13. LANDSCAPE AND VISUAL

13.1 INTRODUCTION

This chapter describes the landscape context of the Proposed Project and assesses the likely significant landscape and visual impacts on the receiving environment arising from the Proposed Project (refer to Chapter 2 for a detailed description of the Proposed Project). Although closely linked, landscape and visual effects are assessed separately.

With regard to potential landscape and visual impacts arising from the Grid Connection Route (GCR), the proposed 110 kV substation and associated overhead line (OHL) connection, and Turbine Delivery Route (TDR), the principal effects are anticipated to occur predominantly during the construction phase of the Proposed Project. Any such effects will be highly localised in nature and confined to the immediate environs of the respective corridors, with both aspects of the Proposed Project having a very limited influence beyond approximately 200–500 m from the proposed works. The construction activities associated with both the GCR and the TDR will be temporary, linear and of limited spatial extent, and will largely utilise existing established corridors and transport routes. Taking account of the absence of highly sensitive landscape receptors along these routes, and the temporary nature of the works, neither the GCR nor the TDR is considered likely to give rise to significant landscape or visual effects during the construction, operational, or decommissioning phases of the project.

On this basis, potential landscape and visual effects associated with the GCR and TDR have been scoped out of the assessment presented below.

Landscape Impact Assessment (LIA) relates to changes in the physical landscape brought about by the Proposed Project, which may alter its character, and how this is experienced. 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 Project without causing unacceptable adverse changes to its character.

Visual Impact Assessment (VIA) relates to assessing effects on specific views and on 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 project in conjunction with other developments (associated or separate to it), or actions that occurred in the past, present or are likely to occur in the foreseeable future.

13.1.1 Statement of Authority

This Landscape and Visual Assessment (LVIA) report was prepared by Cian Doughan, Landscape Architect (BSLA, M.I.L.I) Associate Director at Macro Works Ltd with 10 years of relevant experience, and reviewed by Richard Barker (MLA, M.I.L.I) Divisional Director at Macro Works with over 20 years of experience. Macro Works Ltd is a specialist Landscape and Visual Impact Assessment (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 150+ onshore wind farm proposals throughout Ireland, including over 20 Strategic Infrastructure Development (SID) wind farms. Macro Works and its senior staff members are full/corporate members of the Irish landscape Institute. Relevant recent projects include Ballyfasy SID Wind Farm, Castlebanny SID Wind Farm, Littleton SID Wind Farm along with numerous large-scale solar and electrical infrastructure developments.

13.1.2 Definition of the Study Area

Both the 2006 Wind Energy Development Guidelines and Draft Revised 2019 Wind Energy Development Guidelines (WEDGs) published by the Department of the Environment, Heritage and Local Government specify radii for examining the zone of theoretical visibility (ZTV) of proposed wind farm projects. The 2006 guidance and Draft Revised WEDG[1] is identical in relation to defining the radii for examining the ZTV of proposed wind farm projects. The extent of this search area is influenced by turbine height, as follows:

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

In the case of the proposed project, the blade tips are up to a maximum 150 m height and, thus, the minimum ZTV radius applied is 20 km from the outermost turbines, which represents current best practice with regard to the height of the turbines and scale of the turbine array. There are no features of national/international importance located out to 25 km, and thus the study area remains 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 effects to occur. When referenced within this assessment, the 'central study area' is the landscape within 5 km of the proposed wind farm site boundary, which represents current best practice.

In relation to other features of the proposed project, such as the Grid Connection Route (GCR) and nodes of the proposed Turbine Delivery Route (TDR), their study area relates to their immediate context and a 50 m corridor either side of these linear features, as per current best practice. This is principally due to the localised nature of likely significant effects.

For clarity, a summary of defined terms with regard to the study area that are used throughout this chapter is provided below:

[1] The draft Revised WEDGs represent a consultation draft which are not in force and subject to change.

- Site and Immediate Study Area – the proposed wind farm site and immediate surrounding landscape up to 1 km.
- Central Study Area – areas outside of the proposed wind farm site and immediate study area up to 5 km from the proposed turbine array.
- Wider Study Area – parts of the surrounding landscape between 5-20 km from the proposed turbine array.

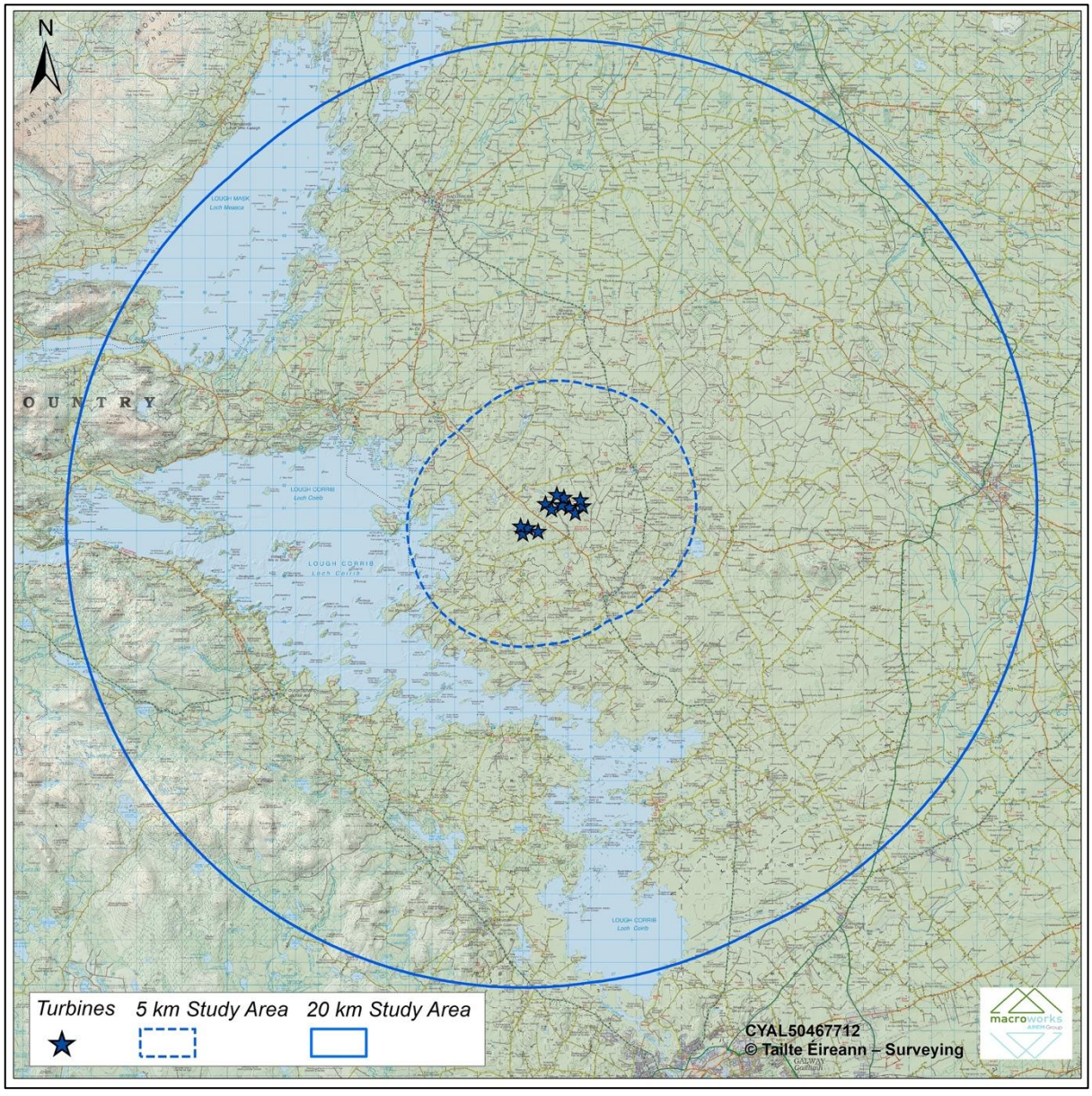


Figure 13-1 Full 20 km extent of the Study Area and 5 km Central Study Area

13.1.3 Scoping and Consultation

Scoping for the Proposed Project was undertaken through pre-application consultation with An Coimisiún Pleanála and consultation with statutory and non-statutory consultees, as well as community engagement. Landscape and visual considerations formed part of the discussions held during the pre-application process and informed the iterative design evolution of the Proposed Project. Through the design process, consideration was given to landscape sensitivity,

visual amenity, cumulative effects and key receptors, including designated views, settlements and cultural heritage features. The consultation process and the responses received are summarised in Chapter 1 of the EIAR.

13.2 ASSESSMENT METHODOLOGY

The LVIA adheres to methodology as prescribed in the following guidance documents:

- European Union (EU) Guidance on the preparation of the EIA Report (Directive 2011/92/EU as amended by 2014/52/EU) (2017);
- Environmental Protection Agency (EPA) publication Guidelines on the Information to be contained in Environmental Impact Assessment Reports (2022);
- Landscape Institute and the Institute of Environmental Management and Assessment (IEMA) publication entitled Guidelines for Landscape and Visual Impact Assessment – Third Addition (2013) (herein referred to as GLVIA3);
- NatureScot Guidance - Assessing the cumulative landscape and visual impact of onshore wind energy developments (2021) [online];[2]
- Department of the Environment, Heritage and Local Government Wind Energy Development Guidelines (2006);
- Scottish Natural Heritage Visual Representation of Wind Farms: Best Practice Guidelines (version 2.2 - 2017).[3]

Department of the Environment, Heritage and Local Government Wind Energy Development Guidelines (2019 Draft)

The draft revised WEDGs represent a consultation draft which are not in force and subject to change. Nevertheless, this document represents current best practice and thus is relevant to this assessment. It is important to note that all information and guidelines relating to landscape areas and types in the current wind energy development guidelines (2006) are duplicated in the draft revised wind energy development guidelines (2019). The only additional information relating to landscape and visual in the draft revised guidelines relates to the visual amenity setbacks. Thus, the current (2006) and draft revised (2019) guidelines have been referenced.

Use of the Term 'Effect' vs 'Impact'

GLVIA3 advises that the terms 'impact' and effect' should be clearly distinguished and consistently used in the preparation of an LVIA.

'Impact' is defined as the action being taken. In the case of the proposed works, the impact would include the construction of the proposed project.

'Effect' is defined as the change or changes resulting from those actions, e.g. a change in landscape character, or changes to the composition, character and quality of views in the receiving environment. This report focusses on these effects.

[2] There is no current guidance document in Ireland relating to the assessment of cumulative landscape and visual effects for onshore wind energy development, and thus, it is standard practice to use the NatureScot guidance
[3] As above.

Assessment of Both 'Landscape' and 'Visual' Effects

Another key distinction to make in a LVIA is between landscape effects and the visual effects of development.

'Landscape' results from the interplay between the physical, natural and cultural components of our surroundings. Different combinations of these elements and their spatial distribution create distinctive character of landscape in different places. 'Landscape character assessment' is the method used in LVIA to describe landscape, and by which to understand the potential effects of a development on the landscape as 'a resource'. Character is not just about the physical elements and features that make up a landscape, but also embraces the aesthetic, perceptual and experiential aspects of landscape that make a place distinctive.

Views and 'visual amenity' refer to the interrelationship between people and the landscape. The LVIA prescribes that effects on views and visual amenity should be assessed separately from landscape, although the two topics are inherently linked. Visual assessment is concerned with changes that arise in the composition of available views, the response of people to these changes and the overall effects on the area's visual amenity.

Production of this Landscape and Visual Impact Assessment involved baseline work in the form of desktop studies and fieldwork comprising professional evaluation by qualified and experienced Landscape Architects. This entailed the following:

13.2.1 Desktop Study

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

13.2.2 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.

13.2.3 Appraisal

- Consideration of the receiving landscape with regard to overall landscape character as well as the salient features of the study area including landform, drainage, vegetation, land use and landscape designations.
- Consideration of the visual environment including receptor locations such as centres of population and houses; transport routes; public amenities and facilities and; designated and recognised views of scenic value.

- Consideration of design guidance and planning policies.
- Consideration of potentially significant effects and the mitigation measures that could be employed to reduce such effects.
- Estimation of the significance of residual landscape effects.
- Estimation of the significance of residual visual effects aided by photomontages prepared at all of the selected VRP locations (see Appendix 13-1).
- Estimation of cumulative landscape and visual effects in combination with other surrounding developments that are either existing, permitted or in the planning system and pending a decision from a planning authority. Projects that are at the pre-planning stage where information is available to the public are also to be included in the cumulative impact assessment.

13.2.4 Assessment Criteria for Landscape Effects

The classification system to determine the significance of landscape and visual impacts complies with the Landscape Institute and IEMA Guidelines for Landscape and Visual Impact Assessment (2013). 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 effects; 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 to its essential characteristics. Landscape Value and Sensitivity is classified using the following criteria outlined in Table 13-1.

Table 13-1 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.

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 effect is a product of the scale, extent or degree of change that is likely to be experienced as a result of the proposed project. 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 proposal site boundary that may have an effect on the landscape character of the area, see Table 13-2.

Table 13-2 Magnitude of Landscape Effects

Magnitude of Effect	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 effect is based on a balance between the sensitivity of the landscape receptor and the magnitude of the effect. The significance of landscape effects is arrived at using the following matrix set out in Table 13-3.

Table 13-3 Effect Significance Matrix

	Sensitivity of Receptor				
Magnitude	*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 (yellow colour)' and above are considered to be 'significant effects' within this assessment. All other effects are deemed Not significant (i.e. Substantial-moderate and below).

13.2.5 Assessment Criteria for Visual Effects

As with the landscape effect, the visual effect of the Proposed Project 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.

13.2.5.1 Visual Sensitivity

Unlike landscape sensitivity, visual sensitivity has an anthropocentric basis. 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 criterion. Susceptibility criteria is extracted directly from the Landscape Institute and IEMA Guidelines for Landscape and Visual Assessment (2013), 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 Landscape Institute and IEMA Guidelines (2013), 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; and
- Travellers on road rail or other transport routes where such travel involves recognised scenic routes and awareness of views is likely to be heightened.
- Visual receptors that are less susceptible to changes in views and visual amenity include;
    - People engaged in outdoor sport or recreation, which does not involve or depend upon appreciation of views of the landscape; and
    - People at their place of work whose attention may be focussed on their work or activity, not their surroundings and where the setting is not important to the quality of working life.

Value Associated with the View

- **Recognised scenic value of the view** (County Development Plan designations, International, National and Regional 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; and
- **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.

13.2.6 Magnitude of Visual Effects

The magnitude of visual effects is determined on the basis of two factors; the visual presence of the proposed project 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 project 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. Instead, the 2012 Fáilte Ireland survey entitled 'Visitor Attitudes On The Environment – Wind Farms' found that *"Compared with other types of development in the Irish landscape, wind farms elicited a positive response when compared to telecommunication masts and steel electricity pylons"*.... and that *"most* (tourists) *felt that their presence did not detract from the quality of their sightseeing, with the largest proportion (45%) saying that the presence of the wind farm had a positive impact on their enjoyment of sightseeing..."*. A further study by

Fáilte Ireland titled 'Report on Visitor Awareness and Perceptions of the Ireland Landscape' (2018) found that in relation to views from prominent tourism sites in Ireland "there is consistent evidence of the majority of visitors not reporting the visibility of large, visually prominent developments that were close and directly in their line of sight". Some examples of this were where no visitors reported the visibility of a wind farm or nearby industrial units at Cashel and no visitor noticed the offshore wind farm at Brittas Bay. The purpose here is not to suggest that turbines are either inherently liked or disliked, 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 effect is classified in Table 13-4.

Table 13-4 Magnitude of Visual Effect

Criteria	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

13.2.6.1 Significance of Visual Effect

As stated above, the significance of visual effect is a function of visual receptor sensitivity and magnitude of visual effect. This relationship is expressed in the same significance metric included for Landscape Effect Significance at Table 13-3.

13.2.6.2 Quality and Timescale in Effects

In addition to assessing the significance of landscape effects and visual effects, the EPA EIAR Guidelines (2022) requires that the quality of the effects is also determined. This could be negative/adverse, neutral, or positive/beneficial. In the case of new energy / infrastructure developments within rural and semi-rural settings, the landscape and visual change brought about by an increased scale and intensity of built form is seldom considered to be positive / beneficial.

Landscape and Visual effects are also categorised according to their 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.

13.2.6.3 Limitations/Difficulties Encountered

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

13.3 EXISTING ENVIRONMENT

13.3.1 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 proposal will be assessed. This also includes reference to any relevant landscape character appraisals and the current landscape policy context (both are generally contained within 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 and vegetation and land use. Centres of population, transport routes and tourism, recreation and heritage features form part of the visual baseline and are dealt with in Section 13.3.3.

13.3.1.1 Landform and Drainage

Wind Farm Site and Central Study Area

The proposed wind farm site and its immediate surroundings comprise gently undulating terrain (refer to Figure 13-2 below). The proposed wind farm site is situated along locally elevated terrain between approximately 30–60 m AOD, with landform within the central study area generally draining westwards towards Lough Corrib. Lough Corrib represents one of the principal hydrological features within both the central and wider study area and is located approximately 3.2 km west of the nearest proposed turbine at its closest point. The Black River is the nearest notable watercourse to the proposed turbine array, passing to the south-east of the eastern array at a distance of approximately 400 m from the nearest turbine, and to the south of the western array at a distance of approximately 1.2 km from the nearest turbine. The river also denotes the County Mayo and County Galway boundary within the southern extent of the central study area. The central study area also encompasses several additional waterbodies, including Rostaff Turlough (Lough Turide), located approximately 1.5 km south of the proposed wind farm site. Shrule Turlough is situated approximately 2.5 km north-east of the proposed wind farm site, whilst Mocorha Lough, a shallow wetland complex, is located approximately 3 km north of the proposed turbine array. Beyond these notable features, the proposed wind farm site and central study area also comprise a network of smaller streams and drainage ditches, which contribute to the locally varied drainage pattern of the surrounding rural landscape.



Figure 13-2 Low rolling terrain within the central study area

Wider Study Area

The wider study area presents with characteristics broadly similar to those of the central study area, most notably to the north, east and south. In these parts of the study area, the terrain is characterised by gently rolling, drumlin-like landforms interspersed with numerous small loughs, streams and watercourses. To the west and north-west, the landscape becomes notably more varied, with Lough Corrib (refer to Figure 13-3 below) and Lough Mask representing the principal landscape features within this part of the study area.



Figure 13-3 Views across Lough Corrib from the locally elevated lands west of the Lough

Beyond these waterbodies, the terrain rises more steeply towards the upland landscapes associated with the foothills of the Maumturk Mountains along the Galway–Mayo border, in addition to other elevated landform features located to the west of Lough Corrib. Situated within the northern periphery of the study area is Lough Carra, which is located immediately north of Lough Mask and forms another notable hydrological and landscape feature within the wider receiving environment.



Figure 13-4 Landscape Context Map

13.3.1.2 Vegetation and Land Use

Wind Farm Site and Central Study Area

The proposed wind farm site and central study area comprise a mosaic of agricultural farmland, generally enclosed by dry-stone walls, with occasional sections of mixed hedgerow vegetation and mature tree lines. Both the eastern and western extents of the proposed wind farm site also encompass areas of exposed rock outcrops and rough ground, which contribute to the locally varied landscape character of the receiving environment. Linear belts of riparian vegetation and small pockets of deciduous woodland are associated with the Black River corridor to the south of the proposed wind farm site, providing localised areas of enclosure and vegetation cover within the wider rural landscape. Areas of marsh and wetland vegetation are also noted in the surrounds of lakelands and turloughs within the study area.

The N84 national road represents a prominent linear land use traversing the eastern extent of the central study area, located approximately 2.7 km east of the proposed wind farm site at its nearest point. In addition, a small quarry development is situated approximately 270 m north of

the proposed wind farm site at its closest point, representing a localised utilitarian land use within the receiving landscape. The central study area also encompasses several settlements including Shrule, Headford and Glencorrib, which account for a notable area of urban land use.

Wider Study Area

Across the wider study area, agricultural land use continues to represent the dominant land cover, albeit with greater variation in prevailing land cover patterns. To the north-east and east, extensive areas of peatland are present, often accompanied by peripheral belts of mature scrub vegetation and semi-natural habitats. Whilst the northern, eastern and southern extents of the wider study area encompass a similar land use mix to that of the central study area, the western extents of the wider study area are notably more varied as a result of the greater variation in topography and landform.

The more elevated lands to the west of Lough Corrib support extensive areas of commercial forestry and established wind energy development, contributing to a more utilitarian and modified upland landscape character within these parts of the study area. Extensive tracts of moorland are also evident across the higher elevations in this area. In addition, there is a greater prominence of broadleaf and riparian woodland cover within the western extents of the wider study area, most notably in the environs of Lough Corrib and Lough Mask (refer to Figure 13-5).



Figure 13-5 Area of moorland transitioning to conifer forestry in the locally elevated lands to the west of Lough Corrib

The wider study area also encompasses a varied mix of anthropogenic land uses. Several quarry developments are distributed throughout the wider study area, whilst numerous settlements are also present, with a greater concentration of settlement evident to the west of Lough Corrib due to its accessibility to Galway City and its surrounding commuter hinterland.

In terms of linear land uses, the wider study area also encompasses a variety of major transport corridors, including the M17, N59, N83 and N84 national routes, the majority of which provide connectivity to the wider environs of Galway City.

