Chapter 5: Landscape and Visual Impact Assessment

Contents

5. Landscape and Visual Impact Assessment

5.1 Introduction

5.1.1 The following chapter provides a Landscape and Visual Impact Assessment (LVIA) for a new proposed wind farm at the Larbrax Moor Site. The Site is subject to a planning consent for a wind farm of 8 turbines at 100m to tip height, which was granted on appeal in October 2016 (Scottish Government Department of Planning and Environment Appeals (DPEA) planning reference PPA-170-2105).

5.1.2 This chapter presents the findings of the assessment of likely significant effects of the Proposed Development on:

- Landscape character and resources, including effects upon the physical elements, character and/or qualities of the landscape during construction and operation; and
- Visual amenity, including effects upon potential receptors (people) and viewing groups caused by change in the appearance of the landscape during construction and operation.

5.1.3 Landscape character and resources are considered to be of importance in their own right and are valued regardless of whether they are seen by people. Effects on views and visual amenity as perceived by people are clearly distinguished from, although closely linked to, effects on landscape character and resources. Landscape and visual assessments are therefore separate, although linked, processes. This chapter deals with landscape and visual effects separately, including an assessment of cumulative landscape and visual effects in each section.

5.1.4 The assessment methodology for the LVIA was developed in accordance with the Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3)[1], and is detailed in **Technical Appendix 5.1: LVIA and Visualisation Methodology**. The assessment was undertaken by chartered Landscape Architects at LUC – see **Technical Appendix 1.1: Statement of Expertise**.

5.1.5 The chapter should be read in conjunction with the following chapters:

- **Chapter 3: Site Selection and Design Strategy**;
- **Chapter 4: Development Description**;
- **Chapter 6: Cultural Heritage**; and
- **Chapter 7: Ecology**.

5.1.6 This chapter is supported by **Figures 5.1.1** to **5.1.11** in Volume 3a of the Environmental Impact Assessment (EIA) Report. **Figures 5.2.1** to **5.2.18** (which provide viewpoint visualisations) are included in Volumes 3b and 3c of the EIA report. All figures are referenced throughout the text where necessary.

5.1.7 The following appendices are also referred to throughout and support this chapter, and are found in Volume 4 of the EIA Report:

- **Technical Appendix 5.1: LVIA and Visualisation Methodology**; and
- **Technical Appendix 5.2: Residential Visual Amenity Assessment (RVAA)**.

5.1.8 This chapter is based on the description of the Proposed Development as set out in **Chapter 4**.

5.2 Assessment Methodology

5.2.1 The LVIA methodology was prepared in accordance with the principles contained within GLVIA3 and is described in detail in **Technical Appendix 5.1**, which should be referred to whilst reviewing the findings of this assessment.

5.2.2 The key steps in the methodology for assessing both landscape and visual effects are as follows:

- The area from which the Proposed Development may theoretically be visible is established through creation of a Zone of Theoretical Visibility (ZTV) map covering a distance of up to 40 km from the outermost wind turbines of the Proposed Development (see **Figure 5.1.2a-b** for blade tip ZTV and **Figure 5.1.3a-b** for hub height ZTV);

[1] Landscape Institute and the Institute of Environmental Management and Assessment (2013) Guidelines for Landscape and Visual Impact Assessment, 3rd Edition

- The landscape of the study area is analysed, and landscape receptors identified using a combination of the ZTV, desk-based research and observations made whilst undertaking field work;
- The visual baseline is recorded in terms of the places where people will be affected by views of the Proposed Development, and the nature of views and visual amenity, seen by different groups of people;
- Viewpoints are selected (including representative viewpoints, specific viewpoints and illustrative viewpoints);
- Likely effects (including cumulative effects) on landscape and visual resources are identified; and
- The significance of landscape and visual effects are judged with reference to the sensitivity of the resource/receptor (its susceptibility and value) and magnitude of effect (taking cognisance of the scale of effect, geographical extent and duration/reversibility).

Policy and Guidance

5.2.3 The LVIA was carried out in accordance with, and with reference to the information and principles contained in:

Policy

- Scottish Government (2023) National Planning Framework 4[2]; and
- Dumfries and Galloway Council (2019) Local Development Plan 2 (LDP2)[3].

Assessment Guidance

- The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017[4] – the EIA Regulations;
- Landscape Institute and the Institute of Environmental Management and Assessment (2013) Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3)[5];
- NatureScot (2021) Guidance - Assessing the cumulative landscape and visual impact of onshore wind energy developments[6];
- Scottish Natural Heritage (SNH) (2018) A Handbook on Environmental Impact Assessment, Appendix 2: Landscape and Visual Impact Assessment, Version 5[7];
- SNH (2017) Visual Representation of Wind Farms, Version 2.2[8];
- Landscape Institute (2019) Technical Guidance Note 06/19, Visual Representation of Development Proposals[9]; and
- Landscape Institute (2019) Technical Guidance Note 02/19, Residential Visual Amenity Assessment[10].

Design and Locational Guidance

- SNH (2017) Siting and Designing Wind Farms in the Landscape, Version 3[11];
- SNH (2015) Spatial Planning for Onshore Wind Turbines – Natural Heritage Considerations[12];
- SNH (2015) Constructed Tracks in the Scottish Uplands, 2nd Edition[13];

[2] The Scottish Government (2023) National Planning Framework 4
[3] Dumfries and Galloway Council (2019) Local Development Plan 2 (LDP2)
[4] The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017
[5] Landscape Institute and the Institute of Environmental Management and Assessment (2013) Guidelines for Landscape and Visual Impact Assessment, 3rd Edition
[6] NatureScot (2021) Guidance - Assessing the cumulative landscape and visual impact of onshore wind energy developments
[7] SNH (2018) A Handbook on Environmental Impact Assessment, Appendix 2: Landscape and Visual Impact Assessment, Version 5
[8] SNH (2017) Visual Representation of Wind Farms, Version 2.2
[9] Landscape Institute (2019) Technical Guidance Note 06/19, Visual Representation of Development Proposals
[10] Landscape Institute (2019) Technical Guidance Note 02/19, Residential Visual Amenity Assessment
[11] SNH (2017) Siting and Designing Wind Farms in the Landscape, Version 3
[12] SNH (2015) Spatial Planning for Onshore Wind Turbines – Natural Heritage Considerations
[13] SNH (2015) Constructed Tracks in the Scottish Uplands, 2nd Edition

- SNH (2019) Good Practice During Windfarm Construction, Version 3[14]; and
- NatureScot (2020) General pre-application and scoping advice for onshore wind farms[15]

Landscape Character, Landscape Capacity and Designated Landscapes

- SNH (2019) National Landscape Character Assessment[16];
- Dumfries and Galloway Council (DGC) (2020). Supplementary Guidance: Part 1 Wind Energy Development: Development Management Considerations Appendix 'C' Dumfries and Galloway Wind Farm Landscape Capacity Study[17];
- Council of Europe (2000) European Landscape Convention[18].

