very northern tip of the country all the way to Kinsale in County Cork. The route enters the Study Area along the coastline in the wider western periphery of the Study Area and skirts around the coastal promontories in the surrounds of Bantry. The Wild Atlantic Way route passes just over c. 14km west of the Site at its nearest point.

The Eurovelo is a network of up to 17 long-distance cycling routes that crisscross Europe. The most relevant of these is the Atlantic Coast route which traverses the northwest and southern coastline of Ireland. Whilst the section of this route along the southwest coast is still under development, it will pass along the coastal parts of the Study Area, and follows the same path as the Wild Atlantic Way within the Study Area.

Due to the elevated and rolling nature of the Study Area, numerous walking trails and cycling trails criss-cross the Study Area. The most notable of these include the Slí Gaeltacht Mhuscraí, the Beara Way and the Sheep's Head Way national waymarked walking trail, all

of which occur throughout the northern, western and southwestern extents of the Study Area. A selection of other local walks and looped trails also occur within the wider surrounds of the Study Area. Some of the most notable of these are the Gougane Barra Loop trails, which are located throughout a dense conifer forest to the west of the Gougane Barra Lake. The Gougane Barra complex itself is also a notable tourism and recreation receptor within the Study Area and St Finabarr's Church and notable heritage feature located along a small island on the lake.

It should also be noted that the site encompass several new looped walking and hiking trails (Shehy Trails) that emanate from a newly constructed car park located to the southwest of the westernmost turbine in the array. Some of these trails will follow existing tracks that traverse the site, whilst others will follow new trails along elevated sections of the upland terrain that characterises much of the site. The looped walking trails also encompass several local heritage features, all of which are outlined in the AIA (refer to **Chapter 13**)

The study area also encompasses an array of heritage features, including Carriganass Castle, Kealkill Stone Circle, Clodagh Standing Stones, Castledonavan, Meighan's Crannóg and Carrignacurra Castle.

11.3.7.6 Identification of Viewshed Reference Points as a Basis for Assessment

The results of the ZTV analysis provide a basis for the selection of Viewshed Reference Points (VRP's), which are the locations used to study the landscape and visual impact of the Proposed Development in detail. It is not warranted to include each and every location that provides a view of the Proposed Development as this would result in an unwieldy report and make it extremely difficult to draw out the key impacts arising from the project. Instead, a variety of receptor locations was selected that are likely to provide views of the Proposed Development from different distances, different angles and different contexts. In all instances, every effort has been made to select the clearest views of the Proposed Development from the relevant receptor type.

The visual impact of a Proposed Development is assessed using up to 6 categories of receptor type as listed below. These categories are derived from both GLVIA3 and best practice:

- Key Views (from features of national or international importance) (KV);
- Designated Scenic Routes and Views (DSR);

- Local Community views (LCV);
- Centres of Population (CP);
- Major Routes (MR); and
- Amenity and heritage features (AH).

Where a VRP 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 VRPs 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 (DSR)

Due to their identification in the County Development Plan, this type of VRP 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 VRP represents those people who live and/or work in the locality of the Proposed Development, usually within a 5 km radius of the site. Although the VRPs are generally located on local level roads, they also represent similar views that may be available from adjacent houses. The precise location of this VRP 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 VRPs is necessary in order to sample the spectrum of views that would be available from surrounding dwellings.

Centres of Population (CP)

VRPs 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 site. The VRP 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 rail lines and are relevant VRP locations due to the number of viewers potentially impacted by the Proposed Development. The precise location of this category of VRP is not critical and might be chosen anywhere along the route that provides clear views towards the 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.

The Viewshed Reference Points selected in this instance are set out in **Table 11.7** below and shown on the VP selection Map in the Photomontage Booklet.

Table 11.7 Outline description of selected Viewshed Reference Points (See Viewpoint Location Map Figure 11.11)

VRP No.	Location	Distance to Nearest Turbine(km)	Representative of	Direction of view
VP1	Local road at Cahernacaha	10.9km – T2	DSR, AH	S
VP2	Local road at Derreenlunnig	7.9km – T1	DSR, AH	SE
VP3	R548 at Ballingeary	7.4km – T2	DSH, CP, MR	S
VP4	Local road at Rossmore	12.5 km – T6	DSR	SW
VP5	Local road east of Gougane Barra Lake	7.8km – T1	DSR, AH	SE
VP6	R584 at Currahy north of Lough Allua	6.0 km – T6	DRS, MR	SW
VP7	Local cemetery at Inchigeelagh	9.3km – T6	AH, CP	SW
VP8	Local road at Kealvaugh More	4.8km – T2	DSR, LCV	S
VP9	Local road at Lisnacuddy	17km – T6	DSR	W
VP10	L8776 at Cornery east of Cloghboola Bridge	1.7km – T2	LCV	S
VP11	Local road laneway at Shehy More	2.5 km – T6	LCV	SW
VP12	Local road at Lakabaun	4.4km – T6	LCV, DSR	SW
VP13	R584 at Curraglass	4.1km T1	LCV, DSR, MR	SE
VP14	L8776 at Douce	1.1km – T1	LCV	SE
VP15	Local road at Coolmountain	2.3km – T6	LCV	W
VP16	Local road at Shanacrane East	1.9km – T6	LCV	W
VP17	Local road at Shanacrane West	1.1km – T9	LCV, AH	NW
VP18	Local road laneway at Cousane	714m – T7	LCV	N
VP19	Local road at Cousane, southwest of site	2.3km – T7	LCV	NE
VP20	R585 at Derragh	1.5 km – T9	MR, LCV, DSR	NW
VP21	Local road south of Shnacrane Cross at Keenrath	3.9km – T9	LCV	NW

VRP No.	Location	Distance to Nearest Turbine(km)	Representative of	Direction of view
VP22	R585 at Glancycarney	1.7km – T7	DSR, MR, LCV	N
VP23	R585 Cousane Gap at Glancycarney	2.0 km – T7	DSR, MR, LCV	NE
VP24	R585 at Maughanaclea	4.3km – T7	DSR, MR, LCV	NW
VP25	Local road at Carriganass	9.9km – T7	AH, CP	E
VP26	Kealkill Stone Circle	9.4km – T7	AH	NE
VP27	Local road at Carrigskullihy	5.9km – T9	DSR	NW
VP28	Ros Geal Residential Housing Estate, Dunmanway	10.6km – T9	CP	NW
VP29	Local road at Grillagh	16.7km – T6	DRS	NW
VP30	Bantry Abbey Cemetery	19.4km – T7	DRS, MR, AH	NE

11.4 MITIGATION MEASURES

Outside of those landscape and visual mitigation measures that formed part of the iterative design process of this Proposed Development over a number of years, and which are embedded in the assessed project, other specific landscape and visual mitigation measures are not considered necessary / likely to be effective. Thus, the impacts assessed in **Section 11.4** are the equivalent of residual impacts in this instance.

11.5 MONITORING MEASURES

Given that there are no specific mitigation measures proposed in regard to the moderation of landscape and visual effects, monitoring measures are not required. It is reiterated however, that an Environmental Manager / Ecological Clerk of Works (ECoW) with appropriate experience will be appointed for the duration of the construction phase so that the CEMP is effectively implemented. This will include replacement landscaping works.