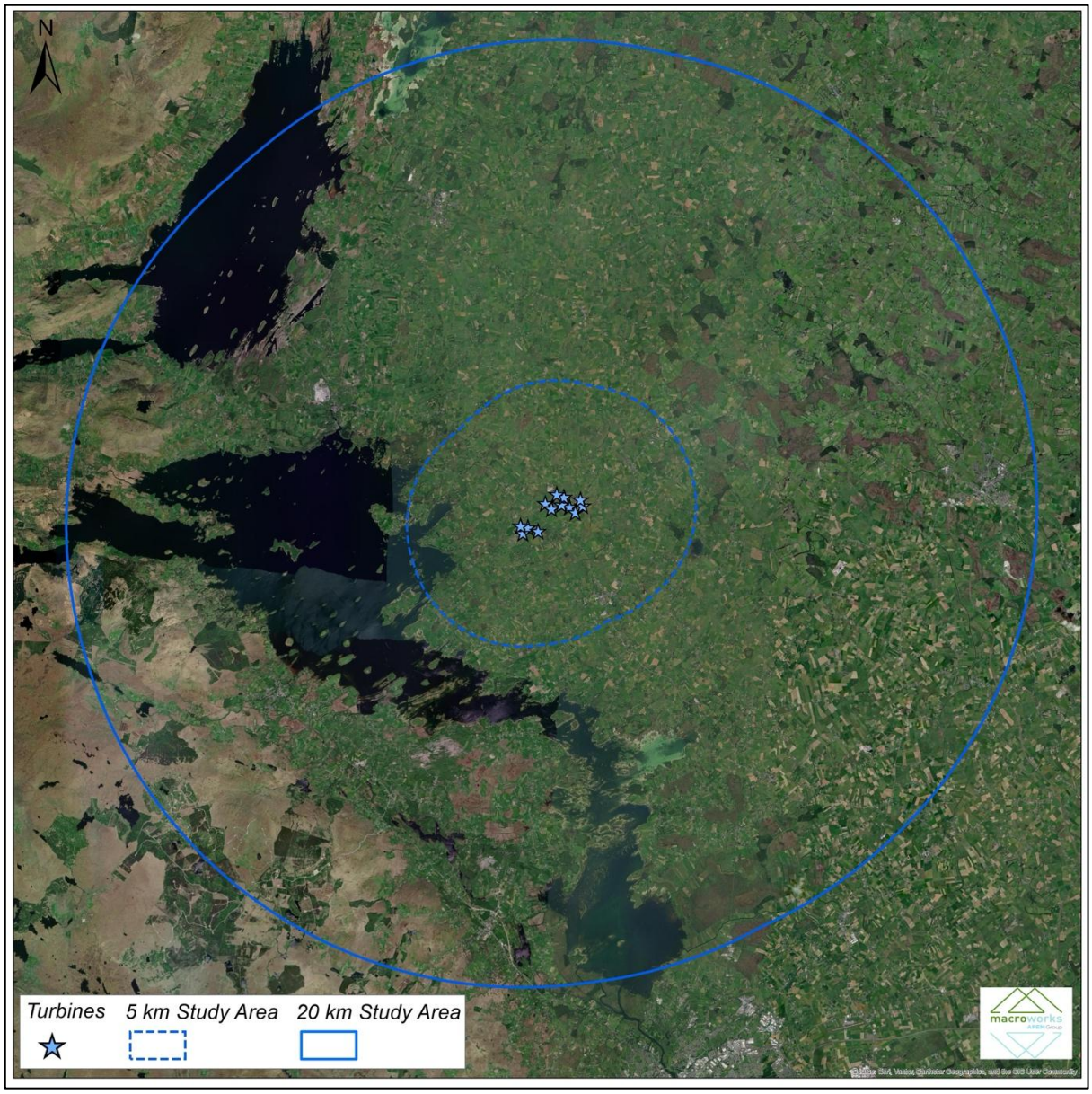


Figure 13-6 Landscape context of the full 20 km study area

13.3.2 Landscape Policy Context and Designations

13.3.2.1 The Department of Environment, Heritage and Local Government Wind Energy Development Guidelines 2006 and Draft Revised 2019 Wind Energy Development Guidelines

The Wind Energy Development Guidelines (2006) provide guidance on wind farm siting and design criteria for six different landscape types. In this instance, the most applicable Landscape Character Type is considered to be 'Hilly and Flat Farmland'. Whilst much of the wider context is also consistent with this landscape type, there are some areas that would be more characterised by the 'Mountain Moorland' and 'Transitional Marginal' landscape types within the wider study area. Siting and design recommendations for the 'Hilly and Flat Farmland' landscape type is included below:

Hilly and Flat Farmland

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

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

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

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

Height - "*Turbines should relate in terms of scale to landscape elements and will therefore tend not to be tall. However, an exception to this would be where they are on a high ridge or hilltop of relatively large scale. The more undulating the topography the greater the acceptability of an uneven profile, provided it does not result in significant visual confusion and conflict.*"

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

Evaluation of Siting and Design Recommendations in relation to the Proposed Project

The Proposed Project demonstrates broad accordance with the siting and design principles outlined within the WEDGs for the Hilly and Flat Farmland landscape type. The turbine array has been sited across locally elevated areas of undulating terrain, avoiding excessive proximity to surrounding dwellings, settlements and transport corridors, whilst responding appropriately to the irregular landform profile of the proposed wind farm site. The clustered layout reflects the absence of a singular ridgeline and provides a coherent layout that integrates with the rolling rural landscape and the broad open underlying field networks. Turbine spacing has been informed by both operational requirements and the varying topography, resulting in a balanced and legible composition that avoids perceptions of visual clutter or dominance. With regard to

cumulative development, the Proposed Project will present as one single turbine cluster, with the nearest permitted development contained over c. 15 km from the Proposed Project.

Siting in Relation to Individual Properties ('Setback')

Section 6.18 of the Draft Revised Wind Energy Development Guidelines (WEDG) (December 2019) refers to appropriate setback distances for visual amenity purposes. The guidelines outline a mandatory minimum setback distance of *"500 meters"* or the distance of *"4 times the tip height"* of the proposed *turbines "between the nearest point of the curtilage of any residential property".* This is set out in Specific Planning Policy Requirements (SPPR) 2 of the Draft Guidelines (2019) 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.*

Evaluation of 'Setback' Recommendations in relation to the Proposed Project

The nearest residential dwelling to any of the proposed turbines is 600 m which fully complies with the setback distance outlined in both the current 2006 Guidelines (i.e. >500m) and the Draft Revised Guidelines (2019), which in this instance is 600 m (4 x 150 m tip height). It is worth noting that these Draft Revised Guidelines are not yet adopted, although new wind farm projects tend to apply their recommended setback from sensitive receptors. It is important to note that the Proposed Project has been designed and sited to adhere to both the guidelines in the current (2006) and draft revised (2019) wind energy development guidelines to the extent that the draft updated guidelines align with current best practice

13.3.2.2 Mayo County Development Plan 2022-2028

13.3.2.2.1 Mayo CDP - Landscape Appraisal for County Mayo

The landscape and renewable energy chapters of the Mayo County Development Plan 2022 – 2028 (MCDP) are informed by the 'Landscape Appraisal for County Mayo', which divides the landscape into Landscape Character Units' based on physical units, appearance, and characterisation. These are defined and described before 'Critical Landscape Factors' are identified, which relate to the relative robustness or sensitivity of the landscape character unit (LCU). LCU and Landscape Character Area (LCA) are used interchangeably through the Landscape Character Appraisal. These are later used to define the 'Principle Policy Areas' and 'Policy Responses' to those areas and relative sensitivities.

The Proposed Project is located within LCU/LCA L – 'South-East Mayo Plains'. This area is described as "*a mosaic of high quality pasture with distinct paddocks divided by rock walls and*

well-maintained hedgerows. There are occasional pockets of transitional pasture and woodland scrub throughout the gently rolling drumlins."

The critical landscape factors of this area are undulating topography and shelter vegetation, both of which serve to provide 'scale and visual containment' for development.

To the west of the County Mayo portion of the study area is LCU/LCA M – 'Lakeland Drumlins'. This area is described as "*an area of low-lying drumlins and wetland associated with Lough's Mask, Carra, and Corrib. There is a mixture of wetland land cover around the lakeshores and patches of forestry and moorland to the north and east. A dramatic backdrop of the Partry Mountains falling steeply to the shores of Lough mask occurs to the west. The eastern parts of this unit appears similar to the pastoral landscape of the unit to the east, however, the overriding feature is the proximately and influence of the Loughs."*

The critical landscape factors are undulating topography, shelter vegetation, prominent ridgelines, and localised lake vistas. As above, the undulating topography and shelter vegetation serve to mitigate well placed develop, while the ridgelines and lake vistas are more sensitive to development and as such:

"The main concern for natural linear features such as lakeshores, coastlines, and ridgelines is to avoid penetration by development that will interrupt and reduce the integrity of such elements. Given the low viewing points around the loughs, visual intrusion by development is likely to be enhanced."

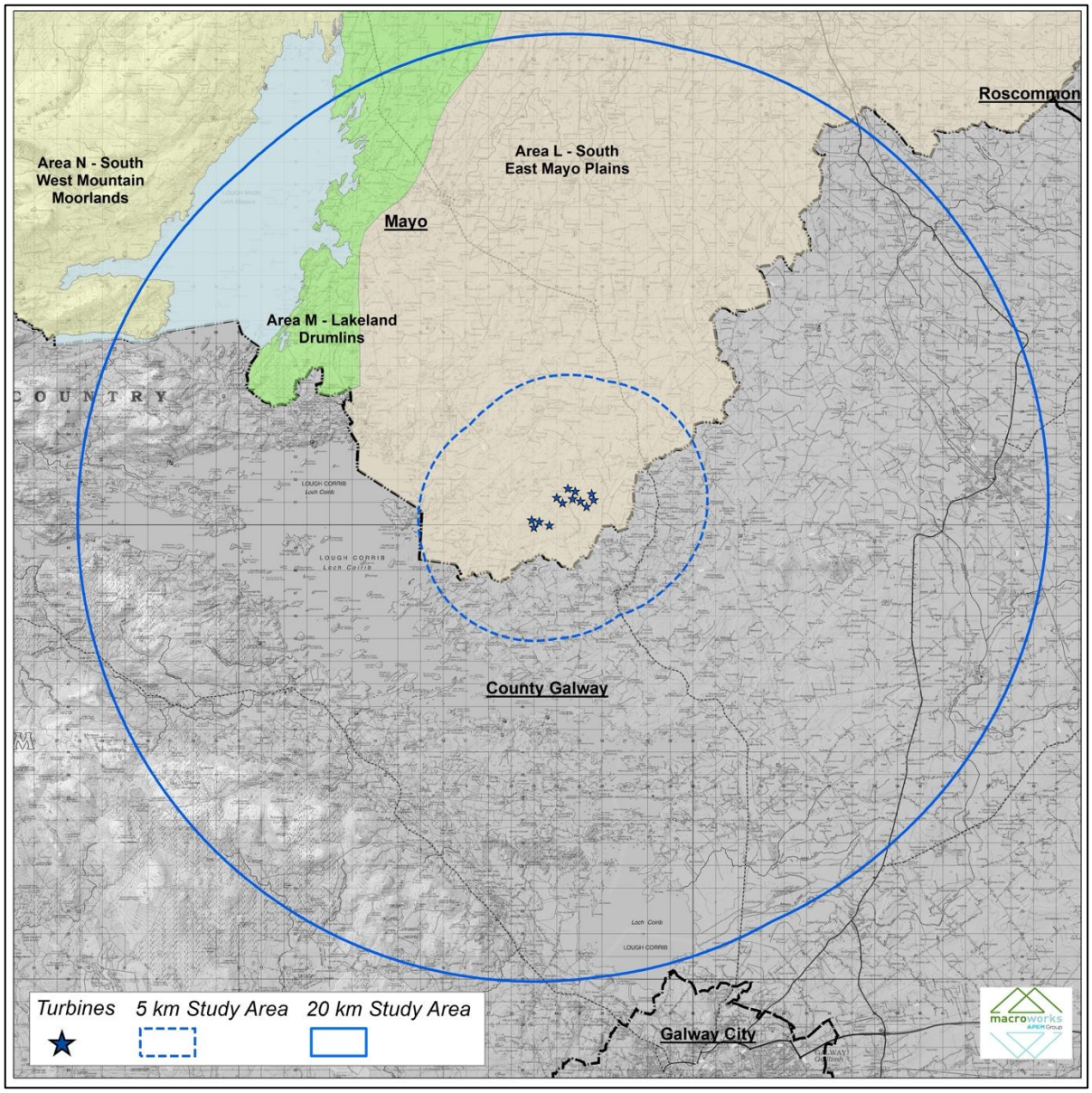


Figure 13-7 Excerpt from the Mayo County Development Plan 2022-2028, Landscape Appraisal showing landscape character units.

The following sections of the landscape appraisal are used to define landscape protection policy areas and a sensitivity matrix. This is integral to Chapter 4 of the MCDP, which outlines the Environment, Heritage & Amenity Strategy. The below 'Landscape Protection Policy Areas' map (See Figure 13-8) is used to assess the development impact of different development types in conjunction with the Landscape Sensitivity Matrix

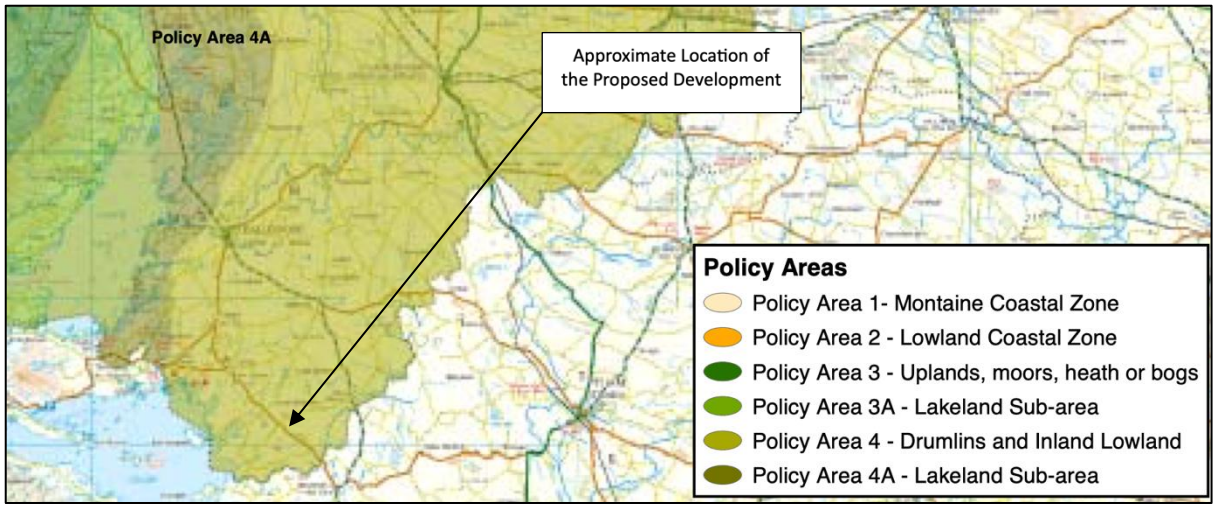


Figure 13-8 Excerpt from the Mayo County Development Plan 2022-2028, Landscape Appraisal showing landscape policy areas in relation to the proposed wind farm site.

The Proposed Project is located within Policy Area 4 – 'Drumlins and Inland Lowland', with the following policies identified:

- *"Policy 21: Recognise that these areas are made up of a variety of working landscapes and contain the vast proportion of the Counties population within principle towns and on rural holdings. These also incorporate all of the major national primary and regional roads, and railways.*
- *Policy 22: Continue to permit development that can utilise existing infrastructure, whilst taking account of absorption opportunities provided by the landscape and prevailing vegetation.*
- *Policy 23: Encourage development that will not significantly interfere or detract from scenic lakeland vistas, as identified in the Development Plan, when viewed from areas of the public realm.*
- *Policy 24: Encourage development that will not result in detrimental impacts (through excessive bulk, scale or inappropriate siting) on the landscape at a local or micro level as viewed from areas of the public realm."*

Policy Area 4A – 'Lakeland Sub-policy Areas' is also relevant due to the proximity of the Proposed Project to Lough Mask:

- *"Policy 25: Ensure all new development utilises the existing infrastructure of the policy area in a manner, which can be best visually absorbed.*
- *Policy 26: Ensure development will not take place on steep slopes, which will have a strong visual impact on the surrounding landscapes, when viewed from areas of the public realm."*

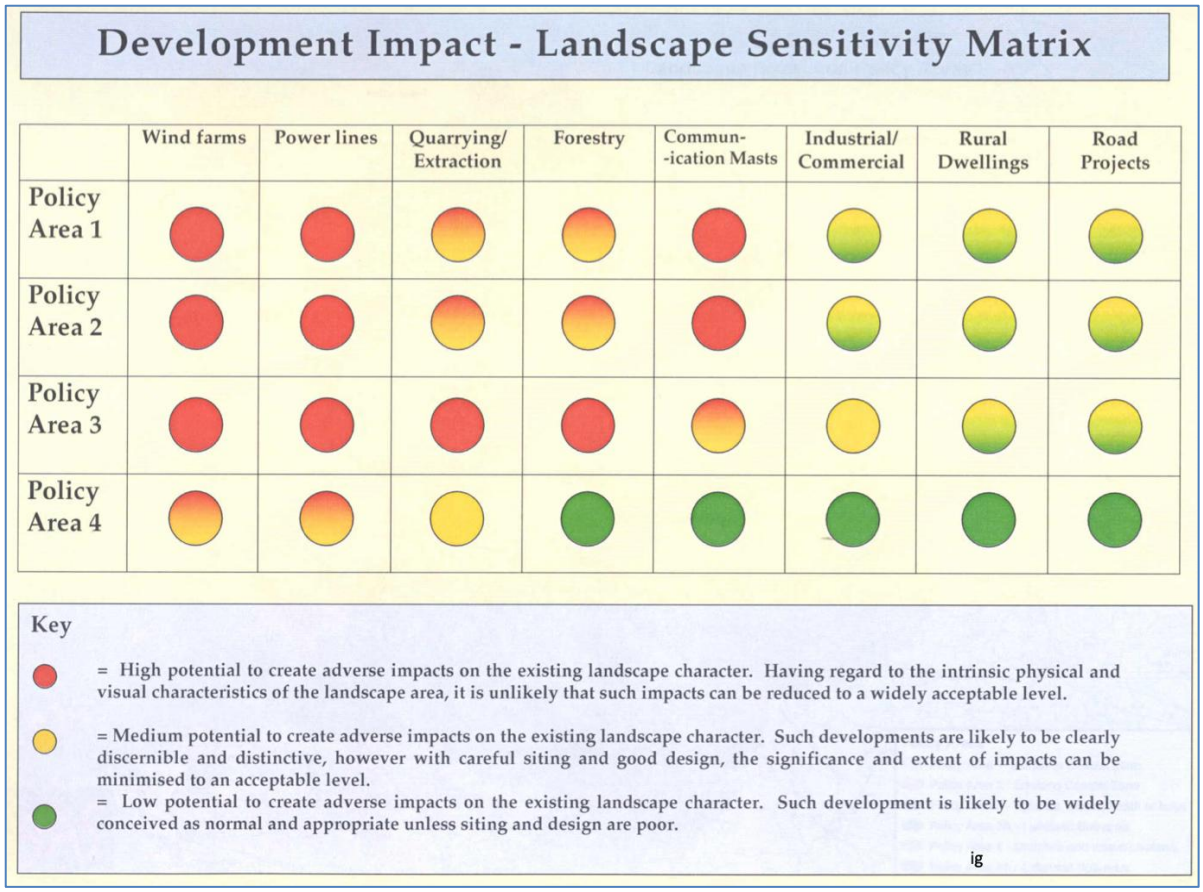


Figure 13-9 Excerpt from the Mayo County Development Plan 2022-2028, Landscape Appraisal showing landscape sensitivity matrix

The MCDP also includes landscape policies and objectives, some of which are relevant to the Proposed Project and are outlined below:

*"**NEP 14** – To protect, enhance and contribute to the physical, visual and scenic character of County Mayo and to preserve its unique landscape character.*

***NEO 27** - To ensure all development proposals are consistent with the Landscape Appraisal of County Mayo and the associated Landscape Sensitivity Matrix and future editions thereof."*

13.3.2.2.2 Mayo CDP – Renewable Energy Strategy

A new Renewable Energy Strategy (RES) for County Mayo (2011-2020) was adopted in a Special Council Meeting on 13th July 2026. The updated RES states that is follows a Local Authority Renewable Energy Strategy (LARES) methodology that "*involves a sieve mapping analysis of key Ecological, Environmental, Archaeological, Landscape and technical areas*". The updated RES include a new wind suitability map (refer to Map 6.10 of the RES and Figure 13-10 below). The new wind suitability map includes for three wind energy classifications; Open for Consideration, Repowering Potential and Unsuitable. It should be noted that the RES states *"Areas located outside of 'Areas Open to Consideration' with the exception of the established clustered wind farm areas are not deemed suitable for commercial wind farm development because of their overall sensitivity arising from landscape, ecological, recreational and or cultural and built heritage resources."*

Analysis of Adopted RES and Comparison with Previous RES

With regard to the proposed turbine array, three of the easternmost turbines are located within the 'Open for Consideration' classification of the adopted RES, whilst the remainder of the turbine array is located within an 'Unsuitable' classification.

The adopted RES includes constraint mapping in Maps 6.8 and 6.9, which relates to 'Practical Constraints' and identifies areas subject to constraints relevant to wind energy development. These maps show a spatial distribution of constraints within the surrounds of the Proposed Development site. However, the spatial pattern and extent of the constraints identified on these maps do not appear to correspond with the considerably broader areas classified as 'Unsuitable' on the Wind Suitability Map. On the basis of the published mapping, it is therefore not readily apparent how the extent of the 'Unsuitable' classification in the vicinity of the Proposed Development has been derived.

