13. LANDSCAPE AND VISUAL

13.1 Introduction

This chapter of the Environmental Impact Assessment Report (EIAR) addresses the potential landscape and visual effects of the proposed Sheskin South Wind Farm in County Mayo. The emphasis in this chapter is on the likely significant direct and indirect effects of the Proposed Development upon the landscape and visual amenity. It covers the assessment methodology, a description of the Proposed Development and the existing landscape, as well as landscape policy and relevant guidance. It includes a description of the landscape policy of County Mayo with specific reference to wind energy and the Landscape and Visual Impact Assessment (LVIA) study area in which the Proposed Development Site is located.

The landscape of the Proposed Development Site and wider landscape area is described in terms of its existing character, which includes a description of landscape values and the landscape's sensitivity to change. The landscape and visual impact assessment of the Proposed Development uses theoretical visibility mapping, representative viewpoints and photomontages. The potential impacts in both landscape and visual terms are then assessed, including cumulative impacts.

13.1.1 Statement of Authority

MKO has developed extensive expertise and experience over the last 15 years in the Landscape and Visual Impact Assessment of a range of projects, including multiple large scale wind energy developments.

This EIAR chapter and the accompanying appendices was written by Jack Smith, MSc., a Landscape and Visual Impact Professional. Jack is an Environmental Scientist and Landscape and Visual Impact Assessment (LVIA) specialist with MKO. Jack is an Affiliate member of the British Landscape Institute and holds membership with the Landscape Research Group. Jack's primary role at MKO is producing the LVIA chapter of EIA reports. Jack specialises in preparing Landscape and Visual Impact Assessment Reports for large-scale projects including wind farms, solar farms, quarry extraction and strategic housing schemes. Jack has additional experience in preparing landscape feasibility reports for large wind farm projects.

Jack Smith was also aided by Jack Workman, an LVIA Professional. Jack Workman MSc, TMLI, is a Technician Member with the British Landscape Institute (TMLI). Jack Workman is the Landscape & Visual Team manager at MKO, he is an Environmental Scientist and Landscape and Visual Impact Assessment (LVIA) specialist. Jack Workman's primary role at MKO is producing the LVIA chapter of EIA reports for large infrastructure developments. Jack holds an MSc. in Coastal and Marine Environments and a BSc. in Psychology, he is a member of the Landscape Research Group, as well as holding a membership with the Chartered Institute of Water and Environmental Management.

13.1.2 'Do-Nothing' Scenario

If the Proposed Development were not to proceed, no changes would be made to the current land-use practice of commercial forestry. Should this occur the landscape and visual impact would be neutral in the context of this EIAR.

13.1.3 Proposed Development Description

A full and detailed description of the Proposed Development can be found in Chapter 4 of this EIAR. Section 1.4 describes the development and its component parts (the 'Proposed Development') including the works subject of a proposed application for planning permission to An Bord Pleanála.

The Proposed Development comprises the construction of 21 No. wind turbines and all associated works. The proposed turbines will have a maximum blade tip height of up to 200 metres above the top of the foundation. The applicant is seeking a ten-year planning permission. The full description of the Proposed Development, as per the public planning notices, is as follows:

1. *Construction of 21 no. wind turbines and associated hardstand areas with the following parameters:*
    a. *A total tip height of 200 metres,*
    b. *Hub height of 115 metres, and*
    c. *Rotor diameter of 170 metres*
2. *All associated underground electrical and communications cabling;*
3. *1 no. Meteorological Mast of 125 metres in height;*
4. *Upgrade of existing tracks and roads, provision of new permanent site access roads, upgrade of 2 no. existing site entrances, construction of 1 no. new site entrance;*
5. *2 no. borrow pits;*
6. *12 no. permanent peat placement areas;*
7. *4 no. temporary construction compounds;*
8. *Permanent recreation and amenity works, including marked trails, seating areas, amenity car park, and associated amenity signage;*
9. *Site Drainage;*
10. *Site Signage;*
11. *Ancillary Forestry Felling to facilitate construction and operation of the proposed development;*
12. *All works associated with the habitat enhancement and biodiversity management within the wind farm site; and*
13. *All associated site development works.*

This application is seeking a ten-year permission and 35 year operational life from the date of commissioning of the renewable energy development.

While not included in the planning application for the Sheskin South Wind Farm development, the on-site electricity substation, the grid connection cabling route and are also assessed in this chapter of the EIAR.

Essential Aspects of the Proposed Development from an LVIA Perspective

Guidance for LVIA (GLVIA3, 2013) states that *"it is important to make sure that the project description provides all the information needed to identify its effects on particular aspects of the environment. For LVIA it is important to understand, from the project description, the essential aspects of the scheme that will potentially give rise to its effects on the landscape and visual amenity"*. The tall, vertical nature of the proposed turbines make them the most prominent elements of the Proposed Development from a landscape and visual perspective and have the most potential to give rise to significant landscape and visual effects. In this regard, the proposed turbines are deemed to be the 'essential aspect' of the Proposed Development which will give rise to effects on the landscape and visual amenity and are therefore a primary focus of the LVIA conducted in this chapter.

The proposed meteorological mast is also a tall vertical structure, it is therefore included in the photomontage booklet and is fully considered throughout this chapter. However, it will be significantly less visible than any turbine given its shorter and slender lattice form.

Other components of the Proposed Development are not deemed to be as visually prominent as the proposed turbines, however, they have the potential to give rise to localised landscape and visual effects. Although not the primary focus of the LVIA, these elements are fully considered throughout this chapter and are assessed in detail in Section 13.7.3.5 – *Ancillary Project Elements*.

13.1.4 Mitigation as Part of the Iterative Design Process

Through the iterative project design process, informed by early-stage impact assessment work, landscape modelling, ZTV mapping and photomontage preparation, every effort has been made to bring forward the optimum design for the Proposed Development with respect to landscape and visual factors.

Proposed Turbines: The final proposed turbine layout that is the subject of this LVIA, already incorporates the following landscape and visual design considerations for good wind farm design:

- The Proposed Development is strategically sited in a remote and isolated upland landscape with large separation distances from sensitive visual receptors.
- Strategic siting of the Proposed Development in a landscape enclosed by tall mountainous features, obscuring views from vast areas of the LVIA Study Area and a variety of sensitive receptors.
- Strategic siting of the Proposed Development at elevations lower than 240m above ordnance datum, following an iterative design process, to ensure minimal visual impact on nearby sensitive landscape features.
- The turbine layout has been designed to create a coherent cluster, contiguous and connected to each other visually and with consistent spacing.
- Strategic siting of the turbines within a site of low landscape value and within or in close proximity to designated wind energy development zones
- Siting of proposed turbines adheres to and exceeds the minimum 500 metre set back distance in the current Wind Energy Development Guidelines (2006, DoEHLG) and also the 4 times tip height set-back distance explicitly set out for residential visual amenity prescribed by the Draft Revised Wind Energy Development Guidelines (2019, DoHPLG).
- The site location and current layout minimises the potential for visibility from sensitive receptors and the site visits and assessment tools show that the actual visibility is less than the theoretical visibility. Where visibility does occur, the design is in accordance with best practice (Wind Energy Development Guidelines (2006, DoEHLG)) and a coherent project is evident.

Ancillary Infrastructure – 110kV Substation, Met Mast, Grid Connection and Access Roads

- The intended connection to the national electricity grid is underground thereby eliminating potential landscape and visual effects during the operational phase.
- The proposed 110kV substation is sited within the commercial forestry on site and will be entirely screened from view outside of the immediate proximity of the site. It is also located a substantial distance from the nearest sensitive receptor, aside from the Western Way, which runs adjacent to the site of the substation (see discussion below in Section 13.7.3.3.3).
- The internal site road layout makes use of the existing tracks wherever possible (to be upgraded for construction and the delivery of wind turbine components), to minimise the requirement for new tracks within the site.
- Felling of existing coniferous plantation is predominantly limited to keyhole felling in localised parts of the site, in keeping with existing practices in the commercial forestry plantation on-site.

13.1.5 Scoping Replies/Pre-Planning Meetings

A scoping and consultation exercise has been carried out by MKO, as detailed in Chapter 2 of this EIAR. Two pre-planning meetings with An Bord Pleanála occurred on the 22nd September 2021 and the 3rd February 2022 in which the cumulative assessment of landscape and visual impacts in relation to other wind farms in the area was raised by the Board. A pre-application consultation meeting took place with Mayo County Council on the 9th September 2021, with cumulative and visual impacts discussed. All feedback and communications have been taken on board when compiling the chapter and assessment. Section 2.7.1 of this EIAR (Chapter 2) summarises the pre-planning meetings with Mayo County Council and An Bord Pleanála in greater detail.

13.2 Brief Methodology and Assessment Criteria

This section broadly outlines the methodology and the guidance used to undertake the landscape and visual impact assessment of the Proposed Development; a more detailed description of the methodology is outlined in Appendix 13-1 – *LVIA Methodology*. There are five main sections to this assessment:

- Visibility of the Proposed Development
- Landscape Baseline
- Visual Baseline
- Cumulative Context
- Representative Viewpoints and Photomontage Locations
- Likely and Significant Effects – outlining the assessment of landscape, visual and cumulative effects

13.2.1 Scope and Definition of Landscape and Visual Impact (LVIA) Study Area

For the purposes of this chapter, where the 'Proposed Development Site' or 'the site' is referred to, this relates to the immediate environment in which the Proposed Development is located. The Proposed Development Site is delineated by a green line labelled as the 'EIAR Site Boundary' in the A0 LVIA Baseline Map (Appendix 13-4) as well as other mapping figures shown in Section 13.4 – *Landscape Baseline.*

The landscape baseline mapping, visual receptor mapping and viewpoint selection are based on wider study areas. The geographical extent of this study area for this LVIA was determined by desktop study, survey work undertaken, the professional judgement of the assessment team, experience from other relevant projects and policy guidance or standards (Appendix 3, *DoEHLG Wind Energy Development Guidelines'* 2006 and GLVIA 2013). The LVIA Study Area has been chosen as 20 kilometres from the proposed turbines for landscape and visual effects, and 15 kilometres for effects on landscape character. These are the study areas for which the baseline maps and viewpoint locations are produced and are referred to as the 'study area' or 'LVIA Study Area'. Furthermore, as prescribed by best practice guidance, the professional judgement of the assessment team, in addition to the results of initial visibility appraisals (See Section 13.3 – *Visibility of the Proposed Development*), the following topic areas have been screened out of the assessment:

- Effects on landscape and visual receptors that have minimal or no theoretical visibility (as predicted by the ZTV) and/or very distant visibility, and are therefore unlikely to be subject to significant effects;
- Effects on designated landscape receptors beyond a 20 km radius from the Proposed Development, from where it is judged that potential significant effects on key characteristics and/or special qualities, or views are judged unlikely to occur;

- Effects on landscape character beyond a 15 km radius from the Proposed Development, where it is judged that potential significant effects on landscape character are unlikely to occur;
- Effects on visual receptors beyond a 20 km radius from the Proposed Development, where it is judged that potential significant effects are unlikely to occur;
- Cumulative landscape and visual effects in relation to single turbines (except where otherwise stated);
- Cumulative landscape and visual effects beyond a 20 km radius from the Proposed Development, where it is judged that potential significant cumulative effects are unlikely to occur;

The tall, vertical nature of the proposed turbines make them the most prominent elements of the Proposed Development from a landscape and visual perspective and have the most potential to give rise to significant landscape and visual effects. The landscape and visual impact of ancillary elements such as the proposed roads, substation, met mast and grid connection are addressed within this chapter, however, the proposed turbines are of primary focus in this LVIA.

13.2.2 Guidelines

The legislation and general guidance on Environmental Impact Assessment is set out in Chapter 1 of this EIAR. The LVIA Reported in this chapter was guided and informed by guidance documentation specifically pertaining to the Landscape and Visual Impact Assessment. Details of the guidance used to conduct this LVIA are outlined in the LVIA Methodology Appendix – *Appendix 13-1*.

13.2.3 Baseline Landscape and Visual Information

In order to carry out this assessment, an initial desk study of baseline information was undertaken that has informed the LVIA, and this included the following:

Landscape

- Landscape Receptors
- Policies and objectives contained in the relevant county development plan pertaining to landscape and wind energy
- Landscape designations in the LVIA Study Area (Amenity Areas; Views and Prospects; Landscape Character Areas)
- Landscape character of the LVIA Study Area
- Landscape character of the Proposed Development site based on
    - Site Surveys undertaken in Summer 2021 and Summer 2022
    - Landscape Character Types identified in 'Landscape Character Types as a basis for Guidelines: Wind Energy Development Guidelines for Planning Authorities (Department of the Environment, Heritage and Local Government, 2006) and also the Draft Revised Wind Energy Development Guidelines (2019)

Visual

- Identification of Visual Receptors in the LVIA Study Area;
- Preliminary assessments of visibility of the Proposed Development from visual receptors using ZTV mapping and on-site appraisals.
- Route Screening Analysis

13.2.4 Assessment of Potential Impacts

The landscape and visual assessment methodology used in this chapter (outlined in Appendix 13-1) includes clearly documented methods based on the GLVIA guidelines (LI & IEMA, 2013). This includes consideration of landscape and visual sensitivity balanced with the magnitude of the effect to determine the significance of effects. Mitigating factors are then taken into consideration to arrive at residual landscape and visual effects. Residual landscape and visual effects are graded upon an 'impact assessment classification of significance' scale, as defined by the Environmental Protection Agency of Ireland (EPA, 2022), included in Section 1.7.1 of Chapter 1 of this EIAR.

Photomontages are used to assess potential impacts, whereby the potential effects arising as a result of the Proposed Development are assessed from viewpoint locations representative of prominent landscape and visual receptors located within the LVIA Study Area. Throughout this chapter 'theoretical visibility', is referred to, this is based on Zone of Theoretical Visibility (ZTV) mapping which is addressed in the following section of this chapter. Further details of the methods used to produce ZTVs and Photomontages, as well as the landscape and visual impact assessment process are presented in the methodology appendix - *Appendix 13-1*.

13.3 Visibility of the Proposed Development

13.3.1 ZTV Mapping: Theoretical Visibility of the Proposed Development.

Zone of Theoretical Visibility (ZTV) mapping is an important step in the LVIA process, in that it clearly shows which areas will have theoretical visibility of the proposed turbines and which areas will have no theoretical visibility.

The ZTV mapping methodology outlined in Section 1.3 of Appendix 13-1 was used to examine the theoretical visibility of the 21 No. proposed turbines from all landscape and visual receptors within the LVIA Study Area, using the half blade height of the wind turbines as points of reference. As noted in Appendix 13-1, actual visibility on the ground is significantly less than predicted by the ZTV mapping due to intervening factors such as: on site screening from natural and man-made features, atmospheric weather and/or localised topography.

Generation of the ZTV utilises large scale topographical data (interpolation across 10 m OSi contour data) and does not account for topographical variation of smaller scale (e.g. < 10 metre). Therefore, in reality, small, localised undulations in topography are likely to further inhibit visibility of the Proposed Development that may not be represented in the ZTV map. Other features of the landscape such as vegetation and man-made elements are also likely to obscure the proposed turbines from view from many areas where the ZTV indicates there is full visibility. In this regard, the ZTV is a useful tool to indicate where there is definitely no visibility of the Proposed Development, therefore receptors located in these areas can be screened out from further assessment.

13.3.2 Half Blade ZTV of the Proposed Development

The Half Blade ZTV map of the Proposed Development and LVIA Study Area is shown in Figure 13-1 below. The ZTV map is used within several mapping figures included in this chapter to enable assessment of theoretical visibility from landscape and visual receptors (See Appendix 13-4 – *LVIA Baseline Map*; Figure 13-12 – *Landscape Character Units & ZTV*; Figure 13-14 – *Visual Baseline & ZTV*). Separate colour bands are used on each ZTV map to indicate the number of turbines of which the half blade will potentially be visible. The legend on each map shows the number of visible turbines for each corresponding colour, which are as follows:

- Orange: 1-5 turbines visible
- Teal: 6-10 turbines visible
- Yellow: 11-15 turbines visible
- Navy: 16-21 turbines visible

Figure 13-2 (below) shows the topographical features and elevation gradients existent within the receiving landscape of the LVIA Study Area, the geography of these topographical features define the distribution of theoretical visibility illustrated in Figure 13-1.

Description of Theoretical Visibility

The Proposed Development is bordered to the west, north, and south by an elevated landform. As the proposed turbines are on the eastern side of this curving ridgeline or range, the topography will obscure visibility of the proposed turbines from the coastal landscape to the north-west, north-east, and west, as well as the mountainous moorland landscape to the south-west. The ZTV map shows that theoretical visibility of the proposed turbines is very limited in locations to the west and north of the Proposed Development and there will be no theoretical visibility along vast areas of the north Mayo coastline.

Figure 13-1 illustrates that most full theoretical visibility of the 21 No. turbines will occur within the relatively flat plains to the south and south-east of the study area where there is no topographical screening of the Proposed Development. The major ridgeline that surrounds the site to the north, west and south will obscure the Proposed Development from view from sensitive visual receptors in these directions. The topography and elevation of the site and the surrounding ridgelines to the north-east and west act as a barrier to effectively screen the Proposed Development from sensitive receptors along the north Mayo coastline, in particular to the north-east where the Céide Fields are located. The low-lying elevation and flat topography to the south-east in the study area will create longer-range, more expansive views of the site. In this regard, there will be full theoretical visibility of the Proposed Development from the northern extent of the Nephin Beg range, which is located near the southern extent of the LVIA Study Area.

Figure 13-1 indicates that theoretical visibility within 5 km is mainly full to partial to the south-west, south, east and north-east, with an area of no visibility to the north-west and west as a result of the adjacent topography, as well as a strip of no visibility directly south along the N59 national road, in close proximity to the Proposed Development, caused by a steep decline in elevation. The topography surrounding the Proposed Development, which can be seen in Figure 13-2 below, can be seen to limit the visibility of the Proposed Development to the west, north, and south, even in locations within 5 km of the Proposed Development.

Beyond 5 km, theoretical visibility remains extremely limited to the west, south, north-west and north-east, with large areas of no or partial theoretical visibility. It is evident from Figure 13-1 that there is widespread full theoretical visibility beyond 5 km throughout the LVIA Study Area to the south and east, and there is full theoretical visibility between 5 km and 10km from the Proposed Development to the south-east. Between 10 km and 20 km south-east of the Proposed Development, there are some patches of no theoretical visibility caused by some smaller topographical undulations.

To the west and north, beyond 5km, there areas where there is partial to full theoretical visibility due to gaps in the larger series of ridgelines that surround the site in these directions. There is an area of full theoretical visibility in the area around Doohoma Head to the west, as well as around Broadhaven to the north-west. Directly north, there is another area of partial to full theoretical visibility located around the peaks of Tawnaghmore and Glinsk, along the north Mayo coastline. To the north-east, an area of full theoretical visibility stretches from the Proposed Development site until Maumakeogh Mountain, which prevents any visibility beyond this.

Beyond 5 km and within 10 km of the turbines, there are large areas of no visibility to the north-west and south-west of the turbines.

Additional ZTV mapping exercises were conducted to assess the theoretical visibility of the Proposed Development cumulatively with all other existing, permitted and proposed wind farm developments located within the LVIA Study Area. These ZTV maps are presented and discussed in Section 13.6 of this Chapter – *Cumulative Context.*

Map Legend

- LVIA Study Area
- EIAR Site Boundary
- Proposed Turbines

Zone of Theoretical Visibility

- 1-5 Turbines Theoretically Visible
- 6-10 Turbines Theoretically Visible
- 11-15 Turbines Theoretically Visible
- 15-21 Turbines Theoretically Visible

5 km

10 km

15 km

20 km

Drawing No.

Figure 13-1

Drawing Title

Zone of Theoretical Visibility

Project Title

Sheskin South Renewable Energy Development

Scale	Project No.	Date	Drawn By	Checked By
1:150,000	201119	30.11.2022	JS	JW

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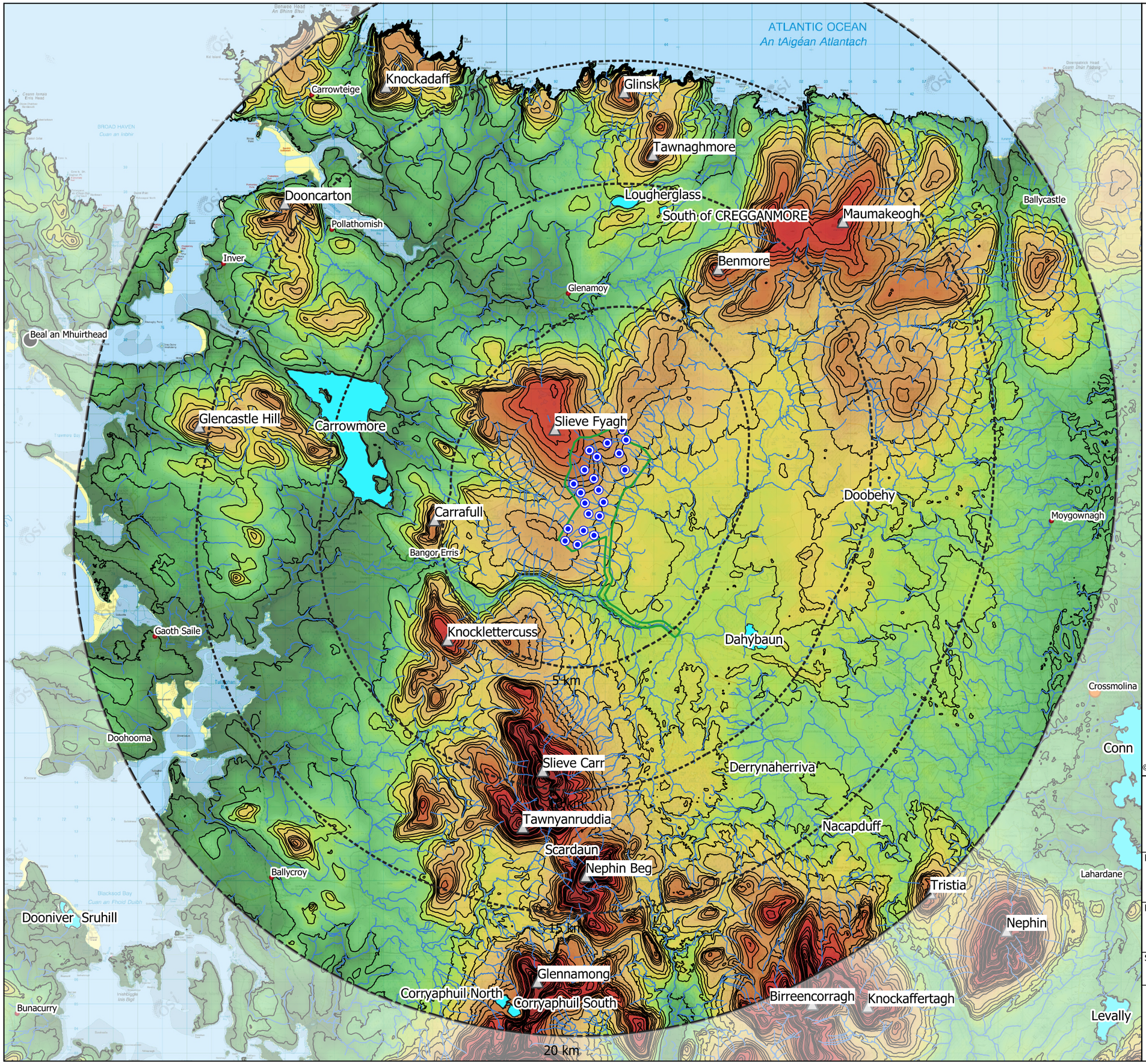

Map Legend

- EIAR Site Boundary
- Proposed Turbines
- Contours - 10 Metre Interval

Elevation Above Ordnance Datum (AOD) (in meters)

- 1
- 25
- 50
- 75
- 100
- 150
- 200
- 250
- 300
- 350
- 400
- Topographical Features
- Lake Waterbodies
- River Waterbodies

County Mayo Settlement Hierarchy

- Tier 1
- Tier 2
- Tier 3
- Tier 4
- Tier 5

Drawing No.

Figure 13-2

Drawing Title

Physical Landscape Features

Project Title

Sheskin South Renewable Energy Development

Scale	Project No.	Date	Drawn By	Checked By
1:150,000	201119	16.11.2022	JS	EMC

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Briefing Note – ZTV as a Tool to Inform the Iterative Design Process

During the iterative design process, multiple ZTVs were produced for differing turbine layout designs, with differing numbers of turbines, and differing turbine dimensions and locations, with the aim of reducing visibility of the Proposed Development from sensitive visual receptors to the west and north. Multiple ZTVs were produced analysing the visibility of differing tip heights of 180m, 200m, and 220m. As a result of this iterative design process, all of the proposed turbines are sited at locations below a base elevation of 240m above ordnance datum (AOD) to ensure they are contained by the elevated landform encircling them to the north and west (Slieve Fyagh) which will limit visibility from vast areas in the northerly and westerly parts of the LVIA Study Area.

13.3.3 Route Screening Analysis

In order to comprehensively demonstrate the varying characteristics of the roads and to record the actual visibility in comparison to the theoretical visibility, a methodology was employed termed Route Screening Analysis, and this was undertaken from all roads within a five-kilometre radius of the proposed turbines. The full methodology is outlined in Appendix 13-1 and the categories recorded were as follows:

- Little/No Screening – mainly open and with some very light vegetation (see Plate 13-1)
- Intermittent/Partial Screening – light deciduous roadside vegetation and vegetation with short gaps which would allow intermittent or partial views (see Plate 13-2)
- Full Screening – vegetation which is dense enough to block views e.g. coniferous forestry (see Plate 13-3)

Plate 13-1 below was taken in the townland of Barroosky along a local road and represents the majority of the roadside screening along the limited number of roads within 5 km of the proposed turbines. This image indicates that the majority of the roads within 5 km of the site have 'Little/No Screening', owing to the lack of roadside screening present in the landscape area within 5 km of the site.