11.6 ASSESSMENT OF POTENTIAL EFFECTS

11.6.1 Do Nothing Effects

In this instance the do-nothing effect would be that the receiving landscape stays in the same or similar condition as it currently is, managed for a combination pastoral farmland and/ or forestry or left as semi-naturalistic moorland.

11.6.2 Landscape Character, Value and Sensitivity

Central Study Area (<5 km)

Landscape value and sensitivity are considered in relation to a number of factors highlighted in the GLVIA3, which are set out below and discussed relative to the Central and Wider Study Area.

The Central Study Area is a dynamic landscape that comprises a multitude of varying landscape features and elements. Nonetheless, it is principally dominated by elevated upland hills, ridges and mountaintop summits and has a relatively remote character due to the rugged and elevated nature of the surrounding landscape context. In terms of land use, the majority of the more elevated lands within the Central Study Area are cloaked in extensive areas of mountain moorland, rocky outcrops and broad commercial conifer forest plantations. Within the lower winding valleys, there is a more notable agglomeration of more typical rural land uses such as agricultural farmland, networks of dense mixed hedgerows and isolated farmsteads.

Whilst there is some sense of the naturalistic within the Central Study Area, which principally relates to rugged rocky outcrops and broad areas of mountain moorland, the immediate surrounds of the Site are also characterised by extensive commercial conifer forest plantations, whilst existing access tracks traverse some of the most elevated parts of the site and diminish any strong sense of remoteness or the naturalistic. Nonetheless, some of the most highly scenic and rugged parts of the Study Area are associated with the landscape in the immediate surrounds of the Cousane Gap. A scenic route designation (S29) in the Cork CDP traverses the central part of the Cousane Gap, where a notable sense of containment is afforded, whilst views across the surrounding rolling landscape are afforded as you exit its more contained sections of the Gap to the east and west. Despite the elevated nature of much of the Central Study Area, the surrounding landscape also presents with a notable working character, which is principally related to the notable accumulation of commercial conifer forest plantations, whilst an existing 12-turbine wind farm development is also located throughout the northern and eastern half of the Central Study Area.

With regard to settlements within the Central Study Area, the surrounding landscape has a relatively modest rural population, with the only notable settlement being the small village settlement of Togher Village located in its southeast extent. Otherwise, the Central Study

Area comprises small linear clusters of dwellings and isolated rural dwellings that are principally located along low-lying winding valleys and sloping hillsides.

As noted above, there is some designated scenic amenity within the Study Area, which predominately relates to designated scenic routes in the current Cork CDP. The nearest of these is the aforementioned S29 Cousane Gap Scenic route, which affords a strong sense of containment by surrounding terrain and vegetation, whilst also encompassing some broad views across the rolling distant landscape. Other designated scenic views within the Central Study Area include the S28 scenic route located along a contained valley in its western extent, whilst sections of the S32 and S33 scenic routes occur in its northeast quadrant and afford both contained views along valleys and broad panoramic views from elevated hilltops and ridges. Whilst some of these scenic designations provide heavily contained views and present with a notable sense of scenic amenity, sections of many of these routes are also notably influenced by an array of existing anthropogenic features, including existing wind farm development and extensive commercial conifer forest plantations. It is important to note that whilst a notable sense of scenic amenity is present within the Central Study Area, there is only a local sense of amenity and heritage within the central study area, defined by the recent inclusion of the Sheeey Trails, a collection of looped walking trails which traverse the site and provide access to several local heritage features. Whilst the Wider Study Area encompasses a vast array of walking trails, scenic driving routes and heritage features, there is a notable absence of these within the Central Study Area, which is reflective of its more working upland landscape values.

In terms of landscape designations, the proposed development is contained within the 'LCT – Ridged and Peaked Upland', which is classified with a 'High' landscape sensitivity, 'High' Landscape Value, and 'Local' level Landscape Importance. The Central Study Area also encompasses two other contrasting LCTs, further reinforcing its dynamic and transitioning nature. 'LCT 12b - Rolling Marginal and Forested Middleground' located immediately to the east of the site, and 'LCT 16b – Glaciated Cradle Valleys' located c. 2km south of the nearest proposed turbine. LCT12b is classified with a 'Medium' landscape sensitivity; 'Medium' Landscape Value; and 'Local' level Landscape Importance, whilst LCT16b is classified with a 'Low' Landscape Sensitivity; 'Medium' Landscape Value; and 'Local' level Landscape Importance. It is important to note that all three landscape character types within the study area have been classified with the lowest of the four landscape importance classifications. Furthermore, whilst the landscape character type that contains the site is classified with a 'high' value, it is not located within Cork CDPs 'High Value Landscape

(HVL)' classification. Indeed, none of the landscape areas within the Central Study Area are classified as HVL.

Overall, it is considered that this is a dynamic landscape comprising some distinct landscape features and landscape areas. Nonetheless, despite some of the more scenic aspects of the Central Study Area, it is considered that much of the surrounding landscape presents with robust working upland characteristics, which is reinforced by the extensive commercial conifer forest plantations and existing wind farm development. Landscape values within the Central Study Area tend to be most associated with the subsistence of the rural economy as opposed to any highly susceptible recreational or naturalistic values. Despite this, there is a notable presence of designated scenic amenity within the Study Area, which relates to a combination of highly contained driving routes and sections of road corridors that pass across elevated terrain. On balance of the reasons outlined above, the Central Study Area is considered to have an overriding Medium landscape sensitivity due to its robust working upland character, although it is important to note that there are some localised parts of the study area that present with a High and Very High sensitivity, such as the Cousane Gap and other heavily contained winding low-lying valleys.

Wider Study Area (c.5-20 km).

The Wider Study Area is similarly varied, encompassing a broad mix of land uses and landscape features. Some of the most notable landscape features include the Shehy Mountains located in the surrounds of the Cork and Kerry County bounds, which encompass the highest mountains in Cork, Knockboy, which rises to a height of 706m AOD. Whilst the northern half of the study area encompasses some of the most elevated ridges and peaks within the surrounding landscape, the southern half of the Study Area also encompasses some notable elevated hills and ridges. Nonetheless, much of the Study Area's wider southern and eastern half accounts for the most notable areas of more typical rural land uses comprising pastoral farmland and smaller blocks of conifer forest. Lough Allua and the River Lee are also other notable landscape features in the wider northern half of the Study Area, whilst the western periphery includes the only sections of the coastline within the Study Area. This coastal part of the study area comprises small islands, broad bays, coastal promontories and a range of other coastal features.

In terms of recreational amenity, the Wider Study Area encompasses more notable tourism and recreational landscape values and contains a large network of waymarked walking trails, local walks, cycling routes and scenic driving routes. The most prominent include sections of the Wild Atlantic Way driving route and the Eurovelo Cycling route. Due to the

elevated and scenic nature of the landscape of the Wider Study Area, many of the most prominent walking and hiking routes tend to cross over elevated mountaintop summits and broad linear ridges and include sections of the Sheep's Head Way, the Slí Gaeltacht Mhuscraí and the Beara Way. The Wider Study Area also encompasses an array of heritage features, which include castle remnants, stone circles, old churches and graveyards.

The highly scenic nature of the surrounding landscape context is reflected in the number of scenic designations located throughout the Wider Study Area, many of which are located along elevated routes that afford views across the surrounding landscape and/or high scenic landscape features. Some of the most visually susceptible parts of the wider landscape include the Gougane Barra complex, situated in the study area's northwest quadrant and enclosed by steep cliffs and rugged escarpments. Other highly sensitive landscape areas include the immediate surrounds of Lough Allua and the coastal parts of the study area.