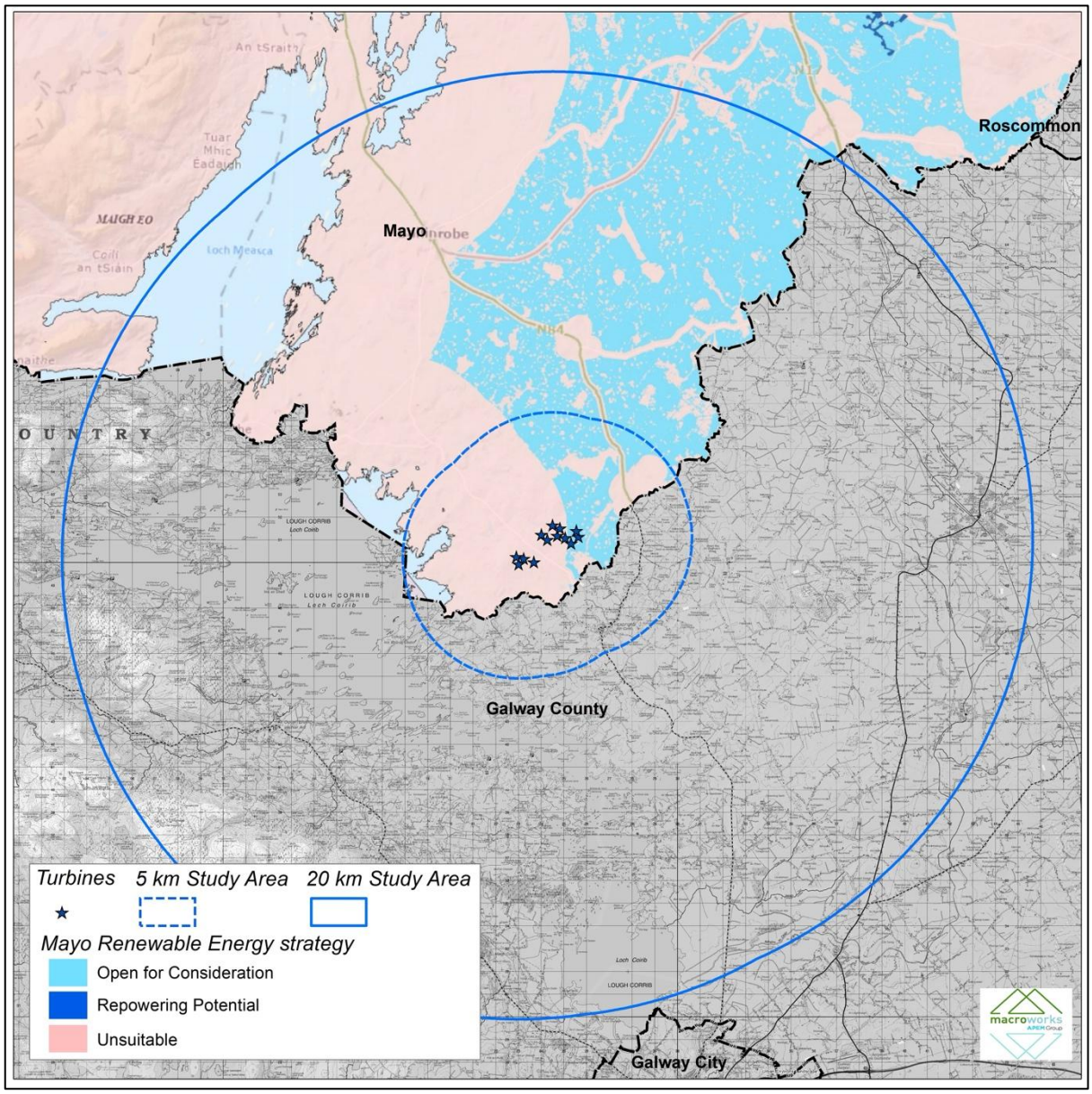


Figure 13-10 Excerpt from the recently adopted RES within the current Mayo CDP showing wind energy classifications within the study area.

It should also be noted that the majority of this projects design lifecycle was formed around the previous Mayo RES, which included for the following wind energy classifications:

- *"**Priority Areas** are areas which have secured planning permission and where onshore wind farms can be developed immediately.*
- ***Tier 1 - Preferred (Large Wind Farms)** are areas in which the potential for large wind farms is greatest.*
- ***Tier 1 - Preferred (Cluster of Turbines)** are areas identified as being most suitable for smaller clusters of wind turbines (clusters of up to three to five turbines depending on site conditions and visual amenity).*
- ***Tier 2 - Open for Consideration** identifies areas which may be considered for wind farms or small clusters of wind turbines but where the visual impact on sensitive or vulnerable landscapes, listed highly scenic routes, scenic routes, scenic viewing points and scenic routes will be the principal consideration. The Tier 2 classification will be reviewed by the Council following a determination by EirGrid of grid infrastructure for the County."*

In this regard, the proposed turbine array was fully contained within the 'Open to Consideration' wind energy classification as indicated on Figure 13-11 below. With regard to renewable energy developments, its states in section 6.5.14 of the previous RES *"Renewable energy developments shall avoid sensitive and vulnerable landscapes, listed highly scenic views, scenic views, scenic viewing points and scenic routes where detailed visual analysis demonstrates that the development will have an adverse effect on those landscapes. Renewable energy developments shall be sited and designed to minimise the visual amenity of the surrounding area."*

The previous RES therefore established a materially different policy position for the site, whereby wind energy development was open to consideration subject to detailed assessment of landscape and visual effects, rather than being identified as 'unsuitable'. Whilst the adopted RES now represents the applicable policy position and is acknowledged as such in this assessment, the previous RES remains relevant context when considering the evolution of the proposed project and the underlying landscape and environmental constraints associated with the site. Both strategies were prepared through a LARES-based strategic assessment process, yet they reach markedly different conclusions regarding the suitability of the same landscape for wind energy development. When this substantial change is considered alongside the apparent lack of direct spatial correlation between the constraint mapping in Maps 6.8 and 6.9 and the 'Unsuitable' areas identified on Map 6.10, the published RES mapping does not provide a readily apparent explanation for the extent of the change in classification at this location.

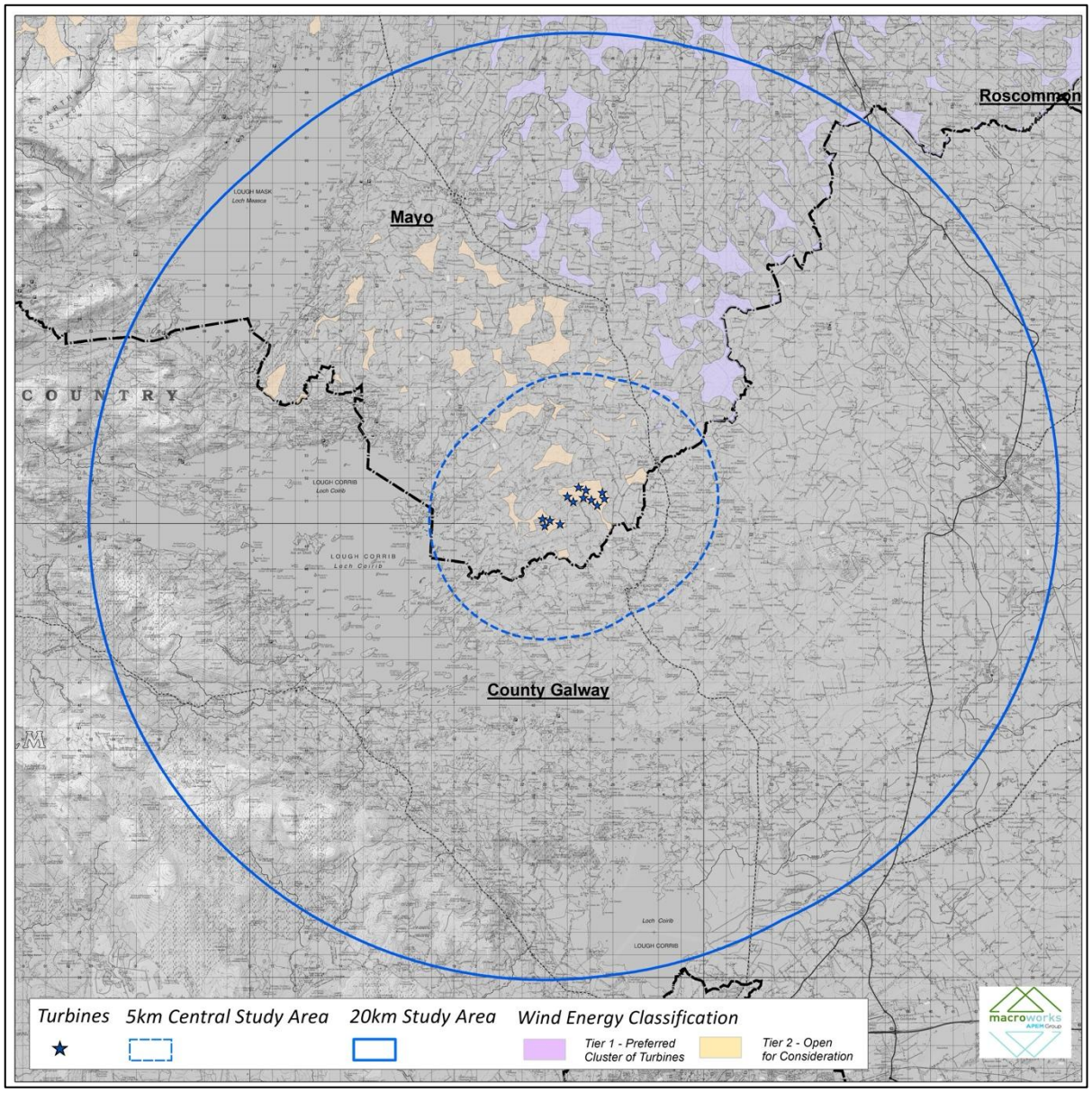


Figure 13-11 Excerpt from the Mayo CDP 2022-2028 showing previous wind energy classifications in relation to the proposed turbine locations

13.3.2.3Galway County Development Plan 2022-2028

While the Proposed Project is entirely contained within County Mayo, a larger extent of the 20 km Study Area falls within County Galway, and thus, it is important to consider landscape policy and designations within areas of County Galway within the study area.

A Landscape Character Assessment accompanies the Galway County Development Plan 2022-2028 as Appendix 4. It classifies and zones the Galway landscape at three levels and assigns a landscape sensitivity rating to each landscape type therein.

Landscape Regions – a broad area of land with a distinctive character due to large-scale natural factors – such as mountains, plains, coasts etc.

Landscape Character Type – an area of land that has an appearance that is readily recognisable as being different and distinctive from other areas.

Landscape Character Unit – the smallest area of distinctive local features within a Landscape Type that can be practicably identified to assist in policy formulation.

The nearest relevant landscape region to the Proposed Project is the 'Eastern Plains' Landscape Region. The Eastern Plains "*is underlain by younger, softer rocks. This derives most of its character from the covering blanket of glacial soils that give rise to extensive, level plains of grasslands, with many areas of bog in the north*."

Further the Galway landscape regions are then subdivided into 10 distinct Landscape Character Types (LCTs). The nearest LCT to the Proposed Project is the 'Central Galway Complex' LCT (refer to Figure 13-12 below), however the Lake Environs LCT, North Galway Complex LCT, Uplands and Bog LCT and Urban Environs LCT all occur within the wider study area.

The nearest LCT, 'Central Galway Complex' (LCT6) is also subdivided into Landscape Character Units (LCU) with the most relevant of these to the Proposed Project LCU 6a 'Black River Basin', which is described as "*Undulating long-occupied working landscape with high levels of settlement. Large regular fields and numerous parkland remnants. Low enclosure except for localised areas of mature parkland trees*".

The current CDP also identifies sensitivity classifications for the broader LCTs, with both the nearest two LCTs to the Proposed Project (Central Galway Complex LCT and North Galway Complex LCT) classified with a 'Class 1 – Low' sensitivity classification, whilst to the west, the Lake Environs LCT is classified with a 'Class 4 - Iconic' sensitivity classification. The Uplands and Bog LCT located in the wider western periphery of the study area is classified with a mix of 'Class 2 – High' sensitivity and 'Class 3 – Special' sensitivity, whilst the LCT – Urban Areas is unclassified with regard to sensitivity.

Galway CDP policies and objectives that are considered to be of particular relevance to landscape and visual matters in relation to the Proposed Project include:

- *"**LCM 1 - Preservation of Landscape Character** - Preserve and enhance the character of the landscape where, and to the extent that, in the opinion of the Planning Authority, the proper planning and sustainable development of the area requires it, including the preservation and enhancement, where possible of views and prospects and the amenities of places and features of natural beauty or interest.*
- ***LCM 2 - Landscape Sensitivity Classification** - The Planning Authority shall have regard to the landscape sensitivity classification of sites in the consideration of any significant development proposals and, where necessary, require a Landscape/Visual Impact Assessment to accompany such proposals. This shall be balanced against the need to develop key strategic infrastructure to meet the strategic aims of the plan.*
- ***LCM 3 - Landscape Sensitivity Ratings** - Consideration of landscape sensitivity ratings shall be an important factor in determining development uses in areas of the County. In areas of high landscape sensitivity, the design and the choice of location of proposed development in the landscape will also be critical considerations."*

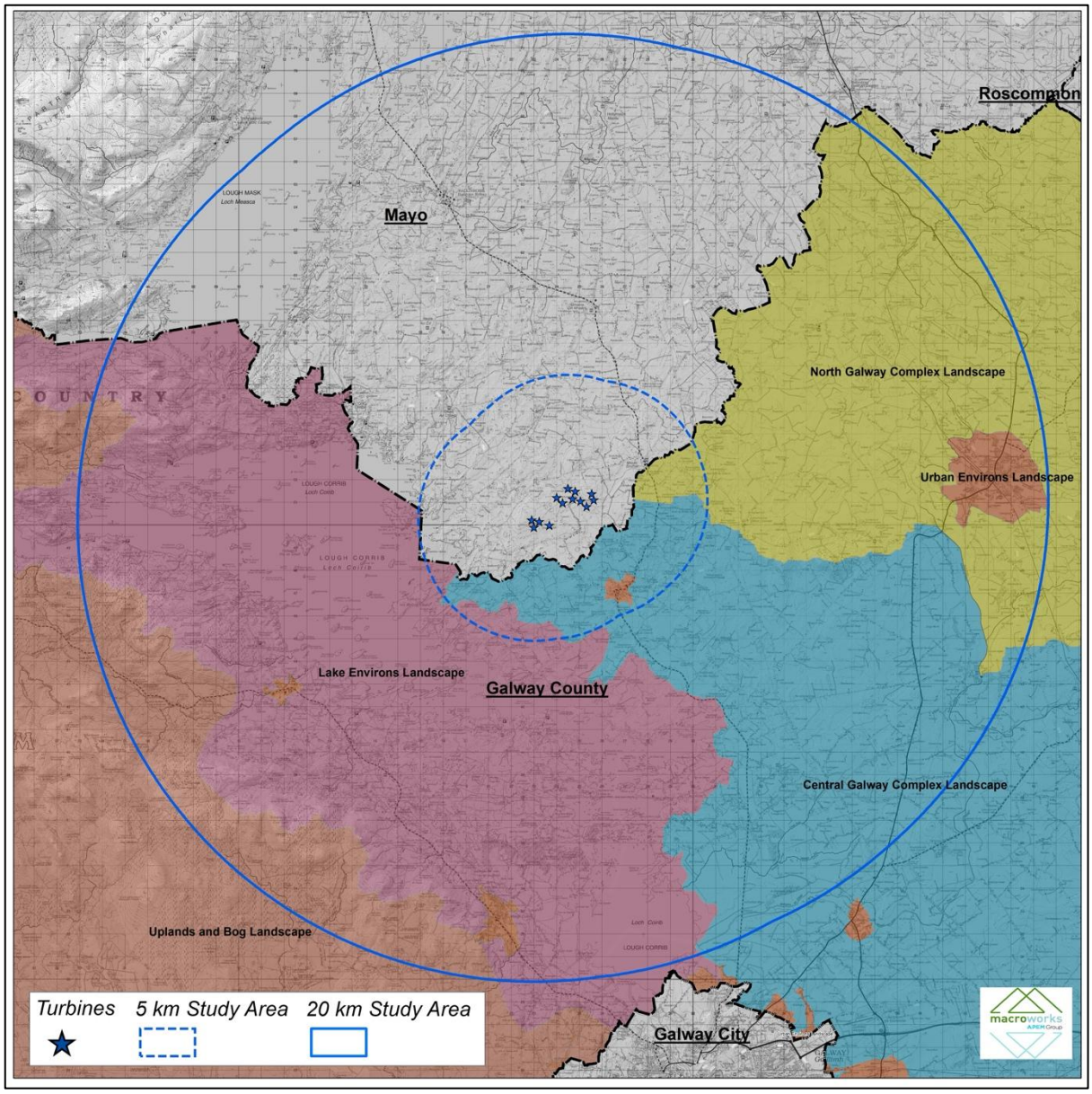


Figure 13-12 Excerpt from the Galway CDP 2022-2028 showing landscape character types in relation to the Proposed Project

13.3.3 Visual Baseline

13.3.3.1 Zone of Theoretic Visibility

A computer-generated ZTV map has been prepared to illustrate from where the Proposed Project is potentially visible. The ZTV presented at Figure 13-13 is based on a tip height of 150m. A large-scale map of a ZTV showing the potential visibility up to the hub height of the proposed turbines is also included in Appendix 13 2. The ZTV map is based solely on terrain data (bare ground visibility), and ignores features such as trees, hedges or buildings, which may screen views. Given the complex vegetation patterns within this landscape, the main value of this form of ZTV mapping is to determine those parts of the landscape from which the Proposed Project will definitely not be visible, due to terrain screening within the 20 km study area.

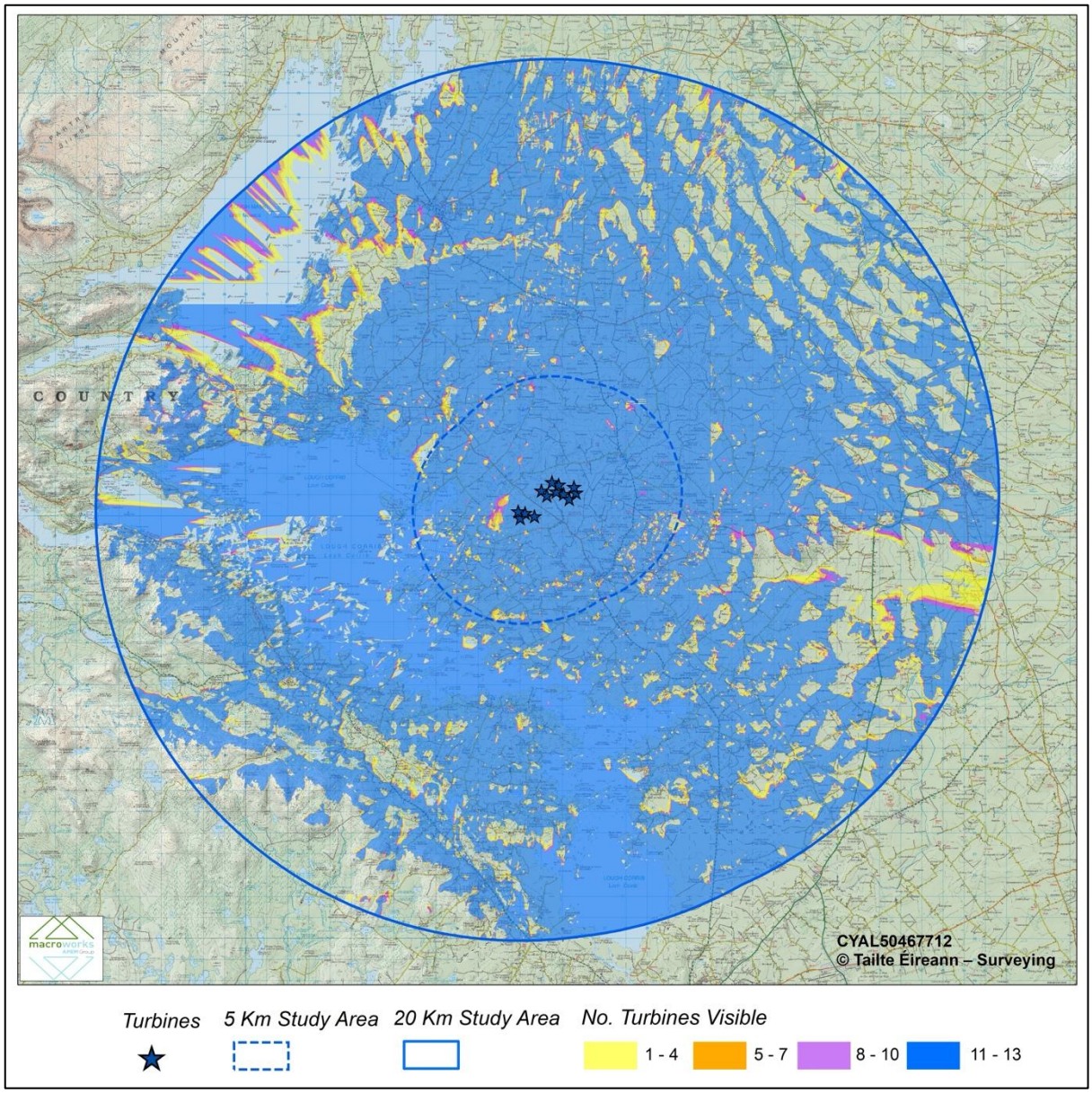


Figure 13-13 Bare-ground Zone of Theoretic Visibility (ZTV) mapping showing theoretic potential for visibility of the proposed turbines within the central and wider study area.

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

- The proposed turbines have the potential to be visible throughout the majority of the central study area due to their locally elevated siting and the low rolling nature of the surrounding landform.
- There are very limited parts of the central study area that will be fully screened by intervening terrain. Indeed, the most notable area where potential visibility will be curtailed is directly to the west of the western turbine array, where steeply sloping terrain will partially screen some of the proposed turbines.
- The wider study area also encompasses extensive areas of comprehensive theoretical visibility (represented by the blue colour pattern) due to the flat to gently rolling terrain that typifies much of the surrounding landscape.