Plate 13-1 An Example of 'Little/No Screening'

Plate 13-2 An Example of 'Intermittent / Partial Screening'

Plate 13-3 An Example of 'Full Screening'

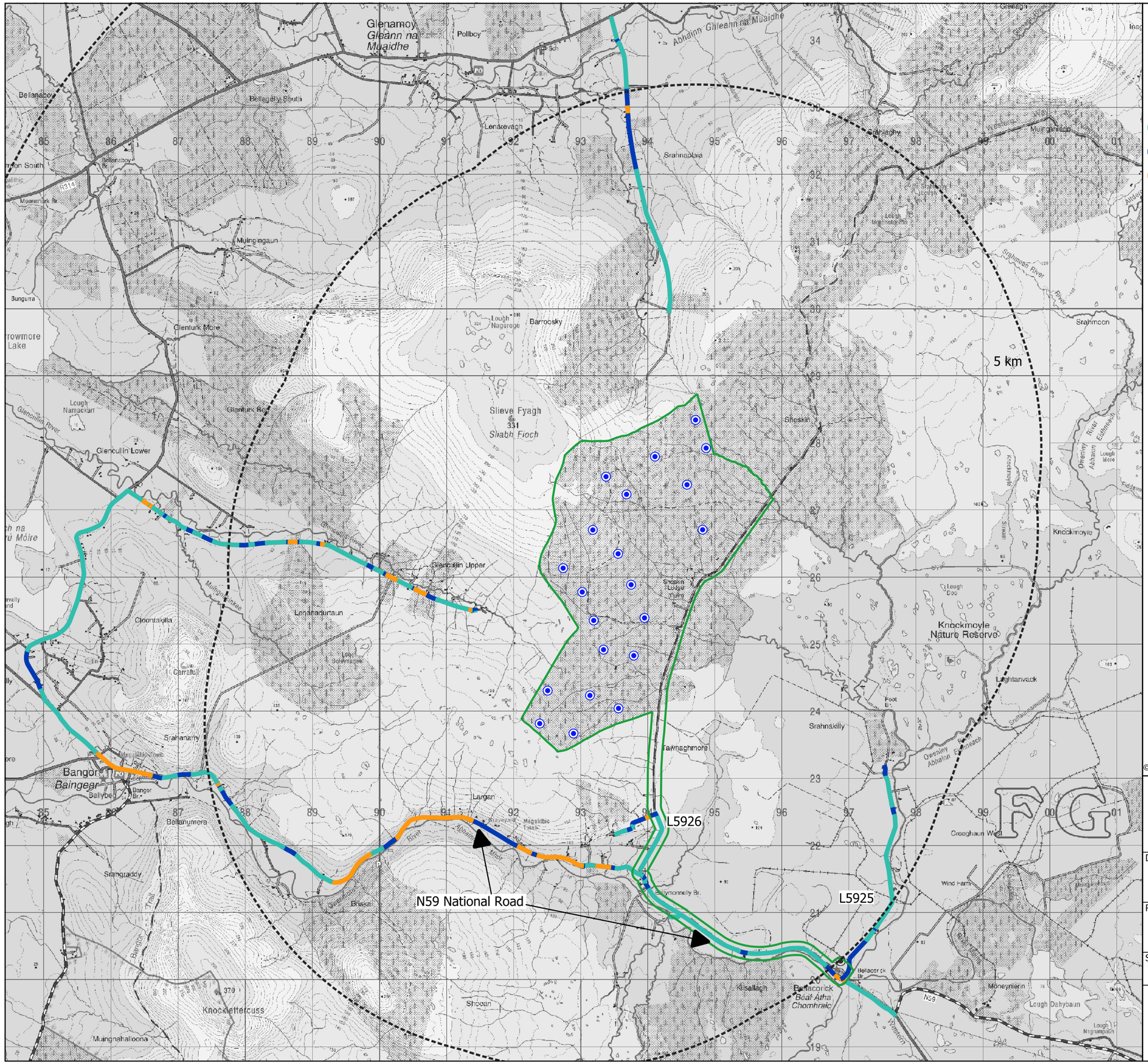
Within 5 km of the proposed turbines there are tracts of mature coniferous plantation forestry interspersed throughout the landscape. Where these are located close to roads views are restricted and closed due to their presence as shown in Plate 13-3 above.

The route screening analysis determines the extent and density of screening present in the immediate vicinity of the proposed site. This allows the actual likely visibility of turbines to be considered and assessed in an objective and quantitative manner reducing the level of subjectivity involved in determining how visible the proposed turbines will be in the local landscape immediately around the site. Table 13-1 shows the distribution of the screening classes on 34.58 km of public road recorded during the survey within 5 km of the proposed turbines (including all public roads within 5 km of the proposed site).

Table 13-1 Distribution of Screening recorded (within 5km) during Route Screening Analysis.

Screening Class	Length of Road Mapped in Figure 13-3	Percentage Distribution of Screening on the Surveyed Roads
Little/No Screening	22.58 km	65.4%
Partial Intermittent Screening	6.5 km	18.7%
Full Screening	5.5 km	15.9%

'Little/No Screening' was recorded for approximately two-thirds (65.4%) of the surveyed roads and was by far the most common class recorded. This suggests that the ZTV will give a good indication of likely visibility within this 5 km area. Some form of screening (either 'Partial/Intermittent' or 'Full Screening') was recorded for approximately 34.6% or one-third of the roads surveyed, which suggests that for this proportion of the roads within 5 km of the Proposed Development, the ZTV may not necessarily indicate the likely visibility of the Proposed Development. Although, it is noted that a large stretch of the 'Full Screening' shown in Figure 13-3 below is located within an area where the ZTV already indicates that there will be limited visibility. Overall, Table 13-1 above suggests that within 5 km of the Proposed Development Site, the ZTV is a good indicator of likely visibility.



Map Legend

- EIAR Site Boundary
- Proposed Turbines

Route Screening Analysis

- Little / No Screening
- Intermittent / Partial Screening
- Full Screening

Drawing No.

Figure 13-3

Drawing Title

Route Screening Analysis

Project Title

Sheskin South Renewable Energy Development

Scale	Project No.	Date	Drawn By	Checked By
1:55,000	201119	16.11.2022	JS	EMC

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Roads around the Proposed Development Site within 5 km are mainly local roads, with the exception of the N59 National Road, that runs in an east-west orientation to the south of the proposed turbines. Figure 13-3 shows that on these local roads the screening type is primarily 'Little/No Screening', with some smaller stretches of 'Intermittent/Partial Screening', and some limited stretches of 'Full Screening' where tracts of coniferous plantation forestry are located adjacent to the road. This 'Full Screening' occurs along the local road to the west of the site, as well as along a small stretch of road on the local road to the north of the site. However, the majority of these roads have 'Little/No Screening'. To the south-east of the proposed turbines there are two local roads adjoining the N59, the L5925 and the L5926. The L5925, the most eastern of these, has mainly 'Little/No Screening', with some limited stretches of 'Intermittent/Partial Screening', both of these types of screening can be seen in Plate 13-4 below, which shows a view from this road towards the Oweninny 1 Wind Farm. The L5926, located to the west of the L5925 and closer to the proposed turbines, consists primarily of 'Little/No Screening', with a stretch of 'Intermittent/Partial Screening' and 'Full Screening' where the road turns to the west, along the stretch located closest to the proposed turbines where a number of residential receptors are located.

Plate 13-4 An Example of 'Little/No Screening' and 'Intermittent/Partial Screening' along the L5925 to the south-east of the site.

The N59 National Road contains a mosaic of all types of screening. To the east, the roadside vegetation is low, and the topography is flat, allowing for long-distance views towards the Proposed Development. As the road moves west, directly to the south and south-west of the proposed turbines within close proximity of the site, the vegetation and topography screen the majority of views in the direction of the proposed turbines. The screening along this section of the road is primarily 'Full Screening', with smaller stretches of 'Intermittent/Partial Screening'. An example of this can be seen in Plate 13-5 below. Further to the west along this road, the roadside topography becomes less steep and as a result the screening becomes primarily 'Little/No Screening', with some small stretches of 'Intermittent/Partial Screening'.

Plate 13-5 An Example of 'Full Screening' along the N59 National Road south of the site.

The town of Bangor-Erris is located to the south-west of the proposed turbines, just outside 5 km from the site. The screening within the town is primarily 'Full Screening', due to the built infrastructure and vegetation present throughout the town. This can be seen in Plate 13-6 below, where longer-distance views can be seen to be screened by the residential buildings and mature vegetation seen in the image.

Plate 13-6 An Example of 'Full Screening' within Bangor-Erris

Map Legend

- LVIA Study Area
- EIAR Site Boundary
- Proposed Turbines

County Mayo Visually Vulnerable Features

- Skylines or Ridgelines
- River Banks or Lake Shores

Scenic Routes MCDP 2022-2028

- Scenic Route
- Scenic Route with Designated Views

N

Drawing No.

Figure 13-4

Drawing Title

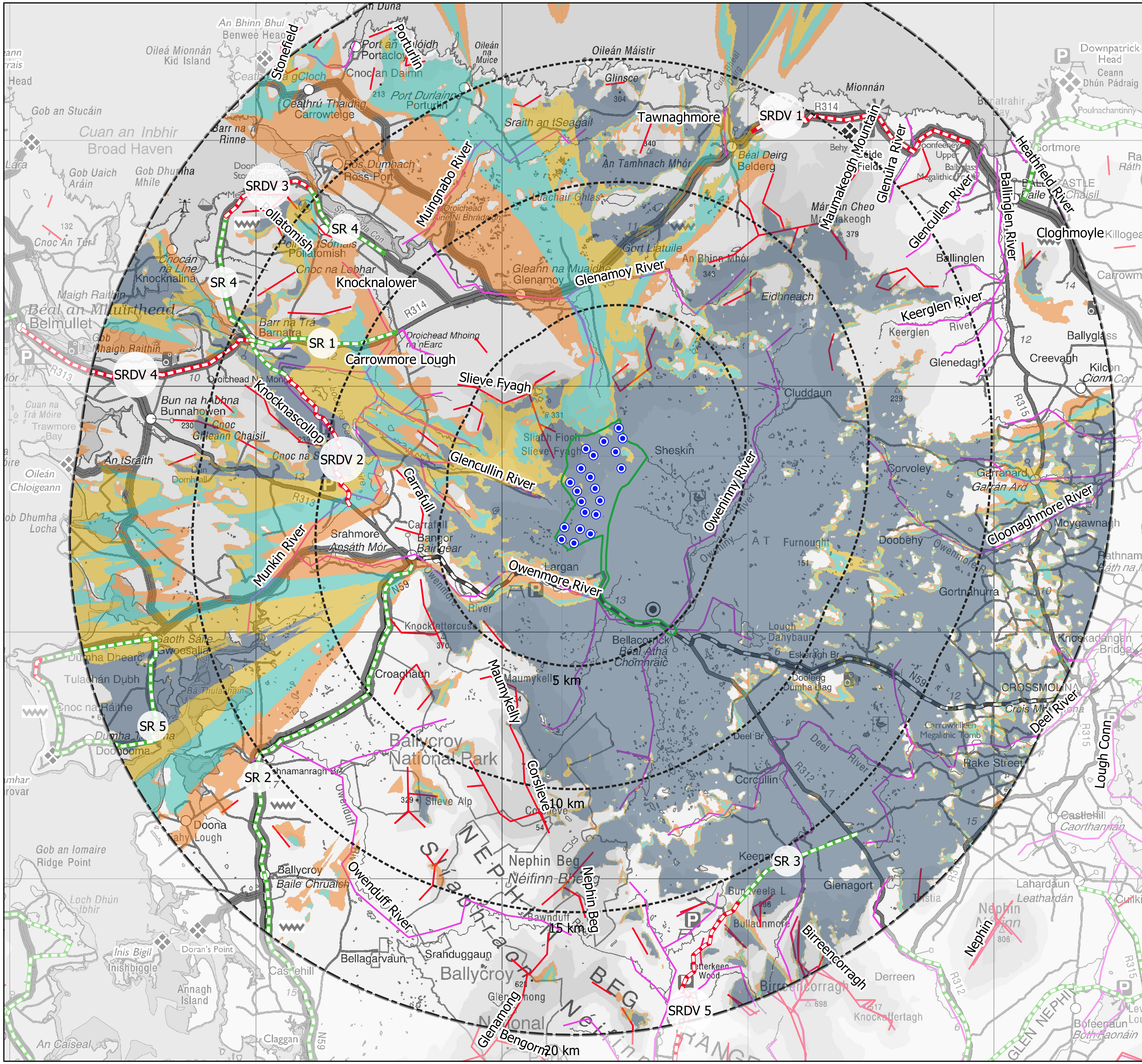
Landscape Baseline

Project Title

Sheskin South Renewable Energy Development

Scale	Project No.	Date	Drawn By	Checked By
1:150,000	201119	30.11.2022	JS	JW

MKO Planning and Environmental Consultants



Map Legend

- LVIA Study Area
- EIAR Site Boundary
- Proposed Turbines

County Mayo Visually Vulnerable Features

- Skylines or Ridgelines
- River Banks or Lake Shores

Scenic Routes MCDP 2022-2028

- Scenic Route
- Scenic Route with Designated Views

Zone of Theoretical Visibility

- 1-5 Turbines Theoretically Visible
- 6-10 Turbines Theoretically Visible
- 11-15 Turbines Theoretically Visible
- 15-21 Turbines Theoretically Visible

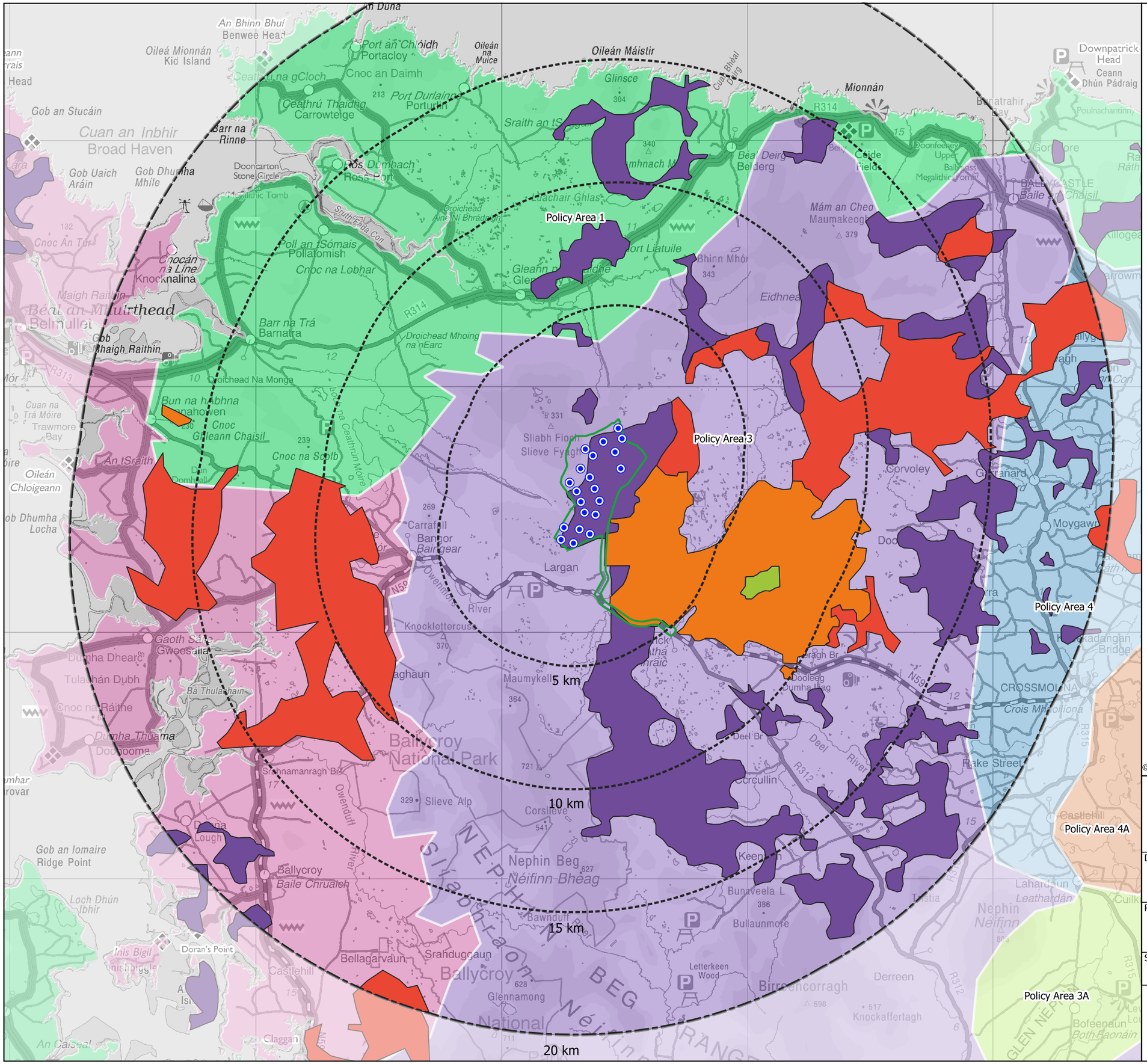
Drawing No.: Figure 13-5

Drawing Title: Landscape Baseline with ZTV

Project Title: Sheskin South Renewable Energy Development

Scale	Project No.	Date	Drawn By	Checked By
1:150,000	201119	30.11.2022	JS	JW

MKO Planning and Environmental Consultants



Map Legend

- LVIA Study Area
- EIAR Site Boundary
- Proposed Turbines

Landscape Policy Areas

- Policy Area 1
- Policy Area 2
- Policy Area 3
- Policy Area 3A
- Policy Area 4
- Policy Area 4A

Renewable Energy Strategy Designations

- Priority Areas
- Priority Areas - Existing Wind Farm
- Tier 1 - Preferred (Large Wind Farms)
- Tier 2 - Open to Consideration

Drawing No.

Figure 13-6

Drawing Title

Landscape Policy Area and RES

Project Title

Sheskin South Renewable Energy Development

Scale	Project No.	Date	Drawn By	Checked By
1:150,000	201119	30.11.2022	JS	JW

MKO Planning and Environmental Consultants

13.4 Landscape Baseline

The Landscape Baseline provides baseline information about the receiving landscape of the Proposed Development site and its wider setting. This is broken down into the following sections:

- **Landscape Designations and Policy Context** - Policy setting pertaining to the location and nature of the Proposed Development site from a landscape perspective based on:
  - Mayo County Development Plan 2022-2028 (MCDP)
  - Landscape Appraisal of County Mayo
- **Landscape Character of the Proposed Development Site** - A description of the physical landscape and characteristics of the site and its immediate landscape setting, this includes the following considerations:
  - Landscape characteristics based upon findings from a site visit conducted in 2021.
  - A review of the Wind Energy Development Guidelines (DoEHLG, 2006), Draft Revised Wind Energy Development Guidelines (DoHPLG, 2019) and siting guidance relating to the landscape characteristics of the Proposed Development site.
  - An appraisal of landscape value and the susceptibility of landscape receptors to change, and a determination of landscape sensitivity
- **Landscape Character of the wider LVIA Study Area** - A description of landscape in a wider setting including the identification of designated Landscape Character Areas (LCAs) located within 15 km of the Proposed Development based upon:
  - Mayo County Development Plan 2022-2028 (MCDP)
  - Landscape Appraisal of County Mayo

13.4.1 Landscape Designations and Policy Context

This sub-section reviews the policies and objectives of various planning policy documents relating to landscape, planning and the locational siting of wind farms, as they relate to the site of the proposed Sheskin South renewable energy development.

The Proposed Development and the entirety of the LVIA Study Area (all areas within 20km) is located in County Mayo, therefore, the Mayo County Development Plan 2022-2028 (hereafter referred to as MCDP), as well as the Landscape Appraisal of County Mayo was consulted to identify landscape designations and policy within the 20 km LVIA Study Area.

13.4.1.1 Mayo County Development Plan (2022-2028)

13.4.1.1.1 *Landscape Policies and Objectives*

The MCDP sets out an overall strategy for the proper planning and sustainable development of the administrative area of Mayo County Council. *Chapter 10* of the MCDP outlines policies pertaining to the natural environment for County Mayo. Landscape policy is also covered in *Chapter 10* of the MCDP. Relevant landscape policy and landscape objectives contained within the MCDP are as follows:

> *"**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 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 it:*

- *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*
- *Satisfies all other criteria, with regard to, inter alia, servicing, public safety and environmental considerations."*

Scenic Routes are considered in more detail below in Section 13.4.1.3.

> ***"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 and enhances local landscape character.*
> - *Satisfies all other criteria, with regard to, inter alia, servicing, public safety and environmental considerations"*

Mayo's Coastal Areas and Lakeshores, as well as other landscape features are considered in more detail below in Section 13.4.1.4,

> ***"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.*
>
> ***NEO 28** To review the Landscape Appraisal for Mayo and update this plan as appropriate, following publication of the statutory guidelines for Planning Authorities on Local Landscape Character Assessments, as detailed in the National Landscape Strategy 2015-2025 and ensure consistency with the provisions of RPO 4.16 and RPO 5.2(b) of the RSES, 2020-2032."*

The Landscape Appraisal of County Mayo has been consulted, as demonstrated throughout this report, during the Landscape and Visual Impact Assessment conducted and reported here. The Landscape Sensitivity Matrix is considered in greater detail below in Section 13.4.1.2. The assessment contained in rest of this chapter discusses both the Landscape Appraisal of County Mayo and the Landscape Sensitivity Matrix in line with the above policies and objectives.

> ***"NEO 29** Require a Landscape/Visual Impact Assessment to accompany significant proposals, located within or adjacent to sensitive landscapes, where appropriate."*

13.4.1.1.2 County Mayo Renewable Energy Strategy

The MCDP refers to the Renewable Energy Strategy (RES) for County Mayo (2011-2020) and states that *"Mayo County Council will commence the review and update the Mayo Renewable Energy Strategy within one year of adopting this plan."* In the absence of this update the RES is referred to in relation to policy relevant to landscape and visual effects in the LVIA Study Area. The RES outlines the strong need for wind energy developments in the county and states:

> *"any proposals for on-shore wind farm developments will be determined in accordance with the Wind Energy Development Guidelines (DoEHLG) 2006 or any subsequent guidelines and the requirements set out in Section 6.5".*

Section 6.4.1 of the RES outlines areas within the county suitable for onshore wind energy development. These 4 classifications areas are as follows:

- ***"Priority Areas:*** *are areas which have secured planning permission and where on shore 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 to 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."*

16 No. of the proposed turbines fall within the classification areas *Tier 2 - Open to Consideration* as set out in the RES for County Mayo. The remaining turbines are within an area that does not fall under any designation in the RES, however, the turbines are all proposed within 400m of the *Tier 2 – Open to Consideration* designation (refer to Chapter 2, Section 2.4.3.2 of this EIAR).

The Renewable Energy Strategy also gives guidance on issues relating to landscape and states that *'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.'*

The classification zones can be found on Figure 13-6 and *Map 8* of the County Mayo RES. Areas within the 20 km LVIA Study Area include classification areas of *Open to Consideration, Tier 1 - Preferred (large wind farm)* and *Tier 2 - Consented* and *Priority Areas.*

13.4.1.2 Landscape Sensitivity

The Landscape Appraisal for County Mayo outlines 'Landscape Policy Areas' (LPAs) within the county boundary, as shown in Figure 13-6. The Landscape Appraisal for County Mayo groups Landscape Character Units (see Section 13.4.3.2 below for further discussion of these) with similar visual landscape elements into one of four LPAs, shown on Figure 13-6 above and include:

1. Montaine Coastal
2. Lowland Coastal
3. Uplands, Moors, Heath or Bogs
4. Drumlins and Inland Lowlands

The Proposed Development is located within LPA 3 which is designated as *Area 3 - Uplands, moors, heath or bogs*. The Landscape Appraisal for County Mayo states the following policies with regards to development in LPA 3:

> ***"Policy 12:*** *Recognise the occurrence of areas of highly valued scenic vistas, uninterrupted by shelter vegetation or undulating topography, which can cover vast areas and are abundant.*
>
> ***Policy 13****: Encourage development that will not have a disproportionate visual impact (due to excessive bulk, scale or inappropriate siting) and will not significantly interfere or detract from scenic upland vistas, as identified in the Development Plan, when viewed from areas of the public realm.*
>
> ***Policy 14:*** *Encourage development that will not interrupt or penetrate distinct linear sections of primary ridge lines when viewed from areas of the public realm.*
>
> ***Policy 15:*** *Facilitate developments that have a locational requirement to be situated on elevated sites (e.g. telecommunications and wind energy structures). It is necessary however to ensure that adverse visual impacts are avoided or mitigated wherever possible.*
>
> ***Policy 16:*** *Preserve from development any areas that have not already been subject to development, which have retained a dominantly undisturbed upland/moorland character."*

Other LPAs located within the 20km LVIA Study Area include LPAs 1, 2, 4 and 4A (a sub-policy area of LPA 4).

The Development Impact – Landscape Sensitivity Matrix outlined in the Landscape Appraisal for County Mayo and shown in *Figure 10.1* of the MCDP, reproduced in Figure 13-7 below, provides a general indication of the likelihood of success of planning applications for each development type. Under the Landscape Appraisal of County Mayo, the subject site is located within LPA 3 which is shown in Figure 13-7 to have a:

> *"High potential to create adverse impacts on the existing landscape character. Having regard to the intrinsic physical and visual characteristics of the landscape area, it is unlikely that such impacts can be reduced to a widely acceptable level".*

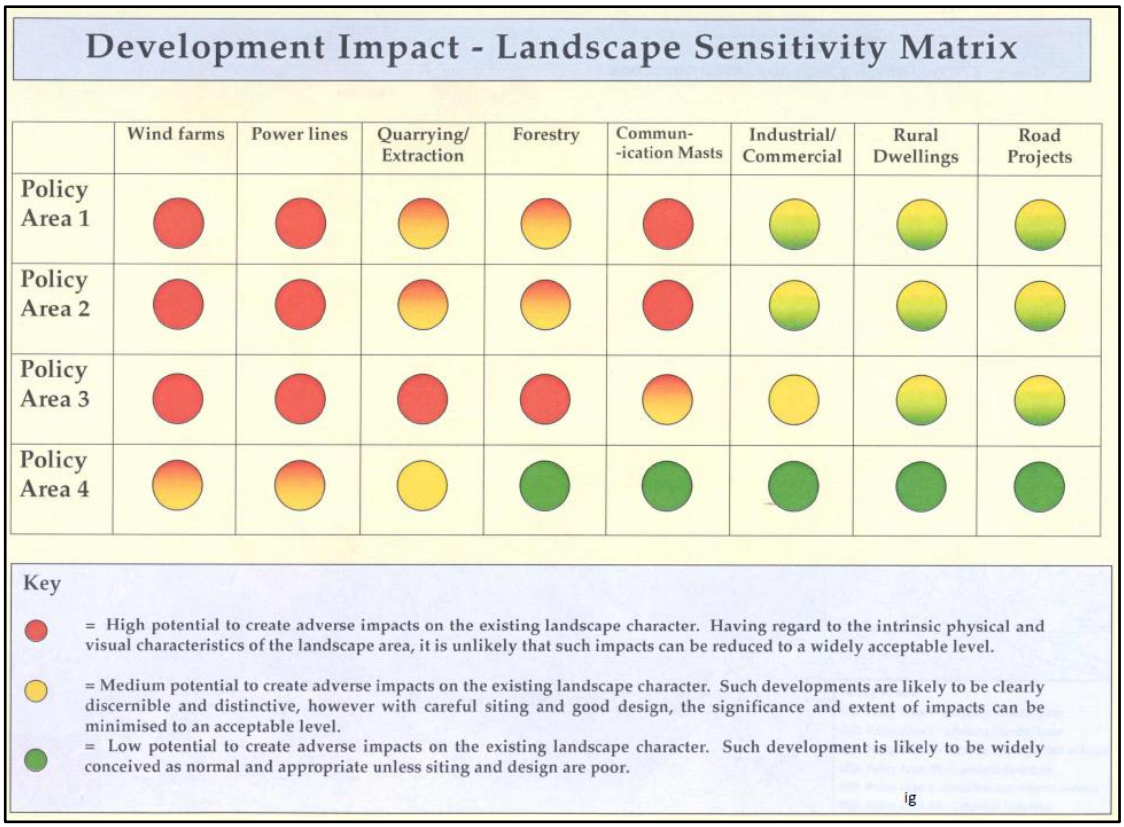


Figure 13-7 Landscape Sensitivity Matrix (extracted from the MCDP)

The Landscape Sensitivity Matrix suggests that all LPAs are sensitive to wind farm development, which is in some contradiction to the wind energy strategy that has areas designated as 'Priority', 'Preferred' and 'Open to Consideration' in landscape policy areas marked as having *'high potential to create adverse impacts'*. The LPAs are outlined in more detail on Figure 13-6.