Consultation

5.2.4 The approach to undertaking the LVIA was set out in the EIA Scoping Report (September 2023). As noted in **Chapter 2: Approach to the EIA,** no Scoping Opinion was received from Dumfries and Galloway Council (DGC) for the Proposed Development. Notwithstanding, follow up consultation was undertaken with NatureScot and DGC on viewpoints and cumulative wind farms for inclusion in the assessment. **Table 5.1** provides details of this consultation, the responses received, and action taken.

Table 5.1: Consultation responses

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action Taken
Dumfries and Galloway Council and NatureScot Date: 7th Nov 2023	Post scoping viewpoint consultation	No response received	N/a
Dumfries and Galloway Council and NatureScot Date: 22nd May 2024	Post scoping cumulative consultation	No response received	N/a

Study Area

5.2.5 The study area for this assessment is defined as 40 km from the outermost turbines of the Proposed Development in all directions, as recommended in current guidance for turbines up to 150 m to blade tip, and as proposed in the EIA Scoping Report (2023). The Proposed Development is shown on **Figure 4.1**, and the LVIA study area is shown on **Figure 5.1.1**.

5.2.6 To assess cumulative effects of the Proposed Development in relation to other developments in the wider area, operational, consented and proposed wind farms within 40 km of the Proposed Development were considered (see **Figure 5.1.8**). Other wind farms within 40 km of the Proposed Development are shown on the wirelines in **Figures 5.2.1 to 5.2.18**. Cumulative ZTVs focus on wind farms within 20 km of the Proposed Development as this is where potential cumulative interactions (and likely significant effects) are most likely to occur (see **Figures 5.1.9 to 5.1.11**).

5.2.7 To assist with assessing theoretical visual effects of the Proposed Development, ZTV maps were produced to blade tip (149.9 m) and hub height (83.4 m) based on the proposed candidate turbine, illustrating where the proposed wind turbines may be visible from within the study area. The ZTV was based on bare earth topography and therefore does not take account of potential screening by vegetation or buildings. As a result, the ZTV shows worst-case visibility. The ZTV is used as a basis for understanding where significant visual effects may occur. Receptors located outside

[14] SNH (2019) Good Practice During Windfarm Construction, Version 3
[15] NatureScot (2020) General pre-application and scoping advice for onshore wind farms
[16] SNH (2019) National Landscape Character Assessment
[17] Dumfries and Galloway Council (2020). Supplementary Guidance: Part 1 Wind Energy Development: Development Management Considerations. Appendix 'C' Dumfries and Galloway Wind Farm Landscape Capacity Study
[18] Council of Europe (2000) European Landscape Convention

the ZTV will not be affected by views of the wind turbines within the Proposed Development and are not considered further in the assessment.

Desk Based Research and Data Sources

5.2.8 The following data sources have informed the assessment:

- NatureScot (2019 web-based resource) Scottish LCT Map and Descriptions;
- Ordnance Survey (OS) Maps at 1:50,00 and 1:25,00;
- OS Terrain® 5 mid-resolution height data (DTM) (5 m grid spacing, 2.5 m RMSE);
- Ordnance Survey 1:25,000 raster data;
- Ordnance Survey 1:50,000 raster data;
- Ordnance Survey 1:250,000 raster data;
- The Consented Larbrax Wind Farm ES (2015) – (consented at 8 turbines at 100m to tip height, refer to decision notice dated October 2016, PPA-170-2105); and
- Data from other wind farm applications for the cumulative assessment and DGC/Energy Consents Unit (ECU) planning portals.

Field Survey

5.2.9 Field survey work was carried out during several visits under differing weather conditions between summer 2023 and summer 2024, and records were made in the form of field notes and photographs. Field survey work included visits to the Site, viewpoints and designated landscapes, and extensive travel around the study area to consider likely effects on landscape character and on experiences of views seen from designated landscapes, settlements and routes.

Assessing Significance

5.2.10 The significance of the potential effects of the Proposed Development were determined by professional judgement and the consideration of the sensitivity of the receptor and the magnitude of the potential effect. A detailed methodology is presented in **Technical Appendix 5.1** and is summarised below.

Sensitivity

5.2.11 The sensitivity of the baseline conditions, including the importance of environmental features on or near to the Site or the sensitivity of potentially affected receptors, was assessed in line with best practice guidance, legislation, statutory designations and professional judgement.

5.2.12 Judgements regarding the sensitivity of landscape or visual receptors require consideration of both the susceptibility of the landscape or visual receptor to the type of development proposed, and the value attached to the landscape or visual resource. Judgements were recorded as high, medium, low or negligible. Detailed information about the approach to determining sensitivity is provided in **Technical Appendix 5.1**.

Magnitude

5.2.13 The magnitude of change was identified through consideration of the Proposed Development, the degree of change to baseline conditions predicted as a result of the Proposed Development and informed through knowledge of best practice guidance and legislation.

5.2.14 Judgements regarding the magnitude of landscape or visual change are recorded as high, medium, low or negligible and combine an assessment of the scale and geographical extent of the landscape or visual effect, its duration and reversibility. Detailed information about the approach to determining magnitude of change is provided in **Technical Appendix 5.1**.

Significance

5.2.15 Levels of significance were predicted by combining judgements on the sensitivity of the landscape or visual receptor and the magnitude of change.