- To the northeast and east, areas where the turbines will be fully screened become more noticeable and present in a 'sand ripple'-like pattern, which typically reflects the drumlin-like formations within the existing terrain.
- To the north and southeast, the potential visibility pattern is relatively consistent through to the periphery of the 20 km study area, reflecting the flat to gently rolling nature of the terrain in these areas.
- To the west, the comprehensive ZTV pattern extends across the lakeland environs of Lough Corrib, with much of the east- and north-east-facing terrain to the west of Lough Corrib also encompassed by comprehensive ZTV coverage. Further to the west and southwest, the ZTV pattern becomes more sporadic as the upland hills and ridges within this part of the study area visually screen the proposed turbines.
- To the northwest, the ZTV pattern remains relatively consistent, albeit with some localised areas to the east and south of Lough Mask fully screened by intervening terrain within the north-western quadrant of the study area.
- With regard to settlements, almost all surrounding centres of population within the study area have the potential to afford visibility of the proposed turbines.
- It is important to reiterate that the above mapping is highly theoretical, as it does not account for the screening effects of built development or surrounding intervening vegetation. In this regard, actual turbine visibility is likely to be considerably less than that depicted by the worst-case scenario ZTV mapping.

13.3.3.2 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, guide books, road side rest stops or on post cards that represent the area.

All of the scenic routes and views that fall inside the ZTV pattern were investigated during the fieldwork to determine whether actual views of the Proposed Project might be afforded. Where visibility may occur, a viewpoint has been selected for use in the visual impact appraisal later in this chapter.

Mayo County Development Plan 2022-2028

The current Mayo CDP 2022-2028 includes Map 10.2 'Scenic Routes and Views', which classifies scenic designations in County Mayo into two categories; Scenic Routes and Scenic Routes with Designated Views.

Galway County Development Plan 2022-2028

The Galway CDP Landscape Character Assessment (Appendix 4 of the CDP 2022-2028) includes a Map of Scenic Routes and Scenic View Points. See Table 13-5.

Table 13-5 Relevance of CDP Scenic views to the Photomontages included in this EIAR.

CDP Ref:	Relevance to visual impact appraisal?	VP ref no. herein
Mayo County Development Plan 2022-2028		
No designated scenic routes located within the study area within County Mayo		
Galway County Development Plan 2022-2028		
SV 20	Not Relevant – View orientated in the opposite direction to the Proposed Project (scenic designation located 19.4 km west)	-
SV 21	Not Relevant – View orientated in the opposite direction to the Proposed Project (scenic designation located 18.7 km southwest)	-
SV 22	Yes Relevant – Potential for views of the Proposed Project	VP4
SV 23	Yes Relevant – Potential for views of the Proposed Project, albeit offset from the main aspect of visual amenity (scenic designation located 16.1 km northwest)	VP4
SV 24	Yes Relevant – Potential for views of the Proposed Project (scenic designation located 13.1 km southwest)	VP28
SV 25	Yes Relevant – Potential for views of the Proposed Project (scenic designation located 16 km southwest)	VP31
SV 27	Yes Relevant – Potential for views of the Proposed Project (scenic designation located 10 km northwest)	VP6
SV 28	Yes Relevant – Potential for views of the Proposed Project, albeit offset from the main aspect of visual amenity (scenic designation located 11.2 km southwest)	VP28/VP29
SV 31	Not Relevant – View orientated in the opposite direction to the Proposed Project (scenic designation located 7. 4km south)	-
SV 33	Yes Relevant - Potential for views of the Proposed Project (scenic designation located 2.6 km south)	VP25
SR Lough Corrib	Yes Relevant - Potential for views of the Proposed Project	VP29

Policy relating to scenic designations in the current Mayo and Galway County Development Plans is included below:

Mayo

NEO 25 – To consider applications for development, along Mayo's Scenic routes, that can demonstrate a clear need to locate in the area concerned, whilst ensuring that:

- *Does not impinge in any significant way on the character, integrity and distinctiveness of the area.*
- *Meets high standards in siting and design.*
- *Contributes to and enhances local landscape character*
- *Satisfied all other criteria, with regard to, inter alia, servicing, public safety and environmental considerations.*

***NEO 26** - To consider applications for development, within Mayo's Coastal Areas and Lakeshores and within areas along scenic routes with designated scenic views, that can demonstrate a long-standing social link to the area concerned, whilst ensuring that it:*

- *Does not impinge in any significant way on the character, integrity and distinctiveness of the area.*
- *Cannot be considered at an alternative location.*
- *Meets high standards in siting and design.*
- *Contributes to an enhances local landscape character.*
- *Satisfies all other criteria, with regard to, inter alia, servicing, public safety and environmental considerations.*

Galway

***PVSR 1** – Protected Views and Scenic Routes - Preserve the protected views and scenic routes as detailed in Maps 8.3 and 8.4 from development that in the view of the Planning Authority would negatively impact on said protected views and scenic routes. This shall be balanced against the need to develop key infrastructure to meet the strategic aims of the plan."*

13.3.3.3Centres of Population

The nearest centres of population to the Proposed Project include Moyne village and the settlement of Glencorrib. Moyne village is a dispersed rural settlement and is located just over 1.2 km south of the proposed turbine array. Glencorrib is a more defined settlement centred along the R334 regional road and situated some 1.8 km north of the proposed turbines. Some of the more notable centres of population within the central study area are located within its wider extents, with the settlement of Shrule, located along the Black River corridor, situated some 2.5 km from the nearest proposed turbine. The largest centre of population within the central study area is the settlement of Headford, which is located just over 3.5 km southeast of the Proposed Project.

The wider study area includes several more notable centres of population, with the largest of these being the settlement of Tuam, which is located east of the M17 corridor and over c. 16 km to the east of the proposed wind farm site. In the northern extent of the wider study area, several settlements are located along the corridor of the N84 and include the village of Kilmaine, some 7.5 km north of the proposed wind farm site, and the larger town of Ballinrobe, located 13 km northwest of the Proposed Project. To the north, the settlements of Cross and Cong are located along the alignment of the R336 regional road, situated 6 km and 10 km northwest of the Proposed Project, respectively.

Within the wider western extent of the study area, to the west of Lough Corrib, several settlements are located along the alignment of the N59 National Secondary Route and include

Oughterard, Rosscahill and Moycullen. Oughterard and Moycullen are the larger of the three settlements, located some 12 km southwest and 16 km south of the Proposed Project, respectively. Moycullen is one of the larger settlements within the wider southern half of the study area. However, it should be noted that, due to the study area's proximity to the wider Galway City environs, there is also a more notable dispersed rural population. Similarly, to the southeast of the wider study area, there is a greater density of rural settlement pattern, with the only notable settlements here including the small villages of Corofin and Corrandulla, both located beyond c. 15 km from the Proposed Project.

13.3.3.4 Transport Routes

The nearest major route to the Proposed Project is the R334 regional road, which dissects the proposed wind farm site and is orientated in a general north-south direction within the study area. The nearest proposed turbine is located just over 500 m from the regional road at its nearest point. The only other major route corridor within the central study area is the N84 National Secondary Route, which extends north-south through the central and wider study area, connecting settlements such as Headford, Shrule, Kilmaine and Ballinrobe. Otherwise, the central study area comprises a dense network of interconnected local roads and rural laneways. The proposed wind farm site itself is bounded by several local roads. The L-1615 and L-66663 local roads are situated directly north of the proposed turbine array, whilst the L-16158 is located directly east, and the L-5666 is located directly south of the proposed wind farm site.

Outside of the central study area, the wider study area encompasses several notable major route corridors. Of most note is the M17/N17 corridor situated within the wider eastern periphery of the study area at a distance of some 16.5 km from the proposed wind farm site at its nearest point. The N83 National Secondary Route also traverses the wider eastern extent of the study area and is located some c. 14 km east of the Proposed Project. The wider western extent of the study area, west of Lough Corrib, encompasses the N59 National Secondary Route, which connects the settlements of Oughterard, Rosscahill and Moycullen from north to south. The N59 is located some c. 12 km southwest of the Proposed Project at its nearest point. It should be noted that many of the aforementioned routes within the study area connect with Galway City and the wider Galway environs in the southern extent of the study area.

The wider study area also encompasses numerous regional and local road corridors, many of which interconnect with the other major route corridors throughout the study area.

13.3.3.5 Tourism, Recreation and Heritage Features

The central study area is not highly recognised for tourism or recreational activity. Indeed, the most notable public amenities tend to relate to local sports pitches within the surrounding settlements. The principal feature within the central study area relates to a heritage asset. Ross Errilly Friary (refer to Figure 13-14 below) was established in the mid-fourteenth century and is one of Ireland's best-preserved and most complete ecclesiastical settlements (OPW). Located to the south of the Black River, Ross Errilly Friary is situated some c. 2 km south of the nearest proposed turbine.



Figure 13-14 Ross Errilly Friary located in the southern extent of the central study area

The wider study area comprises a much more varied landscape and, as such, encompasses a greater variety of tourism, amenity and heritage features. Much of this is contained within the western extent of the wider study area, associated with the lakelands and more elevated uplands further to the west. The only recognised walking trail within the eastern extent of the study area is the Kilmaine Loop walking trails, located within the settlement of Kilmaine some c. 7.2 km from the nearest turbine at its closest point.

Within the western extent of the study area, both Lough Corrib and Lough Mask are principal amenity features within the surrounding landscape, with numerous heritage assets and walking trails located throughout their immediate and wider surroundings. The settlement of Cong, located within the northwestern quadrant of the study area, is a notable tourism destination, with Ashford Castle, one of Ireland's finest luxury hotels, located directly south of the settlement. The village of Cong was also the setting for the Oscar-winning film The Quiet Man, with many national and international visitors travelling to the village and surrounding landscape to view the key filming locations. The settlement also includes Cong Abbey, founded in the 12th century and located along the River Cong. Cong also encompasses several looped walking trails within the surrounding woodlands, whilst Ard Na Gaoithe Forest Recreational Park includes several looped walking trails, some of which pass along the banks of Lough Corrib.

A section of the Western Way National Waymarked Trail also passes through the wider western extent of the study area. The Western Way is a 200 km waymarked trail extending through both Galway and Mayo, with the section within the study area commencing north of Oughterard and passing along the western banks of Lough Corrib. The nearest sections of this waymarked trail to the Proposed Project are located some 13 km west of the proposed turbine array at their nearest point.

Both Lough Corrib and Lough Mask within the study area encompass numerous additional amenity and heritage features, including several piers and quays (refer to Figure 13-15 below). Both loughs contain numerous small islands and are recognised fisheries. The banks of both loughs also include numerous heritage assets, including castle ruins and other built heritage features.



Figure 13-15 Shoreline context of Lough Corrib

Other local trails within the wider study area include the New Village Forest loop trails located to the north of Oughterard, whilst additional looped walking trails are also located in the surroundings of Moycullen.

13.3.4 Identification of Viewpoints as a Basis for Assessment

The results of the ZTV analysis provide a basis for the selection of Viewpoints (VP's), which are the locations used to study the landscape and visual impact of the proposed wind farm in detail. It is not warranted to include each and every location that provides a view of this project 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 provide representative views of the proposed wind farm from different distances, different angles and different contexts.

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

- Key Views (from features of national or international importance);
- Designated Scenic Routes and Views;
- Local Community views;
- Centres of Population;
- Major Routes; and
- Amenity and heritage features.

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

Key Views (KV)

These VPs are at features or locations that are significant at the national or even international level, typically in terms of heritage, recreation or tourism. They are locations that attract a significant number of viewers who are likely to be in a reflective or recreational frame of mind,

possibly increasing their appreciation of the landscape around them. The location of this receptor type is usually quite specific.

Designated Scenic Routes and Views (SR/SV)

Due to their identification in County Development Plans, this type of VP location represents a general policy consensus on locations of high scenic value within the study area. These are commonly elevated, long distance, panoramic views and may or may not be mapped from precise locations. They are more likely to be experienced by static viewers who seek out or stop to take in such vistas.

Local Community Views (LCV)

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

Centres of Population (CP)

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

Major Routes (MR)

These include national and regional level roads and are relevant VP locations due to the number of viewers potentially impacted by the Proposed Project. The precise location of this category of VP is not critical and might be chosen anywhere along the route that provides clear views towards the proposed wind farm 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 Viewpoints selected in this instance are set out in the Table 13-6 and Figure 13-16.

Table 13-6 Outline Description of Selected Viewpoints (VPs)

LCV = Local Community Views; SV/SR = Scenic View/Scenic Route; MR = Major Route; CP = Centre of Population; and AH = Tourism, Amenity & Heritage

VP No.	Location	Representative of	Distance to nearest turbine	Direction of view
VP1	N84 at Kilmaine	MR, CP	7.8 km (T7)	SW
VP2	L-2220 Local Road at Kilconly	CP	12.0 km (T13)	SW
VP3	R346 at Cross	CP, MR	6.3 km (T4)	SE
VP4	R345 north of Lough Corrib at Dúráithe	SV, MR	14.0 km (T4)	SE
VP5	L-5662 at Mocorha	LCV	2.9 km (T7)	S
VP6	Lakeside view at Ard Na Gaoithe Forest Park	SV, AH	10.0 km (T4)	SE
VP7	Local cemetery at Shrule	AH, CP, LCV	2.6 km (T13)	SW
VP8	L-1615 at Cahernabrock	LCV	698 m (T7)	S
VP9	L-16152 at Brodullagh South	LCV	722 m (T13)	W
VP10	R334 at Glencorrib	LCV, CP, MR	1.6 km (T4)	SE & SW
VP11	L-66663 at Ballisnahyny (1)	LCV	928 m (T4)	S & E
VP12	L-16158 at Kinlough	LCV	766 m (T12)	W
VP13	L-2104 at Bunnasillagh north of Lough Hacket	LCV	5.0 km (T12)	W
VP14	L-26151 at Toorard	LCV	614 m (T5)	N, E & W

VP15	R334 at Toorard	MR, LCV	531 m (T1)	E & W
VP16	Local road at Inis Mhic an Tír	LCV, AH	5.4 km (T4)	E
VP17	Moyne Cemetery	AH, LCV	822 m (T11)	N & W
VP18	L-66663 at Ballisnahyny (2)	LCV	1.8 km (T4)	E
VP19	L-5666 at Cloghmoyne (1)	LCV	863 m (T1)	N & W
VP20	L-5666 at Cloghmoyne (2)	LCV	719 m (T3)	N & NE
VP21	L-5666 at Cloghmoyne (3)	LCV	1.4 km (T3)	NE
VP22	L-5666 at Mounthenry	LCV	2.5 km (T3)	NE
VP23	Ross Errilly Franciscan Friary	AH	2.1 km (T1)	N
VP24	Donaghpatrick Cemetery	AH, LCV	6.3 km (T12)	NW
VP25	L-21032 south of Ross Errilly Franciscan Friary	SV	2.5 km (T1)	N
VP26	Residential Housing Estate at Headford	LCV, CP	3.5 km (T11)	NW
VP27	Killursa Church and Graveyard	AH, LCV	3.0 km (T1)	N
VP28	L-1310 at Newvillage west of Lough Corrib	SV	13.2 km (T3)	E
VP29	Oughterard Graveyard	SV/SR, CP, AH	12.3 km (T3)	NE
VP30	Knockferry Pier Lough Corrib	AH	8.1 km (T3)	N
VP31	L-1311 at Bunnagippaun	SV	16.0 km (T3)	NE

VP32	N59 at Clydagh Roundabout	MR, CP	18.8 km (T3)	N

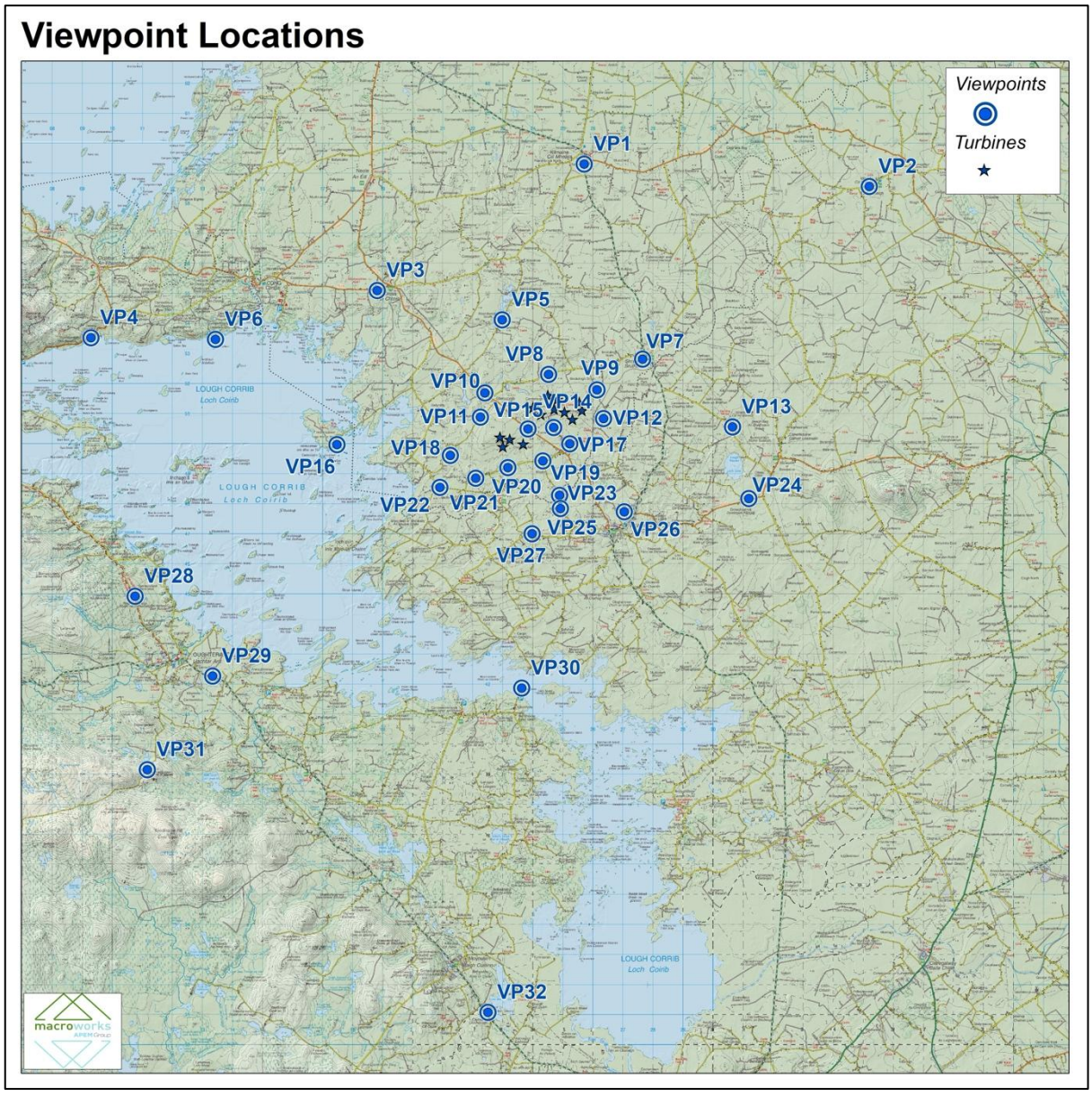


Figure 13-16 Map of Viewpoint Locations

13.4 Assessment of Effects

Based on the assessment criteria employed herein, potential significant effects are considered most likely to occur in instances where highly sensitive landscape and visual receptors coincide with high order landscape and visual effects (see descriptions Table 13-1, Table 13-2 and Table 13-3). From previous extensive experience of this type of project in a modified transitional upland setting influenced by other landscape types such as mountain moorland, transitional foothills and river valley landscape contexts, it is considered that potentially significant landscape and visual effects have the potential to occur in the following ways:

Landscape Effects

a) Irreversible physical effects on sensitive landscape features,

b) Disruption of sensitive land cover and/or land use patterns,

c) Substantial and incongruous change to areas of sensitive landscape character,

Visual Effects

a) A sense of spatial dominance as seen from highly sensitive receptor locations. This is most likely to occur within 3 km of the proposed wind farm site.

b) Visual clutter and ambiguity as seen from highly sensitive receptor locations. This can occur at any distance but tends to occur beyond 2-3 km as turbines become stacked in perspective and a more two-dimensional layout is perceived.

c) A combination of both of the above effects.

Baseline studies and early-stage assessments specific to the Proposed Project indicate that some of the most susceptible landscape receptors are located within the wider study area associated with the lakelands of Lough Corrib and Lough Mask and their immediate environs. These areas present a much stronger sense of visual amenity, tranquillity and naturalness. West again of these lakelands, the terrain rises towards a more dynamic upland rolling landscape, again with a much stronger sense of distinctiveness than the lands within the central study area and the wider study area to the north, east and south.

As with the landscape receptors, the most sensitive visual receptors also tend to be associated with parts of the wider study area. Nonetheless, there are some localised receptors within the central study area, such as Ross Errilly Friary, that are highly sensitive to change. Outside of the central study area, the most sensitive visual receptors are often associated with the lakeland landscape, with numerous scenic views and routes located in the environs of Lough Corrib, whilst several heritage and amenity features are also situated along the lakeside edge and within the surrounding landscape.

13.5 Do Nothing Scenario

In a Do-Nothing scenario, the existing pastoral lands that the Proposed Project is contained across is likely to be continued to be managed for typical agrarian practices. Given the 'open to consideration' wind energy classification that characterises the eastern extent of the site and lands within the surrounding area to the east, there is potential that further applications for wind energy development would arise within the surrounding landscape context.

13.6 Likely Evolution of the Baseline

In the absence of the Proposed Project, the prevailing landscape context, character and visual qualities of the study area are not anticipated to undergo any significant change in the short to medium term. At the proposed wind farm site scale, the surrounding pastoral farmland is likely to remain in agricultural use and continue to be managed in accordance with established rural land management practices that typify the existing receiving environment. As such, the broad pattern of fields, hedgerows, farmsteads and dispersed rural development that currently defines the landscape character of the central study area is expected to remain largely consistent.

In terms of vegetation and land cover, there is potential for a gradual increase in woodland, hedgerow reinforcement and native planting initiatives across both the central and wider study

areas. Such changes are likely to arise in response to evolving local, regional and national policy objectives relating to biodiversity enhancement, climate resilience and biodiversity net gain.