13.4.1.3 Scenic Routes and Scenic Views

Mayo County Council designates scenic routes and prospects in *Chapter 10* and on *Map 10.2* of the MCDP and includes the following objective (also quoted above):

> *"**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 it:*
>
> - *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*
> - *Satisfies all other criteria, with regard to, inter alia, servicing, public safety and environmental considerations."*

Two classes of scenic routes are shown on *Map 10.2* of the MCDP, *"Scenic Routes"* and *"Scenic Routes with Designated Views"*, these are shown on Figure 13-4 above. There are no Scenic Routes or Scenic Routes with Designated Views within the site or within 5 km of the Proposed Development Site boundary. The closest Scenic Route is approximately 5.4 km south-west of the nearest proposed turbine. The closest Scenic Route with a Designated View is located 9 km west of the nearest proposed turbine.

Table 13-2 below outlines the Scenic Routes and Scenic Routes with Designated Views within the LVIA Study Area, including the type of scenic route and the description of the route. It is noted that scenic routes and scenic views are described in the Landscape Appraisal for County Mayo, which is a supporting document for the MCDP but the descriptions contained therein do not always align with the Scenic Routes shown on *Map 10.2* in the MCDP. Therefore, the descriptions contained within have been incorporated within Table 13-2 below, but the descriptions are altered in some cases.

Table 13-2 Designated Scenic Routes and Scenic Views

Viewpoint Type	View Description	Figure 13-4 Map Ref.	Distance of the receptor from the nearest proposed turbine
Scenic Routes with Designated Views	R314 at Ceide Fields (looking towards the Atlantic Ocean).	SRDV 1	13.2km
Scenic Routes with Designated Views	Local road along the western shore of Carrowmore Lake.	SRDV 2	9.6km
Scenic Routes with Designated Views	Local road adjacent to Dooncarton Stone Circle.	SRDV 3	15.4km
Scenic Routes with Designated Views	R314 regional road from Barnatra to Belmullet.	SRDV 4	14.2km
Scenic Routes with Designated Views	Local road from the N59 national road north-west of the Newport, north to Bunaveela Lough	SRDV 5	16.1km
Scenic Route	R314 from Ballanaboy to Barnatra.	SR 1	9km
Scenic Route	N59 from Bangor to east of Rosturk.	SR 2	6.1km
Scenic Route	Local road north-east from Bunaveela Lough to the R312 Regional Road.	SR 3	15.5km
Scenic Route	Local road from south of Pollatomish to Barnatra.	SR 4	11.4km
Scenic Route	Local road from Gweesalia and around the peninsula	SR 5	16.9km

13.4.1.4 Designated Vulnerable Features

Section 3 of the Landscape Appraisal for County Mayo designates a number of areas within the county as vulnerable. These areas include:

- The coastline
- The banks of the Rivers
- The shoreline of all lakes
- The skylines of upland areas
- All headlands and promontories

Skylines and Ridges

As seen on Figure 13-4 above, there are a number of skylines and ridges of upland areas located within the LVIA Study Area and in close proximity to the Proposed Development. The skylines and ridges designated as vulnerable are listed in the Landscape Appraisal for County Mayo. The listed designations that are located within the LVIA Study Area are:

- Slieve Fyagh
- Carrafull
- Maumakeogh Mountain
- Maumykelly
- Corslieve
- Nephin Beg
- Knockascollop
- Knocknalower
- Tawnaghmore
- Cloghmoyle
- Birreencorragh
- Glenamong
- Pollatomish
- Porturlin
- Stonefield

According to *section 3.1(b)* of the Landscape Appraisal for County Mayo, the following policy applies to these features:

> *"These areas or features designated as vulnerable represent the principal features which create and sustain the character and distinctiveness of the surrounding landscape. To be considered for permission, development in the environs of these vulnerable areas must be shown not to impinge in any significant way upon its character, integrity or uniformity when viewed from the surroundings. Particular attention should be given to the preservation of the character and distinctiveness of these areas as viewed from scenic routes and the environs of archaeological and historic sites."*

Wind turbines by their nature are tall vertical objects, they have the potential to visually interfere with the character, integrity and uniformity of these vulnerable features when viewed from the surroundings, these factors are incorporated into the assessment of landscape effects on these features in Section 13.7.3.1 below. In order to identify landscape effects on these designations that are likely to be of greatest significance, the assessment of landscape effects concentrates on ridgelines in close proximity (approx. 5km) to the Proposed Development, where the turbines will appear in a larger horizontal and vertical extent within views upon these features from their surroundings.

The ZTV map (Figure 13-1 above) was used to determine potential locations where there will likely be visibility of the Proposed Development within views of the ridgelines noted above, including

consideration of the distance between the Proposed Development and the ridgelines. It was determined that potential likely significant landscape effects on the character, integrity or uniformity of these features is only potentially likely to occur for those features located in close proximity (approx. 5km) to the Proposed Development. Therefore, the only landscape feature screened in for further assessment is Slieve Fyagh.

The Shorelines of Lakes, Rivers, and Estuaries

As seen on Figure 13-4 above, there are a number of banks of rivers and shorelines of lakes that have been listed in the Landscape Appraisal for County Mayo that are located within the LVIA Study Area. The listed designations that are located within the LVIA Study Area are:

- Glencullin River
- Owenmore River
- Oweninny River
- Glenamoy River
- Carrowmore Lake
- Munkin River
- Muingnabo River
- Keerglen River
- Glencullen River
- Glenulra River
- Owenduff River
- Deel River
- Cloonaghmore River
- Ballinglen River
- Heathfield River

The policy from *section 3.1(b)* of the Landscape Appraisal for County Mayo quoted above in relation to skylines and ridgelines is also applicable to the designations listed above in this section. As tall vertical objects, wind turbines by their nature have the potential to visually interfere with the character, integrity and uniformity of these vulnerable features when viewed from the surroundings, these factors are incorporated into the assessment of landscape effects on these features in Section 13.7.3.1 below. In order to identify the likely landscape effects of greatest significance on these designations, the assessment of landscape effects concentrates on riverbanks and lakeshores that are in close proximity to the Proposed Development, where the turbines will appear in a larger horizontal and vertical extent within views upon these features from their surroundings, as well as other considerations such as the uniqueness, wildness, and naturalness of landscape features at different locations.

The ZTV map (Figure 13-1 above) was used to determine potential locations where there will likely be visibility of the Proposed Development within views of the riverbanks and lakeshores noted above, including consideration of the distance between the Proposed Development and the riverbanks and lakeshores. It was determined that potential likely significant landscape effects on the character, integrity or uniformity of these features is only potentially likely to occur for those features located in close proximity (approx. 5km) to the Proposed Development. Therefore, the only landscape features screened in for further assessment are the Owenmore River and Carrowmore Lake.

13.4.1.5 Summary of Potential Landscape Receptors- Landscape Designations and Sensitivity

As outlined above, County Mayo landscape designations were identified within the 20km LVIA Study Area. Landscape designations within the study area include several LPAs, and several designated landscape features, including ridgelines, riverbanks and lakeshores. The ZTV map overlaid on the identified landscape receptors (Figure 13-5 above) was used to conduct a preliminary assessment to discern if there was theoretical visibility of the proposed turbines from each landscape receptor or from

locations where each landscape receptor was viewed from. Knowledge attained from site visits and desk-based analysis was used to assess if there is likely to be any actual visibility of the Proposed Development and the nature of this visibility from the designated landscape receptors. This visibility (theoretical and actual) in the LPAs is discussed in Table 13-3 below.

Table 13-3 Landscape Receptors – Landscape Policy Areas

Description	Landscape Designation	Theoretical Visibility (ZTV)	Screened In for Further Assessment?
Up to 5km			
Landscape Policy Area 3	Area of High Landscape Sensitivity	Mainly full to partial visibility.	Yes
Landscape Policy Area 1	Area of High Landscape Sensitivity	Mainly partial visibility with some areas of full visibility.	Yes
5 to 10km			
Landscape Policy Area 2	Area of High Landscape Sensitivity	Partial visibility in the northern section of this policy area within the LVIA Study Area.	Yes
15 to 20km			
Landscape Policy Area 4	Area of High to Moderate Landscape Sensitivity	Mainly full to partial visibility.	No

As exhibited in Table 13-3, LPAs 1, 2, and 3, are likely to have visibility of the Proposed Development due to the widespread visibility in these areas indicated by the ZTV. LPAs 1 2, and 3 are screened in for further assessment as a result. LPA 2 has theoretical visibility concentrated mainly within areas designated as *'Tier 1 – Preferred'* in the RES, indicating that these areas are not sensitive to wind energy development. In addition, there is limited theoretical visibility along parts of the coastline within the policy area, which are generally the most sensitive aspects of LPA 2. However, given the sensitivity of the coastline in relation to the overall study area, LPA 2 is screened in for further assessment. LPA 4 has theoretical visibility indicated by the ZTV, however, given its sensitivity to wind energy development in the landscape sensitivity matrix above (the lowest sensitivity) and the limited part of this policy area within the LVIA Study Area, it is therefore not assessed further in this report.

The other landscape receptors (skylines, ridgelines, riverbanks, and lakeshores) noted above as screened in for further assessment based on a preliminary assessment of the potential for the Proposed Development to interfere with character, integrity and uniformity of these vulnerable features when viewed from the surroundings, are listed below in Table 13-4.

Table 13-4 Vulnerable Landscape Receptors Screened In for Further Assessment

Landscape Receptor	Description
Ridgeline or Skyline	Slive Fyagh

Landscape Receptor	Description
Riverbanks or Lakeshore	Owenmore River, Carrowmore Lake

13.4.2 Landscape Character of the Proposed Development Site

Landscape character refers to the distinct and recognisable pattern of elements that occurs consistently in a particular type of landscape, and how people perceive this. It reflects particular combinations of geology, landform, soils, vegetation, land use and human settlement, and creates the particular sense of place found in different areas.

13.4.2.1 Site Visit Findings

The Proposed Development site was visited during 2020 and 2021 where a preliminary assessment of topography, drainage, landcover and land use was conducted in conjunction with other LVIA surveys. Information gathered during these visits have informed the following site descriptions.

Topography and Landform

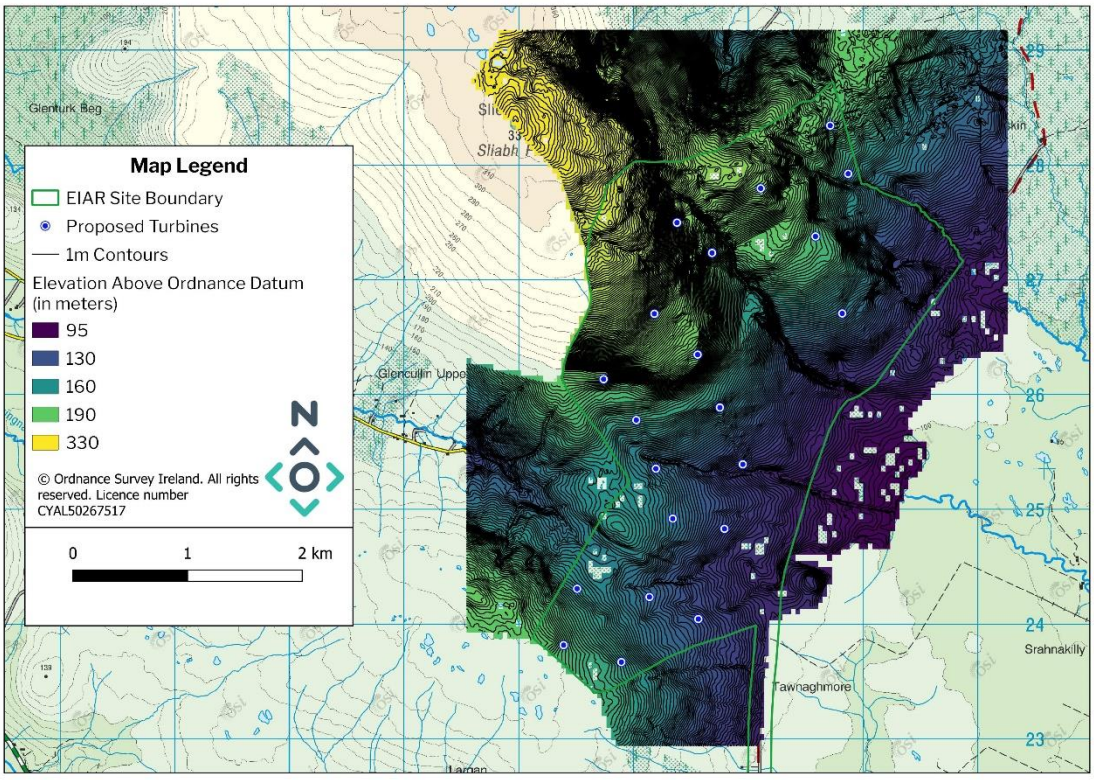


Figure 13-8 Topography of the Proposed Development Site

As shown on Figure 13-8 above. The heightened elevated lands surrounding the Proposed Development Site to the north, west and south-west allow for shortened, localised views towards the site from these directions. The local topography of the wider landscape area surrounding the site is relatively mountainous and undulating to the west and north, with a highest elevation of 340m above ordnance datum (AOD) to the west, on the crest of Slieve Fyagh. To the east and south-east beyond the

EIAR Study Boundary, the topography of the area is flat, with a large area at 100m AOD. The site itself is located partially on the slopes of Slieve Fyagh and a smaller hill to the south, with a number of proposed turbines also located within the intervening valley. The elevation of the Proposed Development Site ranges from 300m AOD to 100m AOD, with the topography generally sloping downwards from the western boundary to the eastern boundary.

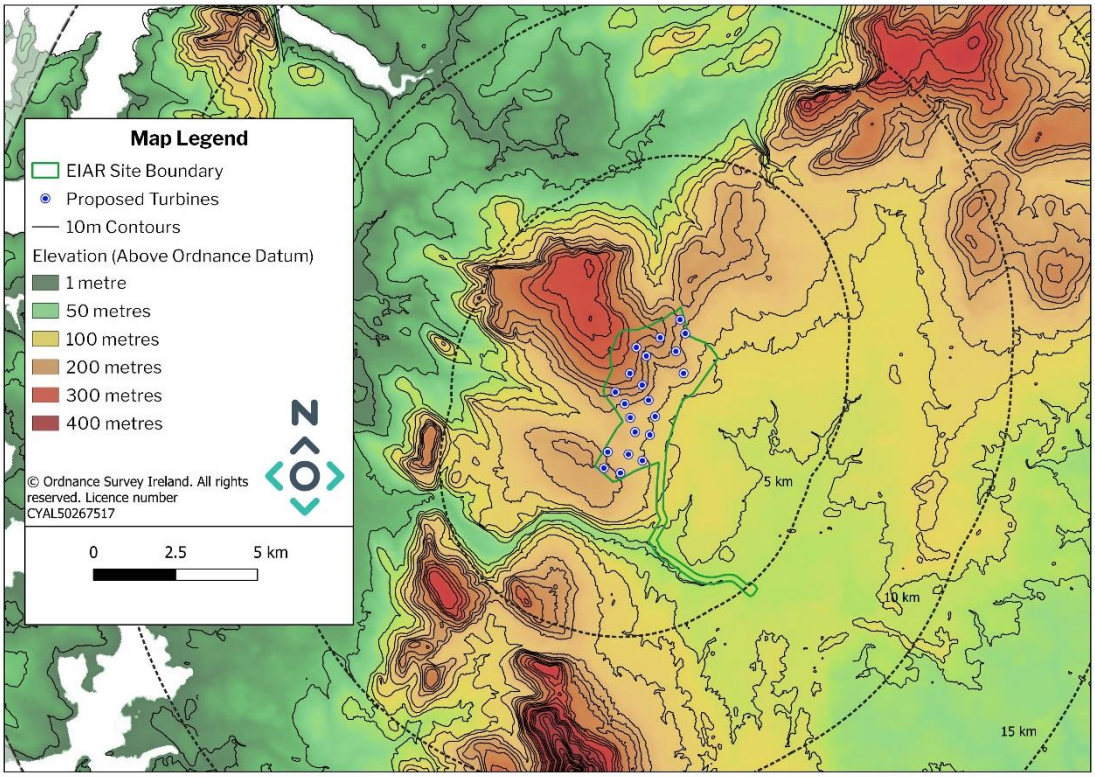


Figure 13-9 Topography surrounding the Proposed Development Site

The topography of the Proposed Development Site and its immediate surrounds is a key feature in the landscape which reduces visibility of the Proposed Development from vast areas and key visual receptors in the study area. Due to the topographical profile of the surrounding landscape, visibility of the Proposed Development will mainly be concentrated to the lowlands (flat bogland plain) to the east and south-east.

The flat bogland plain is clearly visible in the map shown in Figure 13-9 above. The majority of open landscape views found to be directed towards the site are limited to this area of open flat bogland. The majority of the views within the site boundary are rural and remote in character and the landscape is characterised by undulating topography with a mix of scrub vegetation and mature coniferous forestry plantation, as seen in Plate 13-7 below.

Plate 13-7: View looking east indicating the topography of the Proposed Development Site.

Drainage

Natural drainage from the Proposed Development is mainly to the east and southeast. There are two main streams within the site, they are:

- Sheskin River, which drains the southern part of Sheskin forest.
- An unnamed stream, which drains the northern part of Sheskin forest

The combined area of the subcatchments of the Sheskin River and the unnamed stream is approximately 31.4 km2, which represents approximately 13% of the total Owenmore River catchment.:

Both main streams originate as a series of headwater streams at higher elevation. These smaller streams merge progressively as they flow to the east. The headwater streams are fed by runoff and shallow seeps/springs within the blanket bog. The two main drainages merge on lower ground east of the Proposed Development Site. From their point of merger, the river (now the Sheskin River) joins the Oweninny River in the townland of Shrinakilly, approximately 3 km downstream of the eastern site boundary. South of this confluence point, the merged river is referred to as the Owenmore River. This flows south and turns sharply to the west at Bellacorick (by the N59). The Owenmore River subsequently flows west through Bangor Erris and discharges directly to sea in Tullaghan Bay.

Further details regarding site drainage are set out in Chapter 9 of this EIAR: *Hydrology and Hydrogeology*. The watercourses outlined here define the topography of the Proposed Development Site, following the depressions in the topography throughout the site as well as influencing the localised undulations in topography.

Landcover

Landcover is the term used to describe the combinations of vegetation and land-use that cover the land surface. It comprises the more detailed constituent parts of the landscape and encompasses both natural and man-made features.

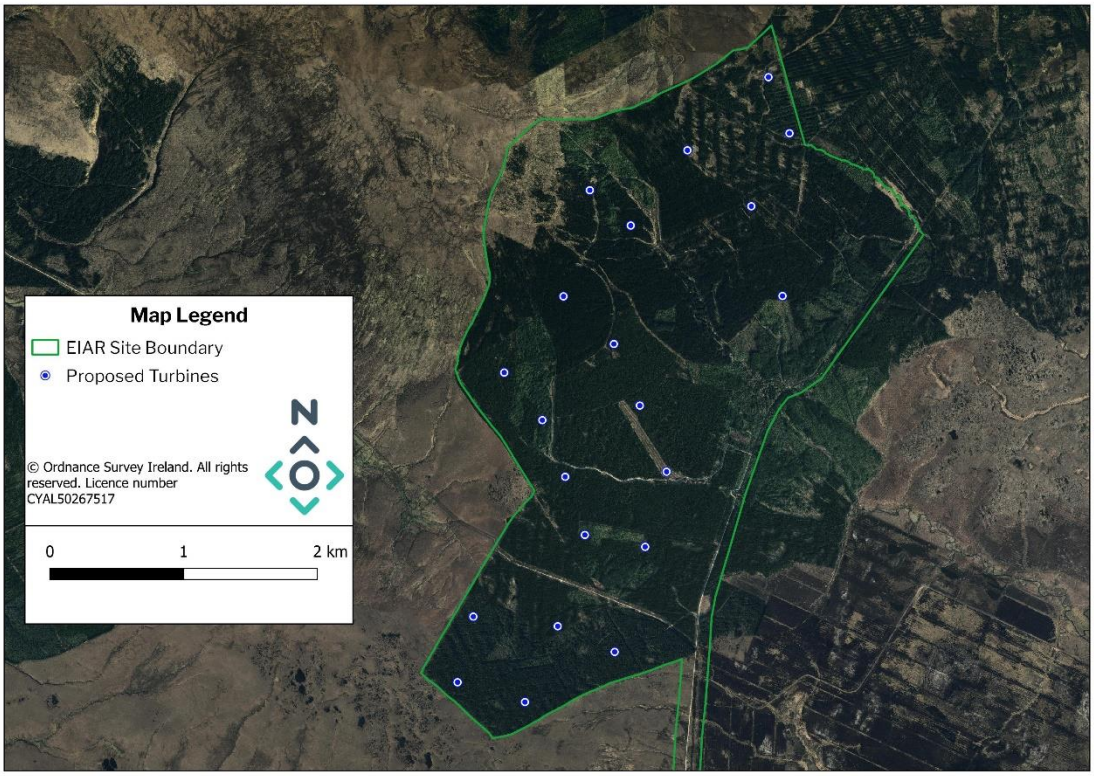


Figure 13-10: Aerial View of the Proposed Development Site showing the landcover.

The land cover of the vast majority of the site comprises of young to mature forestry coverage and low scrub vegetation, and example of which can be seen in Plate 13-9 below. The remainder of the site comprises degraded upland blanket bog. Due to forestry activities, there are large areas of the site where tree felling has occurred, with the landcover in these areas comprising low scrub vegetation, bare earth and the remnants of the coniferous trees that have been removed, shown below in Plate 13-8. There are also a number of forest tracks throughout the site which are primarily comprised of gravel.

Plate 13-8 An example of landcover where the commercial forestry has been cleared

Plate 13-9: Low scrub vegetation and coniferous forestry plantation within the Proposed Development site.

Land Use

The primary land use at the Proposed Development Site is commercial forestry, with widespread young to mature forestry coverage. The forestry operations make the site a modified working landscape, however, it is a remote and isolated upland area, substantially distanced (> 5 km) from any significant

human settlement. The Western Way walking track traverses through the site from north to south, as seen on Figure 13-13 below.

Wind energy is also a significant land-use in the vicinity and includes the operating Bellacorick and Oweninny I Wind Farms, the consented ABO Wind Farm, and phase II of Oweninny Wind Farm which is currently under construction. The locations of the existing and permitted wind farms are listed and shown below in Section 13.6 – *Cumulative Context*. All existing and permitted wind farms within 20 km of the proposed turbines are considered to form part of the likely future receiving environment, these are detailed below in Section 13.6.

In addition to forestry and wind energy, other land-uses in the surrounding area include agriculture, peat-cutting and low-density residential areas. Grid infrastructure in the area includes the Bellacorick 38kV and 110kV substation located approximately 5km south-east of the site off the N59 road.

Plate 13-10: View showing the current land use conditions of the site.

Views and Aesthetic Qualities

Within the Proposed Development Site, including from the Western Way walking route that passes through the site, there are several types of views, as shown in Plate 13-11 and Plate 13-12 below. The site can predominantly be described with having restricted small-scale views, as much of the site is defined by mature coniferous forestry as shown in Plate 13-11 below. Open and unrestricted views with very little screening are common outside the Proposed Development Site boundary to the north and south. The road network adjacent to the site to the north and south allow for more open views towards the site as there is very little vegetation present along these roadways. Given that the roads and Western Way access track travelling through the site are of low quality, there will be very few visual receptors travelling through the site.

Views to the west and north from within the site are restricted to medium-distance views, where the coniferous forestry has not already restricted views to short-distance. This is due to the topography of the site and immediate surrounds, and the rising level of elevation in these directions, which culminate in the crest of Slieve Fyagh, the hill upon which the Proposed Development Site is partially located. The effects of this rise in topography level upon views from the southern site boundary can be seen in Plate 13-13 below.

Plate 13-11 Restricted short-distance views within the site boundary defined by mature coniferous forestry

Plate 13-12 View south-east from the southern site boundary, where limited screening elements allow for open, unrestricted, long-distance views.

Plate 13-13 View west from the southern site boundary, with medium-distance views available, but longer-distance views are screened by the rising topography.

The landscape of the Proposed Development Site can be described as that of a remote landscape setting. There are very few visual receptors within 5 km of the site including residential receptors and road networks, aside from the N59 National Road south-east of the site, shown below in Plate 13-14. This is shown in Plate 13-12 and Plate 13-13 above, which illustrates the remote landscape setting characterised by one-off housing, bogland, and agricultural fields as the defining landscape characteristic of the study area. The spatial extent and scale of the open, remote landscape, with very little development, is shown in Plate 13-12.

Plate 13-14 View from the N59 looking north-west towards the Proposed Development Site

13.4.2.2 Landscape Value and Sensitivity of the Proposed Development Site

Landscape Values were assessed in order to determine the landscape sensitivity of the Proposed Development site and its wider landscape setting and establish the capacity of the immediate landscape in which the Proposed Development will be built, as is prescribed by best practice guidance: *"as part of the baseline description the value of the potentially affected landscape should be established"* (Page 80, GLVIA, 2013). Comprehension of landscape value and its susceptibility to change enables determination of the sensitivity of the landscape at a micro level (the development site) and its capacity to absorb the infrastructure of a wind farm development.

Determination of landscape value considers scenic amenity designations, sensitivity and value designations found in local landscape policy (MCDP), as well as other indications of landscape value attached to undesignated landscapes. Table 13-5 (below) describes various factors that help identify landscape value (Page 84, GLVIA, 2013). These factors and indicators were appraised collectively to determine a landscape value for the Proposed Development Site. The landscape value and susceptibility to change were then considered to form a landscape sensitivity classification of either Low, Moderate, High or Very High for the Proposed Development Site (See Appendix 13-1 Methodology for the different classifications referred to here).