In terms of landscape designations, the study area encompasses some highly sensitive landscape character types in its wider surrounds, all of which are associated with the aforementioned highly sensitive landscape areas and features. The most sensitive landscape character types include LCT4 – Rugged Ridge Peninsulas (Very High Landscape Sensitivity, Very High Landscape Value, National Landscape Importance), LCT8 – Hilly River and Reservoir Valleys (High Landscape Sensitivity, High Landscape Value, National Landscape Importance) and LCT16a – Glaciated Cradle Valleys (High Landscape Sensitivity, High Landscape Value, National Landscape Importance). It is important to note that all three of these landscape character types are also designated with Cork CDPs 'High Value Landscape' designations. The current Cork CDP describes these landscape areas as "our most valuable landscapes".

Overall, the Wider Study Area comprises an array of landscape areas which comprise contrasting values and sensitivities. Nonetheless, the Wider Study Area also encompasses large areas of more typical rural and upland landscapes, where the landscape values tend to relate to the subsistence of the rural economy as opposed to any other highly susceptible landscape values. On balance of the reasons outlined above, the landscape sensitivity of the Wider Study Area is deemed Medium, however, it is important to note that there are some areas of high and even very high sensitivity, which typically relate to areas such as Gougane Barra, the coastline and other highly sensitive landscape features and area.

11.6.3 Landscape Impacts

Landscape impacts are assessed on the basis of landscape sensitivity weighed against the magnitude of physical landscape effects within the Site and effects on landscape character within the wider landscape setting. This wider setting is considered with respect to the Central Study Area (<5 km) as well as the Wider Study Area (5-20 km).

11.6.3.1 Magnitude of Landscape Effect

The physical landscape as well as the character of the Site and the Central Study Area (<5 km) is affected by the Proposed Development as well as ancillary development such as access and circulation tracks, areas of hard standing for the turbines, borrow pits, Grid Connection Route Options and the Onsite Substation and Control Building. By contrast, for the wider landscape of the Study Area, landscape impacts relate exclusively to the influence of the proposed turbines on landscape character. The aspects of the Proposed Development that are likely to have an impact on the physical landscape and landscape character are described in Chapter 2 (Description of Proposed Development) with construction processes described in the Construction and Environmental Management Plan (CEMP) at **Appendix 2.1**.

11.6.3.2 Magnitude of Landscape Effect – Construction Stage

It is considered that the Proposed Development will have a modest physical impact on the landscape within the Site as none of the Proposed Development features have a large 'footprint' and land disturbance/vegetation clearing will be relatively limited. The topography and land cover of the Site will remain largely unaltered with construction being limited to Access Tracks, Turbine Hardstands, the On-site Substation and Control Building compound, Temporary Construction Compound and proposed Met Mast. Excavations will tie into existing ground levels and will be the minimum required for efficient working. Any temporary excavations or stockpiles of material will be re-graded to marry into existing site levels and reseeded appropriately in conjunction with advice from the project ecologist.

The finalised internal Access Track layout has been designed to avoid environmental constraints, and every effort has been made to minimise the length of necessary roadway by utilising and upgrading the existing site access track. Furthermore, the road 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 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. The construction stage effects on landscape character from these activities will be minor.

There will be one 110kV Onsite Substation and Control Building constructed to collect the generated power from the Proposed Development before connecting to the national grid at either the Dunmanway 110kV Substation (Option A) or the Carrigdangan 110kV substation (Option B). The Onsite Substation and Control Building will be located on the east of the Site. The proposed Onsite Substation and Control Building will be contained in an existing small pastoral field that is enclosed by existing fences. The proposed substation compound, which will be enclosed by a 2.4 metre high steel palisade fence. The most notable construction stage landscape impacts resulting from the proposed Onsite Substation and Control Building relate to the minor levelling of the site to form a level platform.

All internal site cabling will be underground and will follow site access tracks without the need for trenching through open ground. Indeed, the land cover of the Site will only be interrupted as necessary to build the structures of the Proposed Development and to provide access. Impacts from land disturbance and vegetation loss at the Site are considered to be modest in the context of this transitional foothill landscape setting that is influenced by an array of working rural land uses.

A permanent meteorological (Met) Mast will be erected on the western part of the Site. It will comprise of a 100 m high lattice steel mast with a shallow concrete foundation. The most notable construction stage effects will relate to the minor amount of ground excavation required to facilitate the shallow foundations for the steel mast structure.

The grid connection cabling will run from the Onsite Substation and Control Building across a combination of private lands and public roads generating land disturbance and associated movement of machinery and stockpiling of materials for both Options A and B. The proposed grid connection routes will include for directional drilling at up to 22 no. locations on Option A and 18 no. locations on Option B. No overhead lines are required for the connection. Connection works will involve the installation of ducting, joint bays, drainage and ancillary infrastructure. This will require delivery of plant and construction materials, followed by ground excavation laying of cables and subsequent reinstatement of trenches, and will result in minor and very localised construction stage landscape effects.

Site activity will be at its greatest during the construction phase due to the operation of machinery on Site and movement of heavy vehicles to and from Site. This phase will have a more significant impact on the character of the Site and cable routes than the operational

phase, but it is a 'short-term' impact that will cease as soon as the Proposed Development is constructed and becomes operational (approximately 16-18 months) from the commencement of construction).

There will be some long term/permanent construction stage effects on the physical landscape in the form of Turbine Foundations and Hardstands, access tracks and an Onsite Substation and Control Building, but only the substation is likely to remain in perpetuity as part of the national grid network. It is likely, that with the exception of some residually useful access tracks, all other development features will be removed from the Site and it will be reinstated / restored to the prevailing land cover. Thus, the construction stage landscape effects of the Proposed Development are largely reversible.

There will be some construction stage effects on landscape character generated by the intensity of construction activities (workers and heavy machinery) as well as areas of bare-ground and stockpiling of materials as identified in the Construction and Environmental Management Plan (CEMP). Such effects will be temporary/short term in duration and are, therefore, not considered to be significant. Overall, construction stage landscape effects are considered to be of a **High-medium** magnitude.

11.6.3.3 Magnitude of Landscape Effect – Operational Stage

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, wind turbines that may not have been a characteristic feature of the area become a new defining element of that landscape character. In this instance, existing wind turbines are familiar features in the immediate and Central Study Area and are characteristic features of the landscape within the Wider Study Area. Indeed, the entire Study Area encompasses up to 80+ existing turbines. Thus, the overall effect therefore, is one of intensification and extension of an established land use and not the introduction of a new and unfamiliar one

In terms of scale and function, the Proposed Development is well assimilated within the context of the Central Study Area. This is due to the broad scale of the landform, landscape elements and land use patterns. These attributes prevent the height and extent of the Proposed Development causing the type of scale conflict that can occur in more intricate landscape areas. The broad hills, ridges and mountaintop summits in the central surrounds of the Site comprise some utilitarian character due to the presence of working rural land uses such as agriculture and commercial scale forestry. Although the Proposed

Development represents a stronger human presence and level of built development than currently exists on the Site, it will not detract significantly from the surrounding working upland landscape. It should also be noted that the Site encompasses several recently development looped walking trails some of which will share the proposed wind farm access tracks. Whilst the proposed development will be a defining feature along these trails and represents a marked increase in the intensity of built development here, it should be noted that walking trails and wind farm developments are not two incongruous forms of development. Indeed, there are many precedents throughout Cork and Ireland, where amenity trails such as these and wind farm developments exist in harmony. Indeed, as noted with regard to a linear amenity route adjacent to the permitted Boggeragh II Wind Farm, located in a similar upland landscape to the proposed development in the wider Cork area (Planning Ref: 10/08067), the Inspectors Report stated, *"The proposed development will involve the introduction of large structures into the landscape at a relatively near distance along part of the route. However, in the context of the assessment in relation to visual amenity and landscape above, I do not consider that the impact of the proposed development would significantly affect the recreational value of the walking route. I have no objection to the proposed development in this respect."* It should also be noted that the Proposed Development will also result in the enhancement of some of these trails, which will also generate some localised positive effects at the site scale.