Within the wider study area, more noticeable changes to the baseline landscape context may occur due to the broader range of landscape typologies and development pressures present. In particular, the southern and western extents of the study area, which are well connected to Galway City and its wider commuter hinterland, may experience continued population growth and associated expansion of urban and peri-urban development. In parallel, there is potential for a gradual increase in renewable energy and associated grid infrastructure developments throughout the wider study area, reflecting national decarbonisation targets and supportive policy provisions contained within the relevant County Development Plans.

Notwithstanding the above, any future evolution of the baseline environment would be guided by national, regional and local planning policy, most notably the Mayo County Development Plan and Galway County Development Plan, both of which seek to balance sustainable rural development with the protection, conservation and enhancement of landscape character, visual amenity and environmental resources.

On balance, whilst the wider study area may experience gradual and incremental changes associated with settlement growth, renewable energy development and biodiversity-led land management initiatives, the central study area is likely to retain its prevailing rural and agricultural character, with no substantial alteration to the fundamental landscape structure or visual qualities of the receiving environment anticipated in the absence of the Proposed Project.

13.7 Mitigation Measures

Given the highly visible nature of commercial wind energy developments, it is not generally feasible to screen them from view using on-site measures as would be the primary form of mitigation for many other types of development. Instead, landscape and visual mitigation for wind farms must be incorporated into the early-stage site selection and design phases.

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

- Mitigation by Avoidance and Design;
- Buffering of Residential Receptors.

13.7.1 Embedded Mitigation/Mitigation by Design

The principal mitigation measure in this instance is the siting of the Proposed Project within a robust rural landscape that is principally characterised by typical rural land uses. The eastern extent of the site is also classified as 'Open to Consideration' in relation to wind energy development, which further reinforces a degree of robustness within the surrounding landscape. Furthermore, the landscape sensitivity matrix for County Mayo indicates that Policy Area 4, within which the proposed project is located, is the most robust of all policy areas within the county, albeit with a High-medium sensitivity to wind energy development, representing the lowest sensitivity classification of all four policy areas.

The landscape of the proposed wind farm site and study area is typified by traditional rural land uses, whilst both the central and wider study areas are intersected by several major route corridors. Whilst some more sensitive landscape areas and units are contained within the central and wider study area, the Proposed Project is well setback from these. Overall, this is a

typical working rural landscape context, within which wind farm development is unlikely to present as a highly incongruous built feature.

At the outset of the Proposed Project, some nearby visual receptors were identified as constraints to the Proposed Project, most notably Ross Errilly Friary and its associated scenic designation. Due to the proximity of these receptors to the proposed turbines, there was potential for notable visual effects to arise. As a result, early-stage wireframes were prepared to gain a better understanding of the potential visual effects associated with these receptors. An initial set of wireframe montages was prepared from 'Scenic View 33 – Friary of Ross', which is described as a view "from the road leading to the Friary ruins" and is classified with a County level of significance within the current Galway CDP, representing the second lowest of four categories. As indicated by the initial wireframe montage, it was noted that the proposed turbines would detract from the degree of scenic amenity afforded here, with the proposed turbines generating some degree of visual clutter and visual tension due to the overlapping of turbine blade sets and stacked views of turbines (refer to Figure 13-17 below).



Figure 13-17 Wireframe montage showing the initial turbine layout from Scenic View 33

It should also be noted that initial wireframe montages were prepared from the immediate context of the Friary (refer to Figure 13-18 below). Whilst the turbines would present as noticeable built features from its immediate context, there is a much stronger sense of separation from the Proposed Project when viewed from the immediate surroundings of the Friary. Indeed, whilst there would be some detraction from the visual amenity afforded here, the turbines would present as more distant features, well setback beyond layers of stacked vegetation and intervening terrain. Furthermore, whilst there remained some potential for the turbine arrangement to generate a degree of visual clutter and stacked views, the proposed turbines, in terms of their scale and function, were not considered likely to significantly detract from the setting of this heritage asset.

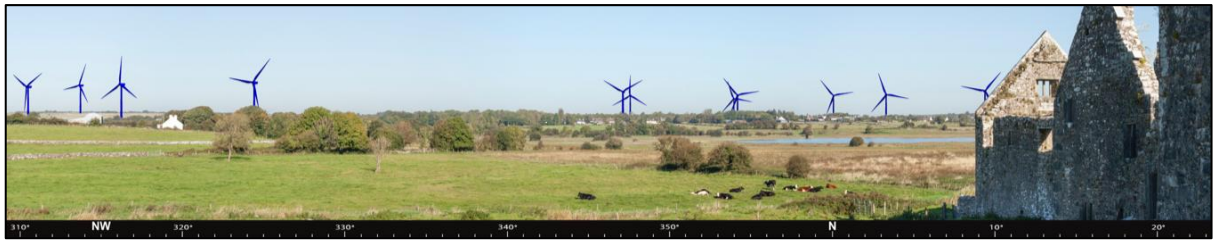


Figure 13-18 Wireframe montage showing the initial turbine layout from Ross Errilly Friary

As a result, it was recommended by the landscape and visual consultant that the turbines be relocated within the proposed wind farm site to alleviate visual effects relating to visual clutter and to limit adverse visual effects at this scenic viewpoint. The final layout that forms part of this submission reflects a much more visually comprehensible arrangement in comparison to the

initial turbine array, with the proposed turbines presenting improved spacing characteristics and a limited, if any, sense of visual clutter (refer to Figure 13-19 below).



Figure 13-19 Representative Viewpoint VP24 showing the final turbine layout from Scenic View - 33

The project has embedded landscape and visual mitigation measures and thus, the assessment of potential landscape and visual effects is equivalent to any assessment of residual effects in this instance.

Principal mitigation measures that will be implemented to make the Proposed Project less intrusive and less prominent at a localised level consist of: -

- The colour will be industry standard off-white/light grey semi-matt non-reflective finish;
- Electricity lines between individual turbines and the substation, and the grid connection infrastructure, will be placed underground;
- Special care will be taken to preserve any features, in so far as possible, which contribute to the landscape character of the study area - such as the retention of existing hedgerows, vegetation and dry-stone walls, insofar as possible, to maintain existing levels of screening and the prevailing landscape structure within the proposed wind farm site. While some localised vegetation clearance is required to facilitate certain aspects of the Proposed Project, this has been limited insofar as possible and generally occurs within the internal parts of the proposed wind farm site, where it will have a limited impact on the receiving landscape character; and
- Counter rotation of blade sets will be avoided.

13.7.2 Setback from Residential Receptors

For the proposed project, the closest receptor not involved in the proposed project is Receptor ID 381 (600 m) south-east from the nearest turbine location (T12), which complies with the Draft Revised WEDG (2019) minimum set back of 500 m and the setback distance of 4 times the maximum tip height (150 m) of the proposed turbines. In this instance and based on the Draft Revised WEDG (2019), the setback distance for visual amenity purposes is 600 m from residential receptors on the basis of the 150 m high turbines (this represents the greatest potential setback distance with regard to all potential turbines ranges).

Variation in residential buffer distances within the nearest kilometre has a much more noticeable effect on perceived turbine scale than when it occurs in the context of more distant views. This is due to the law of perspective, that doubling the distance to an object halves its perceived height. The reduction factor is even more pronounced when considered in the context

of the 'swept area' of turbine blades and not just their tip height. This exponential 'scale in relation to distance' scenario is illustrated in Figure 13-20 below.

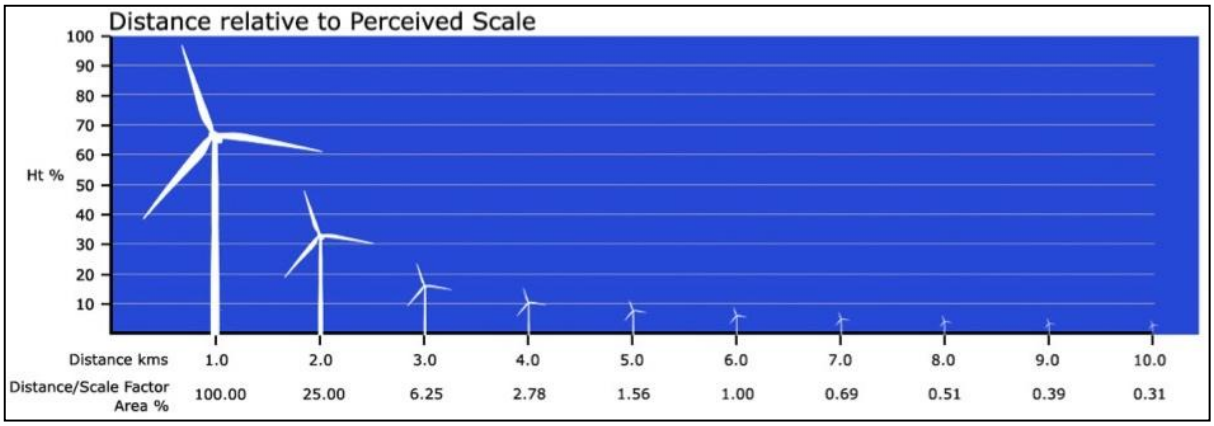


Figure 13-20 Turbine 'scale in relation to distance' relationship

13.8 Potential Landscape Effects

13.8.1 Landscape Character, Value and Sensitivity

Effects on landscape character will be considered at both the proposed wind farm site and central study area as well as the broader scale of the wider study area.

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

The central study area is characterised by a predominantly pastoral rural landscape comprising a patchwork of improved agricultural fields enclosed by dry-stone walls, hedgerows, intermittent tree lines and occasional areas of scrub vegetation. The landscape is typified by traditional rural land uses, dispersed one-off dwellings, farmsteads and a network of local, regional and national roads, whilst the wider receiving environment also accommodates notable elements of existing infrastructure and anthropogenic land uses. The landform within the central study area is generally low rolling in nature, which affords a relatively open landscape structure in places, albeit views are frequently filtered and locally contained by intervening vegetation and subtle variations in topography. Overall, the landscape presents as a typical and actively managed working rural environment, with a moderate degree of human influence and limited sense of remoteness or wildness.

In terms of landscape value, the central study area is not subject to extensive landscape designations and is not widely recognised for exceptional scenic quality at a national or regional scale. Whilst some localised areas and receptors present elevated amenity value, particularly in association with heritage features, scenic routes and watercourse corridors, the prevailing landscape context is principally defined by agricultural production and everyday rural land use activity. The landscape nonetheless affords an attractive rural character typical of County Mayo and Galway, with dry-stone walls, hedgerow networks, pastoral fields and occasional mature vegetation contributing positively to local pastoral aesthetic.



Figure 13-21 Pleasant pastoral aesthetic within the central study area

Having regard to the existing landscape characteristics, land use patterns and degree of human influence, the sensitivity of the central study area to wind energy development is considered to be relatively moderate in the context of the wider receiving environment. Indeed, the landscape sensitivity matrix for County Mayo identifies the relevant policy area with a Low sensitivity with regard to Forestry, Industrial/Commercial development and Road Projects, as examples, with 'wind farms' classified with a High-medium sensitivity, albeit this is the lowest classification for wind farm developments across all four policy areas. Indeed, these land uses sensitivity

classifications highlight that the landscape within 'Policy Area 4', which the proposed wind farm site is contained within, is one of the most robust in the county. With regard to the current Galway CDP, the nearest relevant LCT to the Proposed Project is LCT6 – Central Galway Complex. This landscape unit is classified with a 'Class – 1 Low Sensitivity' classification, the lowest sensitivity classification within the current Galway CDP. The receiving landscape within the central study area is therefore considered to possess a reasonable capacity to accommodate appropriately sited wind energy development, particularly where proposals are carefully designed to respond to local landscape structure, sensitive receptors and the broader pattern of existing rural and infrastructural development.

On balance, and for the reasons outlined above and within Table 13-1, the landscape sensitivity of the proposed wind farm site and central study area is assessed as **Medium-low** with some localised areas of higher sensitivity, such as the immediate context of heritage assets and areas within the immediate vicinity of the lakelands to the west. Overall, while the central study area exhibits some localised sensitivities, it is also predominately characterised by typical working rural land uses and influenced by a range of built developments, which marginally diminishes its susceptibility to change.

Wider Study Area (c.5-20 km)

The wider study area encompasses a broad and varied rural landscape context extending across large parts of County Mayo and adjoining areas of County Galway. The northern, eastern and southern extents of the wider study area present with landscape characteristics broadly consistent with those of the central study area, comprising an actively managed pastoral landscape typified by improved agricultural fields, dry-stone wall and hedgerow boundaries, dispersed rural dwellings, farmsteads and intermittent areas of woodland and scrub vegetation. Numerous small to medium-sized settlements are distributed throughout these areas, whilst an extensive network of local, regional and national roads traverses the wider landscape, contributing to an established degree of human influence and movement throughout the receiving environment. Overall, these parts of the wider study area present as a typical working rural landscape with some degree of landscape enclosure and visual containment afforded by vegetation and gently rolling landform patterns.

In contrast, the western extent of the wider study area presents a much more dynamic and varied landscape character associated with the lakelands of Lough Corrib and Lough Mask and their immediate environs. These landscapes afford a stronger sense of scenic amenity, naturalness and recreational value, with the expansive waterbodies, irregular shorelines, wooded peninsulas and locally elevated landforms contributing to a more distinctive and visually sensitive landscape character (refer to Figure 13-22 below). Further west, the terrain gradually rises towards a more rolling upland landscape and the foothills of more distinctive upland areas, which introduce increased topographic variation, broader panoramic views and a stronger sense of landscape distinctiveness within the wider receiving environment.



Figure 13-22 General stronger sense of visual amenity afforded from the surrounding Lakeland context.

In terms of landscape value, the western extent of the wider study area is notably more sensitive and valued than the predominantly agricultural landscapes to the north, east and south. Scenic amenity is considerably more prevalent in the lakeland context, with numerous scenic views, scenic routes, heritage assets and recreational amenities distributed throughout the immediate environs of Lough Corrib and Lough Mask. These features contribute positively to the perceived quality and experiential value of the surrounding landscape and are frequently associated with elevated levels of visual amenity and recreational appreciation. There are also some notable tourism assets within this part of the study area, with Ashford Castle and the settlement of Cong situated on the northern shores of Lough Corrib. In comparison, the wider rural farmland landscapes contained throughout the northern, eastern and southern extents of the study area are generally characterised by typical rural land uses and a more ordinary working landscape character, albeit still possessing localised scenic and amenity value.

Having regard to the varied characteristics of the wider study area, landscape sensitivity is considered to vary notably across the receiving environment. The northern, eastern and southern extents of the study area, which are strongly influenced by agricultural activity, settlement patterns and existing transport infrastructure, are considered to possess a relatively greater capacity to accommodate change. Conversely, the western lakeland and upland landscapes are considered more susceptible to landscape change due to their elevated scenic quality, stronger sense of naturalness and concentration of amenity and heritage receptors. Overall, whilst parts of the wider study area exhibit elevated sensitivity, particularly within the lakeland and upland contexts, substantial portions of the receiving environment comprise robust working rural landscapes with an established degree of human influence and a corresponding capacity to accommodate a degree of change.

On balance, the wider study area is more diverse than the central study area, incorporating a broader range of landforms and landscape types. It contains areas of high sensitivity that would be particularly susceptible to change, most notably within the lakeland landscapes, while other parts exhibit a similar degree of robustness to the central study area. As a result, the northern, eastern and south extent of the wider study area are all classified with a landscape sensitivity of Medium-low, with some localised areas of higher sensitivity, with the western extent of the study area assessed with a landscape sensitivity of Medium to High, with localised areas of higher and lower landscape sensitivity.

13.8.2 Magnitude of Landscape Effects

The physical landscape as well as the character of the proposed wind farm site, its immediate and central study area (<5 km) is affected by the proposed wind turbines as well as ancillary development such as access roads, areas of hard standing for the turbines, the on-site control building and the 110 kV substation compound. By contrast, for the wider landscape of the study area, landscape impacts relate exclusively to the influence of the proposed wind turbines only on landscape character. A full detailed description of each of these physical components that form part of the Proposed Project that are likely have an impact on the physical landscape and landscape character are described in **Chapter 2** (Description of the Proposed Project) with construction processes described in the Construction and Environmental Management Plan (CEMP) in Appendix 2-2.

13.8.2.1 Construction Stage Effects on the Physical Landscape

It is considered that the Proposed Project will have a modest physical impact on the landscape within the proposed wind farm site as none of the Proposed Project features have a large 'footprint' and land disturbance/vegetation clearing will be relatively limited. The topography and land cover of the proposed wind farm site will remain largely unaltered, aside from some localised areas, such as access tracks and proposed new access locations, areas of hard standing for the turbines, the on-site control building, one proposed borrow pit and two temporary site construction compounds. 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 road 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 existing forestry tracks. 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'. The Proposed Project encompasses approximately 6.8 km of new site access tracks with an upgrade of approximately 1.5 km additional existing internal site access tracks, whilst two new site entrances are proposed on to the R334 regional road and will remain operational during both the construction and operational phases of the Proposed Project. The proposed 110 kV substation will be accessed via a proposed new site entrance onto the L2104 in Co. Galway. There will be an intensity of construction stage activity associated with the access, access tracks and turbine hardstands consisting of the movement of heavy machinery and materials, but this will be temporary/short term in duration and transient in location. There will also be construction stage landscape effects along the surrounding road networks, which relate to the temporary modifications to surrounding local and national roads and localised removal of roadside vegetation to facilitate turbine deliveries. The construction stage effects on landscape character from TDR aspects of the Proposed Project will be limited and highly localised.

Whilst no on-site substation is proposed as part of the Proposed Project, an on-site control building is proposed within the north-eastern part of the proposed wind farm site. The wind farm control building will include the Independent Power Producer (IPP) control room, as well as an office space and welfare facilities for staff during the operational phase. The dimensions of the proposed on-site control building will be 17.83 m in length by 7.5m in width and 6.13m in height and will be finished with nap plaster exterior walls and blue/black slate roof with galvanised doors. The proposed turbines will be linked to the proposed on-site control building

via underground cabling run in cable ducts approximately 1.2 m below the ground surface within the proposed internal tracks and/or their verges. The most notable construction stage landscape impacts resulting from these aspects of the proposed project relate to localised excavations to facilitate the incoming on-site control building and some trenching to accommodate the cable ducting.

The Proposed Project includes a Grid Connection which passes through a combination of public roads and private lands resulting in localised trenching to facilitate the underground cabling. Construction stage landscape effects associated with this aspect of the Proposed Project are likely to be limited, temporary and highly localised, and will be similar in nature to general road works commonly carried out throughout the rural context.

The proposed 110kV substation will be located in an area of existing pastoral farmland some c. 5 km to the west of the proposed turbine array in the townland of Killamanagh. The dimensions of the proposed 110 kV substation compound (which includes an IPP compound and an Eirgrid compound) will be a total of 101 m in length by 124 m in width at the longest points and will include two buildings (one IPP building and one Eirgrid Building) with a pitched roof and will have a nap plaster render finish (20.15 m x 10.75 m and 6.74 m in height) and electrical components necessary to export generated power from the wind to the transmission system. The substation will be surrounded by steel palisade fencing which will be 2.6m in height. The most notable construction stage landscape impacts resulting from the off-site substation relates to the construction of concrete foundations to facilitate that substation buildings and components. Overall, these construction stage effects are relatively minor and compare to the construction of an industrial farm shed.

Impacts from land disturbance and vegetation loss at the proposed wind farm site are considered to be very limited in the context of receiving landscape context, where much of the field boundaries are contained in dry-stone walls or low scrubby vegetation.

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 the proposed wind farm site. This phase will have a more significant impact on the character of the proposed wind farm site than the operational phase, but it is a 'short-term' impact that will cease as soon as the Proposed Project is constructed and becomes operational (24 months from starting onsite to completion of commissioning of the turbines).

There will be some long term/permanent construction stage effects on the physical landscape in the form of turbine foundations and hardstands, access tracks and borrow pit, whilst the proposed 110 kV substation will remain in perpetuity as part of the national grid network. With the exception of some residually useful access tracks, the proposed 110 kV substation and proposed underground cabling, it is proposed that all other development features will be reinstated agricultural pasture use upon decommissioning. Thus, the construction stage landscape effects of the Proposed Project are largely reversible.

Overall, the magnitude of construction stage landscape effects within the proposed wind farm site and its immediately study area are deemed to be High-medium and of an Adverse quality, but of a Short-term duration. The magnitude of construction stage landscape impact will reduce within the central study area to Medium and Medium-low. Beyond 5 km from the proposed wind farm site within the wider study area, the magnitude of landscape impact is deemed to reduce to Low and Negligible at increasing distances as the construction activities relating to the Proposed Project becomes a proportionately smaller component of the overall landscape fabric.

13.8.2.2 Operational Stage Effects on Landscape Character

For most commercial wind energy developments, the greatest potential for landscape and visual effects arises from the introduction of tall, moving structures that can alter the character and perceptual qualities of the surrounding landscape. Wind turbines, which may not previously have formed part of the receiving landscape context, can therefore become a new and visually prominent feature that influences local landscape character and the experience of the area.

With regard to the receiving landscape context within the central study area, there is currently no notable influence from existing wind energy development. Similarly, across the northern, southern and eastern extents of the wider study area, there is only limited influence from existing wind energy development. Notwithstanding this, the wider western extent of the study area encompasses a relatively dense agglomeration of existing wind energy developments located along the elevated hills and ridges west of Lough Corrib. Whilst these existing turbines have the potential to be visible from parts of the immediate and central study area, they exert only a limited influence on the prevailing landscape character due to their considerable separation distances from the central study area.

Although wind turbines are not currently a characteristic feature of the central study area, the proposed turbines respond well to the receiving landscape context due to the locally elevated and open nature of the proposed wind farm site. The Proposed Project comprises two turbine arrays, both of which are contained within low rolling plateaux of locally elevated terrain. Indeed, the broad and open perception of the proposed wind farm site and its surrounding landscape context tends to assimilate the proposed turbines relatively well within the wider landscape framework. Furthermore, the robust and actively managed nature of the receiving landscape does not conflict with the function or appearance of the Proposed Project.