5.2.16 **Technical Appendix 5.1** provides details of the criteria considered in judging the identified aspects of sensitivity (susceptibility and value) and magnitude of change (size/scale, geographical extent, duration, and reversibility), and the grades used to describe each.

5.2.17 Levels of effect are described as negligible, minor, moderate or major, where moderate and major effects are considered to be significant in the context of the EIA Regulations. In terms of the direction of effects (positive or adverse), there is a wide spectrum of opinion with regard to wind turbine development. To cover the worst-case scenario, effects are assumed to be adverse, unless stated otherwise.

5.2.18 This determination requires the application of professional judgement and experience to take on board the many different variables which need to be considered, and which are given different weight according to site-specific and location-specific considerations in every instance. As such, the application of a numerical or formal weighting system is not appropriate for landscape and visual assessment. Consideration of the relative importance of each aspect was made to feed into the overall decision. Judgements were made on a case-by-case basis, guided by the principles set out in **Diagram 1** in **Technical Appendix 5.1**.

Assessment Assumptions

5.2.19 The following assumptions have been made to inform the assessment:

- Trees/vegetation removal will be undertaken in accordance with the proposals set out in **Chapter 4** and **Technical Appendix 4.1: Larbrax Access Forestry Report**.
- Habitat enhancement proposals will be carried out in accordance with **Technical Appendix 7.5: Outline Biodiversity Enhancement and Management Plan**.
- The blade tip height proposed is <150 m therefore no visible aviation warning lighting is required under Article 222 of the Air Navigation Order (ANO) 2016[19].

Assessment Limitations

5.2.20 No substantial information gaps were identified during the preparation of baseline information or undertaking of the assessment. It is considered that there is sufficient information to enable an informed decision to be taken in relation to the identification and assessment of likely significant effects on landscape and views and visual amenity.

5.3 Existing Conditions

Landscape Baseline

5.3.1 This section provides an overview of the landscape baseline, including current landscape character, condition and any designated landscapes. It draws on published studies, supplemented with project specific research and field work where relevant.

The Site and Context

5.3.2 The Site is located approximately 9 km west of Stranraer and lies wholly within the DGC administrative area.

5.3.3 The Site is located within a relatively remote area in the north-west of the North Rhins Peninsula. The Site slopes gently from east to west towards the coast and is relatively low-lying. The eastern section of the Site lies inland and is mostly flat with some small hills. This part of the Site undulates gently and is characterised by a pattern of smooth hills and valleys. This part of the Site includes various high points such as Hind Hill on Galdenoch Moor of 82 m Above Ordnance Datum (AOD) as well as an unnamed hill of 83 m AOD on Larbrax Moor. The northern and southern parts of the Site are characterised by steeper slopes. The western part of the Site lies on the coast and is

[19] Air Navigation Order (ANO) 2016

characterised by sloping hills towards the coast with some steeper slopes present at Salt Pans Bay as well as steep cliffs of varying height.

5.3.4 Land cover within the Site primarily consists of improved pasture with some areas of boggy marshland, woodland planting and shelterbelts and some areas of exposed rock on the western part of the Site. Woodland coverage is limited to small and scattered plantations used as shelterbelts, and there is no commercial forestry present within the Site. Landcover in the wider area is similar to that within the Site and comprises grassland or farmland. The landscape has an open character consisting of improved pastures, bounded by walls or hedges, with few trees. Extensive areas of vegetation comprising broadleaf trees, rhododendron and scrub lie on the eastern boundary of the Proposed Development, as does the B738 road.

5.3.5 A number of minor watercourses and field ditches drain the Site, generally flowing west out to the North Channel. The Green Burn runs along the eastern boundary of the Site, eventually draining into the Galdenoch Burn to the north. The Galdenoch Burn flows along the northern boundary of the Site, eventually draining to the North Channel north of Port Beg. Some areas of standing water, including Loch More and Loch Beg, are present due to the relative flat topography of the Site.

5.3.6 Properties within the surrounding area are mainly single rural dwellings, farmhouses and holiday cottages which are scattered throughout the area. The closest properties to the Site include Greenburn and Meikle Galdenoch (north-east), Larbrax Lodge (east) and Larbrax Cottages and Meikle Larbrax (south). Within the wider area there are a number of small rural settlements including Portpatrick, approximately 8 km to the south and Leswalt, approximately 5.5 km to the east. Several camping, caravan and chalet sites are present in the wider surrounding area.

Landscape of the Study Area

5.3.7 The study area extends to a 40 km radius from the outermost turbines of the Proposed Development in all directions, as shown in **Figure 5.1.** The majority of the study area to the east and south of the Site is within the DGC local authority area. The north and north-east of the study area are within the South Ayrshire local authority area (approximately 13 km to the north-east of the Site). Much of the study area comprises the Rhins of Galloway peninsula. The south-western part of the study area extends into Northern Ireland, with the settlement of Larne located 40 km to the west of the nearest turbine. However, at this distance, effects from the Proposed Development would be negligible and therefore are not assessed.

5.3.8 The landscape character of the study area is largely defined by the peninsula that hosts the Site, comprising rocky and rugged coastal edges with a smoothly undulating farmland interior punctuated with some small forestry blocks. There are views to the sea in all directions creating a sense of an island landscape. To the east, as the study area extends beyond the peninsula the character quickly becomes that of rugged moorland and upland along the eastern edge of Loch Ryan. Extensive areas of improved grassland within 5 km of the Site indicate the managed nature of the agricultural character of the peninsula, with small commercial forestry operations reinforcing this characteristic.

5.3.9 In terms of settlement, the study area extends from an area of sparsely settled farmland, populated by single dwellings or small property clusters, and extends beyond the larger settlements to the east and south of Leswalt, Stranraer, and Portpatrick, all of which are indicated as having no theoretical visibility of the Proposed Development, as shown in **Figure 5.1.2a-b**.