It is important to note that in terms of duration, this Proposed Development represents a long term, but not permanent impact on the landscape and is reversible. The lifespan of the project is 40 years, after which time it will be dismantled and Developer will comply with the decommissioning conditions agreed with the local authority. Within 2-3 years of decommissioning there will be little evidence that a wind farm ever existed on the Site.

In summary, there will be physical impacts on the land cover of the Site and cable route as result of the Proposed Development during the operational phase, but these will be relatively minor in the context of this working upland landscape that comprises pockets of existing wind energy development and areas of commercial conifer forest. The scale of the Proposed Development will be well assimilated within its landscape context without undue conflicts of scale due to the broad and elevated nature of the surrounding uplands. For these reasons the magnitude of the landscape impact is deemed to be **High-medium** within the Site and its immediate environs (c.1km) reducing to **Medium** for the remainder of the Central Study Area. The quality of the landscape effects is deemed **Negative**. Beyond 5 km from the 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 and integrated component of the overall landscape fabric.

11.6.4 Magnitude of Landscape Effects - Decommissioning Phase

The Decommissioning phase will see a similar nature of effects to the construction stage due to the movement of heavy machinery within the site and to and from the Site removing turbine components. However, such effects will be temporary in duration and decreasing in scale as turbines are removed from view and the landscape is substantially reinstated to former uses. As with construction stage impacts, Decommissioning stage effects are not considered to be significant.

11.6.4.1 Significance of Potential Landscape Effects

The significance of landscape impacts is a function of landscape sensitivity weighed against the magnitude of landscape impact. This is derived from the significance matrix (**Table 11.3**) used in combination with professional judgement.

Based on a Medium sensitivity judgement and a High-medium magnitude of construction and decommissioning stage landscape effect, the significance of effect is considered to be Substantial-moderate / Negative / Short-term within and immediately around the Site during construction, but reducing quickly with distance and broader context.

Based on a Medium sensitivity judgement and a High-medium / Medium magnitude of operational stage landscape effect, the localised significance of effect is considered to be **Substantial-moderate / Negative / Long-term** within and immediately around the Site (within c.1km). Thereafter, significance will reduce to Moderate and Slight at increasing distances as the Proposed Development, where visible, will be perceived as a progressively smaller component of the wider landscape fabric even in the context of higher sensitivity landscape units / features such as the Lough Allua and the coastline.

11.6.5 Residual Visual Effects

In the interests of accessibility and so that this chapter remains focussed on the outcome of the visual assessment (rather than a full documentation of it), the visual impact assessment at each of the 30 selected representative viewpoint locations has been placed into **Appendix 11.1**. This section should be read in conjunction with both **Appendix 11.1** and the associated photomontage set contained in a separate booklet accompanying the

EIAR. A summary table is provided below, which collates the assessment of visual impacts (Table 11.8 below). A discussion of the results is provided thereafter.

Table 11.8 Summary of Visual Impact Assessment at Representative Viewpoint Locations (Appendix 11.1)

Visual Impact				
VP No.	Distance to nearest turbine	Visual Receptor Sensitivity	Magnitude of Visual Impact	Visual Impact Significance
VP1	10.8km – T2	High-medium	Low-negligible	Slight-imperceptible / Negative / Long Term
VP2	7.9km – T1	High-medium	Low	Slight / Negative / Long Term
VP3	7.3km – T2	Medium	Negligible	Imperceptible / Neutral / Long Term
VP4	12.4km – T6	High-medium	Low-negligible	Slight-imperceptible / Negative / Long Term
VP5	7.8km – T1	High-medium	Negligible	Imperceptible / Neutral / Long Term
VP6	6.0 km – T6	Medium	Low-negligible	Slight-imperceptible / Negative / Long Term
VP7	9.3km – T6	Medium	Low-negligible	Slight-imperceptible / Negative / Long Term
VP8	4.8km – T2	High-medium	Medium-low	Moderate-slight / Negative / Long Term
VP9	17km – T6	High-medium	Low-negligible	Slight-imperceptible / Negative / Long Term
VP10	1.7km – T2	Medium	Medium-low	Moderate-slight / Negative / Long Term
VP11	2.5 km – T6	Medium-low	Negligible	Imperceptible / Neutral / Long Term
VP12	4.4km – T6	High-medium	Medium-low	Moderate-slight / Negative / Long Term
VP13	4.1km T1	Medium	Medium-low	Moderate-slight / Negative / Long Term
VP14	1.1km – T1	Medium	High-medium	Substantial-moderate / Negative / Long Term
VP15	2.3km – T6	Medium-low	Negligible	Imperceptible / Neutral / Long Term
VP16	1.9km – T6	Medium	Medium	Moderate / Negative / Long Term
VP17	1.1km – T9	Medium	High-medium	Substantial-moderate / Negative / Long Term
VP18	714m – T7	Medium	High	Substantial-moderate / Negative / Long Term
VP19	2.3km – T7	Medium	Medium	Moderate / Negative / Long Term
VP20	1.5 km – T9	High-medium	High-medium	Substantial-moderate / Negative / Long Term
VP21	3.9km – T9	Medium	Medium-low	Moderate-slight / Negative / Long Term
VP22	1.7km – T7	High-medium	High-medium	Substantial-moderate / Negative / Long Term

Visual Impact				
VP23	2.0 km – T7	High-medium	Medium-low	Moderate-slight / Negative / Long Term
VP24	4.3km – T7	High-medium	Medium-low	Moderate-slight / Negative / Long Term
VP25	9.9km – T7	Medium	Low-negligible	Slight-imperceptible / Negative / Long Term
VP26	9.4km – T7	High-medium	Low	Slight / Negative / Long Term
VP27	5.9km – T9	Medium	Low	Slight / Negative / Long Term
VP28	10.6km – T9	Medium-low	Low-negligible	Slight-imperceptible / Negative / Long Term
VP29	16.7km – T9	High-medium	Low-negligible	Slight-imperceptible / Negative / Long Term
VP30	19.4km – T7	High	Low-negligible	Slight-imperceptible / Negative / Long Term

11.6.5.1 Visual Impacts on Designated Views

With regard to the proposed Project, there are a large number of scenic routes located throughout the Central and Wider Study Areas, which are represented by over 17 of the selected VRPs (VP1, VP2, VP3, VP4, VP5, VP6, VP8, VP9, VP12, VP13, VP20, VP22, VP23, VP24, VP27, VP29 & VP30). The nearest and most relevant scenic routes to the Proposed Development include the S28, S29, S32 and S33. All four routes will afford some visibility of the Proposed Development, whilst many also afford views of existing wind farm developments. It is also important to note that the depicted viewpoints along these scenic routes represent a static view. However, in reality, these routes are experienced as a journey and not as a series of fixed views. Thus, the representative viewpoints typically reflect the worst-case scenario in terms of turbine visibility. Furthermore, for many of these scenic routes, the proposed turbines have the potential to be heavily and, in some cases, entirely screened by surrounding terrain and vegetation.