The robust character of the receiving landscape is further reinforced by the presence of other working and anthropogenic land uses within the wider area, including major route corridors, mineral extraction activities, and extensive areas of peat bog to the north and east, which collectively highlight the historically managed and productive nature of the wider landscape context. Although the Proposed Project will introduce a stronger human influence and a greater level of built development than presently exists within the proposed wind farm site itself, it will not significantly detract from the productive rural setting or its associated landscape values.

It is also important to note that the proposed project represents a long-term but reversible built feature within the landscape. The operational lifespan of the wind farm is anticipated to be approximately 35 years, after which the turbines and associated infrastructure will be decommissioned and removed, and the proposed wind farm site reinstated to prevailing land use conditions. Within a period of two to three years following decommissioning, the visible evidence of the wind farm is expected to be minimal, with the exception of the 110 kV substation, underground grid connection, and any retained access tracks that continue to serve practical or management functions as part of the enduring upland working landscape.

In summary, whilst the proposed project will introduce a new and perceptible wind energy component into the receiving landscape, the robust, open and actively managed character of the surrounding low rolling rural landscape is considered capable of accommodating the proposed turbines, which is further reinforced by the 'Open to Consideration' wind energy classification that contains the eastern extent of the site and eastern extent of the surrounding study area. Whilst only the eastern extent of the site falls within the 'Open to Consideration' classification, much of the central study area displays broadly comparable landscape characteristics in terms

of its landform, land use, vegetation patterns, settlement and existing human influence. There is no readily perceptible change in landscape character coinciding with the mapped boundary between the 'Open to Consideration' and 'Unsuitable' classifications. Thus, potential effects on the landscape character should be informed not solely by the mapped policy classification, but also by the site-specific characteristics, sensitivity and capacity of the receiving landscape as experienced on the ground.

For these reasons the magnitude of the landscape effect is deemed to be High-medium within the proposed wind farm site and immediate Study Area, reducing to Medium in the surrounding Central Study Area. Beyond 5 km from the proposed wind farm site, the magnitude of landscape effect is deemed to reduce to Low and Negligible at increasing distances as the wind farm becomes a proportionately smaller component of the overall landscape fabric.

13.8.2.3Decommissioning and Restoration Stage Effects on Landscape Character

The decommissioning phase will have similar temporary impacts as the construction phase with the movement of large turbine components away from the proposed wind farm site. There may be a minor loss of roadside and trackside vegetation that has grown during the operation phase of the project, but this can be reinstated upon completion of decommissioning.

Works in this phase will primarily involve disassembling the turbines and removing off-site. The proposed site access tracks, underground elements of the turbine foundations or the grid connection infrastructure will not be removed. The proposed wind farm site access tracks will remain for agricultural access while the hardstand material and turbine foundations will be left to revegetate naturally. The substation and grid connection infrastructure will form part of the permanent national grid network. A decommissioning plan is contained within the CEMP (Appendix 2-2)

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

13.8.2.4Significance of Potential Landscape Effects (Construction, Operation and Decommissioning Phases)

The significance of landscape effects is a function of landscape sensitivity weighed against the magnitude of landscape impact. This is derived from the significance matrix (see Table 13-3) used in combination with professional judgement.

Based on a Medium-low sensitivity judgement and a High-medium magnitude of construction and decommissioning stage landscape effect, the significance of effect is considered to be **Substantial-moderate / Adverse / Short-term** within and immediately around the proposed wind farm site during construction and decommissioning, but reducing quickly with distance and broader context. Thus, the construction and decommissioning stage landscape effect is deemed **Not Significant**.

Based on a Medium-low sensitivity judgement and a High-medium magnitude of operational stage landscape impact at the proposed wind farm site and its immediate context (<1 km from the turbines), the significance of effect is considered to be **Substantial-moderate / Adverse /**

Long-term within and immediately around the proposed wind farm site, reducing to **Moderate / Adverse / Long-term** within the central study area (c. 1-5 km from the proposed turbines). Thereafter within the wider study area (c. 5-20 km from the proposed turbines), significance will reduce to **Slight** and **Imperceptible** at increasing distances as the Proposed Project becomes a progressively smaller component of the wider landscape fabric even in the context of higher sensitivity landscape units / features.

Thus, whilst there will be some mid to high ranging landscape effects generated by the Proposed Project within the proposed wind farm site and immediate surrounding landscape, the construction, operational and decommissioning phase effects are deemed **Not Significant** as the Proposed Project is located in a robust and modified setting, and thus will not appear as an incongruous form of development in terms of its scale or function.

13.9 Potential Visual Effects

13.9.1 Sensitivity of Visual Receptors

The study area encompasses a diverse range of landscape types and visual receptors, extending from extensive areas of robust and modified rural landscape within the central study area and the northern, eastern and southern extents of the wider study area, to areas of higher scenic value and more pronounced naturalistic character within the western extent of the wider study area, particularly in the environs of the lakelands, uplands, and along elevated hills and ridges.

The most visually susceptible parts of the study area are associated with the lakelands within the western half of the wider study area. These areas encompass the highest concentration of designated scenic routes and scenic views, in addition to numerous tourism, amenity and heritage features. The lakelands themselves represent one of the principal recreational and tourism resources within the study area, recognised as a popular fishing destination and for a broad range of water-based recreational activities. Scenic amenity is at its greatest along the immediate lakeshore, where expansive waterbodies, irregular shorelines, wooded peninsulas and numerous islands combine to create a distinctive and highly scenic landscape character. As a result, scenic designations, amenity features and heritage assets located along the immediate lakeshore are generally classified with a visual receptor sensitivity ranging from High-medium to High. Receptors towards the upper end of this sensitivity range are typically associated with areas of the lakeshore that are less influenced by built development and present with a stronger sense of naturalness and tranquillity.

The western extent of the study area also encompasses elevated terrain west of Lough Corrib, together with foothills that transition towards the Maumturk Mountains within the wider western periphery of the study area. These landscapes present with a greater degree of distinctiveness in comparison to the more typical working rural landscapes that characterise much of the eastern half of the study area, whilst also affording a heightened degree of scenic amenity reinforced by the presence of several scenic designations. Land use within these elevated areas is reflective of their upland character, with mountain moorland and blocks of coniferous forestry forming the principal land cover types. Overall, these elevated areas afford broad and expansive views across the lakelands and wider study area, some of which are designated in the Galway CDP, with visual receptor sensitivity generally ranging from High-Medium to High. The most elevated and expansive panoramic viewpoints are considered to be of High sensitivity due to their elevated scenic quality and susceptibility to visual change.

The central and wider study areas also encompass a variety of heritage assets, some of which are also associated with designated scenic views and routes. Of particular note, Ross Errilly Friary within the central study area represents a significant heritage asset located within the near surrounds of the proposed wind farm site. The setting of the friary is characterised by a pleasant pastoral landscape containing river corridors and turlough features, although the wider context is influenced by surrounding working rural land uses. The nearby scenic view designation is classified as being of 'County' importance within the current County Development Plan, representing the second lowest of four scenic classifications.

The wider study area also encompasses numerous heritage assets and amenity features of note, some of which possess more pronounced tourism and recreational value, including Ashford Castle and the settlement of Cong within the north-western quadrant of the study area. These receptors, situated along the immediate shoreline of the lakelands, present with a notably heightened degree of scenic amenity and are therefore highly susceptible to visual change. In addition to these more sensitive receptors, the central and wider study areas also encompass a range of more localised heritage and amenity features, including local walking routes, churches and graveyards. Whilst these receptors possess an inherent degree of sensitivity, their value is generally more localised in nature. Overall, tourism, amenity and heritage receptors within the study area are considered to encompass visual receptor sensitivities ranging between Medium and High, with receptors of national or international importance, particularly those located within the immediate lakeland context, being the most susceptible to visual change.

Views of the inland working agricultural landscape are generally pleasant in terms of its rolling pastoral aesthetic and 'green', settled working character. The network of hedgerows and vegetation that occur throughout it contributes to some sense of naturalness and, in combination with its undulating topography, generates a high degree of containment in many locations. However, whilst a pleasant pastoral aesthetic is noted throughout some parts of the study area, the wider landscape is also influenced by an array of anthropogenic features such urban settlements, commercial and industrial development, major route receptors and localised areas of existing wind farm development. Overall, the sensitivity of visual receptors within the more working landscape context, which relates to much of central study area and wider northern, western and southern extent of the study area, tends to range between Medium and Medium-low, with those of a Medium sensitivity representing more open expansive views across the wider landscape. It is also worth noting that some local amenity and heritage features also occur throughout the study area, which heightens the degree of receptor sensitivity at a local level.

Key differentials in terms of visual receptor sensitivity relate to the occupation of the visual receptor and whether views of the surrounding landscape are an inherent part of the experience. Static residential receptors are considered generally more susceptible to changes in views over those where views are experienced transiently by those travelling through the landscape, particularly on major transport routes where road infrastructure and traffic volume draw from visual amenity. Likewise, receptors located in closer proximity to the Proposed Project are considered more susceptible to changes in views over those where views are experienced at a distance.

On the basis of the proposed wind farm site-specific factors outlined above and in accordance with the general visual receptor sensitivity considerations contained in the methodology **Section 13.3**, visual receptor sensitivity judgements are provided for each representative viewpoint in the Table 13-7 below and within the visual impact appraisal in Appendix 13-1.

13.9.2 Magnitude and Significance of Visual Effects

13.9.2.1 Construction Stage Visual Effects

During construction, the main visual impacts will arise from frequent heavy vehicle movements and worker vehicles travelling to and from the proposed wind farm site and using the new site entrances located along the R334. There will be construction machinery on site, which may rise above intervening vegetation and buildings. Some of the most notable construction stage visual impacts will result from the erection of the proposed turbines using tower cranes. There will also be stockpiles of stripped topsoil as well as construction materials awaiting use. In addition to construction activities at the proposed wind farm Site, the Proposed Project will also generate some localised visual impacts during the construction phase along the GCR, TDR and at the offsite substation location. However, a large part of this short-term activity within the proposed wind farm site will remain screened from view by the hedgerows and mature conifer plantations that surround the proposed wind farm site and its immediate landscape context. Furthermore, construction-related activity is short-term in nature and will cease once the Proposed Project becomes fully operational.

For these reasons, the magnitude of visual impact at the construction stage is deemed to be no greater than High/High-medium at the nearest surrounding receptors, however, this reduces swiftly at greater distances from the proposed wind farm site, especially within the wider study area, where the magnitude of visual impact is considered to be no greater than Low/Low-negligible. Combined with a Medium/Medium-low sensitivity for receptors (refer to Table 13-7 below for sensitivity of receptors a representative viewpoints) within the immediate study area (<1 km from the proposed wind farm site), the significance of visual effect will be not greater than **Substantial-moderate/Moderate** and of an **Adverse** quality. Thereafter, the significance of effect will reduce to **Moderate/Moderate-Slight** throughout the Central Study Area and **Slight** and **Imperceptible** at increasing distances within the wider study area as the Proposed Project becomes a progressively smaller component in the afforded view.

Thus, visual effects at the construction stage are deemed **Not Significant**.

13.9.2.2 Operational Stage Visual Effects

Table 13-7 below summarises the full textual assessment of visual effects for each Viewshed Reference Point (VRP) contained in Appendix 13-1 and Volume 4 (Photomontage Booklet). Whilst the 'receptor sensitivity analysis table' and full textual assessment for each VRP is normally contained within the landscape and visual chapter, in this instance, given the considerable number of VRPs, it is considered more prudent to place this material in a separate appendix and focus herein on the significance of the findings. The left hand side of the table incorporates data associated with the viewing distance to the nearest turbine, whilst the right hand side contains professional judgements in respect of the view. It is important to note that the professional judgements are based on the effects experienced in relation to the view and are not directly influenced by the statistical data (i.e. the distance to the nearest turbine). These aspects are only combined within Table 13-7 in order to identify patterns of effect to better inform the conclusions of this assessment.

Table 13-7 Summary of Operational Stage Visual Effects at Viewshed Reference Points (VRP's)

VRP No.	Distance to nearest turbine km	Visual receptor Sensitivity (see Appendix 13-1)	Visual Impact Magnitude	Significance of Visual effect
VP1	7.8 km (T7)	Medium-low	Low	**Slight / Adverse / Long-term**
VP2	12.0 km (T13)	Medium-low	Low-negligible	**Slight-imperceptible / Adverse / Long-term**
VP3	6.3 km (T4)	Medium	Low	**Slight / Adverse / Long-term**
VP4	14.0 km (T4)	High-medium	Low-negligible	**Slight-imperceptible / Adverse / Long-term**
VP5	2.9 km (T7)	Medium-low	Medium-low	**Moderate-slight / Adverse / Long-term**
VP6	10.0 km (T4)	High	Low	**Moderate-slight / Adverse / Long-term**
VP7	2.6 km (T13)	Medium	Medium	**Moderate / Adverse / Long-term**
VP8	698 m (T7)	Medium	High	**Substantial-moderate / Adverse / Long-term**
VP9	722 m (T13)	Medium-low	High	**Substantial-moderate / Adverse / Long-term**
VP10	1.6 km (T4)	Medium-low	Medium	**Moderate / Adverse / Long-term**
VP11	928 m (T4)	Medium-low	Medium-low	**Moderate-slight / Adverse / Long-term**
VP12	766 m (T12)	Medium	High-medium	**Substantial-moderate / Adverse / Long-term**
VP13	5.0 km (T12)	Medium-low	Low	**Slight / Adverse / Long-term**

VP14	614 m (T5)	Medium	High	**Substantial-moderate / Adverse / Long-term**
VP15	531 m (T1)	Medium	High	**Substantial-moderate / Adverse / Long-term**
VP16	5.4 km (T4)	High-medium	Medium-low	**Moderate-slight / Adverse / Long-term**
VP17	822 m (T11)	Medium	High-medium	**Substantial-moderate / Adverse / Long-term**
VP18	1.8 km (T4)	Medium-low	Medium-low	**Moderate-slight / Adverse / Long-term**
VP19	863 m (T1)	Medium-low	Medium	**Moderate / Adverse / Long-term**
VP20	719 m (T3)	Medium-low	High-medium	**Moderate / Adverse / Long-term**
VP21	1.4 km (T3)	Medium-low	Medium	**Moderate / Adverse / Long-term**
VP22	2.5 km (T3)	Medium-low	Medium-low	**Moderate-slight / Adverse / Long-term**
VP23	2.1 km (T1)	High-medium	Medium	**Moderate / Adverse / Long-term**
VP24	6.3 km (T12)	Medium	Low	**Slight / Adverse / Long-term**
VP25	2.5 km (T1)	High-medium	Medium	**Moderate / Adverse / Long-term**
VP26	3.5 km (T11)	Medium-low	Medium-low	**Moderate-slight /**

				Adverse / Long-term
VP27	3.0 km (T1)	Medium	Medium-low	**Moderate / Adverse / Long-term**
VP28	13.2 km (T3)	High	Low-negligible	**Slight / Adverse / Long-term**
VP29	12.3 km (T3)	Medium	Low-negligible	**Slight-imperceptible / Adverse / Long-term**
VP30	8.1 km (T3)	High-medium	Low-negligible	**Slight-imperceptible / Adverse / Long-term**
VP31	16.0 km (T3)	High	Low-negligible	**Slight / Adverse / Long-term**
VP32	18.8 km (T3)	Medium	Negligible	**Imperceptible / Neutral / Long-term**

13.9.2.2.1 Effects at Local Community Receptors

Local community views are considered to be those experienced by people who live, work, or travel within approximately 5 km of the proposed wind farm site. These receptors are generally the most likely to experience changes to their visual amenity as a result of the Proposed Project, owing to their proximity to the turbines, the increased likelihood of viewing turbines from multiple directions, and the potential for turbines to become a familiar element within their daily visual environment.

Local community receptors are represented by 20 representative viewpoints (VP5, VP7, VP8, VP9, VP10, VP11, VP12, VP13, VP14, VP15, VP16, VP17, VP18, VP19, VP20, VP21, VP22, VP24, VP26 and VP27), which represents some two thirds of the representative viewpoints for assessment. It should be noted that several of these also represent other receptor types include scenic designations, amenity and heritage features and major routes. The sensitivity of these visual receptors ranged between High-medium to Medium-low, with the predominance of these classified between Medium to Medium-low, representing the relatively robust nature of the central study area. The residual significance of visual effect ranged between **Substantial-moderate** to **Slight**, with the most notable effect of **Substantial-moderate** contained within 1 km of the turbine array, where the visual prominence of the proposed turbines tends to be at their greatest.

The highest ranging visual effects occur at VP8 (Cahernabrock), VP9 (Brodullagh South), VP12 (Kinlough), VP14 (Toorard), VP15 (R334 Toorard) and VP17 (Moyne Cemetery), all of which are classified with a residual significance of visual effect of **Substantial-moderate**. These viewpoints

are located between approximately 500 m and 800 m from the nearest turbines and afford relatively clear views of the Proposed Project. From these locations, the turbines represent the principal and most prominent built features within the surrounding landscape and will introduce a notable increase in the scale, extent and intensity of development visible within the local landscape context. In almost all instances from these viewpoints, the eastern array presents with a dominant visual presence owing to its proximity and locally elevated relationship with surrounding receptors. Although the proposed turbines will result in a marked degree of visual change in these parts of the local surrounding landscape and will detract from the rural character, the often strong sense of openness due to the low dry-stone walls that characterise this landscape aids in assimilating the scale and extent of the proposed turbine array into this landscape setting.

Despite these more notable effects, the proposed turbines generally present in a coherent and visually legible manner. The turbine layout affords relatively clear spacing characteristics and maintains a degree of visual permeability through the array. Whilst some viewpoints exhibit instances of overlap generating a sense of visual clutter and visual ambiguity, particularly where blade sets are viewed rotating along the skyline with some proposed turbines presenting as slightly 'stunted' (refer to VP9), the varying perceived scale of the visible turbines highlights the depth and dispersion of the turbine array across the surrounding landscape. The slender form of the turbines also reduces any strong sense of enclosure or complete obstruction of views. Indeed, whilst the turbines will interrupt pleasant aspects of visibility, particularly at VP14 and VP15, the array does not fully block broader views across the surrounding landscape. In some instances

At receptors located further west of the proposed turbine array (VP18–VP22), visual effects reduce noticeably due to increased screening by low rolling terrain and mature roadside vegetation that cloaks many of the surrounding local roads, most notably the L5666, which is afforded a high degree of containment. These viewpoints frequently afford only partial views of turbine hubs, nacelles or blade tips, with visibility often occurring intermittently through gaps in vegetation. Although the moving turbine components are likely to draw the eye, the perceived scale and extent of the Proposed Project are considerably diminished in these more contained landscape contexts. Residual effects within these areas range from **Moderate-slight** to **Moderate**, reflecting the lower visibility and increased containment.

All other local community receptors within the wider parts of the central study area are classified with a residual significance of effect of **Moderate** to **Slight.** Whilst the turbines will often be visible from many of the surrounding parts of the study area, their perceived scale is notably reduced, with the turbines presenting as distant features viewed in the context of the surrounding typical rural landscape.

Overall, whilst the Proposed Project will generate a notable degree of visual change at some of the nearest local community receptors and will result in a detraction of the prevailing rural character, these effects remain heavily localised to the immediate surroundings of the proposed wind farm site, with visual effects diminishing and increasing distances within the central study area. The proposed turbines present within a well modified pastoral landscape, and whilst they will draw the eye, they will not present as a highly ambiguous form of built development, with wind turbines now a relatively common feature of the rural environment.

In summary, whilst some higher ranging visual effects occur within the immediate surrounds of the proposed turbine array, visual effects at local community receptors are classified as **Not**

Significant in EIA terms. It should also be noted that the proposed turbine array is fully compliant with the minimum visual amenity 'setback' distance outlined in the Draft WEDG's 2019.

13.9.2.2.2 Effects at Designated Views

Numerous scenic views and routes are contained within the study area, albeit only one scenic designation is contained within the central study area, with the predominance of scenic designations contained within the wider western extent of the 20 km study area associated with Lough Corrib and the more elevated lands to its west. Designated scenic views and routes are represented by six representative viewpoints including viewpoints VP4, VP6, VP25, VP28, VP29 and VP31. The visual receptor sensitivity at scenic designations within the study area ranged between High-medium and High, with those of a higher sensitivity typically related to more open broad views that present with a higher degree of distinctiveness. Residual visual effects at designated views range between **Moderate** and **Slight-imperceptible**, with the majority of designated scenic receptors experiencing effects within the lower order due to substantial viewing distances from the Proposed Project in addition to the broad nature of views afforded from these locations.

The nearest and only scenic designation within the central study area is located some c. 2.5 km to the south of the proposed turbine array and is associated with Ross Errilly Friary, a notable heritage asset located south of the Black River corridor. The scenic view is 'View 33 – Friary of Ross' in the current Galway CDP and is described as a view of the "*Ross Friary ruins through the trees as the road approaches the proposed wind farm site. The turlough in the background is an important feature (when present)*". The Galway CDP designates the view as being of 'County' level significance, the second lowest of a four-tier classification system, with county-level views described as *"A view – often a panorama – that encompasses a wider expanse of territory, or a large or prominent natural feature – a hill, bay, ridge, headland or lake shore which gives a sense of a large unit of countryside that is felt to be typical of that part of the county"*. Viewpoint VP25 was selected to represent the scenic view designation, whereas VP23 (discussed in further detail in the tourism, heritage and amenity summary section below) was selected to assess the visual setting of the Friary.