Table 13-5 Indicators of Landscape Value

Indicator	Description
Landscape Designations	The Proposed Development site is located in LPA 3 - Uplands, Moors, Heath or Bogs, which has a high landscape sensitivity to wind farms, as they have a *"high potential to create adverse impacts on the existing landscape character."* Although it should be noted that this designation is in contradiction to the RES for Mayo as there are large areas located within LPA 3 that have existing and consented wind farms, and large areas designated as *'Tier 1 – Preferred'* and *'Tier 2 – Open to Consideration'.* 16 No. of the proposed turbines fall within the classification area Tier 2 - Open to Consideration within Policy Area 3. As noted above in section 13.4.1.4 there are a number of designated vulnerable landscape features located within or close to the proposed site. In particular, these include the Slieve Fyagh ridgeline. It is noted that the proposed turbines have been specifically sited at lower elevations (below 240m AOD) so as to minimise their impact on this feature (see section 13.3.2).
Landscape Quality/Condition	Due to its nature as a coniferous plantation forest, the site is a modified working landscape. The condition of the landscape is degraded in several locations within the site due to the forestry operations.
Scenic or Aesthetic Qualities	The site can predominantly be described with having restricted small-scale views, as much of the proposed site is defined by mature coniferous forestry, and it is noted here that this is the case for the section of the Western Way that passes through the site (see Plate 13-11 above which shows a view from along the Western Way within the proposed site).
Rarity or Conservation Interests	The majority of the Proposed Development Site is dominated by plantation forestry (including clear fells), comprising mainly of Lodgepole pine (Pinus contorta) with some Sitka spruce (Picea sitchenis) in areas which had been planted on Lowland Blanket Bog (PB3). Remnants of this habitat are still found on the site in degraded form.
Cultural Meaning/Associations	The National Inventory of Architectural Heritage (NIAH) structure - NIAH 31301901 Sheskin Lodge is located within the EIAR Site Boundary. There will be no direct effects on the lodge as part of the development proposal. Sheskin Lodge is in private ownership and will be avoided as part of the proposed development. It is located 767m to Turbine T20 to the north and

Indicator	Description
	921m to Turbine T21. See Chapter 12 – Cultural Heritage for further discussion
Wildness/naturalness	The Proposed Development Site is in a highly managed area of coniferous plantation forestry. The entirety of the Proposed Development Site is located within this forested area and so it is considered to be a landscape highly modified by human interference. The site is located in a remote area of isolated upland, therefore there is a degree of wildness considering the setback from human settlement and transport infrastructure.
Recreation Value	The Western Way walking route passes along the eastern border of the Proposed Development Site. This section of the route passes through the Sheskin forest where there is substantial screening from the mature coniferous forestry (Plate 13-11). It is noted in this regard that the Western Way access track travelling through the site is of relatively low quality compared to the entirety of the Western Way walking route.

In consideration of the factors summarised in Table 13-5, the landscape value of the Proposed Development Site is deemed Low. There is some recreational value to the site as the Western Way walking route passes along the eastern border of the Proposed Development Site, although this section of the track is currently a commercial forestry plantation.

The heavily modified nature of the site, its remote location (large set back from settlements) and the existing presence of other wind farms suggests a Low susceptibility to the proposed change. In addition, it is noted that 16 of the 21 no. turbines are located within areas designated in the RES as 'Tier 2 – Open to Consideration' and the remaining locations are located within 400m of this designation. On balance, the landscape sensitivity of the Proposed Development is deemed Low.

13.4.2.3 Landscape Characterisation in the Wind Energy Development Guidelines (DoEHLG, 2006) and the Draft Revised Wind Energy Development Guidelines (DoHPLG, 2019)

The following section considers both the Wind Energy Development Guidelines (DoEHLG, 2006) and the Draft Revised Wind Energy Development Guidelines (DoHPLG, 2019). These guidelines offer guidance for the siting and design of wind energy developments in various landscape contexts by defining six landscape character types that represent most situations where wind turbines may be proposed. The guidance is intended to be indicative and general and notes that it, represents the 'best fit' solutions to likely situations.

The six landscape character types include 'Mountain Moorland', 'Hilly and Flat Farmland', 'Flat Peatland', Transitional Marginal Land', 'Urban/industrial' and 'Coastal' landscape character types. The guidelines note that where a wind energy development is located in one landscape character type but is visible from another, it will be necessary to decide which might more strongly influence the approach adopted for the assessment.

Landscape character types Flat Peatland, Urban/Industrial and Coastal could be ruled out from the beginning, leaving Hilly and Flat Farmland, Mountain Moorland and Transitional Marginal Land. Hilly and Flat Farmland was not applicable to the site as Sheskin does not have *"a patchwork of fields delineated by hedgerows varying in size"*. The Proposed Development Site is similar to the characteristics of Transitional Marginal Landscapes however, the Sheskin South site cannot be described as "*lower areas are usually cultivated and managed as fields*" as there is no degree of

agricultural fields present on the site. Therefore, Mountain Moorland most strongly influences the siting and design of the Proposed Development. Further details of this landscape character type are provided below.

13.4.2.3.1 Mountain Moorland

The key characteristics of the Mountain Moorland landscape type are:

- *"Peaked, ridged or rolling mountains and upland with steep sides or gently formed valleys;*
- *Generally unenclosed;*
- *Landcover comprising blanket bog, a mottling of heather, wild grasses and some rush in wet flushes; and*
- *A landscape type of relative remoteness and often comprising pristine, unspoilt and remote landscapes."*

Plate 13-15 View showing Mountain Moorland landscape type within the Proposed Development Site.

Plate 13-16 View showing Mountain Moorland landscape type within the Proposed Development Site

> *"Given exposure and smoothness of terrain, these landscapes are often sought for wind energy development. The exposure of mountains and the preference for wind energy developments to be located at high elevations result in high visibility."*

According to the Wind Energy Development Guidelines (DoEHLG, 2006) and the Draft Revised Wind Energy Development Guidelines (DoHPLG, 2019), Mountain moorland may be inappropriate for wind energy development for reasons of natural heritage and the fact that some of these landscapes are of rare scenic quality and/or support some of the last wilderness areas of relatively pristine, unspoilt and remote landscapes. However, many examples of these landscapes should be open for consideration subject to appropriate design and landscape siting to minimise adverse impact and optimise aesthetic effect.

The siting and design guidance given for 'Mountain Moorland' in both the Wind Energy Development Guidelines (DoEHLG, 2006) and the Draft Revised Wind Energy Development Guidelines (DoHPLG, 2019) is set out below:

Location

> *"It may be acceptable to locate wind energy developments on ridges and peaks. They may also be appropriate, in certain instances, in a saddle between two peaks where they will be partially contained or "framed". A third acceptable location is lower down on sweeping mountainsides."*

In terms of **location**, the Proposed Development is located on the lower slopes of Slive Fyagh, a topographical feature forming part of an overall series of upland, mountainous topographical features. The Proposed Development, being located on the lower slopes of Slieve Fyagh, is thus appropriately contained by the topography to the north and west, in terms of location.

Spatial Extent

> *"Given the typical extensive areas of continuous unenclosed ground, larger wind energy developments can generally be accommodated because they correspond in terms of scale.*

However, the spatial extent of a wind energy development would need to be reduced where a suggestion of smaller scale is provided by nearby landscape features."

In terms of **spatial extent**, the wider landscape area within which the proposed turbines are located is a large-scale, remote landscape, capable of effectively absorbing a wind farm of this scale and spatial extent. The spatial extent of the wind turbines corresponds, in terms of scale, with the surrounding landscape in which they are viewed. The Proposed Development complies with, and in fact exceeds the mandatory four times tip height set back distance from residential buildings prescribed in the Draft Wind Energy guidelines (DoHPLG, 2019), as well as the 500 metre set back distance noted in the current Wind Energy Development Guidelines (DoEHLG, 2006).

Spacing

"All spacing options are usually acceptable. Where a wind energy development is clearly visible on a crest or ridge there is considerable scope to vary the rhythm, though on simple ridges, regular spacing may be more appropriate. On sweeping and continuously even areas of mountain moorland or upland plateaux regular spacing may be most desirable."

In terms of **spacing**, the proposed turbines have regular spacing. As the turbines are not located on ridges and are instead located at lower elevations that the surrounding ridgelines, regular spacing is appropriate in this landscape character type.

Layout

"All layout options are usually acceptable. However, the best solutions would either be a random layout, and clustered where located on hills and ridges, or a grid layout on sweeping and continuously even areas of moorland or plateaux. Where a wind energy development is close to a linear element, such as a river, road or long escarpment, a corresponding linear layout or staggered line might be most desirable."

In terms of **layout**, the proposed turbines are located on a hillside, primarily the lower slopes of Slieve Fyagh. The turbines are organised in a regular, clustered layout, which is appropriate for this landscape character type.

Height

"There would generally be no height restrictions on mountain moorlands as the scale of landscape is so great. However, shorter turbines may be more appropriate where they are located on small peaks and outcrops in order to maintain an appropriate scale. Profile, whether even or uneven, is dependent on topography: the more rugged and undulating (e.g., knolls and crags) the more uneven it will be. The profile of the wind energy development should not necessarily run in parallel to that of the topography."

In terms of **height**, within the scale of the landscape that the proposed turbines are located in, the 200m maximum tip height of the proposed turbines is appropriate. There are large scale peaks and ridgelines adjacent to the Proposed Development, which itself is located in a remote upland location, suggesting that no restrictions in terms of height is appropriate.

Cumulative Effect

"The open expanse of such landscapes can absorb a number of wind energy developments, depending on their proximity. The cumulative impact will also depend on the actual visual complexity of landform, whether steeply rolling, undulating or gently sweeping. The more varied and undulating an area is topographically, the greater its ability to absorb and screen wind energy developments. The aesthetic effect of wind energy developments in these landscapes is acceptable where each one is discrete, standing in relative isolation."

In terms of **cumulative effect**, the Proposed Development is located within a topographically varied and undulating landscape area which provides screening of the Proposed Development, and other cumulative developments within the LVIA Study Area. The scale and expanse of the landscape is capable of absorbing a number of wind energy development, according to the above guidelines, and so it is acceptable that there will be cumulative visibility of the proposed turbines with other wind farms. The Proposed Development is viewed within the background of a large-scale expansive landscape from the south and east, which is capable of absorbing a number of wind energy developments. From the north and west, the Proposed Development is viewed within a large-scale, varied and undulating landscape which provides substantial screening from these directions. All of these types of views are acceptable, in accordance with the above guidance.

13.4.3 Landscape Character of the wider LVIA Study Area

The Proposed Development is located in a remote, rural and mountainous landscape setting. The Proposed Development is sited at the eastern periphery of an elevated range of moorland peaks that span north Mayo. Beyond the ridgelines to the west of the site, landform tapers down to the rugged and exposed north Mayo coastline which runs from the south-west of the LVIA Study Area, where it is in a north-south orientation, turning a corner at Benwee Head to run in an east-west orientation until it leaves the LVIA Study Area to the north-east of the Proposed Development. A number of other peaks and bogs lie in the intervening space between the coastline and Slieve Fyagh to the north and west of the site, including the Knocknascollop, Pollatomish and Tawnaghmore ridgelines, and Bangor-Erris bog to the south-west. The landscape to the east (beyond 15km from the site) of the LVIA Study Area comprises fertile farmlands and increased human settlement, with the surrounding farmlands are drained by the Cloonaghmore River and Moy River to Kilalla Bay in the north. Human settlement increases to the east of the study area towards the town of Kilalla and then the larger population centre of Ballina, which are located outside of the LVIA Study Area.

A flat basin of open moorland, seen in Plate 13-17 below, extends away to the east and south-east from the mountainous landscape surrounding the Proposed Development site. This flat plateau covers an extensive area and comprises boggy and rocky peatlands and large tracts of coniferous forestry plantations. The basin is enclosed by a linear range of mountains which arc south-westerly from the Maumakeogh Mountain to the Proposed Development site located on the peak of Slieve Fyagh, then south, then south-east to the northern margins of the extensive and mountainous Nephin Beg Range (Ballycroy National Park), of which Nephin is located outside of the LVIA Study Area. This upland plateau is rural, remote and isolated with large set back distances from human settlement. Consequently, this area has been deemed as a suitable landscape for the siting of wind energy developments as is evident by the multiple existing and permitted wind farms in this area. The locations of the existing and permitted wind farms are listed and shown below in Section 13.6 – *Cumulative Context*. All existing and permitted wind farms within 20 km of the proposed turbines are considered to form part of the likely future receiving environment, these are detailed below in Section 13.6.

The surrounding topographical features provide visual screening from large areas of north Mayo, such as the sensitive coastal areas to the north and west. And the isolated characteristics of the site of the Proposed Development reduces potential for significant impacts upon residential receptors.

Plate 13-17 View north-east from the range of peaks (within the Ballycroy National Park) south of the Proposed Development, showing the flat plateau east and south-east of the Proposed Development

The N59 national road crosses the LVIA Study Area to the south of the Proposed Development in an east-west orientation, with this stretch of the national road comprising the majority of the section between Ballina and Bangor-Erris. Carrowmore Lough, seen in Plate 13-18 below, lies just north of Bangor-Erris, to the west of the Proposed Development. This is located on the western side of the mountain range described above, with substantial topographical elements seen surrounding Carrowmore Lough. The landscape to the east and north of the Lough is remote moorland, with heavy coniferous forestry plantation. To the north-west the Glenamoy River (which is partially sourced by the Maumakeogh range) and Muingnabo River (which is predominantly sourced by Tawnaghmore) are significant landscape features, defining the topography that, while gently undulating, is generally flatter than the mountain range to the east and south. Both of these rivers feed into Sruwaddacon Bay. The level of elevation begins to undulate more dramatically along the coastline to the north of these rivers, with Glinsk, Knockaduff and Tawnaghmore being the most substantial topographical features along this stretch of coastline to the north-west of the Proposed Development site.

Plate 13-18 View of Carrowmore Lough and the topographical features to the north-west of the Proposed Development

Sensitive Landscape Receptors

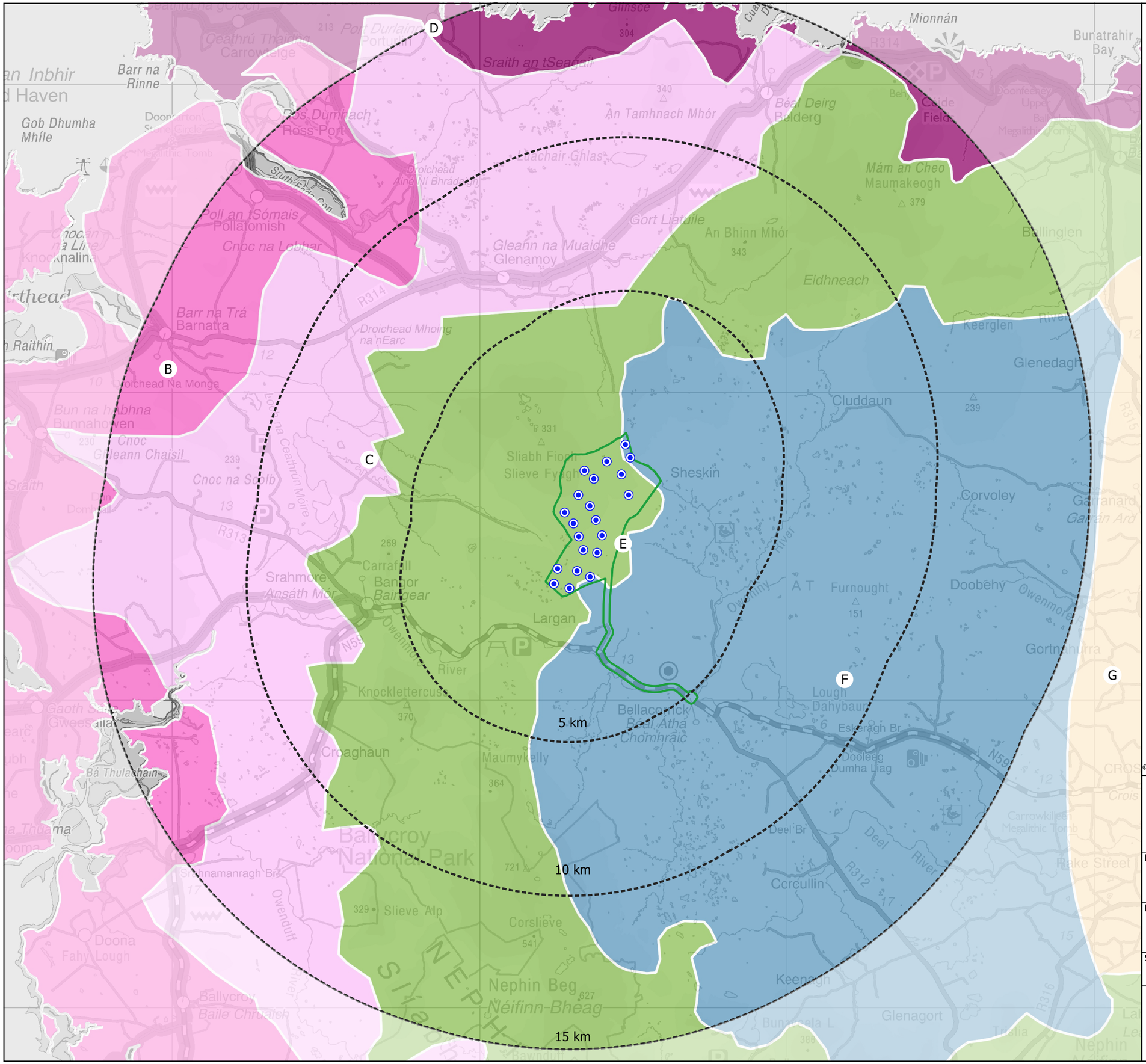
There are a number of sensitive landscape receptors that are relevant contributors to the landscape character of the wider LVIA Study Area. Those most sensitive to the Proposed Development are noted in this section. Aside from those landscape features such as ridgelines, or riverbanks and lakeshores that have been designated in the MCDP and discussed above in section 13.4.1.4, the coastline of County Mayo *"from Killala Bay to Killary Harbour"* is designated as a vulnerable feature in the Landscape Appraisal of County Mayo, with the same policy from this document relating to this feature as the other landscape features discussed above. It is clear that the entire coastline of County Mayo within the LVIA

Study Area is a sensitive landscape feature, acting as a key contributor to the scenic amenity offered within the LVIA Study Area. There are a number of topographical features and ridgelines located along the coastline, offering a dramatic transition from ridgeline to sea cliff along the coastline to the north-west of the Proposed Development site. These include the peaks of Tawnaghmore, Glinsk, and Knockaduff. ZTV mapping shows that the Slieve Fyagh ridgeline results in partial screening of the Proposed Development from these peaks. Also located along the coastline within the LVIA Study Area are the Céide Fields, a significant heritage asset and important feature to the character and value of the wider landscape area. ZTV mapping shows that there will be no visibility of the Proposed Development from the Céide Fields due to the intervening topography of the Maumakeogh Mountain.

13.4.3.2 Landscape Character Units

As noted in Section 13.2.1 (and the Methodology Appendix 13-1), the LVIA Study Area for assessment of landscape character extends to 15 km from the proposed turbines. Five Landscape Character Units (LCUs) identified in the *Landscape Appraisal of County Mayo* are located within this 15 km LVIA Study Area. These LCUs are described below and shown in Figure 13-12 below. A detailed description and comprehensive assessment of each LCU is outlined in Appendix 13-2. The following LCUs were identified as having full or partial theoretical visibility of the Proposed Development and are located within the 15 km LVIA Study Area for landscape character:

- LCU Area B – North-West Coastal Moorland
- LCU Area C - North-West Coastal Bog
- LCU Area D - North Coast Plateaux
- LCU Area E - North Mayo Mountain Moorland
- LCU Area F - North Mayo Inland Bog Basin



Map Legend

- LVIA Study Area
- EIAR Site Boundary
- Proposed Turbines

Landscape Character Units

- LCU B
- LCU C
- LCU D
- LCU E
- LCU F
- LCU G

Drawing No.

Figure 13-11

Drawing Title

Landscape Character Units

Project Title

Sheskin South Renewable Energy Development

Scale	Project No.	Date	Drawn By	Checked By
1:120,000	201119	30.11.2022	JS	JW

MKO Planning and Environmental Consultants

Map Legend

- LVIA Study Area
- EIAR Site Boundary
- Proposed Turbines
- Landscape Character Units

Zone of Theoretical Visibility

- 1-5 Turbines Theoretically Visible
- 6-10 Turbines Theoretically Visible
- 11-15 Turbines Theoretically Visible
- 15-21 Turbines Theoretically Visible

Drawing No.

Figure 13-12

Drawing Title

Landscape Character Units and ZTV

Project Title

Sheskin South Renewable Energy Development

Scale	Project No.	Date	Drawn By	Checked By
1:120,000	201119	30.11.2022	JS	JW

MKO Planning and Environmental Consultants

13.4.3.3 Preliminary Assessment of Landscape Character Units

A map showing all LCUs within 15km and the distribution of theoretical visibility of the Proposed Development occurring in each LCU is shown in Figure 13-12 above. Each LCU is listed below in Table 13-6, as well as a description of theoretical visibility within each LCU, as indicated by the ZTV. Several LCUs identified in the LVIA Study Area (15km for landscape character) have very small areas of theoretical visibility indicated by the ZTV map in Figure 13-12.

The potential visibility of the Proposed Development was appraised on site (multiple surveys conducted during 2020 and 2021) from all LCUs with very limited or partial theoretical visibility.

Table 13-6 Landscape Receptors – Landscape Character Units

LCU	Theoretical Visibility (ZTV)	Screened In for Further Assessment
LCU E - North Mayo Mountain Moorland	Full and partial theoretical visibility within 5km of the proposed site. Mainly no theoretical visibility outside of 5km.	Yes
LCU F - North Mayo Inland Bog Basin	Mainly full theoretical visibility across the LCA.	Yes
LCU D - North Coast Plateaux	Partial to no theoretical visibility.	Yes
LCU C - North-West Coastal Bog	Mainly partial to no theoretical visibility.	Yes
LCU B – North-West Coastal Moorland	Mainly partial visibility within 15km of the proposed site.	Yes

A detailed description of the five LCUs screened in for assessment (Table 13-6) and the likely effects on landscape character as a result of the Proposed Development are presented in the Landscape Character Assessment Tables that form Appendix 13-2. A summary of landscape effects on these LCUs are reported in Section 13.7.3 of this chapter - *Operational Phase Effects.*

13.5 Visual Baseline

13.5.1 Visual Receptors

The main purpose of establishing the visual baseline is to identify the key visual receptors that should be considered for viewpoint selection. Viewpoints are locations from which visual effects are assessed using photomontages (See Appendix 13-1 – *LVIA Methodology*). To this end the following have been identified:

- Designated Scenic Routes and Scenic Views
- Settlements
- Recreational Routes and Tourist Designations
  - Waymarked Walking Routes
  - Cycle Routes
  - Scenic Drives
  - Tourist Routes (e.g. Wild Atlantic Way)
- Viewing Points (e.g. marked on OS Maps)
- Transport Routes

All visual receptors identified in the visual baseline are shown on Figure 13-13 below. These visual receptors are listed in tables in the following sections along with theoretical visibility at those locations indicated by the Visual Baseline and Half-Blade ZTV map – Figure 13-14 below.

During site visits conducted during 2020 and 2021, the likely visibility of the Proposed Development was appraised from receptors where the ZTV has indicated theoretical visibility. Visual receptors are screened out from further assessment when there is either no theoretical visibility of the Proposed Development or where on-site appraisal determined visibility of the Proposed Development to be very unlikely or very limited.

Map Legend

- LVIA Study Area
- EIAR Site Boundary
- Proposed Turbines

Scenic Routes MCDP 2022-2028

- Scenic Route
- Scenic Route with Designated Views
- OSi Viewing Points

Settlement Hierarchy MCDP 2022-2028

- Tier 1
- Tier 2
- Tier 3
- Tier 4
- Tier 5

- Waymarked Recreational Routes
- Tourism or Heritage Site
- National Roads
- Regional Roads
- The Wild Atlantic Way - Tourist Route

Drawing No.

Figure 13-13

Drawing Title

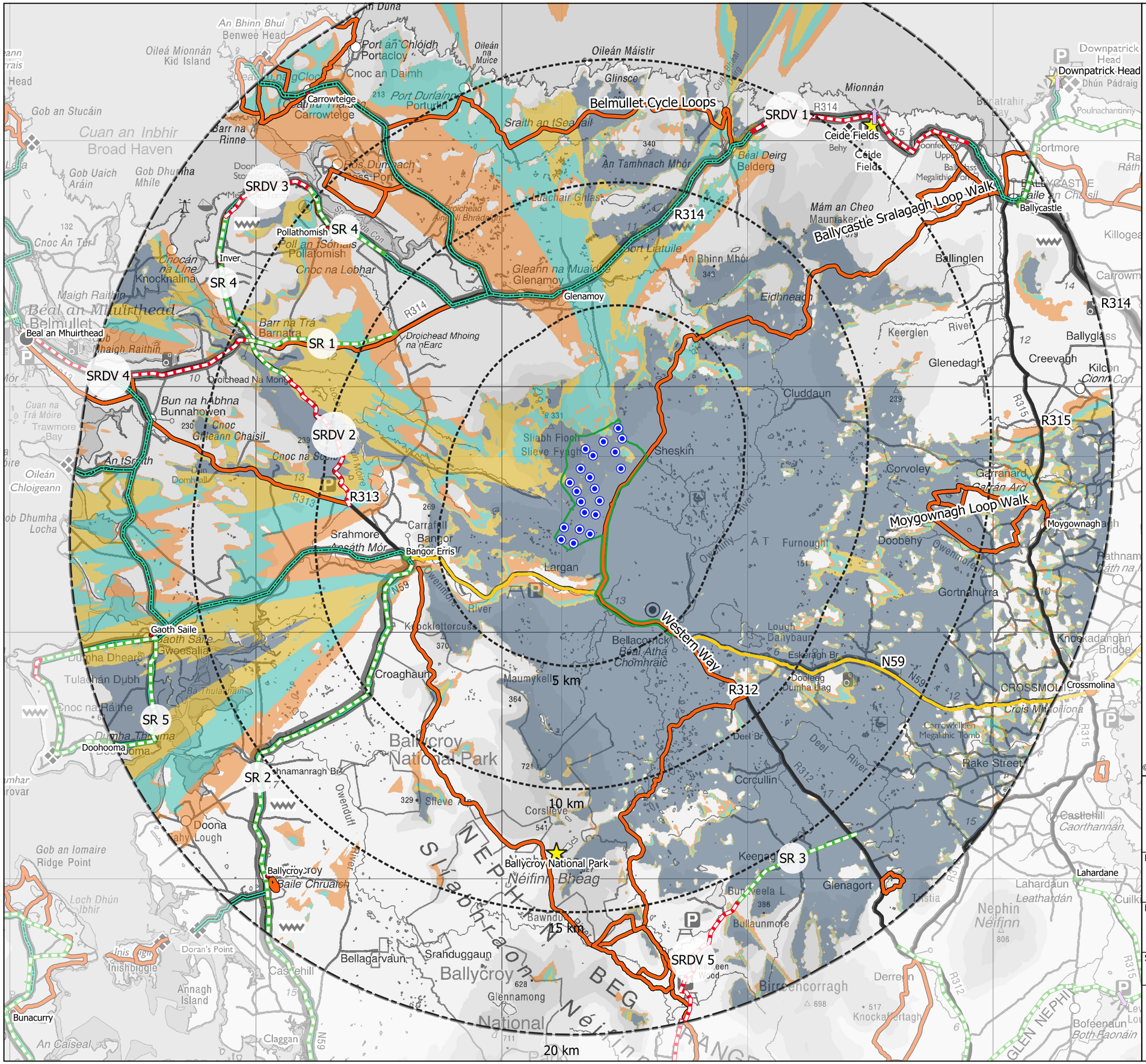
Visual Baseline

Project Title

Sheskin South Renewable Energy Development

Scale	Project No.	Date	Drawn By	Checked By
1:150,000	201119	30.11.2022	JS	JW

MKO Planning and Environmental Consultants



Map Legend

- LVIA Study Area
- EIAR Site Boundary
- Proposed Turbines

Scenic Routes MCDP 2022-2028

- Scenic Route
- Scenic Route with Designated Views
- OSi Viewing Points

Settlement Hierarchy MCDP 2022-2028

- Tier 1
- Tier 2
- Tier 3
- Tier 4
- Tier 5
- Waymarked Recreational Routes
- Tourism or Heritage Site
- National Roads
- Regional Roads
- The Wild Atlantic Way - Tourist Route

Zone of Theoretical Visibility

- 1-5 Turbines Theoretically Visible
- 6-10 Turbines Theoretically Visible
- 11-15 Turbines Theoretically Visible
- 15-21 Turbines Theoretically Visible

Drawing No.