Scenic Route S28

Scenic route S28 is located along the R584 regional road some c. 3.6km northwest of the Site and is described as “*Scenic road at the Pass of Keimaneig to Guagán Barra Views of the surrounding remote rural landscape & rugged mountains*”. Located in a valley comprising the River Owvane, the scenic route is typically well enclosed by a combination of roadside vegetation and an elevated ridge to the west, and the upland terrain, which includes Doughill Mountain, Douce Mountain and Shehy More Mountain to the east and southeast. Whilst the ZTV identifies the potential for views of up to 8 turbines along the southern section of the route, the northernmost sections of this scenic designation will be entirely screened from the development. Viewpoint VP13 was included as a representative

viewpoint from this scenic designation and affords a relatively clear view of the turbines, where they present on both sides of the Shehy More ridgeline in the distance. Although the turbines will marginally detract from the remote character of this route, they do not appear out of place in terms of their scale or function. Thus, the significance of visual impact was deemed 'Moderate-slight'. It is worth reiterating that large sections of this route are heavily enclosed by dense roadside vegetation, which in some cases, will entirely screen the view of the proposed turbines.

Scenic Route S29

Scenic route S29 is located along the R585 regional road that passes through the Cousane Gap and is situated some c. 1.3km south of the site at its nearest point. This scenic route designation is described as "*R585 Regional Road to Kealkill via Cousane Gap to Derragh Bridge Views of remote mountainous landscape*" and extends over c.14km in length. As a result of the considerable length of this scenic route designation, it will encompass varying sensitivities, ranging from more highly sensitive contained views or elevated broad views to more typical views of rolling working landscapes. One of the most visually sensitive parts of this route relates to where it passes directly through the Cousane Gap and is surrounded by steep rocky escarpments and provides a strong sense of enclosure. Several views were included to represent this scenic route due to its extensive nature, varying sensitivities and near distance to the Proposed Development. These include viewpoints VP20, VP22, VP23 and VP24. Both viewpoints, VP20 and VP22, represent the nearest potential views of the Proposed Development afforded from this scenic route designation, where the turbines will present in a dominant manner and be one of the defining built features along this section of the route. Although the turbines present in a dominant manner from both viewpoints, they are viewed in a relatively clear and legible manner and are considered well assimilated in this upland landscape context in terms of their scale and function. Although the turbines will detract from the scenic amenity in both views, this part of the scenic route designation is considered slightly less susceptible to change, as much of the surrounding landscape represents a working rural context comprising pastoral farmland and conifer forest plantation. Both VP20 and VP22 were classified with a visual impact significance of 'Substantial-moderate'.

VP23 is located along a meandering section of the R585 regional road scenic route as it progresses west towards the most enclosed section of the scenic route designation. A brief and partial view of the Proposed Development will be afforded from a bend in this section of the regional road. Up to four turbines have the potential to be viewed from here, with only the nacelles of two of these turbines visible. Whilst the moving turbine components have

the potential to draw the eye along this brief section of the scenic route, they are viewed in the opposite direction to some of the more distinctive and rugged landscape features along this aspect of the route. Nonetheless, the turbines will marginally detract from the scenic amenity along this brief section of the route, which is characterised by little other built development. Overall, the significance of visual impact along this section of the route was deemed 'Moderate-slight'.

VP24 is located along an elevated section of the R585 regional road scenic route west of the Cousane Gap. This elevated section of the regional road corridor affords a broad view towards Shehy More Mountain and its surrounding elevated upland ridges and hills. The proposed turbines will be clearly visible in this eastern aspect of the view. Although the moving turbine components will likely draw the eye from this section of the scenic route, they are located at a distance of over c. 4km and are well assimilated in this landscape context in terms of their scale and function. Overall, the proposed turbines will result in a marginal detraction in the degree of scenic amenity afforded from this section of the route, and thus, the significance of visual impact was deemed 'Moderate-slight'.

Whilst it is considered that the S29 scenic route will be the most impacted scenic designation within the Study Area, it is important to note that this extensive route comprises various aspects of amenity, some of which will not be notably impacted by the Proposed Development. Indeed, some of the most susceptible aspects of visual amenity along this route will have no views of the Proposed Development, or else the turbines will be viewed in the opposite direction or offset from the main aspect of amenity – **Figure 11.12** refers.

Scenic Route S32 and S33

Both S32 and S33 afford elevated views in the direction of the Site and are represented by viewpoints VP8 (S33) and VP12 (S32). It is important to note that these static viewpoints only represent brief views of the Proposed Development from these scenic routes, which also comprise extensive sections where the proposed turbines will be entirely screened by the surrounding terrain and intervening vegetation. VP8 affords a clear and highly legible view of the Proposed Development from a locally elevated hilltop summit. The Proposed Development will be viewed in conjunction with the existing Shehy More turbines, which present at a slightly smaller scale in this view. Nonetheless, the Proposed Development will not appear out of place in this view, which is already characterised by existing wind energy development. Thus, the significance of visual impact was deemed 'Moderate-slight'. VP12 affords an elevated broad panoramic view across the surrounding uplands and lowlands, where the Proposed Development is visible along the rugged Shehy More ridgeline. Whilst

the turbines are slightly offset from the main aspect of amenity to the south, they present in a condensed cluster and slightly disjointed manner, with turbines located on either side of Shehy Mores' principal ridgeline. Nonetheless, the proposed turbines will not appear incongruous in this broad view, which is currently characterised by views of the existing Shehy More wind turbines and distant turbines in the background of the view to the south. Overall, the significance of visual impact was deemed 'Moderate-slight'.

Other Scenic Designations

Aside from the Central Study Area, the Wider Study Area encompasses an array of scenic designations that cross elevated upland terrain, contained valleys, meandering lakeside roads and areas of the coastline. Many of these scenic designations, especially those elevated sections of scenic routes, afford views of existing wind energy developments, such as Shehy More Wind Farm, situated immediately northeast of the Proposed Development. Furthermore, it is also important to note that extensive sections of scenic route designation throughout the study area will afford no views of the Proposed Development due to a combination of surrounding terrain and intervening vegetative screening. Indeed, the selected representative views from scenic route designations have been chosen as they represent the worst-case scenario in terms of potential turbine visibility. The significance of visual impact at all other scenic route designations within the Wider Study Area ranged between 'Moderate-slight' to 'Imperceptible'.

Thus, whilst there will be some borderline significant impacts along the nearest sections of the S29 scenic route, however, impacts at scenic designations within the Study Area are **not considered to be significant**.

11.6.5.2 Visual Impacts on Local Community Views

Local Community views are considered to be those experienced by those people who live, work and move around the area within approximately 5 km of the Site. These are generally the people 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 within the Central Study Area are represented by up to 16 VRPs (VP8, VP10, VP11, VP12, VP13, VP14, VP15, VP16, VP17, VP18, VP19, VP20, VP21, VP22, VP23 and VP24), many of which are also representative of scenic designations in the Central Study Area. The significance of visual impact at local community receptors ranged from 'Substantial-

moderate' to 'Imperceptible', highlighting the varied degree of terrain and vegetative screening within the Central Study Area.