5.3.10 The Southern Upland Way (SUW) runs through the southern part of the study area, between Portpatrick and Bargrennan (refer to **Figure 5.1.2b**). It is approximately 5 km to the south-east of the nearest turbine at its closest point. The Loch Ryan Coastal Path (which follows a similar route to the northern extents of the Mull of Galloway Trail) runs north-south through the eastern part of the study area, over 10 km to the east of the Proposed Development. The Rhins of Galloway Coastal Path follows the coastal edge of the Rhins Peninsula and passes along the western boundary of the Site. National Cycle Network Route 73 runs between Stranraer and Wigtown, beyond the eastern edge of the study area. There are a number of core paths within the study area, including within the Site. Within 5 km these include a coastal path, paths across Larbrax Moor and around Lochnaw Loch.

5.3.11 There are few commercial wind farms on the Rhins Peninsula. The closest operational wind farm is North Rhins (11 turbines, 100 m height to tip), approximately 6 km to the south-east. There are several smaller and domestic scale wind turbines within 5 km of the Site; these include Knocknain Farm (53.7 m height to tip) and Glenhead of Aldouran (46.5 m height to tip). There are also three small turbines (below 50m to tip height) at Meikle Galdenoch, to the immediate north of the Site, and two small turbines near Meikle Larbrax, to the south of the Site. These five small turbines will be decommissioned should the Proposed Development receive consent.

Landscape Character

5.3.12 The Site is located on the Rhins of Galloway, defined within the 'Landscapes of Scotland' as *"A long, narrow, low-lying peninsula, butting out defiantly into the Irish Sea. Nearly cut off from the mainland by Luce Bay and Loch Ryan, it has a strong island character. Cliffs populated by seabirds fringe the coast, notably at the exposed southern mull, which is like the Rhins in miniature attached only by a narrow line of land. The Mull of Galloway, with its Stevenson lighthouse, is an important navigational feature. Well-defined rolling drumlins are a distinctive feature of the landform, their curves emphasised by drystone walls enclosing the geometric fields of lush green cattle pasture. The towns of Portpatrick and Stranraer developed as ports for Ireland ferries and cattle transport. The few other settlements and estates also hug the coast, but there are many inland farms."*[20]

5.3.13 The landscape character of the Site and the study area is described in the Scottish Landscape Character Assessment, published by NatureScot in 2019. LCTs across the Study Area are shown in **Figure 5.1.4** and are shown overlaid with the blade tip height ZTV in **Figure 5.1.5**.

5.3.14 The LCTs within 20 km of the Proposed Development are listed in **Table 5.2:** below. The theoretical visibility of the Proposed Development (ZTV coverage) is used as a means of identifying which LCTs require further assessment, and which LCTs can be scoped out because they are unlikely to experience significant effects arising from the Proposed Development. Other factors such as the key characteristics of the LCTS and relationship with operational wind farms were considered when determining which LCTs to assess in further detail.

Table 5.2: Landscape Character Types within 20 km and Theoretical Visibility

Landscape Character Type within 20 km	Distance and Direction from nearest Turbine	Theoretical visibility of Proposed Development and other considerations to determine if LCT carried forward for detailed assessment
156 - Peninsula	Proposed Development within	**Host LCT. Considered in the assessment.**
158 – Coastal Flats Dumfries and Galloway	9 km to the east	The ZTV indicates theoretical visibility from the western extents of this unit. This is a flatter LCT, and buildings and areas of woodland/ forest will limit actual visibility. When visible, views towards Site will be quite fleeting and seen in the context of views which have been altered by wind farm development on the Rhins Peninsula. In this context, and due to viewing distance, landscape effects are unlikely to be significant. Not considered further.
172 – Upland Fringe Dumfries and Galloway	11 km to the north-east	The ZTV indicates more widespread visibility. Woodland along the valleys of watercourses which cut through the LCT unit, and buildings along the coastal edge, will slightly reduce actual visibility. When visible, the Site will be seen in the context of views which have been altered by wind farm development on the Rhins Peninsula. Due to the lower lying nature of the LCT unit, the landform of the intervening Rhins Peninsula will help to partially screen any wind farm development at the Site. In this context, and due to viewing distance, landscape effects are unlikely to be significant. Not considered further.
73 – Upland Glen Ayrshire	11 km to the north-east	Intermittent pattern of visibility from northern valley side. Woodland/ forest cover will limit actual visibility (more so from lower valley side). When visible, the Site will be seen in the context of views which have been altered by wind farm development on the Rhins Peninsula. In this context, and due to viewing distance, landscape effects are unlikely to be significant.

[20] https://www.nature.scot/landscapes-and-habitats/about-scotlands-landscapes/landscape-variety-scotland. Accessed on 27 June 2024.

Landscape Character Type within 20 km	Distance and Direction from nearest Turbine	Theoretical visibility of Proposed Development and other considerations to determine if LCT carried forward for detailed assessment
		Not considered further.
78 – Plateau Moorland Ayrshire	13 km to the north-east	Some areas of theoretical visibility. Forest cover will limit actual visibility. This LCT unit has been directly altered by wind farm development, through Glen App Wind Farm. In this context, and due to viewing distance, landscape effects are unlikely to be significant. Not considered further.
173 – Plateau Moorland, Dumfries and Galloway	12 km to the north-east	The ZTV indicates visibility, from the western fringes of the LCT unit. Actual visibility will be reduced by areas of forestry. This LCT unit has also been directly altered by wind farm development, further east. When visible, the Site will be seen in the context of views which have been altered by wind farm development on the Rhins Peninsula. In this context, and due to viewing distance, landscape effects are unlikely to be significant. Not considered further.
59 – Raised Beach Coast and Cliffs	13 km to the north-east	The ZTV indicates some limited visibility, from the southern extents of this unit to the west of Loch Ryan. When visible, the Site will be seen in the context of views which have been altered by wind farm development on the Rhins Peninsula. Sea based views, to the west and north-west, will also remain unaltered. In this context, and due to viewing distance, landscape effects are unlikely to be significant. Not considered further.
81 – Southern Uplands Ayrshire	14 km to the north-east	Limited and longer distance visibility, from southern extents of this unit. In this context landscape effects are unlikely to be significant. Not considered further.
64 – Coastal Farmland and Policies	17 km to the north-east	Limited and longer distance visibility, from southern extents of this unit. In this context landscape effects are unlikely to be significant. Not considered further.