Figure 13-14

Drawing Title

Visual Baseline and ZTV

Project Title

Sheskin South Renewable Energy Development

Scale	Project No.	Date	Drawn By	Checked By
1:150,000	201119	30.11.2022	JS	JW

MKO Planning and Environmental Consultants

13.5.1.1 Scenic Views

In addition to theoretical visibility, whether the focus of the scenic route or view is directed towards the turbines is also indicated in Table 13-7.

Table 13-7 Scenic Views within the 20km LVIA Study Area

Map Ref.	Comment on Visibility of Site	Views Directed Towards the Site?	Screened in?
SRDV 1	No theoretical visibility indicated apart from the western end where there is a small stretch of partial theoretical visibility.	Partially	No
SRDV 2	Mainly full theoretical visibility indicated, this was confirmed during site visits.	Yes	Yes
SRDV 3	No theoretical visibility indicated	No	No
SRDV 4	Mainly no theoretical visibility with a small pocket of partial visibility near Barnatra Cross.	Partially	No
SRDV 5	Mainly no theoretical visibility with one small pocket of partial visibility indicated.	Partially	No
SR 1	Mainly partial theoretical visibility indicated.	Partially	Yes
SR 2	Mainly no theoretical visibility indicated.	No	No
SR 3	Full theoretical visibility indicated.	Yes	Yes
SR 4	Mainly no theoretical visibility indicated.	Partially	No
SR 5	Mainly full theoretical visibility indicated with a stretch of partial theoretical visibility indicated along the northern section. Potential visibility was confirmed during site visits.	Yes	Yes

13.5.1.2 Settlements

Map 2.3 of the MCDP outlines the Settlement Hierarchy for the county, which is also shown on Figure 13-13 above. The following five classes below are outlined as the respective settlement hierarchy for Mayo County:

- Tier 1 – Key Towns and Strategic Growth Towns
- Tier 2 – Self-Sustaining Growth Towns
- Tier 3 – Self-Sustaining Towns
- Tier 4 – Rural Settlements
- Tier 5 – Rural Villages

Table 13-8 below lists the settlements identified from the respective MCDP within the 20 km LVIA Study Area also noting their status within the settlement strategy and whether there is theoretical visibility indicated by the ZTV. There are no settlements within 5 km of the Proposed Development Site.

Table 13-8 Settlements within the 20km Study Area for Co. Mayo

Settlement	Settlement Hierarchy	Theoretical Visibility	Screened In?
5 to 10km			
Bangor-Erris	Tier 4 – Rural Settlements	Partial to None	Yes
Glenamoy	Tier 5 – Rural Villages	Partial	Yes
10 to 15km			
Pollatomish	Tier 5 – Rural Villages	None	No
15 to 20km			
Inver	Tier 5 – Rural Villages	None	No
Gaoth Saile	Tier 5 – Rural Villages	Partial	No, views of turbines at this distance for this receptor will not have a Significant visual effect
Ballycroy	Tier 5 – Rural Villages	None	No
Ballycastle	Tier 4 – Rural Settlements	None	No
Moygownagh	Tier 5 – Rural Villages	Full to None	No, views of turbines at this distance for this receptor will not have a Significant visual effect

13.5.1.3 Recreational and Tourist Destinations

Recreation and tourist destinations were identified after reviewing the Tourism Strategy for County Mayo and identifying any Way Marked Walking routes within the LVIA Study Area. The routes are shown on and are listed in Table 13-9 below along with theoretical visibility shown on ZTV mapping for the routes.

Table 13-9 Recreational Routes and Tourist Destinations within the 20 km Study Area for Co. Mayo

Route Name	Description	Theoretical Visibility	Screened In?
Up to 5km			
Western Way	125km cycle and walking route which runs north-south through Co. Mayo.	Mainly Full	Yes
5 to 10km			
Bangor Trail	24.9km point-to-point trail located near Srahmore, County Mayo	Mainly no visibility	No
Belmullet Cycle Loops	Waymarked looped cycle routes along the north-west coast starting in Belmullet and reaching as far as Ballycastle.	Full to Partial	Yes
The Wild Atlantic Way	Scenic Route along Irelands west coast	Full, Partial and None	Yes
10 to 15km			
Moygownagh Loop Walk	15km looped walking trail beginning near St. Cormac's Church in the village of Moygownagh.	Full to Partial	Yes
Ballycroy National Park Visitor Centre	The visitor centre for Ballycroy National Park	None	No
15 to 20km			
Letterkeen Loop	12km looped waymarked walking trail starting in Newport	None	No
Ceide Fields	Stone-age monument and visitor centre	None	No
Benwee Loop Walk	12.4km looped walking trail near Carrowteigue.	Partial	No, views of turbines at this distance for this receptor will not have a Significant visual effect, given the distance involved.
Drumleen Loop Walk	Looped walking trail around Drumleen Lough	Mostly none with some areas of full visibility	No

Route Name	Description	Theoretical Visibility	Screened In?
Ballycastle Sralagagh Loop Walk	9.5km looped walking trail near Ballycastle	None	No

13.5.1.4 OSi Viewing Areas

One viewing area was identified in an Ordnance Survey of Ireland (OSI) map of the LVIA Study Area, this viewpoint is described below in Table 13-10 and whether there is theoretical visibility indicated by the ZTV map and if the view is focused in the direction of the Proposed Development.

Table 13-10 OSi Viewpoint Areas

OSI Viewing Area Location and Description	Theoretical Visibility (ZTV)	Direction/Focus of View	Screened in for assessment?
Viewpoint off the R314 near the Ceide Fields, directed north-east out towards the sea	No	Focused away from the Proposed Development	No

13.5.1.5 Major Transport Routes

For the purpose of viewpoint selection national primary and secondary roads were assessed in detail. Preference was given to viewpoint selection on regional routes in cases where they passed through settlement areas or coincided with scenic routes to increase the number of visual receptors represented. Transport routes within 5 kilometres of the site were also assessed as part of the route screening analysis.

Table 13-11 Significant transport routes within the 20 km study area for Co. Mayo

Transport Route	Theoretical Visibility	Screened In?
Up to 5 km		
N59	Mostly full theoretical visibility to the east of the proposed site, to the west of the site there is mostly no theoretical visibility	Yes
5 to 10km		
R314	Mostly partial to no visibility indicated, with some pockets of full theoretical visibility	Yes
R312	Mainly full theoretical visibility	Yes
R313	Mostly partial to no visibility indicated, with some pockets of full theoretical visibility	Yes
15 to 20km		

Transport Route	Theoretical Visibility	Screened In?
R315	Mostly no visibility indicated, with some pockets of full theoretical visibility	No views of turbines at this distance for this receptor will not have a Significant visual effect

13.5.2 Visual Receptor Preliminary Assessment

After identifying the visual receptors in the study area based on designated scenic routes, settlements, recreational and tourist destinations, recreational routes, OSi viewing areas and transport routes, a preliminary assessment was carried out to screen out visual receptors that will not be impacted by the Proposed Development.

Zone of Theoretical Visibility mapping and visibility appraisals conducted on site during surveys undertaken in 2021 were used to scope out visual receptors from further assessment. In the case of the visual receptors shown in Table 13-12 below, views towards the turbines were either entirely screened or substantially screened from view. In some cases, the factor of distance to the Proposed Development Site as well as the directional focus of views was included in the screening assessments and was a contributing factor precluding these locations being selected as viewpoints.

Directions have been indicated for viewpoints shown on OSi maps and designated scenic views and scenic routes by either written text or on accompanying maps in the MCDP. Therefore, the viewing points, protected views and scenic routes within the study area, listed in Table 13-12 that are not directed towards the proposed turbines have been screened out from further assessment.

*Table 13-12 Visual Receptors Screened **Out** - No visibility indicated by ZTV map OR no visibility found on site OR not in the direction of the Proposed Development*

Visual Receptor Category	Visual Receptor with no significant visibility found on site (or views focused away from the Proposed Development)
Designated Scenic Routes and Views	› SRDV 1 › SRDV 3 › SRDV 4 › SRDV 5 › SR2 › SR4
Osi Viewing Areas	Ciede Fields OSi Viewpoint
Settlements	Inver, Ballycroy, Ballycastle, Moygownagh, Gaoth Saile
Recreational Routes and Tourist Destinations	Bangor Trail, Ballycroy National Park Visitor Centre, Letterkeen Loop, Ceide Fields, Benwee Loop Walk, Ballycastle Sralagagh Loop Walk, Drumleen Loop Walk
Transport Route	R315

Following the pre-assessment exercise, the visual receptors shown in Table 13-13 below have been selected for assessment due to their significance within the study area and the potential visual effects

they may experience due to the Proposed Development.

Table 13-13 Visual Receptors Screened In For Further Assessment – utilised to establish photomontage locations.

Visual Receptor Category	Description	Viewpoint No.
Designated Scenic Routes	SRDV 2	VP3
	SR 1	VP1
	SR 3	VP4
	SR 5	VP2
Settlements	Bangor-Erris	VP5
	Glenamoy	VP7
Recreational Routes and Tourist Destinations	Belmullet Cycle Loops	VP6, VP3, VP7, VP8
	Wild Atlantic Way	VP2, VP5, VP6, VP7, VP8
	Western Way	VP9, VP10, VP11
	Moygownagh Loop Walk	VP4
Transport Routes	R314	VP1, VP7, VP8
	R312	VP9, VP10
	R313	VP6, VP3
	N59	VP13, VP5, VP11

Furthermore, in addition to the viewpoints listed above, which were selected according to the key visual receptors identified in the visual baseline additional viewpoints were selected within 10 km to assess the visual effects closer to the Proposed Development from various directions in view of the potential for cumulative interactions with other existing, permitted and proposed wind farms in the area – See Section 13.6 - *Cumulative Context*

13.5.3 Photomontage Viewpoint Locations

The locations of 13 photomontage viewpoints are illustrated in Figure 13-15 below. Photomontages will be used to assess the significance of visual effects arising from the Proposed Development from each viewpoint location. The viewpoint locations are representative, and, in some instances, imagery was not captured directly next to a visual receptor but in another location in close proximity where there may be superior line of sight towards the Proposed Development (e.g. higher elevation or less screening). A detailed description of the viewpoint selection process and photomontage assessment methodology is provided in Appendix 13-1.

Several additional viewpoint locations were visited during the field survey for which early-stage photomontages were generated (photowires). These photomontage viewpoints were not selected for inclusion in the final Volume 2 photomontage booklet due to their poor visibility or absence of prominent visual receptors. These early-stage photomontages do not form part of the assessment of

visual effects contained in Appendix 13-3, however, several of these early-stage photomontages are presented and discussed in text to illustrate certain points later in this chapter of the report and their locations are marked as red icons on Figure 13-15.

The photomontages are presented in the Volume 2 – *Photomontage Booklet* accompanying this EIAR. The likely or significant visual effects of the Proposed Development arising from each viewpoint location are reported in Section 13.7.3.3.2 of this Chapter. An extensive and detailed assessment of each photomontage is included in the photomontage assessment tables in Appendix 13-3.

Map Legend

- LVIA Study Area
- EIAR Site Boundary
- Proposed Turbines
- Photomontage Viewpoint Locations
- Photowire Locations

Drawing No.

Figure 13-15

Drawing Title

Photomontage Viewpoint Locations

Project Title

Sheskin South Renewable Energy Development

Scale	Project No.	Date	Drawn By	Checked By
1:150,000	201119	16.11.2022	JS	EMC

MKO Planning and Environmental Consultants

13.6 Cumulative Context

The purpose of this section is to identify all wind farm developments in the LVIA Study Area which potentially contribute to assessment of cumulative and in combination landscape and visual effects. This chapter assesses the likely landscape and visual impacts of the Proposed Development, both independently, as well as in combination with all other existing and operational wind farm developments in the LVIA Study Area. This chapter also assesses the Proposed Development in combination with the *'likely future receiving environments'* (EPA, 2022) which includes all existing and permitted wind farm developments in the LVIA Study Area, as well as under construction wind farm developments (at the time of the conduct of this LVIA).

The landscape of the site and its wider setting is a highly suitable area for the development of wind energy and consequently a variety of projects exist within differing stages of the wind farm life cycle (existing, permitted and proposed). To provide clarity for the reader and authors of this report, a variety of photomontage visuals have been produced to include various cumulative scenarios in the Volume 2 Photomontage Booklet. All wind farm developments in the LVIA Study Area are identified in this section and presented within the photomontage booklet within one of the following categories:

- **Existing** – Existing wind energy developments currently operational in the baseline landscape at the time of conducting this LVIA;
- **Do-Nothing Scenario** - Wind Energy Developments either under construction or permitted (consented) at the time of conducting this LVIA. These developments have a high probability of being operational in a future receiving landscape.
- **Proposed** - All well-developed wind farm proposals with project specifications in the public domain at the time of conducting this LVIA. Cumulative effects between the Proposed Development and the development within this category is more uncertain and is reliant on an outcome of the planning and consenting system.

A description of how these various cumulative categories are presented in the photomontage booklet is comprehensively reported in Section 1.3.2.2 of the Appendix 13-1 – *LVIA Methodology*. These categories are a useful guide to enable understanding and structure when viewing the photomontage booklet and identification of developments in this section. However, irrespective of how a development is categorised, the assessments of cumulative landscape and visual effects includes all wind farm developments.

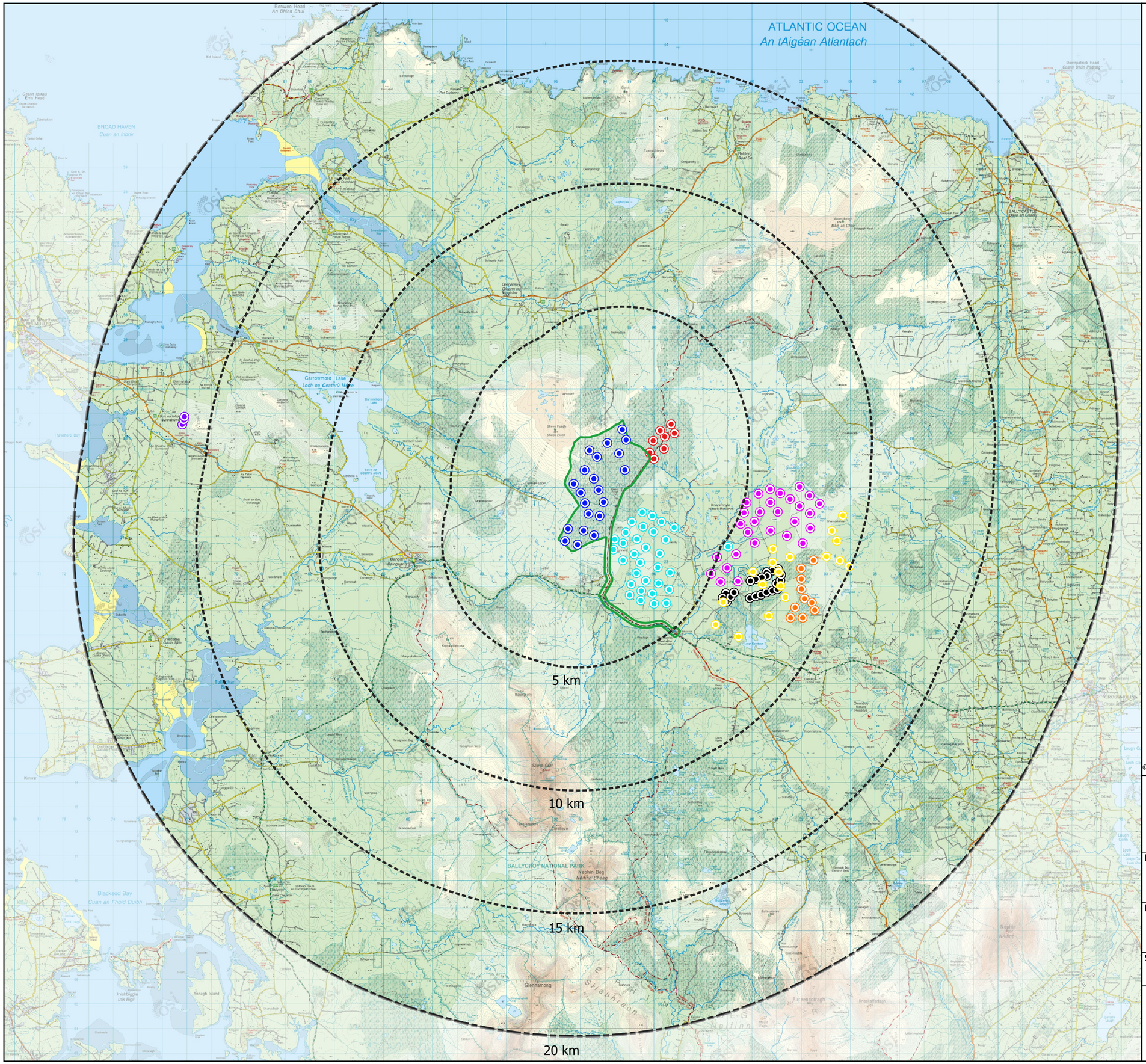
The effects reported both in this chapter and within the assessment appendices (Appendix 13-2 - *LCA Assessment Tables*; Appendix 13-3 - *Photomontage Assessment Tables*) uses appropriate and logical narrative to discuss cumulative interactions between the Proposed Development and all other wind energy developments irrespective of which category they occur. Whilst the categories provide clarity in presentation of visuals considering the scope of potential development in this landscape, discussion of cumulative interactions on specific landscape and visual receptors is relative to the effects on that receptor and proportionate to the likelihood of significant landscape and visual effects occurring.

In terms of cumulative landscape and visual effects, only other wind energy projects have been considered, as only these would be described as very tall vertical elements in the landscape and therefore give rise to significant cumulative effects. Other wind energy developments within 20 km of the Proposed Development were identified by searching past planning applications lodged through the various planning authorities (Mayo County Council and An Bord Pleanála) online planning portals. The information identified in the initial planning search was then used to verify, by means of a desk-based study and ground-truthing, whether the permitted wind energy developments had been constructed. The list of existing, permitted and proposed wind turbines present within the study area are listed in Table 13-14 below:

Table 13-14 Cumulative Context: Other Wind Farms within 20km of the Proposed Sheskin Wind Farm

Wind Farm	Status	No. of Turbines	Hub and Blade Dimensions
0 to 5km			
ABO Sheskin	Permitted (considered part of the Do-Nothing Scenario)	8	Tip Height 176m; Rotor Diameter 117m
Oweninny 2	Under Construction (considered part of Existing Scenario)	25	Tip Height 176m; Rotor Diameter 120m
5 to 10km			
Oweninny 1	Operational (considered part of Existing Scenario)	29	Tip Height 176m; Rotor Diameter 120m
Oweninny 3	Proposed (considered part of Proposed Scenario)	18	Tip Height 200m; Rotor Diameter 150m
Bellacorrick	Operational (considered part of Existing Scenario)	21	Tip Height 50.5m; Rotor Diameter 31m
Glenora	Proposed (considered part of Proposed Scenario)	22	Tip Height 180m; Rotor Diameter 162m
15 to 20km			
Bunnahowen	Existing (considered part of Existing Scenario)	3	Tip Height 82.5m; Rotor Diameter 55m.

There are 7 No. existing, permitted and proposed wind farms within the 20 km boundary (comprising a total of 126 no. wind turbines), as shown in Table 13-14 above. The locations of the seven wind farms can be identified on the Cumulative Context map Figure 13-16, shown below.



Map Legend

- LVIA Study Area
- EIAR Site Boundary
- Proposed Turbines

Other Wind Turbines (Existing, Permitted, and Proposed)

- Existing Bellacorick
- Existing Bunnahowen
- Existing Oweninny 1
- Oweninny 2 (under construction)
- Permitted ABO Sheskin
- Proposed Oweninny 3
- Proposed Glenora

Drawing No.

Figure 13-16

Drawing Title

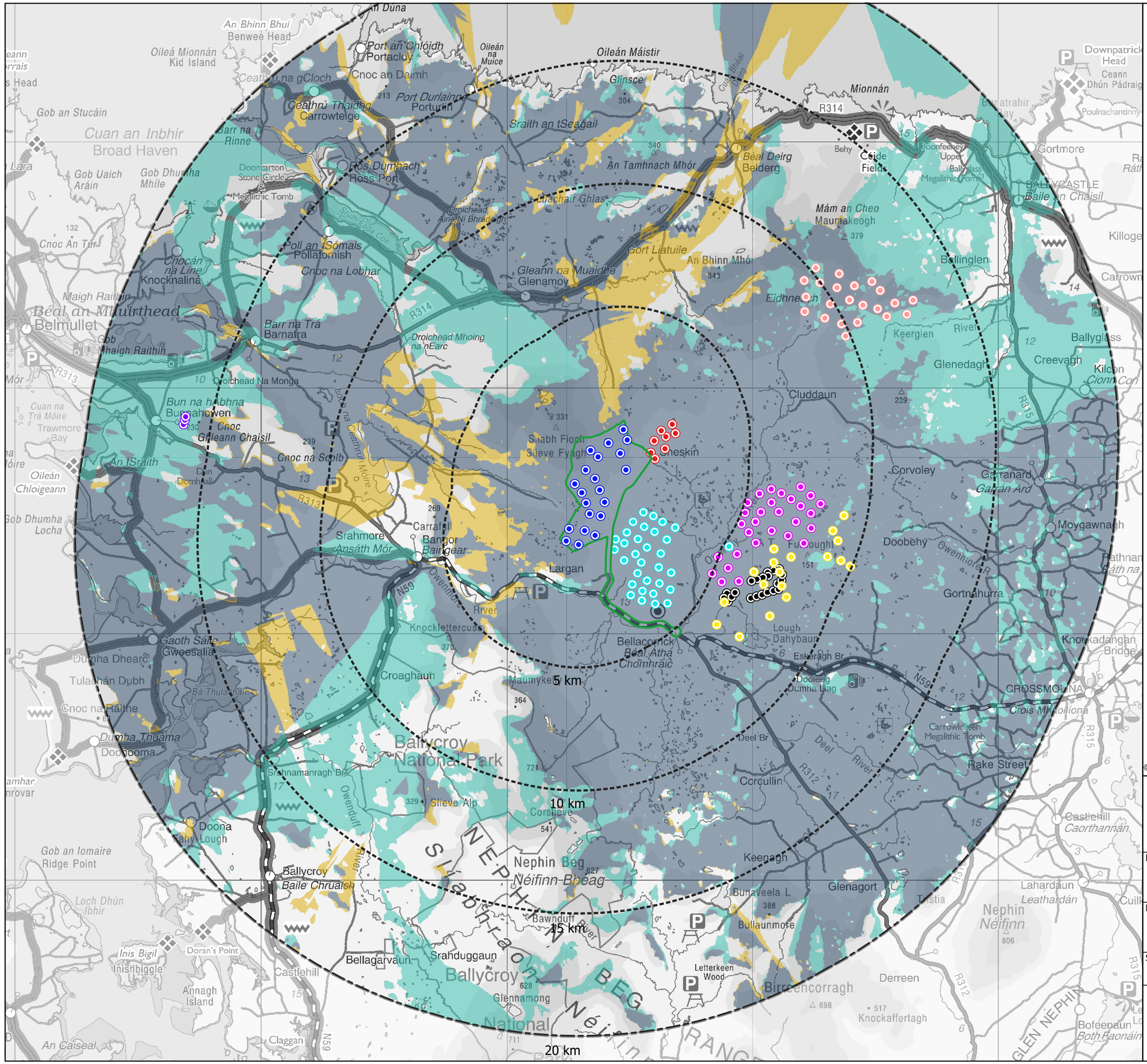
Cumulative Baseline

Project Title

Sheskin South Renewable Energy Development

Scale	Project No.	Date	Drawn By	Checked By
1:150,000	201119	16.11.2022	JS	EMC

MKO Planning and Environmental Consultants



Map Legend

- LVIA Study Area
- EIAR Site Boundary
- Proposed Turbines

Other Wind Turbines (Existing, Permitted, and Proposed)

- Existing Bellacorick
- Existing Bunnahowen
- Existing Oweninny 1
- Oweninny 2 (under construction)
- Permitted ABO Sheskin
- Proposed Oweninny 3
- Proposed Glenora

Cumulative Comparative ZTV

- Theoretical Visbility of Cumulative Turbines Only
- Theoretical Visibility of Proposed Sheskin South Only
- Theoretical Visibility of both Sheskin South and Cumulative Turbines

Drawing No.

Figure 13-17

Drawing Title

Cumulative Comparative ZTV

Project Title

Sheskin South Renewable Energy Development

Scale	Project No.	Date	Drawn By	Checked By
1:150,000	201119	16.11.2022	JS	EMC

MKO Planning and Environmental Consultants

13.6.1 Comparative Cumulative Theoretical Visibility to half-blade

Figure 13-17 compares the cumulative theoretical visibility of all existing, permitted, and proposed wind farms (represented in navy and teal) with any additional visibility of the Proposed Development represented in yellow. To the east and south, where most open and clear visibility of the proposed Sheskin South turbines will occur, the number of additional areas where turbines will now be visible is extremely limited. There are some additional areas to the north and west of the study area that will now have visibility of turbines, particularly within 10km of the proposed turbines in these directions. However, from these directions, views of turbines are often screened by the intervening topography, and there are limited open views of the proposed turbines from this part of the LVIA Study Area. In addition, the area in close proximity to the proposed Sheskin South turbines, where the majority of the additional visibility is located, is remote, with very few visual receptors in this area. There is a lack of visual receptors in the areas where views of turbines are now available as a result of the Proposed Development. The visual receptors in this part of the study area generally fall within areas where turbines are already visible. Specifically, there are some additional sections of the R314 and R313 regional road where turbines are now visible. However, these are relatively small sections, in comparison with the sections where turbines were already theoretically visible. In addition, the comparative cumulative map produced shows theoretical visibility, which will likely be further reduced by screening effects provided by vegetation, localised topography, and other vertical elements in the landscape.