Viewpoints VP14, VP17, VP18, VP20 and VP22 were all classified with a significance of visual impact of 'Substantial-moderate' due to their near distance to the turbines, which will typically present with a dominant visual presence. Viewpoint VP18 represents one of the nearest potential views of the proposed turbines and is located in an elevated contained valley some c. 700 m from the nearest visible turbine. Whilst only five of the proposed turbines have the potential to be viewed here, turbine T7 presents at a prominent scale, further accentuated by the uphill views and contained nature of this upland valley. Nonetheless, the turbines are viewed well-spaced here and tend to present in a relatively legible manner, albeit at a prominent scale. It is also important to note that the more open visibility to the south across the distant terrain remains unaffected here. VP13 is located on the northern side of Shehy More's principal ridgeline and only has the potential to view up to four proposed turbines. Nonetheless, the turbines will be a prominent feature in this uphill view and relatively contained valley setting. Whilst the turbines do not appear over-scaled, they represent a marked degree of visual change and will become one of the defining features of this contained valley. VP17 represents some of the nearest local receptors to the Site's southwest. The proposed turbines are viewed along a steeply sloping ridge that contains the view and will have a dominant visual presence, which is further heightened by the steep uphill nature of the view. Nonetheless, the turbines do not appear incongruous in terms of their scale or function across this broad elevated ridge. However, they will present with some negative aesthetic issues relating to the partial visibility of the proposed turbines rotating along the skyline ridge.

Viewpoints VP16 and VP19 were classified with a 'Moderate' significance of visual impact and will both afford relatively clear views of the turbines from a distance of c. 1.9km to the east and west of the Site, respectively. Whilst the turbines will be prominent built features in both views and will generate a notable increase in the intensity of built development in this upland setting, they do not present with any sense of overbearing, nor do they appear over-scaled in the context of the broad surrounding landscape features.

All other VRPs within the Central Study Area were classified with a significance of visual impact of 'Moderate-Slight' or less. Indeed, in some instances, VRPs representing the nearest local community to the west of the Site in the townlands of Shehy More and Coolmountain were classified with an 'Imperceptible' significance of impact due to the heavily contained nature of this aspect of the Study Area.

Overall, some of the nearest local community receptors will afford clear near distant views of the Proposed Development, where the turbines will present in a dominant manner and will generate some borderline significant visual impacts. Nevertheless, **it is not considered that the Proposed Development will result in 'significant' visual effects** at local community receptors as the proposed development is well offset from the nearest residential receptors and is well assimilated into this upland context in terms of its scale and function.

11.6.5.3 Visual Impacts on Centres of Population

As a result of the relatively remote location of the Proposed Development, there are no notable population centres within the Central Study Area. Indeed, the only population centre is Togher Village, which comprises a small cluster of residential dwellings, a church and a local school located just under c.5 km southeast of the Site. Viewpoint VP21 is the nearest representative of Togher Village and affords a clear view of the proposed turbines. Whilst the turbines have the potential to draw the eye and will be notable built features in the northwest viewing aspect, they present in a clear and legible manner and do not appear over-scaled or out of place. Thus, the significance of visual impact was deemed 'Moderate-slight'. All other centres of population are located in the Wider Study Area and represented by viewpoints VP3, VP7, VP25 and VP28. The significance of visual impact at these settlements was deemed between 'Slight-imperceptible' and 'Imperceptible', as many of these centres of population are located in low-lying areas a considerable distance from the Site and avail of a high degree of screening from surrounding terrain and intervening vegetation. Furthermore, whilst numerous other settlements are located within the Wider Study Area, they were not included as viewpoints for assessment as there was either very limited or no potential for visibility from these distant locations.

As a result of the reasons outlined above, it is **not considered that the Proposed Development will result in significant visual impacts** at Centres of Population within the Study Area.

11.6.5.4 Visual Impacts on Major Routes

The most notable major routes in relation to the Proposed Development include the R585 regional road and R584 regional road, both of which are also designated scenic routes within the Central Study Area and have been comprehensively summarised and assessed in section 11.6.5.1 above. Other notable major routes in the Wider Study Area include the N22 national primary and N71 national secondary routes. The N22 national primary route

is located some c.17km northeast of the turbines and has a very limited potential to afford theoretic visibility of the Proposed Development. Due to the limited potential for turbine visibility and considerable distance from the Proposed Development, no VRP was included from the N22. Furthermore, even if briefly viewed from this considerable distance, the proposed turbines will only generate a significance of visual impact in the order of 'Slight-imperceptible'.

The N71 national secondary route traverses a section of the southwest quadrant of the Study Area and has intermittent potential to afford views of the Proposed Development from distances ranging between 14.4km from the site to 20 km from the Site. It is important to note that the principal aspects of visual amenity from this major route are typically in the opposite direction to the proposed wind farm towards the surrounding varied and scenic coastline. Viewpoint VP30, located at a cemetery adjacent to the N71 in Bantry, represents potential views from the N71 and affords a distant view of the turbines that present along the rolling terrain in the background. Furthermore, it is likely that the proposed turbines will only be discernible from here in the clearest viewing conditions, and even still, they will have no notable effect on the character of the surrounding coastal landscape. Thus, the significance of visual impact was deemed 'Slight-imperceptible' at worst. Brief intermittent views of turbines also have the potential to be afforded from other surrounding major routes, including the R584 in the wider northern half of the Site and several regional roads in the wider southeast quadrant of the Study Area. Nonetheless, due to the considerable distances from the Site and the high degree of screening in the direction of the Site, the significance of visual impact is considered to be no greater than 'Slight-imperceptible'.

As a result of the reasons outlined above, **it is not considered that any significant visual impacts will occur in respect of major route receptors.**

11.6.5.5 Visual Impacts on Tourism, Amenity and Heritage Features

Whilst a broad and varied agglomeration of tourism, amenity, and heritage features occur throughout the Study Area, almost all of these receptors occur within the Wider Study Area and therefore have limited potential to be notably impacted by the Proposed Development. One of the most notable tourism, amenity and heritage features is the Gougane Barra Complex, situated some c. 7.5 km northwest of the proposed turbines at its nearest point. Due to the heavily enclosed nature of this landscape setting, the ZTV identified no potential for visibility at a large proportion of the enclosed lakeside context. The only theoretical potential for turbine visibility is at the northeast tip of the Lough where the existing screening will likely entirely screen any view of turbine tips. Indeed, VP5 was included as a

representative view from one of the only parts of Gougane Barra (northeast tip of the lake) with the potential for visibility of the proposed turbines (the ZTV indicated the potential for theoretic visibility of up to two turbines along the northeast extent of the lake). Nonetheless, as highlighted in VP5, there is extremely limited potential for any notable visibility of the proposed turbines. Furthermore, visibility of the partial blade tip of one turbine has the potential to be afforded, but only from a local access road between a gap in the roadside vegetation. Overall, it is not considered that this brief view of a turbine blade tip will have any influence on the highly scenic character of the Gougane Barra Complex.