Landscape Sensitivity

5.3.15 DGC's Local Development Plan 2 Supplementary Guidance: Wind Energy Development: Development Management Considerations (2020) as well as the earlier Wind Farm Landscape Capacity Study (2017) set out detailed policy considerations against which all proposals for wind energy will be assessed. It contains an onshore spatial framework, identifying areas of low, medium and high sensitivity to wind farm development. The entirety of the Site is within an area of high sensitivity for the turbine typology proposed (80-150 m to blade tip).

5.3.16 The Dumfries and Galloway Wind Farm Landscape Capacity Study identifies the Peninsula LCT (the 'host LCT') as being of high landscape sensitivity, with low capacity for very large turbines (100 m+ to tip height). The study outlines that the character area exhibits "*strong qualities of remoteness and naturalness associated with the northern, western and southern coasts*", and the existence of smaller wind turbines "*have resulted in cumulative impacts particularly where turbine designs vary*". The study outlines that within the character area "*care should be taken to attain a compatibility of size between existing and proposed turbines from key views. Turbines around 100 m high are more likely to be appropriate in terms of achieving compatibility of size with existing wind turbines within the North Rhins wind farm (located 7 km to the south-east) and avoiding dominating nearby smaller scale landscapes and the backdrop to Stranraer.*"

5.3.17 Although the host LCT is identified as having low capacity for very large turbines, it should also be acknowledged that the concept of landscapes having a fixed 'capacity' is increasingly questioned. Policy imperatives such as the declared climate emergency and NPF4 Policy 11 imply that greater levels of landscape change must be accepted. To this end, regarding onshore wind development, NatureScot state that "*wind energy studies should not be referred to as capacity studies, as no local or regional targets are available on which to determine the capacity for development*"[21]. However, the capacity studies do provide useful guidance and have been used as a basis for determining the underlying sensitivity of the landscape, which does not change with policy.

Designated Landscapes

5.3.18 Designated landscapes within the study area are shown on **Figure 5.1.6**. Theoretical visibility of the Proposed Development is shown on **Figure 5.1.7** and described below. As with LCTs, this is used as a means of identifying which nationally and locally designated landscapes require further assessment, and which are unlikely to be affected by the Proposed Development and therefore not considered further in the assessment.

Nationally Designated Landscapes

5.3.19 There are no nationally designated landscapes within the 40 km study area.

Locally Designated Landscapes

5.3.20 The Site is located within the Rhins Coast Regional Scenic Area (RSA). This is a local level landscape designation in Dumfries and Galloway. The Local Development Plan 2 Regional Scenic Areas Technical Paper (January 2018) provides a description for this area, as follows:

- "*This area comprises the attractive rocky coastlines of the Rhins Peninsula from the Wig in the north, round past the Mull of Galloway in the south, to Ardwell. It also includes the eastern shore of Loch Ryan from opposite the Wig northwards. It is based on the previous Rhins ARSS [Area of Regional Scenic Significance].*"
- *"The boundaries of the designated area were modified to reflect the visual envelope of the sea, and to include the whole of the narrow southern peninsula leading to the Mull of Galloway where the dominant presence of the sea creates a unique and special character. The locally distinctive policy landscapes around Lochnaw Castle were excluded as these and other policy landscapes elsewhere in the region are more appropriately protected under LDP policy HE6: Historic Gardens and Designed Landscapes."*
- *"The coast is characterised by steep cliffs of varying height, plus raised beaches and rocky foreshores, with small rocky and sandy bays connected by a ribbon of low lying land. It is relatively inaccessible, approached only at intervals by a network of narrow lanes which serve scattered farmsteads, plus occasional coastal villages connected by more major roads. There are several camping, caravanning and chalet sites, and the area is subject to a degree of interest in further tourist facilities. Inland the topography is gently undulating, with a pattern of smooth hills and valleys, and the landscape is an open one of improved pastures, bounded by walls or hedges, but with few trees. Views of the coast generally tend to be lost over near ground horizons within a kilometre or so from the shore, other than from the crests of hills. The exception is the narrow southern peninsula leading down to the Mull of Galloway, where the proximity of the two coasts means the sea is always evident*."

5.3.21 This chapter will consider the potential for direct effects on the Rhins Coast RSA, and how this may affect the overall integrity of the designation.

5.3.22 There are no other local level landscape designations within 20 km of the Proposed Development. Any effects on wider local level landscape designations will be indirect and over a long distance, and unlikely to alter the integrity of these landscapes.

Gardens and Designed Landscapes

5.3.23 Lochnaw Castle Garden and Designed Landscape (GDL00407) is located approximately 2.5 km to the north-east of the Proposed Development. The GDL is not publicly accessible and is privately owned. It is valued for its architecture and walled garden designed by the Scottish Landscape Architect John Hay[22]. The landscape is

[21] https://www.nature.scot/professional-advice/landscape/landscape-tools-and-techniques/landscape-sensitivity-studies
[22] https://portal.historicenvironment.scot/designation/GDL00407

described as dominating a '*natural geological basin'*, and being '*bounded in the north by the minor road (B7043 and Grachrie and Glenlochart woods; in the east by Clashnarroch and South Craighead woods; in the south by the policy woodland around Green Burn and Larbrax Lodge, and in the west by the minor road (B738)*'.

5.3.24 There is theoretical visibility of the Proposed Development from the GDL. However, due to the mature woodland cover to the west of the GDL, along with the confined nature of the walled garden, views towards the Proposed Development are largely screened.

5.3.25 All other GDLs are located beyond 10 km from the Proposed Development, so any effects will be indirect and over a longer distance. There is theoretical visibility from the two GDL to the east of Loch Ryan (Lochryan (GDL00266) and Castle Kennedy (GDL00093)), from the higher ground to the east of both (refer to **Figure 5.1.7**). From here, views towards the Proposed Development will be over a longer distance, with turbines seen behind enclosing horizons formed by the Rhins Peninsula. These horizons have been altered by operational wind farms due to North Rhins Wind Farm. In this context, significant visual effects are considered unlikely.