Overall, the relatively small additional areas that will now have visibility of turbines are generally remote (additional areas where turbines will now be visible account for 5.9% of the overall LVIA Study Area), with few visual receptors. The visual receptors that are located within these areas are generally roads that are located further than 5km from the Proposed Development Site. A combination of the nature of the visual receptors (i.e. the speed road-users will be travelling at and the transitory nature of the views experienced), as well as the fact that there is existing visibility of turbines along large stretches of these roads, means that there will likely be very little additional visibility of turbines in areas where turbines were previously not visible as a result of the addition of the proposed Sheskin South turbines.

Assessment of Cumulative Visual Effects – Photomontages

Photomontages have been utilised to assess the cumulative interactions between the Proposed Development and the other existing, permitted and proposed wind farms identified in the LVIA Study Area. Cumulative visual effects are described in the photomontage assessment tables included in Appendix 13-3, and are a contributing factor considered in the significance of visual effects ratings determined for each viewpoint. A discussion of cumulative visual effects is presented in Section 13.7.3.4 – *Cumulative Visual Effects.*

13.7 Likely or Significant Landscape and Visual Effects

13.7.1 'Do-Nothing' Scenario

The Do-Nothing option to developing a wind farm at the Proposed Development Site would be to leave the site as it is, with no changes made to the current land-use practices of commercial forestry. In the absence of the Proposed Development, and without dramatic changes to policy or economic drivers in the area, the established trends in respect of land use/landcover (see Section 13.4.2 and Section 13.4.3 above) and the baseline landscape and visual context are likely to remain largely consistent with the scenario described in the preceding sections of this chapter. It is considered that there would be likely future interest in developing this landscape for wind energy production, which is demonstrated given the level of existing, permitted, under-construction wind farms outlined in Table 13-14 above (these wind farms are considered to form part of the Do-Nothing Scenario, see Section 13.6). Characteristic commercial forestry operations across the Proposed Development Site and adjoining areas are expected to continue. Should this occur, the impact would be neutral in the context of this EIAR.

13.7.2 Construction Phase Effects

It is estimated that the construction phase of the Proposed Development will last between approximately 18-24 months. The construction stage of the Proposed Development will involve construction of 21 no. wind turbines, one onsite substation, a met mast, all associated hardstand areas, construction of access roads, excavation and reinstatement of 2 no. borrow pits, all the associated excavation works for the cable connection to the on-site substation location, underground grid connection cabling to the 110 kV substation in Bellacorrick and accommodation works along the turbine delivery route, as detailed in Chapter 4 of this EIAR. Construction phase effects also include the use of peat placement areas, temporary construction compounds and the associated effects resulting from the movement of construction and turbine transport vehicles into and out of the site, to allow the construction of the turbines and associated elements.

13.7.2.1 Landscape Effects (Construction Phase)

The felling and earthworks such as cut and fill required to facilitate construction of the Proposed Development will have a direct effect on the landscape. Where excavation is required within the Proposed Development Site, existing landcover, vegetation and spoil will be removed during the construction phase. In most instances, groundworks and excavation trenches will be re-instated upon completion of construction. Excavation will be visually contained by the surrounding forestry and will not be visible from the wider LVIA Study Area. The construction activities may potentially cause temporary impacts on the landscape such as the creation of temporary structures, dust and noise. In general, it is considered that the construction phase will have a Short-Term, 'Slight', Negative effect in terms of direct landscape effects.

The construction works will be short-term in nature and completed as soon as practically possible. All construction activities will follow best practice methods as set out in the Construction and Environmental Management Plan (CEMP) to reduce impacts upon the environment and landscape of the site. Further details are contained in the CEMP in Appendix 4-3 of this EIAR.

It is considered that this is a Short-term, Slight, Negative effect in terms of landscape effects, although these will be localised to the landscape of the site itself and the development footprint.

13.7.2.2 Visual Effects (Construction Phase)

The most substantial visual effects will arise from requisite construction activities such as building tower sections and erecting the turbines, these will be Short-Term, Slight, Negative visual effects. The equipment and vehicles required to transport and erect the wind farm components include large cranes and large haulage vehicles; these will cause Short-Term Slight, Negative visual effects.

General housekeeping measures, detailed in the CEMP, will ensure that the active construction areas will be kept tidy, mitigating localised visual impacts during the construction phase. A detailed description of all construction activities is included in Chapter 4 of this EIAR and within the CEMP.

13.7.2.3 Ancillary Project Elements including Grid Connection

Grid Connection – Construction Phase Effects

The intended grid connection route will be located underground, therefore the greatest effects attributed to this element of the Proposed Development will occur during the construction phase. The majority of cable route works are to be carried out along the L52926 local road between the Proposed Development and the N59 national road, and the section of the N59 where the grid connection route joins the national road until it reaches the Bellacorrick 110kV substation, as well as forestry tracks. The construction phase of the proposed underground cabling will be temporary, localised and transient in nature, as the works move along the cable route. The works will include roadside vegetation removal, tar and soil stripping, excavation and other associated construction activities. These activities will cause temporary change to the physical landscape along the grid connection route. Changes will be localised to the immediate environment surrounding the grid connection route and will not affect the character of the landscape setting or visual amenity of the wider area. The Proposed Grid Connection works are likely to cause temporary, negative landscape and visual effects of 'Slight' significance.

The following measures will be implemented to mitigate effects during the construction phase and operational phase of the grid connection route:

- In all circumstances, excavation depths and volumes will be minimised, and excavated material will be re-used where possible (see the CEMP for additional details).
- Where the cable trench is to be located in the road verge, subsoil will be piled on site and re-used after cabling works. Should any vegetation be removed, it will be replaced with the same or similar species whenever it is not possible to salvage and reinstate.
- Any areas of bare soil remaining after the landscaping phase will be seeded as soon as possible with a grass seed mix to minimise sediment run-off.

Other Ancillary Project Elements

For the purposes of this LVIA, a number of individual elements of the Proposed Development, ancillary to the proposed wind turbines, have been grouped together for the assessment of effects in the construction phase, given the similar nature of the works required. The project elements to be constructed during this phase include the proposed roads and turbine hardstand areas, anemometry masts and the electricity substation compound (and ancillary elements thereto) may all give rise to potentially similar landscape and visual effects. Details of these components of the Proposed Development and the required works to construct them are contained in Chapter 4 of this EIAR. Due to the topography of the Proposed Development Site and surrounding areas, in addition, the coniferous forestry present on site, the lower ancillary project elements will be visible only in their immediate surroundings, hence, any visual effects will be localised and predominantly confined to within the Proposed Development Site.

Proposed Substation: The proposed substation site is located within forestry, adjacent to the south-eastern boundary of the wind farm development site, adjacent to an existing forestry road which runs north to south along the eastern boundary of the site. Access to the substation will be off the existing road. The footprint of the proposed onsite electricity substation compound measures approximately 21,500m^2 and will include a wind farm control building and the electrical components necessary to consolidate the electrical energy generated by each wind turbine and export that electricity from the wind farm to the national grid. The proposed substation location is surrounded by commercial forestry which will screen any potential long-ranging views of the substation, limiting any landscape and visual effects to the localised area around the substation and the adjacent forestry road. The construction of this facility will result in a High magnitude of change in the landscape but in a localised area within the site. Any landscape and visual effects are likely to be highly localised, Negative, Short-Term and will be of 'Moderate' significance.

Site Access Roads and Hardstand Areas: The proposed access roads and hardstand areas are flat features. Consequently, they will be most visible within their immediate surroundings, therefore any landscape and visual effects will be very localised. Every use will be made of the existing forestry access tracks on site. 7.8km of existing tracks will be upgraded appropriately whilst 14.2km of new internal roads will need to be constructed. Some vegetation clearance will occur as a result of this construction. The road construction design has attempted to minimise the excavation required and to minimise the disruption to peat hydrology. The impact of the construction of these flat and hard surfaces will be very localised. The landscape and visual effects arising from the access roads and hardstand areas are considered to be highly localised Negative, Short-Term effects of 'Slight' significance.

Meteorological (Met) Mast: One met mast is proposed as a part of the Proposed Development. This will be a slender structure, 125 metres in height, and in itself will not be an imposing structure in terms of visual impact. The landscape and visual effects of the construction of the proposed mast will be localised, considering that construction activities related to this will be most visible within their immediate surroundings. Within the site and its immediate landscape setting, the landscape and visual effects arising from the construction of the met mast is considered to be of highly localised Negative, Short-Term effects of 'Slight' significance.

Peat and Spoil Placement Areas: It is proposed to store any excess peat and spoil generated through construction activities around turbines bases. These placement areas will reach a maximum height of 1m of peat placed around the turbine hardstands. The placement of peat will have a localised landscape and visual impact as a result of changing landcover from coniferous forestry at present to stored peat resulting from construction activities. The impact of these placement areas will be very localised. The landscape and visual effects arising from the peat and spoil placement areas are considered to be Negative, Long-Term, effects of 'Slight' significance.

13.7.3 Operational Phase Effects

13.7.3.1 Landscape Effects

13.7.3.1.1 *Landscape Designations – Landscape Policy Areas*

The landscape designations brought forward as landscape receptors which require further assessment to identify any likely Significant landscape effects are Landscape Policy Areas (LPAs) 1, 2 and 3.

Landscape Policy Area 3 – Uplands, Moors, Heath or Bogs: where the Proposed Development is located, is an area of high landscape sensitivity to wind farm development, as indicated in the landscape sensitivity matrix from the MCDP, shown in Figure 13-7 above. The ZTV mapping shows widespread full theoretical visibility in the northern portion of this LPA. It is also notable that there is widespread development of wind energy, either existing or permitted, in this policy area, and there are large parts of this policy area that are designated as *'Tier 1 – Preferred'* and *'Tier 2 – Open to Consideration'* in the Renewable Energy Strategy for County Mayo 2011-2020, particularly in the northern section of the

LPA, including sections within areas where the Proposed Development is located. The layout of the Proposed Development is located (i.e. turbine siting at elevations lower than 240m AOD) so as to avoid impacts on the designated scenic views where development has not already occurred. The locations of the turbines on the eastern slopes of Slieve Fyagh results in reduced visibility of the turbines above the ridgeline formed by this hill from the west and north as well as from locations to the east and south-east of the Proposed Development (e.g. VP 9), where there is existing (and Do-Nothing) views of a large number of wind turbines already present in any case, although there are still turbine components visible above the ridgelines from this orientation (see also VPs 13 and 11). Where interference with views of the ridgeline occurs as a result of the Proposed Development, there are generally already turbines (from existing and permitted developments) visible below and above this ridgeline and adjacent ridgelines. *Policy 16* in the *Landscape Appraisal for County Mayo* provides that undisturbed areas, in particular, should be preserved from development, which is not the case in the area within which the Proposed Development is primarily located and visible, given the presence of a large number of other wind farms (existing, permitted, and proposed) within this LPA. In addition to this, within LPA 3 it is the policy of Mayo County Council to *"Facilitate developments that have a locational requirement to be situated on elevated sites (e.g. telecommunications and wind energy structures). It is necessary however to ensure that adverse visual impacts are avoided or mitigated wherever possible."* Overall, the policies within the Landscape Appraisal for County Mayo relating to LPA 3 suggest that the Proposed Development is appropriately scaled and located so as to avoid, insofar as possible for a development of this nature, adverse impacts on the landscape, particularly in relation to the policies relating to LPA 3. In this regard, the Proposed Development strikes a balance between sustainable development and protection of the sensitive landscape features where required. Taking all the factors discussed above into account, there will be no Significant landscape effects in relation to LPA 3 as a result of the Proposed Development.

Landscape Policy Area 1 – Montaine Coastal Zone: This area is located approx. 3.6 km from the nearest proposed turbine at its closest point, and approx. 48.5 km at is furthest point, with a large portion of this policy area located outside of the LVIA Study Area. There is widespread partial theoretical visibility indicated on the ZTV in the parts of LPA 1 that are within the LVIA Study Area, with some large areas of full and no theoretical visibility indicated as well. Visibility within this policy area is mainly concentrated to the north-west of the Proposed Development. The vast majority of the LPA is located beyond 5 km from the Proposed Development so the turbines will have a reduced vertical and horizontal extent within areas where views are available (e.g. VP1). From the areas within this LPA that are closest to the northern coastline where there are valuable scenic coastal vistas, the proposed turbines will only be partially visible as small elements in the background of views that are not in the direction of the coast. Given the distance of the Proposed Development from the majority of this LPA and the scenic attributes protected by the policies related to this LPA in the Landscape Appraisal of County Mayo (see *Policy 3, 4, 5, 6,* and *7* for this LPA), such as coastal scenic vistas, primary ridgelines, and coastlines, there are not deemed to be any significant impacts upon this landscape area – LPA 1 (see the discussion of VPs 1, 7, and 8 in Appendix 13-3, where the highest residual visual effect was deemed to be 'Slight'). In general, views of the Proposed Development from within the LPA will be inland, away from the most sensitive scenic amenity features (i.e the coast), and views are substantially screened by the topographical elements encircling the Proposed Development that lie in the intervening space between this LPA and the Proposed Development Site. Taking all the factors discussed above into account, there will be no Significant landscape effects in relation to LPA 1 as a result of the Proposed Development.

Landscape Policy Area 2 – Lowland Coastal Zone: This area is located approximately 6 km from the nearest proposed turbine at its closest point, and approximately 39km at its furthest point (Inishkea South). Theoretical visibility is limited to areas south-west of the Proposed Development in the LPA, with mainly partial theoretical visibility throughout (although there is a section of full theoretical visibility around Gweesalia), as well as a section of full and partial visibility to the north-west, between 15 and 20km from the Proposed Development. The entirety of the LPA is located beyond 5 km from the Proposed Development so the turbines will have a small vertical and horizontal extent within areas where views are available (e.g. VP2). In general, views of the Proposed Development from within the LPA will be inland, away from the most sensitive scenic amenity features (i.e the coast), and views are

substantially screened by the topographical elements encircling the Proposed Development that lie in the intervening space between this LPA and the Proposed Development Site (e.g. VP5). Although, it is noted that there are some scenic views of the distinctive inlets, formed by the coastline in this LPA, where the Proposed Development will be visible above the ridgelines that form the backdrop for these inlets (e.g. VP2, VP6). In these cases the proposed turbines are viewed as very small background elements given the distance of the coastline from the Proposed Development in general. It is noted that *Policy 8* for LPA 2 states the following: *"Recognise the substantial pockets of residential and rural landuses in some locations and the emerging pressures for differing landuses of industry, wind energy and residential development in this policy area,"* showing that wind energy development is acceptable as part of the sustainable development of this area. However, it is also noted that *Policy 10* and *Policy 11 (as well as Policies 3, 4, 5, 6,* and *7* for LPA 1, which are referred to in relation to this LPA) refer to the impact on the landscape from development and the need to protect the sensitive landscape features (i.e. coastline, primary ridgelines, previously undeveloped coastline). There will be some visual intrusion upon primary ridgelines and additional views of turbines where there previously was none from sensitive locations within this LPA, in particular the coastal inlet views highlighted above. However, as the turbines appear as distant background elements here, with a limited horizontal and vertical extent within views, such additional views of turbines are consistent with the policies outlined here, where a balance between sustainable development and protection of the sensitive landscape features is required. Taking all the factors discussed above into account, there will be no Significant landscape effects in relation to LPA 2 as a result of the Proposed Development.

13.7.3.1.2 Landscape Designations – Vulnerable Landscape Features

A number of designated vulnerable landscape features were identified, in the Landscape Baseline – Section 13.4.1.4, within the LVIA Study Area. These include ridgelines, and lakeshores and riverbanks.

Ridgelines

Of the 15 designated ridgelines identified, one was screened in for further assessment using ZTV mapping and consideration of those ridgelines with the potential to experience significant landscape effects, taking into account factors such as distance from the Proposed Development and likely views of the landscape feature within views where the Proposed Development would likely be seen, informed through site visits and desktop studies.

Slieve Fyagh – is a ridgeline forming part of the western edge of the overall series of ridgelines topographically separating the flat bog plain to the east of the Proposed Development from the coastal area to the west of the Proposed Development. The Proposed Development will be viewed in the same viewshed as this peak from locations to the south-east of the ridgeline (see VPs 9, and 10), where the ridgeline appears smaller and less dramatic than the ridgelines to the south (i.e. Corslieve and Nephin Beg) as well as from locations directly north (see VP7) where the proposed turbines are seen to the left-hand side of the ridgeline, where the topography slopes downwards allowing views of the turbines. There are also views of the turbines from the west (see VPs 3 and 1) where the proposed turbines are seen to the right-hand side of the ridgeline.

The turbines themselves are located on the lower slopes of the eastern side of this hill, and as a result from locations to the west and north (where there are more undisturbed views of this ridgeline than from the south and east) the turbines are often seen on either side of the ridgeline, and not above. This is particularly evident from VP1, where Slieve Fyagh is the primary notable topographical feature in view, the Proposed Development is seen primarily to the right-hand side of the feature, and the proposed turbines are appropriately scaled and absorbed in relation to the ridgeline itself, with very limited turbine components seen to break the ridgeline. This is similarly the case with VP7, where the turbines are seen to the left-hand side of the ridgeline, with tips of the turbine blades seen to rise to a level appropriately scaled in relation to the height of the ridgeline. From the west and north, as the turbines are strategically sited at elevations below 240m AOD (see Section 13.3.1), it is unlikely that they will appear substantially above the highest point along the ridgeline, providing a measure of scale

to the turbines and protecting the character of the ridgeline as the defining feature within the skyline, a key feature of the surrounding landscape. There will be views of the turbines above the ridgeline from locations to the south-east, although it is noted that the large number of existing, and permitted turbines in this area results in pre-existing interference with the ridgeline in any case (in a Do-Nothing Scenario), with some additional interference resulting from the addition of the Proposed Development but with limited changes to the existing baseline views as a result. Taking all of the above factors into account, including the sensitivity of the ridgeline and the policy relating to it in the Landscape Appraisal for County Mayo 2014-2020, it is considered that no significant landscape effects will arise on this landscape feature as a result of the Proposed Development.

Lakeshores and Riverbanks

Of the 15 designated lakeshores and riverbanks identified, one was screened in for further assessment using ZTV mapping and consideration of those with the potential to experience significant landscape effects, taking into account factors such as distance from the Proposed Development and likely views of the landscape features within views where the Proposed Development would likely be seen, informed through site visits and desktop studies.

Owenmore River – is located just south of the Proposed Development and runs in a west-east orientation flowing west until it joins the Munkin River and the flows into Tullaghan Bay. The river runs parallel to the N59 national road for the stretch closest to the Proposed Development Site. VP11 is located on the N59 adjacent to the north of the River, which is close to the bank of the river. There are open views from the road towards the proposed turbines to the north, away from the river itself. The river itself is also out of view here, with views obscured by the intervening bogland habitat that the river cuts through. It is also noted that there is a substantial level of wind farm development in the same direction away from the river at this location along the local road, and while there will be some additional cumulative landscape effects as a result of the Proposed Development, it's addition to views of the river from its surroundings will not impinge in a significant way upon the character, integrity or uniformity of the river, particularly given that there is substantial wind farm development in much of the surroundings of the river from this location, in particular, in a Do Nothing Scenario, the turbines from the under construction Oweninny 2 wind farm are closer to the river than the turbines of the Proposed Development.

VP13 is captured from further west along the N59 national road, also adjacent to the river, at a parking area on the side of the road. The river cuts through the lowest part of the valley here and the banks are identifiable in the right-hand side of the image. Several proposed turbines will be visible above the valley wall in the centre background and will be viewed within the same general direction as the riverbanks. A residual visual effect of 'Slight' was deemed to arise at this viewpoint (see Appendix 13-3) and the turbines are seen as background elements within the view, not obstructing or substantially interfering with the view of the river. In addition, given the separation distance from the Proposed Development and the screening provided by the topography, the setting of the river is not fundamentally altered as a result of the addition of the Proposed Development within the view.

Carrowmore Lough – is located approximately 7.5 km west of the Proposed Development and is a large lake nestled within the upland north-Mayo moorland landscape, providing scenic and recreational amenity to the area. VP3 is located on the local road that runs along the western banks of the Lough and it is apparent from this that the turbines of the Proposed Development will be seen above a ridgeline located behind the far side of the lake, providing a degree of separation from the lakeshore itself, but with the Proposed Development within the view. The proposed turbines are framed within a saddle of lower ground between two elevated ridgelines to either side are effectively absorbed within the scale of the view. While there are already some turbines from the Oweninny 2 Wind Farm already visible from this location (in a Do-Nothing Scenario), the turbines of the Proposed Development appear larger and closer and to a greater degree encroach on the view from this location. A residual visual effect of 'Moderate' was deemed to arise at this location. However, it is noted that the turbines are still located a substantial distance away and appear generally as small elements within the view, and there is

substantial screening of the Proposed Development by the intervening topography. Given this separation distance from the Proposed Development, the scale of the landscape in view, and the screening provided by the topography, the setting of the lakeshore is not fundamentally altered as a result of the addition of the Proposed Development within the view.

Overall, the turbines will appear as background elements, and the immediate surrounds of the riverbanks and lakeshores will maintain their character, integrity and uniformity. It is deemed that there will be no significant landscape effects on these landscape features as a result of the Proposed Development.

13.7.3.1.3 Landscape Character of the Proposed Development Site

The landscape character of the Proposed Development Site will undergo a change in character by the introduction of vertical structures in the landscape. There will also be localised change around the ancillary project infrastructure. There will be a substantial magnitude of change to the landscape in localised areas within the site where the landscape is materially altered (infrastructure footprint).

The Renewable Energy Strategy which has been adopted within the Mayo County Development Plan, has identified the site of the current proposal as containing areas designated *Tier 2 - Open to Consideration*. The landscape value and sensitivity of the Proposed Development Site was deemed to be Low in Section 13.4.2 above. Low sensitivity balanced with a substantial magnitude of change amounts to long-term landscape effects of Moderate significance upon the physical fabric of the landscape of the site (See LVIA Methodology, Appendix 13-1). These direct landscape effects will be highly localised to the footprint of the Proposed Development. Effects on the perceptual and aesthetic character of the site are also deemed to be of Moderate significance.

Mitigation of Landscape Effects within the Landscape of the Proposed Development Site

The following measures have been included in the project design in order to avoid or reduce direct effects on landscape receptors of the Proposed Development Site:

- The turbines have been sited to avoid direct impacts on any sensitive landscape features such as nearby undeveloped boglands and the landscape value of the site in general is low.
- The internal site road layout maximises the use of the existing forestry tracks wherever possible, to minimise the requirement for new tracks within the site.

Residual Landscape Effects

Considering the mitigation measures above, residual effects upon the landscape of the site are deemed to be of 'Slight' significance, given that siting and design of the Proposed Development has avoided any sensitive landscape features.

13.7.3.1.4 Landscape Character Areas

An assessment of the effects on landscape character was undertaken for the five LCUs within the study area that are listed in Table 13-6 of Section 13.4.3.2. The individual assessments for each LCU are summarised in Table 13-15 below and included in detail in Appendix 13-2 - *Landscape Character Assessment Tables*. The assessment criteria and grading scales which aided the assessment of landscape effects are detailed in Section 1.4.2 of the *LVIA Methodology Appendix* – Appendix 13-1. It is noted that, as clearly laid out in the landscape character assessment tables, that the assessment of cumulative effects on landscape character are also incorporated in the determination of significance summarised in Table 13-15 below. The effects on landscape character relating to introduction of the Proposed Development in the Existing, Do-Nothing, and Proposed scenarios (outlined above in Section 13.6) are

considered in detail in these assessment tables. Section 13.7.3.2 below contains additional discussion of cumulative effects on landscape character.

Table 13-15: Landscape Character Effects of LCUs within the LVIA Study Area.

Landscape Character Unit (LCU)	LCU Sensitivity to Wind Farm Development	Magnitude of Change	Significance of Landscape Character Effect
LCU E – North Mayo Mountain Moorland	Medium	Moderate	Moderate
LCU F – North Mayo Inland Bog Basin	Low	Moderate	Slight
LCU D – North Coast Plateaux	High	Negligible	Slight
LCU B – North-West Coastal Moorland	High	Negligible	Not Significant
LCU C – North-West Coastal Bog	Medium	Slight	Slight

As demonstrated by Table 13-15, no significant landscape effects are likely to occur on the landscape character in the LVIA Study Area. The majority of the Proposed Development is located in LCU E – North Mayo Mountain Moorland, with 2 turbines located within LCU F – North Mayo Inland Bog Basin. LCU E North Mayo Mountain Moorland has a 'Moderate' landscape character effect as a result of the Proposed Development, and LCU F – North Mayo Inland Bog Basin has a 'Slight' effect as a result of the Proposed Development. These effects are fully assessed an detailed in Appendix 13-2.

LCU E – North Mayo Mountain Moorland is an LCA of medium sensitivity due to valuable landscape resources located to the south of the unit, including a scenic route, as well as the prominent ridgelines which occupy the area. The magnitude of change was determined to be Moderate (see Appendix 13-2). There is no or limited theoretical visibility of the Proposed Development from the scenic route in the south of the unit. In terms of the prominent ridgelines within the LCU, which are noted as a Visually Vulnerable (these are also assessed as landscape receptors in their own right above in Section 13.7.3.1.2), and key characteristic of the LCU in the MCDP, the proposed turbines are well framed and screened by the surrounding topography, and where they are visible from within this LCU, mostly appear congruent with the ridgelines and do not substantially obscure or interfere with views of the ridgelines, reducing the impact on this visually vulnerable feature (see VPs 13 and 5). Generally, the layout of the Proposed Development enables it to be absorbed effectively within the landscape as there is a screening effect provided as a result of the location of turbines within an area of lower elevation when compared to the surrounding topography in the direction of this LCU. The perceived scale of the proposed turbines will reduce significantly with distance and there are also large areas of this LCU where there is no theoretical visibility of the Proposed Development indicated by the ZTV, as a result of the surrounding topography.

LCU D – North Coast Plateaux and **LCU B – North-West Coastal Moorland** both have high sensitivity to wind farm development as they contain Visually Vulnerable features, including, among others, prominent ridgelines, coastal vistas, as well as scenic routes, and scenic views. However, LCU B also contains large areas designated as *'Tier 1 – Preferred'* and *'Tier 2 – Open to Consideration'* in the Renewable Energy Strategy for County Mayo 2011-2020. There is limited theoretical visibility indicated in both of these LCUs and the intervening distance between the sensitive landscape receptors and the

proposed turbines reduces the visual prominence of the turbines. Therefore, both of these LCUs have a 'Slight' landscape effect.

LCU C - North-West Coastal Bog has a medium sensitivity to wind farm development and also contains large areas designated as *'Tier 1 – Preferred'* and *'Tier 2 – Open to Consideration'* in the Renewable Energy Strategy for County Mayo 2011-2020. There is partial and full theoretical visibility indicated in much of this LCU within the LVIA Study Area. The proposed turbines are well framed and screened by the surrounding topography, and where they are visible from within this LCU, mostly appear well absorbed by the scale of the ridgelines and do not substantially obscure or interfere with views of the ridgelines, reducing the impact on this visually vulnerable feature (see VPs 1, 3, and 7). Therefore, this LCU will experience a 'Slight' landscape effect.