It should also be noted that the proposed development is located along lands that encompass several newly developed looped walking trails that encompass local heritage features and a parking area. Viewpoint VP17 was selected to represent the parking area, which is located immediately southwest of the site and will encompass clear and prominent views of the turbines, resulting in a significance of visual effect of Substantial-moderate. Indeed, the looped trails will pass immediately adjacent to the proposed turbines, where their perceived scale will be at its greatest. Nonetheless, whilst the proposed turbines will have a dominant visual presence along sections of these trails, due to their slender forms, they will not obstruct views of neighbouring ridges or distant mountains. It should also be noted that wind energy development is a familiar feature along the elevated lands surrounding Shehy Moore Mountain, with an existing wind farm development comprising 11 turbines located just over 0.18 km northeast of the site. Thus, it is not considered that the proposed turbines will present as incongruous built features from these newly developed amenity trails. Refer to the AIA for a full assessment of impacts at all surrounding sites of archaeological, and/or cultural heritage significance

Several heritage features also occur within the wider surrounds of the Study Area and include castles, graveyards, stone circles and crannogs. Kealkill Stone Circle has the most notable potential to afford a clear view of the Proposed Development due to its locally elevated location along sloping terrain south of Kealkill. Viewpoint VP26 is representative of this heritage receptor, where a broad sweeping panoramic view is afforded across the wider landscape to the west, north and east. The proposed turbines will be visible in the eastern aspect of this view along Shehy More Mountain and to the south of the existing Shehy More Wind Farm turbines. Whilst the moving turbine components have the potential to draw the eye, they are viewed in the context of the existing turbines and, therefore, will not appear out of place. Furthermore, the proposed turbines represent a very small visual envelope in this broad panorama. As a result, the significance of visual impact at this receptor was deemed 'Slight'. It is important to note that all other VRPs within the study

area were classified with a visual impact significance of 'Slight' or less. It is also worth noting that clear views of the Proposed Development have the potential to be afforded from several hiking and walking trails that traverse elevated lands and mountaintop summits. Nonetheless, many of the elevated sections of these routes already comprise views of other existing wind farm developments throughout the Wider Study Area. Thus, even if viewed from these elevated linear receptors, the Proposed Development will not appear out of place and instead represents the intensification of an already established land use.

As a result of the reasons outlined above, it is **not considered that the Proposed Development will result in significant visual impacts in respect of tourism, amenity and heritage features** within the Study Area.

11.6.5.6 Summary of Visual Impacts

Based on the visual impact assessments outlined in sections 11.6.5.1 to 11.6.5.5 above and in **Table 11.8** above, the residual visual impacts range between 'Substantial-moderate' to 'Imperceptible'. The majority of the most notable impacts relate to the nearest views of the Proposed Development, which principally represent scenic designations and local community receptors. Whilst the Proposed Development will have a dominant visual presence and will present at a considerable scale from some of the nearest views, the proposed turbines appear well accommodated in this upland landscape in terms of their scale and function. Whilst there will be some near significant impacts along the nearest surrounding scenic route designation (S29), the turbines typically present, offset from, or in the opposite direction from the main aspects of scenic amenity along this route.

The surrounding landscape is already strongly influenced by existing wind energy developments, most notably the existing Shehy More Wind Farm immediately northeast of the proposed Gortloughra turbines. As such, the Proposed Development will likely be perceived as a logical and visually coherent extension of this already established wind energy development, particularly when viewed from receptors to the north of the site, where the Shehy More turbines are already a prominent feature.

In terms of alignment with the landscape and visual objectives set out in the Cork County Development Plan, the proposed development has been carefully designed and sited in respect of these objectives. In particular, Objectives GI 14-12 to 14-14, which focus on preserving scenic amenity and the character of scenic route designations throughout the county, have been taken into account. A comprehensive assessment of scenic routes within the study area has been carried out as part of this LVIA. Based on this assessment, the

Proposed Development will not significantly detract from the prevailing landscape character or visual amenity afforded along these routes. While the turbines will be visible from certain sections, they are generally viewed either offset from or in the opposite direction to the main aspects of scenic amenity and will not block or heavily obstruct any sensitive viewing aspects. In this part of West Cork, where wind turbines are a familiar feature in similarly elevated upland settings, the proposed turbines are considered to be visually well accommodated.

Overall, whilst some of the nearest surrounding receptors will experience visual impacts close to significant, it is not considered that the proposed Project will result in significant visual impacts. Instead, the Proposed Development is a well-considered and appropriately scaled development that assimilates well within this robust upland context, and will, in many instances, be perceived as a natural extension of the neighbouring turbines.

11.6.6 Cumulative Impacts

Within the Study Area there are 18 existing (operational) wind farms and 4 consented wind farm developments. There are also 3 wind farms proposed (in the planning system) at present within the Study Area. The cumulative developments are set out below.

Table 11.9 Cumulative Windfarms within the Study Area

Windfarm Name	Number of Turbines	Distance and Direction from the Development Site Boundary	Status
Shehy More WF	11	0.18km northeast	Operational
Carrigarierk WF	5	4.35 km east	Operational
Carrigarierk 2 WF	3	4.87km east	Consented
Derreenacrinnig WF	3	6.39km southwest	Proposed
Milane Hill WF	9	8.68km south	Operational
Grousemount WF	38	8.7km northwest	Operational
Cleanrath WF	11	9.29km northeast	Consented
Derragh WF	6	9.55 km north	Operational
Kilgarvan II WF (Sillahertane)	10	10.70 km north	Operational
Gortyrhilly WF	14	11.2km north	Proposed
Killaveenoge WF	10	11.69km south	Operational
Currabwee WF	7	12.78km southeast	Operational

Windfarm Name	Number of Turbines	Distance and Direction from the Development Site Boundary	Status
Lahanaght Hill Wind Farm	5	13.15 km south	Operational
Midas WF (Coolknoohil)	11	13.22km north	Operational
Midas WF (Glanlee I)	6	14.33km north	Operational
Midas WF (Inchee)	6	14.85 km north	Operational
Kilgarvan I WF (Coomagearlahy)	15	15.62km north	Operational
Kilgarvan Repower Wind Farm	11	15.62km north	Proposed
Kilgarvan II WF (Lettercannon)	7	16.03km northwest	Operational
Coomatallin WF	4	16.35 km southeast	Operational
Kilvinane WF	3	16.95 km southeast	Operational
Barnadivane WF	6	17.13km east	Proposed
Kilgarvan II WF (Inchincoosh)	6	17.18km northwest	Operational
Ballybane WF	21	17.33km southwest	Operational
Inchamore WF	5	17.84km north	Consented
Garranareagh WF	4	18.67km east	Operational

As per Table 11.9 above, there are 18 operational wind farms, 4 consented wind farms in the study area and 4 wind farm developments in the planning system within the study area. The nature of cumulative visibility within the study area is analysed below using the cumulative wireframe views contained in the photomontage booklet (a standalone accompanying document) and the cumulative ZTVs (refer to **Figure 11.13**)

Although the photomontages (separate booklet accompanying the EIAR) and Cumulative ZTV map in **Figure 11.13** 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 this instance, the Study Area comprises land on which there are a mix of existing wind farms, consented wind farms and proposed (in planning) wind farms. As a result, the cumulative assessment of wind farm developments within the Study Area will be broken

into two categories: the current cumulative scenario and the potential future cumulative scenario. The current cumulative scenario will assess the cumulative effect of the proposed Gortloughra Wind Farm in respect of existing wind farm developments and consented wind farm developments. The potential future cumulative scenario will assess the proposed Gortloughra Wind Farm in respect of existing wind farms, consented wind farms and proposed (in planning) wind farms.