5.3.26 Visibility from other GDLs across the wider study area is very limited. As such, effects on recreational receptors in GDL across the study area is not considered further. Effects on the setting of GDL is considered in further detail in **Chapter 6: Cultural Heritage**.

Visual Baseline

5.3.27 This section identifies the extent of theoretical visibility of the Proposed Development and identifies visual receptors. This section also introduces the viewpoints that are used as representative points from which to assess effects on visual receptors (people) and particular views, including reasons for their selection.

Analysis of Visibility of the Proposed Development

5.3.28 **Figures 5.1.2a-b** and **5.1.3a-b** show the theoretical visibility of the Proposed Development to maximum blade tip height (149.9 m) and hub height (83.4 m) respectively. The ZTVs indicate that, across the study area, theoretical visibility of the Proposed Development is more widespread along the west of the Rhins of Galloway, as well as the western coast between Stranraer and Cairnryan.

5.3.29 Within 5 km of the outermost turbines, there is theoretical visibility of the four proposed turbines in all directions of the Site, with visibility towards the south becoming more intermittent at lower elevations. All four turbines are theoretically visible from the neighbouring property clusters at Galdenoch, High Auchneel, and Knockaldie. The ZTV also indicates widespread theoretical visibility along the Rhins of Galloway Coastal Path Trail and Southern Upland Way as it passes Black Head. To the south and south-east, theoretical visibility becomes more intermittent due to the undulating terrain. To the north-east theoretical visibility is widespread, including from Lochnaw Castle, and Glenhead of Aldouran, though with intervening vegetation actual visibility may be reduced.

5.3.30 Between 5 km and 10 km of the outermost turbines, there is theoretical visibility of up to four turbines to the north and north-east, with visibility becoming more intermittent and restricted to north-facing upland areas. Theoretical visibility is widespread across the north of the peninsula, including from North Cairn, Bair More Hill (98 m AOD), Ballscalloch and High Clachan. To the south theoretical visibility continues across north-facing slopes towards Blackhead and Broad Moor, where the North Rhins Wind Farm is located approximately 7 km to the south-east of the Proposed Development.

5.3.31 Between 10 km and 20 km, there is limited theoretical visibility within the centre of the Rhins, and no theoretical visibility from the larger population centres of Leswalt, Stranraer and Portpatrick. The eastern shores and adjacent west facing hill slopes near Cairnryan have widespread theoretical visibility of all four turbines, including from Cairn Hill (199 m AOD), Braid Fell (235 m AOD), Lamb Hill (239 m AOD) and the settlement of Cairnryan. Small upland areas to the south of the Site have theoretical visibility of the four turbines, including Craigoch Moor (108 m AOD), and Barmore Hill (142 m AOD).

5.3.32 Between 20 km and 40 km from the outermost turbines there is intermittent theoretical visibility of up to four turbines to the east, continuing from the west facing slopes that extend from Cairnryan, with views of up to two turbines possible from lower lying areas to the south-east including Castle Kennedy. To the south, areas of theoretical visibility reappear in the south of the Rhins, including from Inchmulloch Hill (121 m AOD), Cairn Fell (164 m AOD), and Inshanks Fell (164 m AOD), as well as sections of the rocky coast around Barncorkire Moor and Crammag Head.

Key Visual Receptors

5.3.33 Potential visual receptors include:

- Residents at their homes or in their communities, including views from isolated properties, scattered communities or defined settlements;
- Road users (including those travelling on recognised tourist routes);
- Those engaged in recreational activities (e.g. hill walkers and cyclists); and
- People at their place of work, including agricultural workers.

5.3.34 People at work are generally held to be of lower sensitivity to changes in their view and are not considered further in this LVIA.

Selection of Viewpoints for Assessment

5.3.35 This section sets out the viewpoints within the 40 km study area which were selected to represent and assess the visual effects of the Proposed Development. The viewpoint list is a representative selection of locations. As per **Table 5.1**, consultation was also undertaken with NatureScot and DGC to agree the assessment viewpoints, but no response was received. It should be noted that the viewpoints listed in **Table 5.3** is not an exhaustive list of locations from which the Proposed Development will be visible but is being used to determine the locations within the study area where significant effects may be more likely to occur. As such, it is beyond the scope of this assessment to determine every location within the study area where significant visual effects may occur.

5.3.36 A total of 17 LVIA assessment viewpoints were selected through desk study and site work. As set out in the EIA Scoping Report, this list was refined from the original list of 22 assessment viewpoints (considered as part of the Consented Larbrax Wind Farm LVIA within the 2015 ES) to focus on potentially significant visual effects. The original viewpoints not taken forward to the assessment of the Proposed Development are highlighted in grey. In total, 17 viewpoints have been assessed in this chapter for LVIA purposes. Viewpoint 7: Lochnaw Loch Shore has been assessed in the cultural heritage assessment (**Chapter 6: Cultural Heritage**) only. The viewpoints selected are all publicly accessible as advocated by GLVIA3[23] and include:

- Locations selected to represent the experience of different types of receptor;
- Locations at different distances to provide a representative range of viewing angles and distances (i.e. short, medium and long distance views);
- Locations which illustrate key cumulative interactions with other existing, consented and/or proposed wind farms (i.e. either in combined in success views[24]);
- Locations which represent a range of viewing experiences (i.e. static views and points along sequential routes);
- Specific viewpoints selected because they represent promoted views or viewpoints within the landscape; and
- Illustrative viewpoints chosen specifically to demonstrate a particular visual effect or specific issue (which could include restricted visibility in particular locations).

5.3.37 The viewpoints used to assess the visual effects are listed in **Table 5.3:** below and their locations are shown on **Figure 5.1.2** and **Figure 5.1.3**.

[23] The selection of viewpoints for LVIA should take account of the factors listed in Paragraph 6.20 of GLVIA3.
[24] Combined effects occur where the observer is able to see two or more developments from one viewpoint and successive views occur when the observer has to move to another viewpoint to see different developments.