Representative Viewpoint VP25 takes in a pleasant view of the road leading to the Friary and the Friary itself, both of which are bounded by surrounding typical rural pastoral lands. Rostaff Turlough (Lough Turide) is partially visible to the rear of the heritage feature, whilst the proposed turbines are viewed at a distance of some 2.5 km, presenting as noticeable moving features in the view background, rising beyond a low ridge and stacked layers of intervening vegetation. The eastern turbine array occurs in alignment with the Friary, whilst the western array sits slightly offset to the northwest. In this instance, the moving turbine components generate some visual tension due to their relationship with the skyline setting of the heritage feature. The turbines present as co-dominant built elements and draw the eye away from the principal focus of the view. Nonetheless, visual mitigation measures were incorporated during the iterative design process to refine turbine locations and reduce visual interaction with the receptor insofar as possible, as set out in Section 13.7 above. Whilst the proposed turbine array presents in a relatively legible manner, with clear spacing characteristics between the turbines, the moving components will nonetheless detract from views of the Friary. Overall, the residual significance of visual effect was classified as **Moderate** at VP25.

Elsewhere, designated scenic views associated with Lough Corrib and the elevated western landscapes experience substantially lower effects due to their considerable distances from the

proposed wind farm site. At VP4, the proposed turbines will be well offset from the principal aspect of visual amenity, which is directed across Lough Corrib. This representative view is characteristic of the Lough Corrib Scenic Route and the more distant scenic designation 'View 23 – An Charraig Thoir'. The proposed turbines will not present as prominent features from this viewing distance of over 14 km and will be partially screened by intervening terrain and dense mature vegetation along the northern shoreline of the Lough. Accordingly, the residual significance of visual effect was classified as **Slight–imperceptible**.

Representative Viewpoint VP6 was selected to represent scenic 'View 23 – Ard na Gaoithe', which is described as a view of *"Lough Corrib and Scolbillaun. The wooded shores in the background are important features of the view"*. The view is also representative of the surrounding local walking trails and the wider setting of Ashford Castle. As with VP4 above, the principal aspect of visual amenity relates to views southwards across the lake and its wider surroundings. This view possesses a notable sense of tranquillity, with limited influence from surrounding built development. The proposed turbines will be visible, albeit offset from the principal aspect of amenity, but have the potential to draw the eye as some of the tallest forms of built development within this aspect of the view. Nonetheless, due to the notable viewing distances of over 10 km, the turbines will have a sub-dominant visual presence and will present largely in silhouette against the sky, generating a very low degree of visual contrast. Furthermore, the broad panoramic nature of the view and the extensive visual envelope afforded across the lake reduce the visual influence of the Proposed Project within the overall composition. Overall, the significance of visual effect is deemed to be **Moderate–slight**, which is principally influenced by the elevated sensitivity of the visual receptor rather than the magnitude of visual effect generated by the Proposed Project.

Representative viewpoints VP28 and VP31 are associated with scenic view designations located to the west of Lough Corrib. Viewpoint VP28 is representative of scenic 'View 24 – Western Way High Road' and affords an elevated and distinctive view across Lough Corrib, where a broad extent of the lough, its islands, and the lands surrounding the waterbody to both the east and west are visible. The proposed turbines are viewed in the distant background at a distance of some 13.2 km and present at a relatively small scale with a limited visual presence. Whilst visible from this location, the distant turbines do not noticeably detract from the visual setting of the lough, nor do they materially diminish the scenic amenity afforded from this elevated viewpoint. Overall, the residual significance of visual effect at VP28 was classified as **Slight**.

Viewpoint VP31 is located further inland from the western shoreline of Lough Corrib and is situated within rolling elevated lands to the south of Oughterard. The turbines are viewed here in a similar manner to VP28, albeit at a similarly small scale due to the considerable viewing distances of over 16 km. Whilst visible, the turbines will present as some of the taller built features located to the east of the lough; however, their distant nature and limited scale within the broader panoramic composition ensure that they do not exert a strong influence on the visual amenity afforded from this location. Accordingly, the residual significance of visual effect at VP31 was classified as **Slight**.

Overall, whilst visibility of the Proposed Project occurs from several designated views and scenic routes, the principal aspects of scenic amenity remain largely unaffected and/or the turbines present as distant background features with a limited influence on the scenic qualities afforded from such designations. With regard to the nearest scenic designation represented by Viewpoint VP25, whilst the turbines will result in some detraction in the degree of scenic

amenity afforded and generate a degree of visual tension with the setting of the heritage asset, the proposed turbines present in a relatively legible manner with clear spacing characteristics and do not appear incongruous within the context of the surrounding working rural landscape. Furthermore, the iterative design process sought to reduce visual interaction with this receptor insofar as practicable. Consequently, visual effects at scenic designations within the Study Area are assessed as **Not Significant** in EIA terms.

13.9.2.2.3 Effects at Tourism, Heritage and Amenity Receptors

Tourism, heritage and amenity receptors include lakeside viewpoints associated with Lough Corrib, forest park amenities, heritage assets, local cemeteries and recreational destinations represented by viewpoints VP6, VP7, VP16, VP17, VP23, VP24, VP27, VP29 and VP30, with receptor sensitivities varying from Medium to High. The more sensitive receptors tend to be associated with more than one receptor type. Residual visual effects range from **Moderate** to **Slight–Imperceptible**. It should be noted that many of the tourism, amenity and heritage receptors within the study area are also representative of other receptor types, including scenic designations and local community views, as discussed in the preceding sections.

VP6 at Ard Na Gaoithe Forest Park represents one of the more sensitive tourism and amenity receptors within the study area owing to its elevated lakeside setting overlooking Lough Corrib and its wider association with the setting of Ashford Castle. As discussed in the designated views section above, this receptor is also classified as a scenic view in the current Galway CDP. Whilst the proposed turbines are visible from here, they are visible across only a very limited extent of the forest trails, with the majority of the trail network heavily contained by mature woodland. Furthermore, with regard to the tourism and heritage receptor of Ashford Castle, the turbines will have no effect on the overall visual setting of the castle and its surrounding context, which is similarly contained by mature woodland and layered vegetation. Nonetheless, owing to the sensitivity of the scenic view, the degree of tranquillity experienced along the shoreline in the view represented by VP6, and the distant views of the turbines, the residual significance of visual effect was classified as **Moderate–slight**.

The nearest and principal heritage receptor within the central study area is Ross Errilly Friary, located some 2.1 km south of the proposed turbine array. Whilst the scenic designations section discusses representative viewpoint VP25, which was selected to represent the scenic view receptor, viewpoint VP23 was included to represent the visual setting and immediate context of the Friary ruins. All of the proposed turbines have the potential to be visible from here at a similar, albeit marginally greater, scale than at VP25. The proposed turbines introduce a notable increase in the extent of built development visible within the wider landscape setting; however, in contrast to VP25, there is clearer separation from the Proposed Project, with the intervening landscape to the north of the heritage receptor more clearly defined. Indeed, the proposed turbines rise beyond a low ridge and layered intervening vegetation to the north.

Whilst the turbines will present as notable built features from here, they do not generate any sense of overbearing, nor do they significantly detract from the visual setting of the historic Friary. Importantly, the turbine layout was refined during the project's evolution to minimise adverse aesthetic effects at this receptor, such as stacked turbine views or overlapping blade sets. In this regard, the turbines present in a relatively legible manner, albeit across a broad lateral extent. Whilst the Proposed Project will result in a noticeable increase in the quantum and scale of built development visible within the surrounding landscape, it is not considered to

fundamentally alter the appreciation or visual setting of the Friary. Overall, the residual significance of visual effect was classified as **Moderate**.

Other more local heritage receptors are distributed throughout the central and wider study area, including Donaghpatrick Cemetery (VP24), Killursa Church and Graveyard (VP27), and Oughterard Graveyard (VP29), which experience mid- to lower-order effects ranging between **Moderate** and **Slight–imperceptible**. At these locations, increased separation distances, intervening vegetation and the broad extent of surrounding views reduce the prominence of the proposed turbines. Even where turbines are visible, they generally present as modest-scale background features and do not significantly detract from the appreciation of these heritage features or their surrounding landscape context.

Other amenity receptors associated with Lough Corrib, in addition to those already discussed, include Inis Mhic an Tír (VP16) and Knockferry Pier (VP30), which similarly experience mid- to lower-order effects. Whilst the turbines, when viewed from Inis Mhic an Tír (VP16), will present as noticeable features and have the potential to draw the eye, they occur within inland views to the east, with the principal aspects of amenity in these areas more commonly oriented across the wider lakeland setting to the west. At Knockferry Pier on the western shores of the lough, the turbines will be heavily screened by intervening mature vegetation, much of which lines the eastern shoreline in this part of the study area. Whilst views of partial blade sets can generate a degree of visual ambiguity, in this instance they are viewed at distances of over 8 km and will have only a minimal visual presence. The residual significance of visual effect was classified as **Moderate–slight** at VP16 and **Slight–imperceptible** at VP30.

In summary, visual effects at tourism, amenity and heritage receptors within the study area are classified as **Not Significant** in EIA terms.

13.9.2.2.4 Effects at Centres of Population

Centres of population are represented by Kilmaine (VP1), Kilconly (VP2), Cross (VP3), Shrule (VP7) Glencorrib (VP10), Headford (VP26), Oughterard (VP29) and Moycullen (VP32). The sensitivity of these visual receptors ranged from Medium-low to Medium, principally on the basis that views from these settlements are often heavily influenced by existing surrounding built development and do not present within any distinct sense of visual amenity. The residual significance of visual effects range between **Moderate** and **Imperceptible**, with effects generally decreasing rapidly with increasing separation distance from the Proposed Project.

The more notable effects occur at the nearest settlements to the proposed wind farm site. Whilst the dispersed settlement of Moyne is the nearest to the proposed wind farm site, it is not a wholly defined village and is represented by viewpoints VP14 and VP17, discussed in the local community receptors summary above. The village of Glencorrib (represented by VP10) is the nearest defined settlement contained some 1.8 km north of the proposed turbine array, where the turbines are visible to the south in two distinct clusters. The western array presents more prominently, whilst the eastern array is partially screened by built development and vegetation. Although the proposed turbines will increase the intensity and scale of built development visible from the settlement, they remain separated from the village by pastoral lands and do not appear over-scaled or incongruous within the surrounding modified landscape context. Thus, the residual significance of visual effect is deemed **Moderate**.

The village of Shrule is contained to the northeast of the proposed wind farm site represented by VP7. All 13 of the proposed turbines will be visible from this relatively open view situated

behind the settlements main street within the local cemetery. Whilst all the turbines are visible from here, with the nearest turbines presenting at a distance of 2.6 km, the perceived scale of the turbines varies greatly from furthest to nearest highlighting the depth and dispersion of the array across the wider surrounding landscape. Indeed, whilst the turbines will present as prominent features here, the present with no sense of overbearing, nor do they appear highly ambiguous in the surrounding working rural context. Overall, the residual significance of visual effect was classified as **Moderate.**

At Headford (VP26), all thirteen turbines are visible with the nearest turbines viewed at distances of approximately 3.5 km. The Proposed Project presents as two distinct parcels, with the eastern array appearing slightly larger due to its reduced offset from this visual context. Whilst the turbines are noticeable within views from the settlement edge and increase the scale of built development visible locally, they do not dominate the view or appear incongruous within the surrounding open rural setting. Residual visual effects are therefore classified as **Moderate-slight**.

Other centres of population, including Kilmaine, Kilconly and Oughterard, experience lower order effects due to greater viewing distances, screening vegetation and more restricted visibility. In these circumstances, turbines are generally visible only intermittently and present as distant background elements with limited influence on local visual amenity.

Overall, visual effects at centres of population are assessed as **Not Significant** in EIA Terms.

13.9.2.2.5 Effects at Major Routes

Major route receptors include the N84, R334, R345, R346, R333 and N59 corridors represented by VP1, VP3, VP4, VP10, VP15, VP24, VP29 and VP32. The sensitivity of visual receptors at these representative viewpoints ranged between High-medium to Medium-low, whilst the residual significance of visual effect ranging between **Substantial-moderate** and **Imperceptible**. It should be noted that the majority of visual receptor locations representing major routes also represent other visual receptor types including scenic designation, local community views and centres of population, many of which are discussed in the above sections. Those locations with a higher visual receptor sensitivity tend to be also representative scenic designations.

The R334 regional road is the nearest major route receptor to the proposed turbine array passing directly between the eastern and western turbine arrays. Representative viewpoint VP15 is located along the regional road where it intersects the two arrays and affords a clear view of both, with the turbines present in a dominant manner along these nearest sections of the major route corridor. Although the turbines will present as the principal built feature visible from this and surrounding sections of the regional road corridor and generates a marked degree of visual change, the turbines maintain clear spacing characteristics and their slender form allows continued visibility through the array and towards the more distant elevated lands surrounding Lough Corrib to the west. Whilst the turbines introduce a stronger sense of enclosure locally, they do not fully obstruct wider views across the surrounding landscape. Residual effects at this location are classified as **Substantial-moderate**. The turbines will also be intermittently visible along sections of the route both north and south, with visual effects reduce at greater distances from the turbines. VP10 represents both the major route and the settlement of Glencorrib to the north of the proposed wind farm site where visual effects are classified as **Moderate**.

The N84 National Secondary Route is the only other major route that traverses through the central study area, passing through the settlements of Shrule and Headford within the central study area and Kilmaine in the wider study area. As outlined in the sections above, residual visual effects ranged from **Moderate** to **Slight-imperceptible** at these representative viewpoints, with the most notable effects occurring along sections of the major route corridor that traverse nearest to the Proposed Project. Nonetheless, this major route corridor is not considered a highly sensitive visual receptor, and whilst some sections along the route corridor present with a pleasant pastoral aesthetic, it tends to be heavily influenced by typical rural land uses rather than any highly susceptible landscape features or areas.

At other route corridors, including other national and regional roads, effects reduce substantially. Visibility is often intermittent due to roadside hedgerows, mature vegetation and changes in road alignment. Turbines are frequently viewed at middle to far distances and generally occupy a limited proportion of available views. Consequently, visual effects remain within the mid-to-lower order.

Overall, visual effects at major routes are assessed as **Not Significant** in EIA Terms.

13.9.2.2.6 Summary of Operational Stage Visual Effects

As outlined in the above sections and in Table 13-7, The residual significance of visual effects as a result of the Proposed Project ranges from **Substantial–moderate** to **Imperceptible**. A summary of residual visual effects at receptor types at assessed representative viewpoints is provided in Table 13-8.

Table 13-8 Summary of Operational Phase Visual Effects at Defined Receptor Types

Receptor Type	Residual Significance of Visual Effect Range (at assessed representative viewpoints – refer to Appendix 13-1)
Local Community Receptors	Substantial-moderate to Slight
Designated Views & Routes	Moderate to Slight-imperceptible
Tourism, Amenity & Heritage Receptors	Moderate to Slight-imperceptible
Centres of Population	Moderate to Imperceptible
Major Routes	Substantial-moderate to Imperceptible

Based on the assessment undertaken, residual operational stage visual effects generated by the Proposed Project range between **Substantial-moderate** and **Imperceptible**, with the highest ranging effects confined to local community receptors located within the immediate surroundings of the proposed turbine array. These higher-order effects occur principally at receptors located to the east, southeast and south of the Proposed Project where the turbines are viewed at close range and become prominent built features within the surrounding rural landscape. Notwithstanding this, these effects remain heavily localised, generally contained within approximately 1 km of the proposed turbine array, beyond which visual effects reduce

progressively as viewing distances increase and the degree of screening afforded by low rolling terrain and intervening vegetation becomes more pronounced.

The more notable local visual effects of a **Substantial-moderate** classification principally relate to viewpoints VP8, VP9, VP12, VP14, VP15 and VP17, where the proposed turbines present at a dominant scale and generate a marked increase in the scale, extent and intensity of built development visible within the local landscape. However, even at these receptors, the proposed turbines generally present in a coherent and visually legible arrangement, with clear spacing characteristics, relatively limited turbine overlap and a degree of visual permeability retained through the array. Whilst the Proposed Project will result in some detraction from the prevailing rural character and alter local visual amenity, the turbines do not generally appear over-scaled or incongruous within the context of the modified pastoral landscape that characterises the central study area. The open nature of the surrounding landscape, defined by extensive pastoral fields, low drystone walls and dispersed settlement pattern, further assists in assimilating the scale and extent of the proposed turbines array.

Beyond the immediate surroundings of the proposed wind farm site, visual effects reduce rapidly. Designated scenic views, tourism and amenity receptors associated with Lough Corrib, heritage features, centres of population and major route corridors generally experience effects within the **Moderate** to **Imperceptible** range. Within the central study area, one of the more notable visual constraints to the Proposed Project relates to Ross Errilly Friary and its associated scenic view receptor. Whilst the proposed turbines will generate a residual significance of visual effect of **Moderate** at both the heritage receptor and adjacent scenic view, the proposed turbine array was specifically designed around this receptor to mitigate the potential for highly ambiguous visual effects, such as stacked or cluttered views of turbines. Consequently, the proposed turbines present in a clearer and more legible manner within the final turbine layout, which evolved through an iterative design process.

Beyond the central study area, the proposed turbines are typically viewed at middle to far distances, often partially screened by landform and vegetation, and generally occupy only a limited extent within broader views. In many instances, the principal aspect of visual amenity remains associated with the lakeland setting of Lough Corrib, the elevated scenic landscapes to the west, and the immediate settings of local heritage features, with the Proposed Project presenting as a distant feature with a sub-dominant to minimal visual presence. Consequently, whilst the turbines will often remain visible, they generally present as background features and do not materially diminish the appreciation of scenic or amenity value within the wider study area.

Importantly, the Proposed Project demonstrates full compliance with the visual amenity offset guidance outlined in the *Draft Revised WEDGs 2019*. In this instance, the nearest non-involved residential receptor is located beyond 600 m (4 x the tip height of the proposed turbines) from the nearest proposed turbine. As a result, whilst some localised higher-order visual effects occur within the immediate surroundings of the proposed turbine array, the Proposed Project does not give rise to significant visual effects on residential visual amenity.

Overall, the Proposed Project represents a well-sited wind energy project located within a modified and relatively robust rural landscape characterised by pastoral agriculture, dispersed settlement, drystone field boundaries and established working land uses. Whilst the proposed turbines will introduce a notable increase in the scale and extent of built development within parts of the central study area, the receiving landscape is considered capable of accommodating

a wind energy development of this nature and scale. On balance, having regard to the turbine layout, receptor offsets, prevailing landscape character and the limited spatial extent of higher-order effects, residual operational stage visual effects are assessed as **Not Significant in EIA terms** (i.e. below Substantial-moderate significance of visual effect).

13.9.2.3Decommissioning Stage Visual Effects

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

For these reasons, the magnitude of visual impact at the decommissioning stage is deemed to be no greater than High/High-medium at the nearest surrounding receptors, however, this reduces swiftly at greater distances from the proposed wind farm site, especially within the wider study area, where the magnitude of visual impact is considered to be no greater than Medium-low to Negligible. Combined with a Medium/Medium-low sensitivity for receptors within the immediate study area (<1-2 km from the proposed wind farm site), the significance of visual effect will be not greater than **Substantial-moderate/Moderate** and of an **Adverse** quality. Thereafter, the significance of effect will reduce to **Moderate/Moderate-Slight** throughout the central study area and **Slight** and **Imperceptible** at increasing distances within the wider study area as the proposed wind farm becomes a progressively smaller component in the afforded view.

Thus, residual visual effects at the decommissioning stage are deemed **Not Significant**.

13.10 Cumulative Effects

The NatureScot Guidance relating to 'Assessing the Cumulative Landscape and Visual Impact of Onshore Wind Energy Developments (2021)' identify that cumulative effects on visual amenity consist of combined visibility and sequential effects. The same categories have also been subsequently adopted in the Landscape Institute's (IEMA) 2013 revision of the Landscape and Visual Impact Assessment Guidelines. The principal focus of wind energy cumulative impact assessment guidance relates to other wind farms - as opposed to other forms of development. This will also be the main focus herein, albeit with a subsequent consideration of cumulative effects with other forms of notable development (existing, permitted or pending a decision from a planning authority), particularly within the central study area.

Cumulative visual effects typically arise in two main ways. Combined visibility occurs when the Proposed Project is visible alongside, or in the context of, other existing, consented or proposed wind energy developments, either simultaneously within a single view or in successive views across the landscape. Sequential effects arise where turbines are experienced along prominent

linear receptors, such as roads, walking trails, or other movement corridors, where successive views of the turbines are encountered over a distance.

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

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

Table 13-9 provides the criteria for assessing the magnitude of cumulative effects, which are based on the NatureScot Guidelines (2012).

Table 13-9 Magnitude of Cumulative Effect

Magnitude of Effect	Description
Very High	The proposed wind farm will strongly contribute to wind energy development being the defining element of the surrounding landscape. It will strongly contribute to a sense of wind farm proliferation and being surrounded by wind energy development. Strongly adverse visual effects will be generated by the proposed turbines in relation to other turbines.
High	The proposed wind farm will contribute significantly to wind energy development being a defining element of the surrounding landscape. It will significantly contribute to a sense of wind farm proliferation and being surrounded by wind energy development. Significant adverse visual effects will be generated by the proposed turbines in relation to other turbines.
Medium	The proposed wind farm will contribute to wind energy development being a characteristic element of the surrounding landscape. It will contribute to a sense of wind farm accumulation and dissemination within the surrounding landscape.

	Adverse visual effects might be generated by the proposed turbines in relation to other turbines.
Low	The proposed wind farm will be one of only a few wind farms in the surrounding area and will be viewed in isolation from most receptors. It might contribute to wind farm development becoming a familiar feature within the surrounding landscape. The design characteristics of the proposed wind farm accord with other schemes within the surrounding landscape and adverse visual effects are not likely to occur in relation to these.
Negligible	The proposed wind farm will most often be viewed in isolation or occasionally in conjunction with other distant wind energy developments. Wind energy development will remain an uncommon landscape feature in the surrounding landscape. No adverse visual effects will be generated by the proposed turbines in relation to other turbines.