The assessments, detailed in full, in Appendix 13-2 determined that the Proposed Development is only likely to induce 'Moderate', 'Slight' or 'Not Significant' effects on the landscape character of the LCUs assessed within the LVIA Study Area.

13.7.3.2 Discussion of Cumulative Landscape Effects

Cumulative landscape effects will occur within the basin of open upland landscape where the Proposed Development is sited adjacent to several existing, permitted and proposed wind farms. The Proposed Development will be separate from these other developments, but it will be an addition to a landscape that already comprises many wind turbines. In a general sense this is a large, open, remote and expansive landscape type with relatively simple landcover, making it an acceptable area to absorb and accommodate many wind farms. A description of the cumulative visual interactions between the proposed turbines and other cumulative projects from visual receptors to the south and east is included in the photomontage assessment tables - *Appendix 13-3*. As alluded to in the following text, most cumulative landscape effects are contained within the Landscape Character Units comprising this upland basin, as the prominent ridgelines surrounding it screen and contain both the Proposed Development and other wind farm developments within one visual unit.

Landscape Character Units – Cumulative Landscape Effects

After identifying the cumulative baseline and cumulative status for each LCU it was assessed to what extent the addition of the Proposed Development changes the status of the individual LCUs against a Do-Nothing Scenario (see Appendix 13-2). It was found that only in the LCU within which the majority of the Proposed Development is located (LCU E - North Mayo Mountain Moorland) does the cumulative landscape status change. In this case the Proposed Development will change the status from '2. Landscape Character Area with occasional wind turbines in it and/or intervisible in another landscape character area/s' to '3. Landscape character area with wind turbines.' However, it is noted that the topography surrounding the site provides screening of the proposed turbines from much of the LCU. The ZTV and on-site appraisals conducted indicated that visibility is primarily limited to within 5 km of the proposed turbines, with the remainder of this large LCU having no theoretical visibility. This area in close proximity to the Proposed Development is also remote therefore has few receptors. It is noted further in relation to cumulative effects in a Proposed Scenario that the proposed Glenora wind farm development is also located within this LCU, which, in the absence of the proposed Sheskin South wind farm development, would mean that the baseline status of this LCU would be '3. Landscape character area with wind turbines'. Both the proposed Sheskin South and Glenora developments are substantially screened from large areas within this LCU by the topography surrounding these sites. Therefore, the cumulative effects of both in a Proposed scenario will not change the landscape status of this beyond '3. Landscape character area with wind turbines.'

The cumulative landscape status of LCU F – North Mayo Inland Bog Basin remains unchanged despite the addition of the proposed turbines, as there are already a large number of existing and permitted wind farms within this LCU (Do-Nothing Scenario). It is noted here that the addition of the proposed

Sheskin South turbines would not change the cumulative landscape status given that there are large areas of the LCU to the south where there are no turbines.

Although the addition of the proposed Sheskin turbines does change the cumulative status of LCU E – North Mayo Mountain Moorland, it is noted that visibility of the proposed turbines within this LCU is actually quite limited as a result of the surrounding topography. There is no change to the cumulative status of the other LCUs located within the LVIA Study Area. Therefore, the cumulative landscape effects are considered are considered to be Not Significant.

13.7.3.3 Visual Effects

13.7.3.3.1 *Selection of Photomontage Viewpoints*

An assessment of the visual effects arising as a result of the Proposed Development was undertaken using photomontages from 13 no. viewpoint locations. The locations chosen for photomontages follow a detailed and extensive process including review of baseline information, site visits and high-quality photo taking at multiple locations within the LVIA Study Area. Many other locations, which based on a desktop review had the potential for views of the site, had complete intervening screening or were screened to such an extent that the development of photomontages was not considered useful in terms of the assessment process i.e. little or no visibility towards the Proposed Development. These 13 no. viewpoint locations are shown previously in Figure 13-15 as well as the A0 Map – *Appendix 13-4 LVIA Baseline Map*.

13.7.3.3.2 *Summary of Viewpoint Assessment*

An assessment of the visual effects of the proposed turbines was undertaken from the 13 viewpoint locations identified in Section 13.5.3 above using the assessment methodology described in Appendix 13-1. The locations of these viewpoints are shown in Figure 13-15 above. The individual assessments from the 13 viewpoints are presented in Appendix 13-3 and summarised in Table 13-16 below. Appendix 13-3 and Table 13-16 should be read in conjunction with the photomontage booklet forming Volume 2 of the EIAR.

Several additional viewpoint locations were visited during the field survey for which early-stage photomontages were generated (stitched photos with photowires). These photomontage viewpoints were not selected for inclusion in the final Volume 2 photomontage booklet due to their poor visibility or absence of prominent visual receptors. These early-stage photomontages do not form part of the assessment of visual effects (Appendix 13-3), however, several of these early-stage photomontages are presented and discussed in text to illustrate certain points later in this section of the report and their locations are marked as red icons on Figure 13-15 above.

The visual effect of the Proposed Development was assessed from each viewpoint in terms of the sensitivity of the visual receptors, along with the magnitude of change, as recommended in the GLVIA3 (2013) guidelines. This, in conjunction with a detailed review of the photomontages themselves as well as the likely visibility of the Proposed Development within the LVIA Study Area informed the assessment of visual effects.

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

Key reasons enabling the Proposed Development to be effectively absorbed by the landscape of the site and surrounding area are outlined below and are evident in the photomontages:

- **The Proposed Development is located in an isolated area with limited number of residential dwelling and settlements located throughout the landscape area surrounding the site.**
  The sensitivity of the residential visual amenity in the area surrounding the Proposed Development is reduced by the lack of settlements and limited numbers of residential dwellings in close proximity to the site, and within the wider landscape area. This is particularly true of areas where there is likely to be most visibility of the Proposed Development, such as to the south and south-east, where the screening effect of the topography surrounding the site is reduced.

- **Strategic Siting – of the Proposed Development on the eastern slopes of Slieve Fyagh**
  The proposed Sheskin South development is sited on the lower regions of Slieve Fyagh, the crest of which is west of the proposed turbines. This provides substantial screening of the Proposed Development from areas within the LVIA Study Area to the west, south-west, and north-west, reducing visibility and mitigating visual effects in an extensive area.

- **Strategic Siting – of the proposed turbines in locations at a lower elevation (below 240m AOD) than adjacent ridgelines**
  To the west, as well as other topographical elements to the north-east, the Proposed Development is partially contained or 'framed' by the surrounding landform. The large-scale and simple landform of the elevated moorland landscape enables the Proposed Development to be effectively absorbed by the surrounding landscape.

- **The Proposed Development does not obstruct landscape views of the North Mayo coastline and does not fundamentally impact scenic amenity attributed to the coast.**
  Many valuable scenic views and scenic routes located in the LVIA Study Area are predominantly attributed to the coastal sector of the region, providing significant amenity for recreation and tourism. The proposed Sheskin South turbines will not substantially impact any sensitive scenic amenities attributed to the coast.

Table 13-16: Viewpoint Assessment Summary

VP No	Description	Grid Ref.	Approx. distance & direction to nearest turbine	Visual Sensitivity of Receptor(s) (at viewpoint)	Magnitude of Change	Residual Significance of Visual Effect
1	View from the R314 Regional Road in the townland of Muingerroon South, approximately 10.4 km west of the nearest proposed turbine. This viewpoint is located on a designated scenic route.	E 483,869 N 831,616	10.4 km W	**High**	**Slight**	**Slight**
2	View from a local road, on the Wild Atlantic Way tourist route, in the townland of Tullaghanduff. The viewpoints is located approximately 17.9km south-west of the nearest proposed turbine on a Co. Mayo designated scenic route.	E 475,893 N 816,577	17.9 km SW	**High**	**Slight**	**Moderate**
3	View from a local road at Carrowmore Lough in the townland of Rathmorgan, approximately 10 km west of the nearest proposed turbine. This viewpoint is located at a Co. Mayo designated scenic route with designated views.	E 483,019 N 828,340	10 km W	**High**	**Moderate**	**Moderate**
4	View from Nephin Drive local road in the townland of Fiddaunnageeroge, approximately 15.5 km south-east of the nearest proposed turbine. This viewpoint is located on a Co. Mayo designated scenic route.	E 500,700 N 810,363	15.5 km SE	**High**	**Moderate**	**Moderate**
5	View from a local road, just off the N59 National Road, Wild Atlantic Way tourist route and a Co. Mayo designated scenic route, in the townland of Srahgraddy, approximately 6.2 km south-west of the nearest proposed turbine.	E 486,277 N 822,638	6.2 km SW	**Medium**	**Slight**	**Slight**
6	View from the R313 Regional Road within Belmullet village in the townland of Belmullet. The viewpoint is located approximately 22.7 km	E 470,777 N 832,168	22.7 km NE	**High**	**Negligible**	**Not Significant**

VP No	Description	Grid Ref.	Approx. distance & direction to nearest turbine	Visual Sensitivity of Receptor(s) (at viewpoint)	Magnitude of Change	Residual Significance of Visual Effect
	west of the nearest proposed turbine, on a Co. Mayo designated scenic route with designated views.					
7	View from the R314 Regional Road in the townland of Gortleatilla, approximately 7.6 km north of the nearest proposed turbine.	E 495,185 N 835,978	7.6 km N	**Medium**	**Moderate**	**Slight**
8	View from the R314 Regional Road, which is also located on the Wild Atlantic Way, in the townland of Belderg More, approximately 12 km north-east of the nearest proposed turbine.	E 499,241 N 839,608	12 km NE	**High**	**Slight**	**Slight**
9	View from the R312 Regional Road, in the townland of Moneynierin. The Viewpoint is located on the 'Western Way' way marked walking trail. It is located approximately 6 km south-east of the nearest proposed turbine.	E 497,660 N 819,485	6 km SE	**Medium**	**Slight**	**Slight**
10	View from the R312 Regional Road and the Western Way way-marked walking route, in the townland of Derry Lower, approximately 8 km south-east of the nearest proposed turbine.	E 498,953 N 818,131	8 km SE	**Medium**	**Slight**	**Slight**
11	View from the N59 National Road and the Western Way way-marked walking trail, in the townland of Tawnaghmore, approximately 2.4 km south-east of the nearest proposed turbine.	E 493,827 N 821,583	14.8 km S	**Medium**	**Moderate**	**Moderate**
12	View from a local road in the townland of Cluddaun approximately 7.9 km north-east of the nearest proposed turbine.	E 502,381 N 830,337	7.9 km NE	**Low**	**Moderate**	**Slight**
13	View from the N59 National Road in the townland of Briska, approximately 3 km south-west of the nearest proposed turbine.	E 490,023 N 821,955	3 km SW	**Medium**	**Slight**	**Slight**

The assessment of visual effects determined the residual significance of the visual effects to range from 'Moderate to 'Not Significant', with the number of findings at each level of significance listed in Table 13-17 below.

Table 13-17: Summary of Viewpoint Impact Assessment Results

Significance of Residual Visual Effect	Description	No. of Viewpoints
Profound	An effect which, by its character, magnitude, duration or intensity significantly alters most of a sensitive aspect of the environment	0
Very significant	An effect which, by its character, magnitude, duration or intensity significantly alters most of a sensitive aspect of the environment	0
Significant	An effect, which by its character, magnitude, duration or intensity alters a sensitive aspect of the environment	0
Moderate	An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends	4
Slight	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities	8
Not Significant	An effect which causes noticeable changes in the character of the environment but without significant consequences.	1
Imperceptible	An effect capable of measurement but without significant consequences	0

The significance of the residual visual effect was not considered to be 'Profound', 'Very Significant' or 'Significant' at any of the 13 viewpoint locations. A residual effect of 'Moderate' was deemed to arise at 4 of the viewpoint locations. A residual visual effect of 'Slight' was deemed to arise at 8 of the 13 viewpoint locations. The only other viewpoint resulted in a 'Not Significant' residual visual effect.

The viewpoint assessment results (see Appendix 13-3) will be summarised and discussed in more detail in the following sections.

13.7.3.3.3 *Visual Effects on Visual Receptors*

Generally, overall visual effects are strongly guided by ZTV mapping (based purely on topography), which indicates vast areas of the LVIA Study Area where the Proposed Development will not be visible, as comprehensively discussed in Section 13.3. The following section discusses the visual effects arising at key sensitive visual receptors within the zone of theoretical visibility and screened in for assessment previously in Section 13.5 – *Visual Baseline.*

Designated Scenic Routes and Views

Map 10.2 of the MCDP was consulted to identify a total of 10 designated scenic routes and scenic routes with designated views within the LVIA Study Area. Six of these designated scenic routes were screened out for further assessment in Section 13.5 as the ZTV indicated there is no visibility and visibility during the site visit was difficult to establish due to screening by topography and vegetation. The remaining four scenic routes were brought forward for viewpoint assessment. In addition, one OSi Viewpoint was identified within the study area. This viewpoint (located at the Ceide Fields) was screened out as the ZTV indicated that there is no theoretical visibility, and the view is directed away from the Proposed Development.

Scenic Route: R314 from Ballanaboy to Barnatra. (Map Ref. SR 1)

This scenic route has primarily partial theoretical visibility, with a stretch of no theoretical visibility at the western end, close to the Barnatra junction. VP1 is located along this scenic route and shows an open and expansive view to the east towards Slieve Fyagh. The topography substantially screens the majority of the proposed turbines from view from this location, resulting in a reduced horizontal extent of the visible turbines than would otherwise be the case. As noted above in relation to the assessment of landscape effects on the Slieve Fyagh ridgeline, as the turbines are strategically sited at elevations below 240m AOD (see Section 13.3.1), it is unlikely that they will appear substantially (i.e. no more than blade tips of several turbines will be visible) above the ridgeline above the highest point along the ridgeline, providing a measure of scale to the turbines and protecting the character of the ridgeline as the defining feature within the skyline, a key feature of the surrounding landscape from the eastern end of this scenic route. Overall, as detailed in full in Appendix 13-3, a 'Slight' residual visual effect is deemed to arise.

Scenic Route: Local road from Gweesalia and around the peninsula. (Map Ref. SR 5)

This scenic route is partially located within the LVIA Study Area and there is full theoretical visibility indicated along a section of this part of the route. VP2 is located along this section and shows an open and expansive view of Tullaghan Bay and the undulating ridgeline formed by various peaks in north Mayo. The turbines are partially screened by the topography and at this distance appear as very small features in the background of the view. In addition, the turbines appear appropriately scaled and coherent within the scale of the landscape where they are viewed. The addition of the Proposed Development will be the largest wind farm within this view, although other wind turbines can be seen already. Overall, as detailed in full in Appendix 13-3, a 'Slight' residual visual effect is deemed to arise.

Scenic Route with Designated Views: Local road along the western shore of Carrowmore Lake. (Map Ref. SRDV 2)

This scenic route contains a mix of partial and full theoretical visibility. VP3 represents the most open views available along this scenic route and at the highly scenic view. The turbines are partially screened by the topography and at this distance appear as small features in the background of the view. The proposed turbines are framed within a saddle of lower ground between two elevated ridgelines to either side. In addition, the turbines appear well-absorbed and congruent with the undulating ridgeline, with the tips of the turbines following the curve of the topography. The under-constrcution Oweninny 2 development is also visible in the same viewshed as the Proposed Development and will be seen through the proposed turbines. Therefore, the addition of the proposed Sheskin South turbines will not add entirely novel elements into the view. Overall, as detailed in full in Appendix 13-3, a 'Moderate' residual visual effect is deemed to arise.

Scenic Route: Local road north-east from Bunaveela Lough to the R312 Regional Road. (Map Ref. SR 3)

VP23 is located along this designated scenic route, and shows an elevated view, overlooking the flat bogland plain located to the south-east of the Proposed Development, as well as the curving ridgeline surrounding this landscape. From this viewpoint the proposed Sheskin South turbines will be seen primarily behind the Oweninny 2 turbines. While the Proposed Development increases the density of turbines visible and extends the horizontal and vertical extent of turbines visible, it does not fundamentally alter any of the key sensitivities of the scenic views available from these locations. Overall, as detailed in full in Appendix 13-3, a 'Moderate' residual visual effect is deemed to arise.

Other Visual Receptors - Settlements

Of the 8 settlements identified in the LVIA Study Area, six were screened out in the 'Visual Receptor Preliminary Assessment', as the ZTV indicated that there was no theoretical visibility and/or no visibility of the Proposed Development could be established on site, or the settlements were located at such a substantial distance from the Proposed Development that Significant effects were deemed not likely to arise. Hence, viewpoints were selected for the remaining two settlements: Bangor-Erris and Glenamoy.

Bangor-Erris: There is mostly partial to no theoretical visibility indicated for the settlement of Bangor-Erris by the ZTV, site visits also confirmed that the proposed turbines will be substantially screened by the intervening topography, despite the settlement's proximity to the Proposed Development. Plate 13-19 below is taken from within Bangor-Erris and indicates the substantial additional screening from buildings and vegetation from various locations from within the village. VP5 is located in Bangor-Erris, near the Kiltane GAA Club, where a 'Slight' effect was deemed to arise. This viewpoint is located on the opposite side of the Owenmore River as the majority of the settlement, and so represents the most open views possible from within the village. The ZTV indicates that theoretical visibility in this area is only present to the south of most of the parts of the village. Given the large areas where no theoretical visibility exists, a 'Slight' effect is deemed to arise on the town of Bangor-Erris.

Plate 13-19 View from the N59 within Bangor-Erris showing the typical levels of screening provided by the built infrastructure and vegetation present throughout the village.

Glenamoy: There is partial theoretical visibility indicated for the village of Glenamoy, and site visits also confirmed that the proposed turbines will be substantially screened by the intervening topography. The photowire below in Plate 13-20 (Photowire B on Figure 13-15 above) was captured from the R314 regional road west of the main cluster of residential properties within the settlement. The proposed turbines are substantially screened from this location by the intervening ridgeline, with the two turbines seen above the ridgeline, although the scale of the Proposed Development within the view is small and there will be limited views of the turbines from within the village itself where additional screening from the buildings and other built infrastructure will provide additional screening. VP7 is representative of the scale that turbines are likely to appear in views from Glenamoy given its similar distance from the site and its similar orientation. Given the level of likely visibility from Glenamoy a 'Not Significant' residual visual effect is deemed to arise in relation to the Proposed Development.

Plate 13-20 Photowire B: View from the R314 regional road

Other Visual Receptors – Recreational Routes and Tourist Destinations

Of the 11 recreational and tourist destinations identified within the LVIA Study Area, seven were screened out in the 'Visual Receptor Preliminary Assessment', as the ZTV indicated that there was no theoretical visibility and/or no visibility of the Proposed Development could be established on site. Hence, viewpoints were selected for the remaining four recreational and tourist destinations and routes.

Wild Atlantic Way: The Wild Atlantic Way (WAW) runs through a large part of the western and northern parts of the LVIA Study Area. Theoretical visibility is mostly limited to partial visibility across much of the WAW to the west of the study area, represented by VPs 2, 5 and 6. There are also large stretches of this part of the route where there is no theoretical visibility indicated. VP2 is discussed above in relation to the visual effect on the part of the route around Gweesalia, which were deemed to be 'Slight' from that viewpoint. VP5 is discussed above in relation to the effects of the Proposed Development on the settlement of Bangor-Erris, which were deemed to be 'Slight'. The WAW also passes through Belmullet where VP6 is located. The photomontage assessment tables assessed this viewpoint as experiencing a 'Not Significant' effect, given the distance of the turbines from the viewpoint. Please see full descriptions of the extent of visibility and visual effects of the Proposed Development arising at these viewpoints within Appendix 13-3.

There are also views of the Proposed Development from the section of the WAW that passes through the northern part of the LVIA Study Area. To the north, there is full and partial theoretical visibility indicated along the stretch of the R314 that also forms part of the WAW. VPs 7 and 8 are located along this stretch of road. There is substantial screening of turbines from both of these locations due to the intervening topography. VPs 7 and 8 were deemed to experience 'Slight' effect, as detailed in full within Appendix 13-3. To the north-east of the Proposed Development, where the most sensitive visual receptors (e.g. Ceide fields) are located, there is no theoretical visibility indicated by the ZTV and a visibility appraisal conducted during a site visit determined it extremely unlikely that the Proposed Development will be visible from this area.

The Viewpoints discussed here offer mainly open views towards the Proposed Development which are not necessarily representative of views commonly experienced along the entire length of the route. For example, much of the route is located within areas where there is no theoretical visibility and even in areas where there is theoretical visibility indicated by the ZTV, other screening elements frequently interfere with views towards the Proposed Development. An example of this is shown in Plate 13-21 below, where the mature hedgerow adjoining the road screens views in this direction. Overall, in consideration of this review of the five viewpoints located along the WAW, there will be no significant effects arising on any section of the WAW as a result of the Proposed Development.

Plate 13-21 View in the townland of Pollboy showing screening elements along the WAW

Western Way: The Western Way runs through a large part of the LVIA Study Area, including adjacent to boundary of the Proposed Development Site itself, with a total length of approx. 57 km within the LVIA Study Area. There is mainly full theoretical visibility along most of the route within 10 km of the Proposed Development. As stated, the Western Way runs adjacent to the Proposed Development Site itself and within this section there is likely to be a substantial magnitude of change in terms of the visual effects given that there will be a change in character of the baseline in such close proximity to the visual receptor. Given that this is a recreational route and users will be using it in a recreational capacity, this will result in a 'Significant' effect on the section of the route within the Proposed Development Site. Further from the Proposed Development the visual effects on the walking route will lessen. VPs 9, 10, and 11 are located along the Western Way, to the south of the Proposed Development. Excepting VP11, all of the visual effects from these viewpoints were deemed 'Slight', and this is generally the case outside of sections of the route in close proximity to, or within, the Proposed Development Site. VP11 is deemed to experience a 'Moderate' effect, which is mostly due to the proximity of the viewpoint to the Proposed Development and the resulting scale of the turbines within view (See Appendix 13-3 for full details of these assessments).

The section of the route that is located within the Proposed Development Site goes through the commercial plantation forestry that covers most of the site. While this section does have recreational value, the aesthetic value and naturalness of this part of the route is reduced by human interference in the form of plantation forestry, that also heavily restricts views. This commercial forestry may be felled at some point in the future although it is likely that the site will remain fundamentally the same in terms of the character of the Proposed Development Site as a commercial forestry site. In addition, this section of the route already passes through the permitted ABO development, with the under-construction Oweninny 2 development also located nearby. It is noted that the Western Way also passes through the proposed Glenora development, which is located approx. 10km north further along the route and will contribute to the cumulative impact on the route, specifically with regards to additional sequential views of turbines now available along certain sections of the route. As noted, the under-construction Oweninny 2 and permitted ABO wind farms are also located along the Western Way, adjacent to the Proposed Development, and so the presence of turbines along the route is not a novel element, however, there will be additional turbines. Overall, taking into consideration all of the factors above, including the overall length of the route and the relatively small section adjacent to where the proposed Sheskin South turbines are located, the Proposed Development will have a 'Moderate' visual effect on the Western Way.

Moygownagh Loop Walk: The ZTV indicates that there is full to partial theoretical visibility along most of this route. The part of this route located closest to the Proposed Development is located within a heavily forested area, substantially screening views in the direction of the Proposed Development. This commercial forestry may be felled at some point in the future although it is likely that this part of the route will remain fundamentally the same in terms of the character of the route as partially within a commercial forestry site. VP4 is located at a similar distance and orientation as this recreational route, and the visual effects were deemed 'Moderate'. However, this viewpoint location is at a higher elevation than the Moygownagh Loop Walk with more open and expansive views of the flat bogland plain, within which the Proposed Development is located, available from this viewpoint as compared to the views available from the Moygownagh Loop. In addition, during the site visit a number of additional screening elements were noted such as the presence of commercial forestry on the northern side of the loop, which substantially screens views in the direction of the Proposed Development. Even if this forestry were felled it is considered that the scale of the turbines seen in the representative Photomontage from VP4 will not give rise to Significant visual effects on visual receptors at this location. Overall, there will be no Significant visual effects on the route as a result of the Proposed Development, with visibility largely constrained from the majority of the route by topography and screening from the forestry.

Belmullet Cycle Loops: These cycle loops occupy a large section of the north-west of the LVIA Study Area, with mostly partial or no theoretical visibility, although there are sections with full theoretical visibility indicated. VPs 3, 5, 7, and 8 are located along these routes, with VP6 deemed as experiencing a 'Not Significant' residual visual effect, and VPs 3, 7 and 8 deemed as experiencing 'Slight' effects (see Appendix 13-3 for full assessments of these viewpoints). The locations of these viewpoints are also those where there was limited screening in the direction of the Proposed Development. This will not always be the case along these routes and there will be screening elements such as mature roadside vegetation that will further decrease the visibility of the Proposed Development, an example of this is seen in Plate 13-22 below, where the tall roadside hedgerow screens views. The ZTV indicates that there is primarily no or partial theoretical visibility from along the Belmullet cycle loops, and views of the Proposed Development are substantially screened by the intervening ridgelines and landform. There will be no Significant effects on the route as a whole, or on any individual section of the routes.

Plate 13-22 View from the Belmullet Cycle Loop in the townland of Pollboy, showing screening from roadside vegetation

Other Visual Receptors – Major Transport Routes

Of the five major transport routes identified within the LVIA Study Area, one was screened out in the 'Visual Receptor Preliminary Assessment', as the ZTV indicated that there was no theoretical visibility and/or no visibility of the Proposed Development could be established on site. Hence, viewpoints were selected for the remaining four transport routes. All the viewpoints below are discussed in greater detail above and in the photomontage assessment tables contained in Appendix 13-3. The Route Screening Analysis undertaken above in Section 13.3.4 details the likely visibility of the roads surrounding the site, including smaller local roads, there are no Significant effects deemed likely to arise in relation to these transport routes.

N59 National Road: This is the main transport route in the LVIA Study Area, and a key transport route between Crossmolina and Bangor-Erris and the coastline beyond. There is full theoretical visibility indicated along most of the portion of this road within the eastern half of the LVIA Study Area, with partial visibility indicated along the stretch of the road that passes to the south of the Proposed Development. The section of the road to the south-west of the Proposed Development has no theoretical visibility indicated. VPs 5, 9, 11, and 13 are all located along this road. The highest visual effect rating in the photomontage assessment tables was at VP11, where a 'Moderate' effect was deemed to occur. However, this is mainly due to the sensitivity of the residential receptors located nearby and not the transport route. The other viewpoints located along the road (VP 5 and 13) were deemed to experience a 'Slight' effect. Overall, there will be open visibility of the Proposed Development from the stretch of the road to the east of the site, with the turbines primarily seen behind the Oweninny 2 development (see VP9 for example). The density of turbines seen from this orientation will increase as a result of the addition of the Proposed Development, however, in general the Proposed Development is not seen to substantially extend the horizontal or vertical extent of turbines within the wind farm landscape. From the south and west of the Proposed Development along the N59, views of the proposed Development are substantially screened by the intervening topography.