11.6.6.1 Current Cumulative Scenario

The cumulative ZTV map shows the potential cumulative visibility between the proposed turbines and all other existing and consented developments within the 20 km Study Area. At present, there are 18 existing (operational) wind farms and 4 consented wind farm developments. The nearest existing wind farm to the Proposed Development is the existing Shehy More Wind Farm development, which is located along elevated lands immediately northeast of the Proposed Development. Whilst wind energy development is a familiar feature of the Study Area, it is important to note that the majority of existing and consented developments within the Study Area are contained outside the Central Study Area. Indeed, only two wind farm developments – Shehy More Wind Farm and Carrigdangan Wind Farm, both of which are operational developments, are contained within the Central Study Area. The considerable number of existing and consented wind farms and wind turbines within the Study Area is highlighted on the cumulative ZTV map (based on a bare-ground scenario – see **Figure 11.13**), which identifies that more than 83.1% of the Study Area has the potential to afford visibility of existing, consented developments in addition to the Proposed Development. Indeed, the high degree of existing turbine visibility is evident on the cumulative ZTV map, which shows that the Proposed Development only has the potential to be viewed in isolation for 2.3% of the Study Area. These areas are principally contained in the western extent of the Study Area, where the underlying terrain will likely screen the views of the neighbouring Shehy More turbines to the east of the Proposed Development. Only 16.9% of the entire Study Area has the potential to afford no visibility of existing, consented or the Proposed Development, which further reflects the fact that existing wind turbines are a familiar feature of this landscape context.

As the majority of existing and consented development is located outside of the Central Study Area and is well offset from the Proposed Development, the most notable potential for cumulative visual effects relates to the two existing developments contained within the Central Study Area. Indeed, the Shehy More development will generate the most notable cumulative effects with respect to the Proposed Development as it is located immediately to the northeast of the proposed Gortloughra turbines. Nevertheless, much of the

cumulative intervisibility of the proposed turbines and the Shehy More and Carrigaerierk turbines relates to receptors located within the northern extent of the Study Area. In fact, there will be limited opportunities for combined views of the proposed turbines and the Shehy More turbines within the southern aspects of the central and Wider Study Area, aside from the most elevated ridges and peaks. Viewpoint VP8 highlights the cumulative intervisibility of the proposed turbines and the existing Shehy More turbines, which are located to the northeast of the Proposed Development. Whilst the existing Shehy More is slightly smaller in scale than the proposed turbines, there is no strong sense of scale conflict generated. Indeed, the Proposed Development will likely be viewed as an extension of the existing Shehy More Wind Farm development.

In terms of sequential cumulative effects, the proposed, consented and operational developments have the potential to be viewed from numerous linear receptors within the Study Area, including scenic routes, national waymarked walking trails throughout the central and Wider Study Area and major routes within the central and Wider Study Area. Some of the more notable linear receptors in relation to the Proposed Development include the scenic route designations within the Central Study Area. One of the most susceptible scenic routes is the S29 scenic route, which occurs to the south of the Site and passes through the Cousane Gap (refer to **Error! Reference source not found.** above). Whilst the cumulative ZTV identified the potential for theoretical cumulative visibility of the proposed, existing and consented development along this route, it is important to note that this does not account for screening from surrounding vegetation. In this instance, the eastern extent of the Cousane Gap scenic route affords a high degree of roadside vegetation in some areas, which, in combination with the dense layers of intervening vegetation throughout the Study Area, will heavily screen views of the existing two nearest wind farm developments. It is important to note that the Proposed Development will have no notable cumulative effect with any existing or consented developments on some of the most sensitive parts of this Cousane Gap scenic route. As per the representative viewpoints VP20, 22, 23 & 24, where there is no or very limited potential for intervisibility of the Proposed Development and other surrounding existing or consented developments. Nevertheless, other linear routes, such as scenic designations and waymarked walking trails, especially those that pass across elevated lands, will afford sequential views of the Proposed Development. However, as noted above, the most notable aspect of combined visibility of the Proposed Development relates to views of the proposed turbines in combination with the existing Shehy More turbines. Where other developments are visible, they tend to be viewed well offset from the proposed Gortloughra turbines, contained along ridges and peaks in the wider landscape.

Overall, whilst the Proposed Development will form part of an existing and consented array of 22 wind farm developments within the Study Area, it does not generate any notable cumulative visual effects, albeit it will result in a further sense of wind farm accumulation and dissemination within the Study Area. Nonetheless, any strong sense of wind farm proliferation is notably offset by the fact that only two other existing wind farm developments are contained within the Central Study Area, with the majority of existing and consented developments contained in the wider southern and northern half of the Study Area. On balance of the reasons above, it is considered that the Proposed Development will contribute to a cumulative landscape and visual impact in the order of **Medium** in respect of the current cumulative scenario. Despite the considerable number of existing wind farm developments within the Study Area, the Proposed Development is principally viewed distinctly separate to these and is most often viewed well-spaces along a broad rolling ridge in combination with the Shehy More Wind Farm turbines.

11.6.6.2 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 proposed wind farm developments that are currently in the planning system. In this instance there are 4 other developments, all of which are contained within the Wider Study Area as highlighted in the potential future cumulative scenario cumulative ZTV below (refer to Figure 11.14). Derreenacrinning Wind Farm is the nearest of the four and is proposed to comprise three turbines and is situated just over 6km southwest of the site. This development is well offset from the proposed Gortloughra turbines by a notable distance and by several rolling elevated ridges.

As per the cumulative potential future baseline scenario ZTV, the potential for an additional degree of cumulative turbines visibility only increases by a very marginal degree, from 83.1% of the study area affording views of the Proposed Development and existing and permitted development to a maximum of 86.3% of the study area affording views in the potential future baseline scenario. Overall, due to the distance of the four proposed and in-planning developments from the Proposed Development turbines, it is not considered that the cumulative impacts will notably differ from those potentially experienced in the current cumulative scenario. Thus, it is considered that the proposed Gortloughra Wind Farm development will contribute to a cumulative landscape and visual impact in the order of **Medium** in respect of the potential future cumulative scenario.

11.7 SUMMARY OF SIGNIFICANT EFFECTS

It is not considered that there will be any significant effects on landscape and visual amenity arising from the Proposed Development.

11.8 STATEMENT OF SIGNIFICANCE

Based on the landscape, visual and cumulative assessment contained herein, it is considered that there will not be any significant effects arising from the Proposed Development.

11.9 REFERENCES

- Environmental Protection Agency (EPA) publication 'Guidelines on the Information to be contained in Environmental Impact Assessment Reports (2022) and the accompanying Advice Notes on Current Practice in the Preparation of Environmental Impact Assessment Reports;
- Landscape Institute and the Institute of Environmental Management and Assessment publication entitled Guidelines for Landscape and Visual Impact Assessment – Third Edition (2013);
- NatureScot: Assessing the cumulative landscape and visual impact of onshore wind energy developments (2021);
- Department of the Environment, Heritage and Local Government Wind Energy Development Guidelines (2006) and Draft Revised Wind Energy Development Guidelines (2019);
- Scottish Natural Heritage (SNH) Visual representation of wind farms: Best Practice Guidelines (version 2.2 - 2017); and
- Landscape Institute Technical Guidance Note (TGN) 06/19 Visual Representation of development proposals (2019)