13.10.1 Assessment of Cumulative Effects

In addition to the Proposed Project, there are two operational wind farms and two consented wind farms and three wind farms in the planning system contained within the study area. These are set out below:

Table 13-10 Cumulative Wind Farms within the study area

Wind Farm Name	Number of turbines	Distance and Direction from proposed turbine array to nearest cumulative turbine (km)	Status
Shancloon Wind Farm	11 no.	6.6 East	Recently refused but still open to Judicial review possibility so still included here
Laurclavagh Wind Farm	8 no.	12.1 Southeast	In-Planning
Ardderro Wind Farm	25 no.	16.7 Southwest	Consented
Knockranny Wind Farm	8 no.	16.9 Southwest	Consented
Uggool Wind Farm	15 no.	17.3 Southwest	Operational
Seecon Wind Farm	15 no.	18.6 Southwest	Operational
Cloonascaragh Turbine	1 no.	19.9 East	In-Planning

The appraisal of cumulative effects with other wind energy developments is based on the cumulative ZTV maps and wireframes provided in Appendix 13-2 and the Photomontage booklets in Volume 4.

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

Although the photomontages and Cumulative ZTV map in Appendix 13-2 relates principally to cumulative visual effects (i.e. utilising the selected VP set), it also informs the closely related assessment of cumulative landscape effects, particularly those relating to cumulative effects on the overall landscape character of the study area. The assessment below, therefore, relates to both cumulative visual effects and cumulative landscape effects.

In terms of cumulative construction and decommissioning stage effects, it is unlikely that the construction or decommissioning of two wind farm developments within the study area will occur in tandem as the Proposed Projects timelines and operational lifespan does not align with any other projects within the study area. However, should the construction or decommissioning of the Proposed Project and another consented development occur at the same time, there is the potential for an increase in the intensity of construction/decommissioning activity within the study area. This includes the movement of HGVs along the surrounding road networks, storage of working vehicles and machinery, and the erection of tower cranes to construct/remove the turbine components. However, as the majority of consented and existing developments are well offset from the Proposed Project, it is not considered that these will generate any notable cumulative effects in the immediate surroundings of the Proposed Project. Overall, with regard to cumulative construction or decommissioning effects with other wind farm developments within the study area, effects are assessed as **Not Significant**

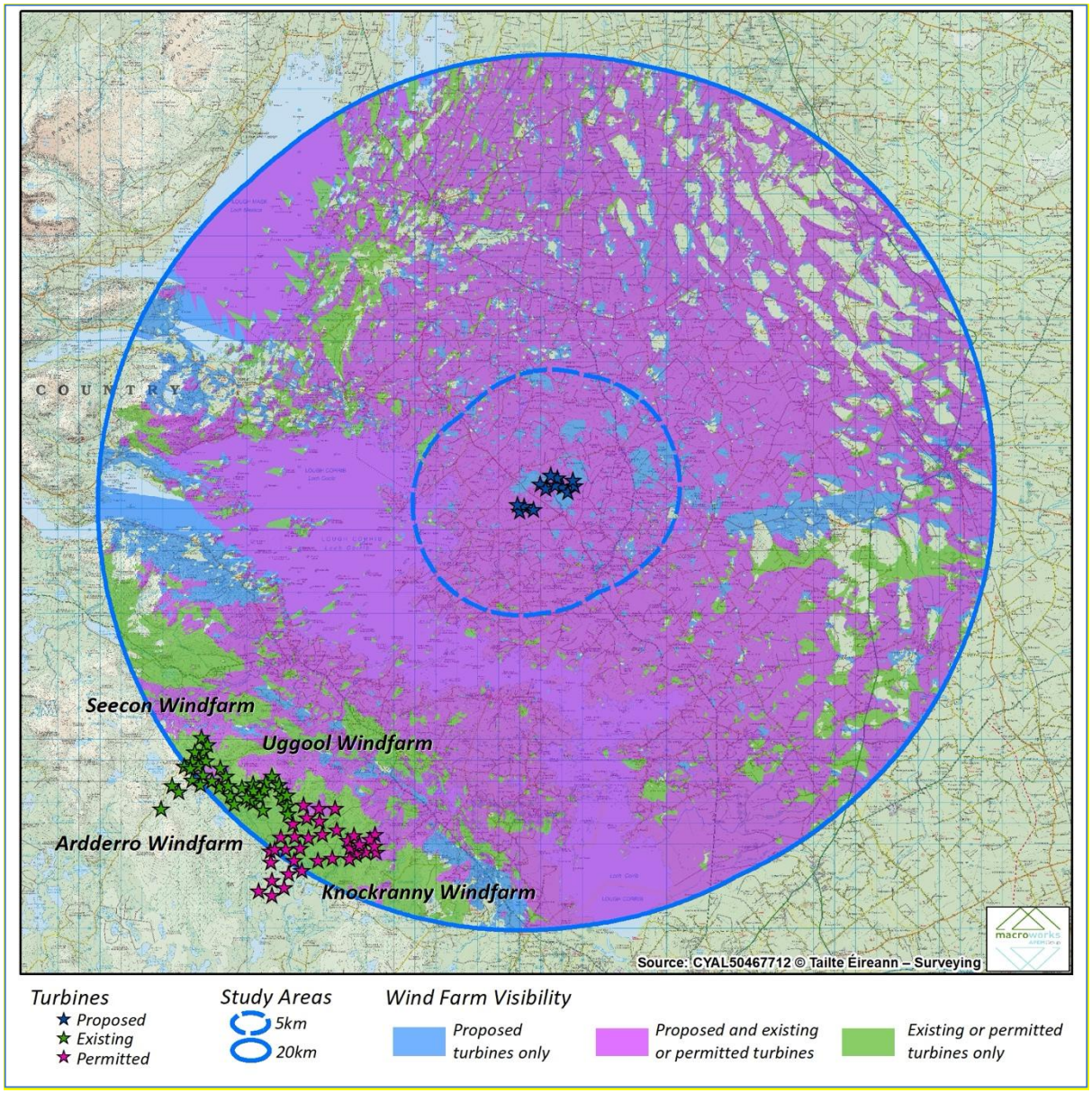


Figure 13-23 Cumulative ZTV Map (Tip Height 150m) – Current Cumulative Scenario

Current Cumulative Scenario

The cumulative ZTV map (refer to Appendix 13-2 and Figure 13-23 above) illustrates the potential for cumulative visibility between the proposed turbines and all other existing and consented wind farm developments within the 20 km study area. At present, there are two operational wind farms and two consented wind farm development within the 20 km. All of these other developments are considerably offset from the Proposed Project, located within the wider southwest periphery of the study area along rolling elevated terrain west of Lough Corrib.

As illustrated by the ZTV map, which is based on a bare-ground scenario and is therefore likely to overestimate visibility once existing screening is taken into account, the potential for views of the proposed Rooaunalaghta turbines in isolation (identified by the blue colour pattern) extends to approximately 8.7% of the study area. The is no specific areas where views of the turbines occur in isolation. Indeed, the blue pattern is scattered sporadically throughout the 20 km study area, with numerous small blocks occurring within the central study area. A notable

block of blue colour pattern occur to the southeast of the wider study area where Knockma Hill or locally known as the Hill of Maeve, will screen more distant views of turbines to the southwest. In contrast to this, several notable areas of blue pattern occur along the foothills of the elevated terrain to the southwest of the wider study area and along the western shores of Lough Corrib, where the nearest ridges and hills along the terrain in this part of the study will screen the other existing and consented developments, with potential for distant views to be afforded of the proposed turbines across Lough Corrib (as highlighted in VP28 and VP31).

With regard to combined theoretical cumulative visibility with other existing and consented developments, approximately 68.5% of the study area has the potential to afford visibility of the Proposed Project in combination with one or more wind energy developments. Whilst this represents a relatively extensive proportion of the 20 km study area, the cumulative visibility pattern relates to a bare-ground scenario and does not consider screening in the form of vegetation or built development, nor does it account for the potential visual intensity of cumulative developments. The nearest operational or consented wind farm development is located in excess of 16 km to the southwest of the proposed turbines. Consequently, although combined visibility is theoretically possible across a broad geographic extent, the separation distances between developments are considerable.

In visual terms, within the central study area, where visible the existing and consented turbines will present as distant background elements with a limited visual presence and reduced apparent scale due to the considerable viewing distances involved. As such, whilst cumulative visibility may occur, the degree of visual interaction between the proposed turbines and other wind energy developments will be limited.

In terms of sequential visual effects, these principally relate to the major route corridors within the central and wider study area. As noted above, whilst there is potential for sequential views of the Proposed Project in combination with other cumulative wind farm developments, they will be viewed as clearly separate developments, which diminishes the potential for any notable cumulative visual effects to occur.

In conclusion, the Proposed Project will give rise to a Low magnitude of cumulative landscape and visual effects, reflecting a contained intensification of wind energy development within the study area. Indeed, the proposed turbines will most often be viewed in isolation and where cumulative visibility of other turbines occurs, the other consented and operational developments will present a distinctly separate clusters with a limited visual presence often as background features or viewed in the opposite direction to the Proposed Project. Indeed, the Proposed Project represents a modest increase in the intensity of cumulative wind farm development within the study area. Thus, cumulative effects generated by the Proposed Project are classified as **Not Significant**.

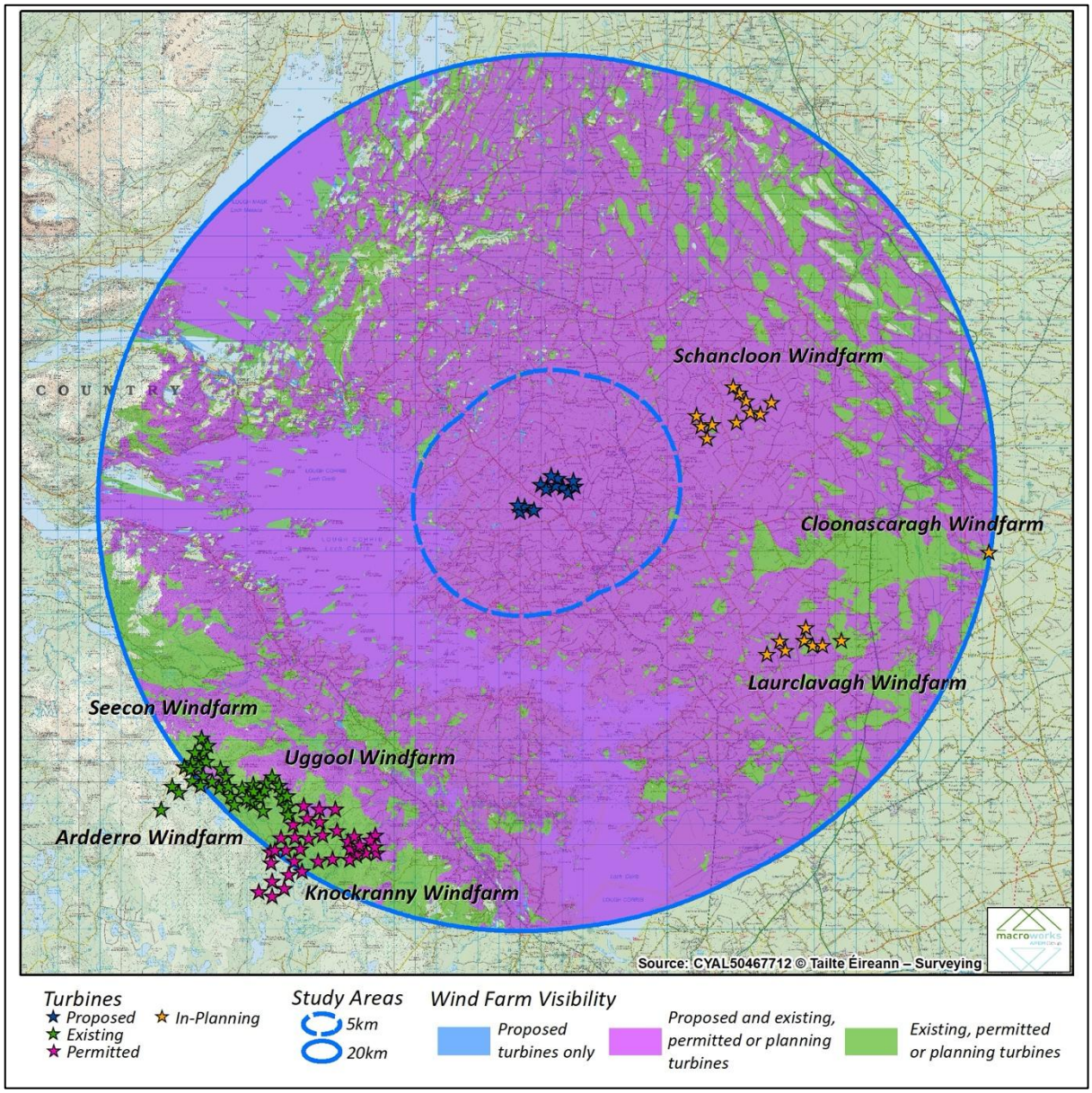


Figure 13-24 Cumulative ZTV Map (Tip Height 150m) – Potential Future Cumulative Scenario

Potential Future Cumulative Scenario

The potential future cumulative scenario includes all operational, consented and in-planning wind farm developments within the 20 km study area. In this regard, the potential future cumulative scenario accounts for three additional developments, all located within the eastern half of the wider study area, in contrast to the current cumulative scenario where the other cumulative turbines are located within the wider landscape to the west. Shancloon represents the nearest and largest of the in-planning wind farm developments, located approximately 6 km east of the proposed wind farm site within a broadly comparable landscape context to the Proposed Project, namely a low rolling rural landscape. Laurclavagh Wind Farm is located slightly further to the southeast at a distance of c. 12 km from the proposed wind farm site, whilst a single turbine development known as Cloonascaragh Wind Farm is situated on the eastern periphery of the study area, over 19 km from the Proposed Project.

Overall, the potential future cumulative scenario would introduce an additional 20 no. turbines within the 20 km study area, in addition to the Proposed Project and other operational and

consented developments. As illustrated by the potential future scenario ZTV (refer to Appendix 13-2 and Figure 13-24 above), the introduction of these additional turbines results in a clear reduction in the potential for isolated views of the proposed turbines, with the *'visibility of proposed turbines only'* category reducing to approximately 0.6% of the study area. This also reflects the flat to low rolling terrain of the eastern extent of the study area, which results in a greater extent of theoretical cumulative visibility.

With the reduction in isolated views of the proposed turbines, the potential for combined visibility of the proposed turbines together with operational, consented and in-planning turbines increases to over 76.6% of the entire 20 km study area. Notwithstanding these figures, the actual combined visibility of the Proposed Project with other cumulative developments within the potential future scenario is likely to be considerably lower in reality due to the influence of intervening vegetation, landform and built features.

Cumulative visual effects are likely to be most notable in relation to the proposed Shancloon turbines, as these represent the nearest cumulative development to the Proposed Project. Despite this, the Proposed Project maintains clear separation distances from the Shancloon turbines and, as such, the two developments would present as distinct and visually separate clusters. Similarly, all three in-planning developments within the eastern extent of the wider study area would remain spatially separated and well offset from one another. This notably reduces the potential for any highly adverse cumulative visual effects, such as stacked views of cumulative turbines or combined views generating a sense of enclosure within the surrounding local landscape context.

Overall, the addition of the Proposed Project in combination with the three in-planning developments would contribute to a noticeable increase in the extent and intensity of wind energy development within this part of the study area. Where turbines are currently not a strongly defining characteristic of the local landscape, they would become a more recognisable component of the surrounding working rural landscape. Notwithstanding this increased presence, the separation distances between developments aids in diminishing any substantial cumulative proliferation of wind energy development. On balance, the residual cumulative landscape and visual effect associated with the potential future scenario is considered to be of **Medium** magnitude, reflecting a noticeable but not dominant increase in cumulative wind energy presence across the study area.

Thus, cumulative effects generated by the Proposed Project in the potential future scenario are classified as **Not Significant**.

13.11 Conclusion

The Proposed Project is located within a relatively typical rural landscape context, heavily influenced by traditional rural land uses. The central study area and large parts of the wider study area are associated with working landscape values and are not considered to be highly sensitive. This is reflected by the proposed wind farm site location within Policy Area 4 of the current Mayo County Development Plan, which is identified as the most robust landscape area in the county in accordance with the sensitivity matrix (refer to Figure 13-9 above). Whist this Policy Area identifies a High-medium sensitivity to wind farm development, this is the lowest sensitivity classification for such development within the county. Whilst some more sensitive landscape units occur within the wider western extent of the study area, these tend to be well offset from the Proposed Project and are viewed within a separate visual context.

In terms of landscape impacts, the Proposed Project will generate a marked increase in the intensity of built development within the immediate and local context and will result in some detracting influence on the prevailing rural character. However, the Proposed Project is not considered to represent a highly incongruous land use within this already modified landscape context. In terms of physical effects, there will be some localised reprofiling of terrain at the proposed wind farm site scale to accommodate hardstands and other ancillary features. However, any associated landscape effects will be highly localised to the proposed wind farm site itself and will have limited perceptual influence beyond the proposed wind farm site boundary. Overall, the Proposed Project is considered to comply with Policies 21–24 set out for the relevant Policy Area 4 within which the Proposed Project is located.

With regard to residual visual effects, the Proposed Project will generate some of the higher-order effects within the immediate study area (i.e. within 1 km of the proposed turbines), where the turbines have the potential to present with a dominant visual presence and will be perceived as the largest built features within the surrounding local context. Indeed, at a local level there will be some reduction in the degree of visual amenity afforded, which is commonplace for wind farm developments of a similar scale and nature. Notwithstanding this, the proposed turbines do not appear over-scaled and do not generate any strong sense of overbearing within this context, as the generally open nature of the surrounding landscape, comprising low dry-stone walls and limited intervening vegetation, assists in assimilating the overall scale and extent of the Proposed Project. Furthermore, the proposed turbine array is fully compliant with the visual amenity setback distances set out in the Draft Revised WEDG (2019). Overall, residual visual effects within the immediate and local surrounding context range from **Substantial–Moderate** to **Moderate–Slight**. Whilst these represent some of the more notable visual effects associated with the Proposed Project, they are generally localised to the immediate receiving environment and are assessed as **Not Significant** in EIA terms.

With regard to other surrounding sensitive visual receptors, Ross Errilly Friary is located within the southern extent of the central study area and encompasses an associated scenic view designation. Whilst early-stage mitigation measures were employed to reduce potential adverse visual effects at this receptor, the proposed turbines will present as notable built elements from both the scenic view designation and the immediate surroundings of the heritage asset. Notwithstanding this, the proposed turbines present setback from these receptors and will not generate any sense of overbearing. Furthermore, the turbines generally present in a legible manner, particularly from the immediate context of the Friary, where the arrangement of turbines avoids more ambiguous visual effects such as excessive overlap, stacked views and visual clutter. Overall, the residual significance of visual effect at both the scenic designation and heritage asset is assessed as **Not Significant**.

The wider surrounding study area encompasses numerous other sensitive visual receptors and areas of landscape with a higher susceptibility to visual change. Representative viewpoints have been included for all relevant sensitive receptor groups within the wider surrounding landscape. Whilst the proposed turbines have the potential to be visible from many of these receptors, they are generally viewed at considerable distances where they present with a limited visual presence and/or are viewed offset from the principal aspects of visual amenity associated with such receptors. Overall, residual visual effects within the wider study area are assessed as **Not Significant**. With regard to policy relating to scenic designations within the current Mayo County Development Plan, principally Policies NEO25 and NEO26, the Proposed Project is considered to be in full compliance with the objectives of these policies. In relation to Policy

PVSR1 of the Galway County Development Plan, whilst the Proposed Project will result in some detracting influence on visual amenity, most notably at the nearest scenic view to the proposed wind farm site (Scenic View 33), the residual significance of visual effect is classified as **Not Significant**. Furthermore, the policy states that the protection of such views *"shall be balanced against the need to develop key infrastructure to meet the strategic aims of the plan"*.

Overall, the Proposed Project represents a considered and appropriate form of development within this robust and modified rural landscape context and is not considered to give rise to significant adverse landscape or visual effects, either individually or cumulatively.

With regard to residual construction and decommissioning stage landscape effects, the significance of effect is considered to be **Substantial-moderate / Adverse / Short-term** within and immediately around the proposed wind farm site during construction and decommissioning, but reducing quickly with distance and broader context. Furthermore, the significance of landscape effect during the operational phase is deemed to be **Substantial-moderate / Adverse / Long-term** within and immediately around the proposed wind farm site, reducing to **Moderate / Adverse / Long-term** within the central study area and reducing swiftly at further distances from the Proposed Project. Within the wider study area (c. 5-20 km from the proposed turbines), the residual significance of landscape effect will reduce to **Slight** and **Imperceptible**. Overall, residual landscape effects are assessed as **Not Significant.**

With regard to residual visual effects during the construction and decommissioning stage, these will range between **Substantial-moderate** and **Imperceptible** throughout the study area, with those closer to the development experiencing higher ranging effect. In terms of the residual visual effects during the operational phase, the Proposed Project will result in some localised high-ranging residual visual effects. Indeed the residual significance of visual effect ranges between **Substantial-moderate** to **Imperceptible.** Whilst the Proposed Project will present with a prominent visual presence from some of the nearest receptors, residual visual effects are assessed as **Not Significant**.

In terms of cumulative landscape and visual effects, these have been assessed based on both the current cumulative scenario and the potential future cumulative scenario. Cumulative effects associated with the current cumulative scenario are limited owing to the considerable offsets between the Proposed Project and the nearest other operational or consented developments, all of which are located at distances exceeding 16 km. Within the potential future cumulative scenario, the Proposed Project will contribute to a more notable intensification of wind farm development within the low rolling rural landscape, with three additional developments contained within the eastern half of the wider study area. Notwithstanding this, the proposed turbines are well offset from all other in-planning turbine arrays and, whilst the Proposed Project will contribute towards wind energy development becoming a more characteristic feature of the study area, it does not generate any strong sense of wind farm proliferation, visual overconcentration, or unacceptable cumulative clutter. Overall, the cumulative landscape and visual effects arising from the Proposed Project under both the current cumulative scenario and the potential future cumulative scenario are assessed as **Not Significant**.

13.12 REFERENCES

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