R314 Regional Road: the R314 traverses the northern half of the LVIA Study Area, with theoretical visibility indicated to the east and west of the proposed site. VPs 1, 7, and 8 are all located along this road with the highest visual effect arising from these being a 'Slight' effect. There are multiple patches of theoretical visibility along this road, with a stretch of no theoretical visibility to the north-west of the Proposed Development. Views from the eastern area of theoretical visibility are largely constrained by the intervening topography which substantially screens views of the Proposed Development from this stretch of the route (as evident in VPs 7 and 8). Views from the western patch of theoretical visibility are assessed in more detail above in relation to scenic route – SR 1, but it is noted that the turbines are primarily seen to the side of the ridgeline in Slieve Fyagh from this location, with turbines seen as appropriately scaled elements from all locations where visibility exists along this route.

R312 Regional Road: The R312 is located in the southern part of the LVIA Study Area, approx. 6 km from the nearest turbine at its closest point. There is mainly full theoretical visibility indicated by the ZTV within the LVIA Study Area. Viewpoints 22 and 26 are located along this road with the highest visual effect arising from these being a 'Slight' effect. On-site appraisals and photomontages determined that there are generally open views across the flat bogland plain towards the Proposed Development from this route, particularly as receptors travel along the route in a north-easterly direction along, directly towards the proposed turbines. The addition of the Proposed Development increases the density of turbines visible within the views available. However, it is noted that the turbines of the Proposed Development do not generally increase the horizontal or vertical extent of turbines visible within views from this road and are visually contained within the visual extent of turbines currently visible.

R313 Regional Road: The R313 is located to the west of the Proposed Development and runs in an east-west orientation. There is mostly partial theoretical visibility indicated by the ZTV. VPs 3 and 6 are both located along or close to this road, with the highest visual effect arising from these being a 'Moderate' effect. Although this is related to view of Carrowmore Lough in VP3, which is representative of views from the local road that runs along the shores of the Lough. While there will be partial visibility of the proposed turbines from the stretch of road close to this Viewpoint, there will be greater levels of topographical screening than seen in VP3 due to the positioning of the hill of Carrafull in relation to the Proposed Development from the locations further south and west than VP3. Theoretical visibility on this route decreases the further to east and closer to the Proposed Development that the route travels, and from locations beyond 15km there is no theoretical visibility indicated.

There will be no Significant visual effects on any of the transport routes assessed above. Cumulative visual effects arising in a journey scenario where multiple views of wind turbines will occur at different points for a visual receptor travelling along the N59 are addressed below.

Residential Visual Amenity

The Proposed Development is sited in a relatively isolated, remote upland landscape, consequently the proposed turbines are set back substantial distances from sensitive residential receptors. In this regard no significant visual effects are likely to occur on residential visual amenity. The largest cluster of residential properties within 5km of the Proposed Development is located approximately 1.7 km to the south-east, on the opposite side of an intervening ridgeline. This cluster of houses has a mixture of full, partial, and no theoretical visibility of the Proposed Development, indicating that the intervening ridgeline provides substantial screening of the Proposed Development, in addition to localised screening elements such as vegetation present around the houses themselves. VP11 shows a view from the N59 national road towards this cluster of houses, behind which the turbines of the Proposed Development are located. This view shows a more open view of the turbines than is available from these houses themselves, as the slopes upon which they are located begin to screen the Proposed Development from view more substantially closer towards the houses. In addition, it is noted that the landscape in the opposite direction to that shown in VP11 is open and expansive and forms the primary views for these residential properties. A 'Moderate' residual visual effect was deemed to arise at VP11, which incorporates the likely effects on residential visual amenity for the properties seen within this view.

Plate 13-23 View east from a local road proximate to the nearest residential receptor to the proposed turbines

The closest individual residential receptor is located 1.3km to the west of the nearest proposed turbine (T5), in the townland of Glencullen Upper (see Plate 13-23 above). It is noted that the commercial forestry within which the proposed turbines are located is not visible from these residential receptors as the forestry, and the proposed turbines, are physically separated by topography from this location, and while the closest turbine (T5) will be visible (along with other proposed turbines), the ZTV indicates that several turbines from the Proposed Development will be almost completely obscured from view. From locations further from the site along this small local road, there is a high level of screening provided at multiple locations from coniferous forestry (as shown in Figure 13-3 above). The 1.3 km set-back distance and the intervening topographical elements mean no Significant visual effects will arise.

It is further noted in relation to residential visual amenity that the turbines of the Proposed Development adhere to the required set-back distances from residential properties set out in the Wind Energy Development Guidelines (DoEHLG, 2006), and Draft Revised Wind Energy Development Guidelines (DoPHLG, 2019). In fact, the turbines are located over twice the required set-back distance

from the nearest residential property. There are no significant effects deemed likely to arise in relation to residential visual amenity as a result of the Proposed Development.

13.7.3.4 Discussion of Cumulative Visual Effects

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

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

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

Following this guidance, a primary focus is given to the cumulative effects likely to occur as a result of other wind turbines identified in the LVIA Study Area.

Cumulative visual effects were assessed as part of the Photomontage Assessment Tables found in Appendix 13-3. Whether a visual effect is deemed to be positive, negative or neutral, this involves a degree of subjectivity. What appears to be a positive effect to one viewer could be deemed to be a negative effect by another viewer. All predicted visual effects of the viewpoints below are Long Term and Direct effects.

There are eight other existing, permitted or proposed wind farms located within 20 km of the Proposed Development. The majority of these are located to the east and south-east of the Proposed Development, within a flat bogland plain containing a large number of wind turbines which generally appear in combination as one large wind farm from a number of orientations and locations. The proposed Sheskin South turbines appear similarly sited and designed as the adjacent developments (see VPs 4, 10, 11 and 12). The turbines from the Proposed Development and the adjacent developments (e.g. Oweninny 2, ABO, etc) generally appear from these viewpoint locations as a collective unit, which is acceptable in this open and expansive landscape character type (see Section 13.4.2 above). Plate 13-24 below demonstrates the wide expanse of turbines visible in the viewshed within which the proposed Sheskin South turbines will be seen (See also VP 12).

Plate 13-24 Viewpoint 12 - 180 degree wireframe - directed south towards the other existing, permitted, and proposed wind farms

Highly sensitive receptors to the west and north of the LVIA Study Area are unlikely to have substantial visibility of multiple wind farms and so significant cumulative effects are not anticipated, particularly along the coastline to the north (e.g. VP7, VP8). To the west and north of the Proposed Development there is substantial screening provided, in general, by the intervening ridgelines. As a result, from the west, the turbines located in the flat bogland plain adjacent to the Proposed Development (e.g. Oweninny 1, Oweninny 2, ABO, etc.) are rarely seen in the same viewshed as the proposed Sheskin South turbines (see VPs 5, 6, 7) and where they are seen, there is usually substantial screening provided by the topography (e.g. VPs 1, 2, 3). The N59 National Road is discussed below in relation to sequential visibility in a journey scenario along the route.

N59 National Road: VPs 9, 11, and 13 represent views from this route and cumulative effects are discussed in greater detail in the photomontage assessment tables in Appendix 13-3. From the locations to the east of the site (VP 9), the proposed Sheskin South turbines are seen in the same viewshed as a number of other wind energy projects and further, are seen behind a number of other wind farms increasing the density of turbines in view, but generally not increasing the horizontal or vertical extent of turbines visible. In addition, the proposed Sheskin South turbines are viewed to the rear of the closer turbines of Oweninny 2. From this location, the scale of the turbines in both the Proposed Development, and the consented ABO and Oweninny 2 developments are such that the developments combined read as a single wind farm with similarly sized turbines. There is some overlap of turbine components and visual stacking occurring at this viewpoint that is more noticeable given the proximity of the turbines from the viewpoint. In VP 11, located within 2.5 km of the nearest proposed turbines, the turbines increase the horizontal extent of turbines visible within the view. The proposed Sheskin South turbines will appear similar in terms of scale to the Oweninny 2 turbines, which are the closest turbines to the Proposed Development, and these two developments appear at a similar distance from the viewpoint. In general views from the east of the Proposed Development, the proposed turbines will be seen as background elements, behind other turbines (existing or permitted) and there will be additional cumulative effects arising as a result of the increased density of turbines within the view, however, as discussed in greater details within Appendix 13-3 there will be no significant cumulative impacts as result of the Proposed Development from these viewpoints.

Visibility of the Proposed Development occurs from locations along this route to the south-west of the site. It is noted that views of the proposed turbines increase the frequency of views of turbines from locations along the N59, with a greater number of views of turbines now available from locations to the west of the existing and permitted collection of wind farms (e.g. VP13) although there is substantial screening of the Proposed Development due to the topography from this stretch of the route. Overall, from the N59 National Road, the addition of the Proposed Development will cause some additional visibility of turbines where there was no visibility previously from locations to the west of the Proposed Development. In addition, there will be an increased density of turbines within views in the direction of the Proposed Development from locations along the road to the east of the site. Altogether, considering the summary of cumulative visibility outlined here, and the detailed assessment of cumulative visual effects conducted in Appendix 13-3, no significant cumulative visual effects are deemed to arise on the N59 as a result of the addition of the Proposed Development into the landscape.

In terms of general visibility throughout the parts of the LVIA Study Area where the proposed Sheskin South turbines will be seen in the same viewshed as other adjacent wind farms, with cumulative visibility tending towards views of the proposed Sheskin South turbines in combination with other turbines, as opposed to sequential views along routes (with the exception of the N59 as outlined above). It is relevant that the topography surrounding the Proposed Development Site is open and large scale, which increases the ability of the landscape within which the turbines are viewed to absorb the Proposed Development, further reducing the additional visual cumulative effects. For the landscape character type where the proposed turbines are located, Mountain Moorland, the character of the landscape as an expansive, wide-ranging landscape is accepting of cumulative effects, whether wind farms are seen as discrete elements, standing in relative isolation, or as collective units made up of two or more developments (see Section 13.4.3). The latter is the case with the proposed Sheskin South turbines when they are viewed from certain directions (south-east and east).

A comparative ZTV (Figure 13-17 above) shows that the additional cumulative visibility over that of the proposed, existing, and permitted turbines within the LVIA Study Area only increased in a small number of areas due to the addition of the Proposed Development. The main areas where there is additional visibility of turbines as a result of the Proposed Development are to the west and north of the Proposed Development. There are limited visual receptors in the additional areas indicated on the comparative ZTV map and where there are visual receptors (e.g. short sections of the R313 and R314 regional roads) the visual effects on these locations have been assessed (see VP 3, VP7 and VP8) in Appendix 13-3 with consideration given to cumulative impacts and no significant effects were found. Therefore, it is considered that the Proposed Development will not have a Significant effect on the extent of cumulative visibility within the LVIA Study Area.

The landscape character of the area within which the Proposed Development Site is located is one of a large scale which contains open, expansive views, and these assist in allowing the landscape to accommodate a large number of turbines, which a detailed visual assessment outlined here and in the photomontage assessment tables contained in Appendix 13-3 has covered in detail. Overall, it is considered that Long Term, Moderate Cumulative Visual Effect is deemed to arise.

13.7.3.5 Ancillary Project Elements including Grid Connection

For the purposes of this LVIA, a number of individual elements of the Proposed Development, ancillary to the proposed wind turbines, have been grouped together for the assessment of effects in the operational phase. These operational project elements include the proposed roads and turbine hardstand areas, anemometry masts and the electricity substation compound (and ancillary elements thereto) may all give rise to potentially similar landscape and visual effects. Details of these components of the Proposed Development are contained in Chapter 4 of this EIAR. Due to the topography of the Proposed Development Site and surrounding areas, in addition, the coniferous forestry present on site the lower ancillary project elements will be visible only in their immediate surroundings, hence, any visual effects will be localised and predominantly confined to within the Proposed Development Site.

Proposed Substation: The proposed substation site is located within forestry, adjacent to the south-eastern boundary of the wind farm development site, adjacent to an existing forestry road which runs north to south along the eastern boundary of the site. Access to the substation will be off the existing road. The footprint of the proposed onsite electricity substation compound measures approximately 21,500m^2 and will include a wind farm control building and the electrical components necessary to consolidate the electrical energy generated by each wind turbine and export that electricity from the wind farm to the national grid. The proposed substation is surrounded by commercial forestry which will screen any potential long-ranging views of the substation, limiting any landscape and visual effects to the localised area around the substation and the adjacent forestry road. Any landscape and visual effects are likely to be highly localised, Negative, Long-Term and will be of 'Slight' significance.

Site Access Roads and Hardstand Areas: The proposed access roads and hardstand areas are flat features. Consequently, they will be most visible within their immediate surroundings, therefore any landscape and visual effects will be very localised. Every use will be made of the existing forestry access tracks on site. 7.8km of existing tracks will be upgraded appropriately whilst 14.2km of new internal roads will need to be constructed. The impact of these flat and hard surfaces will be very localised. The landscape and visual effects arising from the access roads and hardstand areas are considered to be highly localised, Negative, Long-Term and will be of 'Slight' significance.

Meteorological (Met) Mast: One met mast is proposed as a part of the Proposed Development. This will be a slender structure, 125 metres in height, and in itself will not be an imposing structure in terms of visual impact. The landscape and visual effects of the proposed mast will be localised, considering that it will be significantly less visible than any turbine given its shorter and slender lattice form and will fade from view at a distance of anything more than a few kilometres (approx. 5km) where it will have little to no impact. This area within 5km of the Proposed Development site is notably lacking in visual receptors and consequently no Significant visual effects are deemed to arise in this area, considering the appearance of the Met Mast within a number of the Photomontages produced (e.g. VP12, VP2, VP9). Within the site and its immediate landscape setting, the landscape and visual effects arising from the met mast is considered to be of 'Slight' significance.

Peat and Spoil Placement Areas: It is proposed to store any excess peat and spoil generated through construction activities around turbines bases. These placement areas will reach a maximum height of 1m of peat placed around the turbine hardstands. The placement of peat will have a localised landscape and visual impact as a result of changing landcover from coniferous forestry at present to stored peat resulting from construction activities. The impact of these placement areas will be very localised. The landscape and visual effects arising from the peat and spoil placement areas are considered to be highly localised, Negative, Long-Term and will be of 'Slight' significance.

Proposed Grid Connection: This underground cable connection will originate at the proposed onsite substation located at the south-eastern boundary of the site, adjacent to an existing forestry road. The underground cable connection will run southwards from the substation along the existing forestry road before meeting the L-52926 local road in the townland of Tawnaghmore. The proposed grid connection cabling route will continue south along the L-52926 local road before turning east onto the N59, passing through the townlands Killsallagh and Bellacorick before turning north into the 110kV Bellacorick substation in townland of Bellacorick. The grid connection cabling route is approximately 6.9 kilometres in length.

As the proposed Grid Connection is located underground, landscape and visual effects of the proposed Grid Connection during the operational phase will be negligible. The landscape and visual effects occurring during the construction phase of the proposed underground Grid Connection are reported previously in Section 13.7.2.3. In general, the proposed ancillary infrastructure elements (discussed above) will cause landscape effects of 'Moderate' significance where the physical fabric of the landscape has been fundamentally altered, however, these landscape effects are very localised. The landscape character of the site will undergo a moderate degree of change, and long-term landscape effects of 'Slight' Significance will occur. As these ancillary features of the Proposed Development will remain largely unseen from outside the site, effects on the wider landscape setting will be 'Not Significant'. Visual effects arising from the proposed ancillary project elements will be 'Slight', localised and Long-Term where seen, but will remain largely unseen from outside the development site.

13.7.4 Decommissioning Phase Effects

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

The important element of decommissioning from a landscape and visual impacts perspective is the dismantling and removal of the wind turbines. This will occur for a limited period of time and will predominantly involve cranes adjacent the turbines during the dismantling process. Once dismantled, turbine foundations would remain in place underground and will be covered with earth and reseeded as appropriate (See Chapter 4 of this EIAR). Removal of the turbines and ancillary infrastructure from the site will result in a Short-term, Slight, Negative visual effect. A Decommissioning Plan is included as Appendix 4-7 to this EIAR.

13.8 Conclusion

The sensitive visual and landscape receptors with visibility of the Proposed Development were assessed based on site visits and using multiple tools and methods including the production of verified photomontages that follows best practice guidance for LVIA (see Appendix 13-1 for an overview of the methodology employed). Other tools such as ZTV mapping and Route Screening Assessment have also been employed to determine the likely potential and actual visibility of the proposal. No significant landscape or visual effects were recorded as a result of the proposed Sheskin South development.

The Proposed Development is located within an area that is surrounded to the north and west by topographical features that provide substantial levels of screening in these directions. The siting of the proposed turbines at locations at a lower elevation than these features substantially reduces the visibility of the turbines from vast geographical areas to the west and north. As a result, the visibility of the Proposed Development in these directions is mainly limited to partial or no visibility, excepting areas in the immediate vicinity of the site that are on the same sides of the hills that surround the proposed turbines, although there are extremely limited numbers of receptors at these locations. ZTV mapping and on-site surveys found that visibility of the Proposed Development is predominantly concentrated to the east and south-east of the Proposed Development Site, where flatter topography permits longer-ranging views. The ZTV map presented in Figure 13-1 illustrates the topographical screening described here.

The landscape area within which the Proposed Development is located is remote, with limited numbers of residential receptors and settlements. As a result, most locations where there are both sensitive receptors and open visibility of the majority of the turbines in the Proposed Development, tend not to be located in close proximity, reducing the spatial extent and size of the turbines from sensitive locations where they are likely to be viewed from.

In terms of construction and operational phase landscape effects relating to designated landscape receptors (Landscape Policy Areas and Vulnerable Features – see Section 13.7.3.1.1 and Section 13.7.3.1.2), there were no significant landscape effects deemed to arise as a result of the Proposed Development and it was determined that the addition of the Proposed Development is consistent with the sustainable development of these areas and achieves the balance sought between the policies outlined in The Landscape Appraisal for County Mayo. As discussed in greater detail above, the Proposed Development will not fundamentally alter any of the key sensitivities of these LPAs, including any key scenic amenity attributable to the coastline or elsewhere.

In relation to Vulnerable Features, the Slieve Fyagh ridgeline, Carrowmore Lough, and the Owenmore river were assessed in order to determine whether the Proposed Development (Operational, Construction and Decommissioning Phase) would *"impinge in any significant way upon its character, integrity or uniformity when viewed from the surroundings"* (*Section 3.1(b)* of the Landscape Appraisal for County Mayo). For the Slieve Fyagh ridgeline, the turbines will be viewed primarily below the highest points on this ridgeline from locations to the west and north (where there are more undisturbed views of this ridgeline than from the south and east), given their strategic siting at elevation lower than 240m AOD, resulting in a coherent layout in relation to the ridgeline. This provides a measure of scale to the turbines and protecting the character of the ridgeline as the defining feature within the skyline. There will be views of the turbines above the ridgeline from locations to the south-east, although it is noted that the large number of existing turbines in this area results in pre-existing interference with the ridgeline in any case, with some additional interference resulting from the addition of the Proposed Development but with limited changes to the existing baseline.

For the Owenmore River, a number of photomontage viewpoints were assessed from locations in close proximity to the riverbanks. Overall, the turbines will appear as background elements from many of the locations where it is visible from the river. The character of views in the direction of the Proposed Development from the riverbanks themselves are already subject to high levels of wind energy development, and given the distance of the Proposed Development from the closest points along the river (approximately 1.8km from the nearest turbine), it's addition to views of the river from its surroundings will not impinge in a significant way upon the character, integrity or uniformity of the river.

For Carrowmore Lough, there will be larger and more easily discernible views of turbines from the shores of the Lough. However, the proposed turbines are framed within a saddle of lower ground between two elevated ridgelines to either side and are effectively absorbed within the scale of the view. A residual visual effect of 'Moderate' was deemed to arise at the viewpoint (VP 3) located along the lakeshore. However, it is noted that the turbines are still located a substantial distance away and appear generally as small elements within the view, and there is substantial screening of the Proposed Development by the intervening topography. Given this separation distance from the Proposed Development, the scale of the landscape in view, and the screening provided by the topography, the setting of the lakeshore is not fundamentally altered as a result of the addition of the Proposed Development within the view.

In terms of landscape character, the Proposed Development Site itself is of low landscape value and sensitivity given its current landcover and land use of commercial plantation forestry. The majority of the site is partially located within an area designated within the County Mayo RES as having areas of *Tier 2 Open to Consideration*. Overall, taking into account its current land use and remoteness, the topographical features surrounding the site, and the policy contained within the RES, the landscape of the Proposed Development Site itself has a low sensitivity to wind energy development and no

significant landscape effects will arise as result of the Proposed Development (further detail above in Section 13.7.3.1.3).

In terms of the wider landscape character of the LVIA Study Area (15km study area for effects on landscape character – see Section 13.2.1), there will be no 'Significant' or higher landscape effects. One LCU will experience 'Moderate' landscape effects as a result of the Proposed Development. LCU E – North Mayo Mountain Moorland, in which the majority of the Proposed Development is located, will experience direct effects on landscape as a result of the Proposed Development. This is a large LCU (approx. 543km^2), and the footprint of the Proposed Development will only materially alter a small proportion of the landscape area, and so direct landscape effects are very localised. In addition, the Proposed Development will not be visible from the vast majority of this LCU, with visibility restricted to the localised area around the site and within 5 km of the Proposed Development Site. Therefore, the effects on its landscape character will be 'Moderate' (This is outlined in greater detail above in Section 13.7.3.1.4 and within Appendix 13-2).

The Proposed Development is also partially located within LCU F – North Mayo Inland Bog Basin. A 'Slight' effect on this LCU was deemed to arise as a result of the Proposed Development, given the existing levels of wind energy development within this LCU, and the overall character and sensitivity of the area. All other LCU's in the study area will experience a 'Slight' effect (see Appendix 13-2 for the full assessment of effects on landscape character).

In terms of cumulative landscape effects, only LCU E – North Mayo Mountain Moorland, where the majority of the Proposed Development is located, will experience a change in the cumulative status attributed to it, with a change in the status from '2. Landscape Character Area with occasional wind turbines in it and/or intervisible in another landscape character area/s' to '3. Landscape character area with wind turbines.' However, it is noted that the topography surrounding the site provides screening of the proposed turbines from much of the LCU. There is no change to the cumulative status of the other LCUs located within the LVIA Study Area. Therefore, significant cumulative effects on landscape character are not considered to arise.

The visual assessment concluded that residual visual effects of "Moderate" was deemed to arise at four of the 13 viewpoint locations. All other viewpoints were assessed as resulting in Slight (8) and Not Significant (1) residual visual effects. As demonstrated in the Photomontage booklet (Volume 2) and photomontage assessment tables (Appendix 13-3), the turbine locations, spacing, and heights have been appropriately selected for Sheskin South site, and design of the Proposed Development adheres to the guidance for the siting of wind farms in Mountain Moorland Landscape Types, as set out in The Wind Energy Development Guidelines for Planning Authorities (DoEHLG, 2006), & (DoPHLG, 2019). The siting ensures the wind farm will be viewed as appearing similarly sized and scaled in relation to nearby developments, and while it will increase the density of turbines within views, it is viewed behind other wind farms as a background element within views from the south-east and will not substantially increase the horizontal or vertical extent of turbines visible from this orientation and are visually contained within the visual extent of turbines currently visible, from the majority of viewing locations. In addition, the majority of the areas where there is visibility of the proposed turbines are the least sensitive locations within the LVIA Study Area, and where there are already a large number of permitted and existing wind farms visible. In particular, it is noted that the Proposed Development does not obstruct landscape views of the North Mayo coastline and does not substantially impact scenic amenity attributed to the coast.

10 no. designated scenic routes along with a number of other sensitive visual receptors were assessed as part of this visual assessment. There were no significant effects found to occur at visual receptors in the LVIA Study Area. From SRDV 2 and SR 3 a 'Moderate' residual visual effect was deemed to arise, with a residual visual effect of 'Slight' deemed to arise on SR 1 and SR 5. All other designated scenic routes were screened out from further assessment.

In terms of other sensitive visual receptors, such as recreational and tourist destinations, settlements, and transport routes, the visual effects were found to be 'Slight' or 'Not Significant' for the majority of these.

Viewpoint 14 – Srahgraddy, which is representative of the most-open views available from Bangor-Erris, the closest settlement to the Proposed Development, at a location within the town where people will be acting in a recreational capacity, was deemed to experience a 'Slight' residual visual effect.

The Western Way walking route, which passes through the Proposed Development itself will experience a 'Moderate' visual effect, including some cumulative effects as a result of the proposed Sheskin South, proposed Glenora and permitted ABO developments, among others nearby. There will be a substantial magnitude of change to the character of the section of the walking route that passes through the Proposed Development Site. Overall, however, considering the overall length of the route and the relatively small section where the proposed Sheskin South turbines are located, the Proposed Development will not cause significant visual effects on this route.

In relation to residential visual amenity, it is emphasised that the turbines are located over twice the required set-back distance from the nearest residential property, with topographical screening also mitigating any effects on residential visual amenity. There are no significant effects deemed likely to arise in relation to residential visual amenity as a result of the Proposed Development.

Cumulative visual effect are likely to arise given the addition of the Proposed Development within a landscape area where multiple other wind farms are located nearby. The proposed Sheskin South turbines will be seen in the same viewshed as other adjacent wind farms, with cumulative visibility tending towards views of the proposed Sheskin South turbines in combination with other turbines, as opposed to sequential views along routes (although these do occur along the N59, as detailed above). The addition of the Proposed Development increases the density of turbines visible within these typical combined views. It is relevant that the topography surrounding the Proposed Development Site is open and large scale, which increases the ability of the landscape within which the turbines are viewed to absorb the development, mitigating the additional visual cumulative effects. For the landscape character type where the proposed turbines are located, Mountain Moorland, the character of the landscape as an expansive, wide-ranging landscape is accepting of cumulative effects, whether wind farms are seen as discrete elements, standing in relative isolation, or as collective units made up of two or more developments (see Section 13.4.3). The latter is the case with the proposed Sheskin South turbines when they are viewed from certain directions (south-east and east).

A comparative ZTV (Figure 13-17 above) shows that the additional cumulative visibility over that of the proposed, existing, and permitted turbines within the LVIA Study Area only increased in a small number of areas due to the addition of the Proposed Development. There are limited visual receptors in the additional areas indicated on the comparative ZTV map and where there are visual receptors (e.g. short sections of the R313 and R314 regional roads) the visual effects on these locations have been assessed (see VP3, VP7 and VP8) above with consideration given to cumulative impacts and no significant effects were found. Therefore, it is considered that the Proposed Development will not have a Significant effect on the extent of cumulative visibility within the LVIA Study Area.

The landscape character of the area within which the Proposed Development Site is located is one of a large scale which contains open, expansive views, and these assist in allowing the landscape to accommodate a large number of turbines, which a detailed visual assessment outlined above (Section 13.7.3.4) and in the photomontage assessment tables contained in Appendix 13-3 has covered in detail. Overall, it is considered that the cumulative impact can be described as Long Term, Moderate Cumulative Visual Effect.

In conclusion, the Proposed Development is an appropriately designed and suitably scaled project, there are no Significant landscape or visual effects envisioned.