Table 5.3: LVIA Viewpoints

No.	Name	Grid Reference	Approx. Distance (km)[25]	Reasons for Selection
1	Core Path, west of Meikle Galdenoch	196588E 563144N	0.6	The viewpoint represents users of a core path to the north of the Site and to the west of a property at Meikle Galdenoch. Included as full photomontage assessment viewpoint.
2	Core Path, Larbrax Moor	198091E 561442N	1.1	The viewpoint represents views experienced by recreational receptors and road users. Included as full photomontage assessment viewpoint.
3	Meikle Galdenoch, near Parking Area	197360E 563149N	1.2	The viewpoint represents views experienced by road users and nearby residential receptors. Included as full photomontage assessment viewpoint.
4	B738, near Lochlaw Cottage	198228E 561801N	1.8	The viewpoint represents views experienced by road users and nearby residential receptors. Included as full photomontage assessment viewpoint.
5	B738, near Meikle Galdernoch	198044E 563431N	1.7	The viewpoint represents views experienced by road users and nearby residential receptors. Included as full photomontage assessment viewpoint.
6	Agnew Monument	200834E 564617N	4.9	The viewpoint represents views experienced by recreational receptors. Included as full photomontage assessment viewpoint.
7	Lochnaw Loch Shore	199565E 563361N	3.2	Fieldwork in 2023 confirmed that dense roadside vegetation (rhododendron) has made access difficult and screens views towards the Site, from the eastern loch shore (including from the B7049). Intervening vegetation, to the west of the loch, also screens views of the proposed turbines. Lochnaw Castle offers self-catering accommodation and public access to the grounds is not promoted. Not considered further in the LVIA but has been included as a viewpoint, illustrated by a wireline only, to inform **Chapter 6**.
8	Slewdown Hill	198729E 564451N	3.1	The view represents views experienced by road users, from minor road which passes to the west of the summit. Included as full photomontage assessment viewpoint.

[25] Distance between viewpoint and the nearest wind turbine of the Proposed Development

No.	Name	Grid Reference	Approx. Distance (km)[25]	Reasons for Selection
9	High Aucheneel	197193E 565572N	3.0	The viewpoint represents views experienced by road users (on the B738 and when travelling south) and nearby residential receptors. Included as full photomontage assessment viewpoint.
10	Southern Upland Way, near Mulloch Hill	201350E 559055N	5.0	The viewpoint represents views experienced by recreational receptors on the Southern Upland Way, one of Scotland's Great Trails. Included as full photomontage assessment viewpoint.
11	Parking Area, near Killantringan Lighthouse	198245E 556742N	4.8	The viewpoint represents views experienced by road users (from minor road to south of the viewpoint) and recreational receptors. Included as full photomontage assessment viewpoint.
12	South Cairn	196890E 569230N	6.6	The viewpoint represents views experienced by road users from the minor road network to the east of the viewpoint. Included as full photomontage assessment viewpoint.
13	Marian Tower	199547E 568847N	7.0	The viewpoint represents views experienced by recreational receptors. Included as full photomontage assessment viewpoint.
14	High Ardwell	200526E 571037N	9.4	The viewpoint represents road users and nearby recreational receptors. Included as full photomontage assessment viewpoint.
15	Minor Road, west of North Point o' Spittal	202111E 552881N	10.0	The viewpoint represents views experienced by road users. Included as full photomontage assessment viewpoint.
16	Stranraer to Belfast Ferry	191948E 568780N	7.4	The viewpoint represents people travelling on the Stranraer (which leaves from Cairnryan) to Belfast ferry. Due to difficulties in taking photography on a moving vessel, only a wireline has been provided.
N/A	Cairnryan Picnic Site	206203E 569036N	11.3	Due to viewing distance (11.3 km) and intervening screening provided by landform, effects will fall below the threshold of significance. Not considered further.

No.	Name	Grid Reference	Approx. Distance (km)[25]	Reasons for Selection
17	Little Laight	206238E 570808N	12.9	Represents walkers on the Loch Ryan Coastal Path. Due to viewing distance effects are likely to fall below the threshold of significance. Included as a wireline only viewpoint.
18	Braid Fell	211201E 566459N	15.1	Represents walkers at the summit of Braid Fell. Due to viewing distance effects are likely to fall below the threshold of significance. Included as a wireline only viewpoint.
N/A	Chlenry Hill	215031E 558654N	18.1	Due to viewing distance (18.1 km) and intervening screening provided by landform, effects will fall below the threshold of significance. Not considered further.
N/A	Bennane Head	209322E 586516N	27.1	Due to viewing distance (27.1 km) effects will fall below threshold of significance. Not considered further.
N/A	Cairn Fell	210331E 536128N	29.0	Due to viewing distance (29 km) effects will fall below threshold of significance. Not considered further.

Settlements

5.3.38 Settlements (as defined in the DGC LDP2 (2019)) within 20 km of the Proposed Development are listed in **Table 5.4:** below. There are no settlements within 5 km of the nearest turbine. In order to focus on potentially significant visual effects, settlements from which there is no theoretical visibility are not considered further in this assessment (see ZTV in **Figure 5.1.2**). In addition, settlements with limited visibility over a longer distance, where views of the surrounding landscape (including the Site) are not important to the landscape context and / or where it is unlikely that significant effects could occur are not considered further in the assessment.

5.3.39 The closest settlements to the Site are Leswalt, approximately 5.5 km to the east of the nearest turbine, Portpatrick, approximately 7.5 km to the south, and Stranraer approximately 8.6 km to the east, however due to intervening landform potential visibility from these settlements is limited as set out below.

Table 5.4: Settlements within 20 km Scoped In/Out of the LVIA

Settlements within 20 km	Theoretical Visibility of the Proposed Development (ZTV Coverage)
Leswalt	Smaller settlement on the Rhins, located within 10 km to north-east of the Site. The ZTV indicates no theoretical visibility. Not considered further.
Stranraer	Larger settlement to south of Loch Ryan. The ZTV indicates no theoretical visibility. Not considered further.

Settlements within 20 km	Theoretical Visibility of the Proposed Development (ZTV Coverage)
Portpatrick	Smaller settlement on western coastline of Rhins, within 10 km to south-west of the Site. The ZTV indicates a very limited pattern of theoretical visibility. Not considered further.
Kirkcolm	Smaller settlement on eastern coastline of Rhins, within 10 km to north-east of the Site. The ZTV indicates a very limited pattern of theoretical visibility. Not considered further.

Routes

5.3.40 Visibility from a route is not uniform along its entire length. This is because views of the surrounding landscape change as one moves along the route depending on the direction of travel, surrounding topography, buildings, structures, tree cover and vegetation pattern alongside the route. Theoretical visibility of the Proposed Development from routes across the 40 km study area is illustrated in **Figure 5.1.2** and **Figure 5.1.3**. They include a hierarchy of roads, railways and recreational routes (promoted long distance footpaths, Core Paths and cycle routes). Road and rail routes tend to use low lying areas or valleys and passes, but walking routes are more variable and can pass over hills and along ridges.

5.3.41 Based on an analysis of theoretical visibility and potential views, **Table 5.5:** below provides information on which routes were carried forward for detailed assessment. Due to the lower susceptibility of receptors typically using roads and railways, those beyond 20 km from the Site are scoped out of the assessment. Promoted long-distance footpaths and cycle routes are included at up to 20 km from the Site. Where there is limited theoretical visibility, or where actual visibility from a route is likely to be limited due to localised screenings, these routes are not considered further in this LVIA, as the likelihood for significant sequential effects is limited.

Table 5.5: Routes within 20 km Scoped In/Out of LVIA

Route	Theoretical Visibility of the Proposed Development (ZTV Coverage)
Roads	
A77	ZTV indicates some theoretical visibility from route, along eastern shoreline of Loch Ryan (beyond 10 km distance). Views from this section of the route will be oblique in nature. When visible, the Site will be seen in the context of views which have been altered by wind farm development on the Rhins Peninsula. In this context, and due to viewing distance and nature of views, sequential effects are unlikely to be significant. Not considered further.
A718	Limited visibility from this route, which runs north of Stranraer on the eastern shoreline of the Rhins. Not considered further.
A75 (A751)	This route runs east from Stranraer. The ZTV indicates some visibility, within 10 to 20 km. Actual visibility will be reduced by woodland and buildings alongside the route. When visible, in more fleeting and direct views when travelling west, the Site will be seen in the context of views which have been altered by wind farm development on the Rhins Peninsula. In this context, and due to viewing distance and nature of views, sequential effects are unlikely to be significant. A railway line also follows a similar route to the A75, running east from Stranraer through the eastern extents of the LVIA Study Area, before turning north and travelling up through Glen Luce (where the valley land from will provide screening). Views from the section of the railway to the east of Stranraer will be similar in nature to the A75. Similar effects will be experienced from the A751, a short route which runs to the east of Stranraer and links into the A75. Views will also be more oblique in nature from this route.

Route	Theoretical Visibility of the Proposed Development (ZTV Coverage)
	Not considered further.
A716	This route runs south from Stranraer. The ZTV indicates very limited visibility. Not considered further.
Recreational Routes	
Southern Upland Way	Located within 4.7 km of the Proposed Development at its closest point. The ZTV indicates theoretical visibility from the earlier sections of this route as it travels north towards Black Head and Killantringan, and from separated sections further along the route, to the south-east of the Proposed Development. Views will be direct in nature along this earlier section of the route, in the middle distance (less than 5 km) and will be seen in combination with the operational Knocknain Farm turbine, which will appear distinctly smaller above the horizon. **Considered in the assessment.**
Rhins of Galloway Coastal Path	The Rhins of Galloway Coast path passes directly through (along the western edge) of the Site from north to south. The ZTV indicates theoretical visibility from much of the route from both north and south of the Proposed Development within a range of 3 km, with more intermittent visibility to the north and south within 7km. Views will be more direct in nature, when travelling either north or south towards the Site. There will be close proximity oblique views to the east of any wind farm development in the Site, when passing through the Site. **Considered in the assessment.**
Loch Ryan Coastal Path/ Mull of Galloway Trail	ZTV indicates some theoretical visibility from route, along the eastern shoreline of Loch Ryan (beyond 10 km distance). This section of the route follows a similar alignment to the northern extents of the Mull of Galloway Trail (the southern extents of this path, which follow the eastern coastline of the South Rhins, are outside of the ZTV). Views from this section of the Loch Ryan Coastal Path/ Mull of Galloway Trail will be oblique in nature. When visible, the Site will be seen in the context of views which have been altered by wind farm development on the Rhins Peninsula. In this context, and due to viewing distance and nature of views, sequential effects are unlikely to be significant. Not considered further.
Ayrshire Coastal Path	ZTV indicates some theoretical visibility from route, along lower slopes of Penderry Hill (beyond 10 km distance). When visible, the Site will be seen in the context of views which have been altered by wind farm development on the Rhins Peninsula. In this context, and due to viewing distance and nature of views, sequential effects are unlikely to be significant. Not considered further.
National Cycle Network Route 73	ZTV indicates very limited theoretical visibility from route, at a distance of over 10 km. Not considered further.
Core Paths (mapped within 5 km)	
Core Paths within 5 km are mapped on Figures 5.1.2 and 5.1.3.	A number of core paths are located within close proximity to the Site, including core paths LESW/413/1, LESW/413/2, LESW/361/3, and LESW/361/4 which pass directly through the Site. The ZTV indicates theoretical visibility from all of these close-proximity core paths, as well as clear visibility from sections of the core path network up to a distance of approximately 5 km to the north and south and 4 km to the east. Views will be experienced in a variety of aspects including from within the Site, and from further distances along upland areas and along the coastal edge to the west of the Rhins. From nearer views, the turbines will be a notable presence. From further distances turbines may be seen in combination with the operational Knocknain wind farm and Glenhead of Aldouran (when seen from the north-east). **Considered in the assessment.**

Properties

5.3.42 Views from residential properties within 2.5 km of the nearest wind turbines of the Proposed Development are assessed as part of the RVAA in **Technical Appendix 5.2**.

5.4 Other Wind Farm Development

Identification of Developments to be included in the Cumulative Assessment

5.4.1 The assessment of effects focuses on developments that are likely to give rise to significant cumulative effects and concentrates on the relationship between the Proposed Development and other operational, under construction, consented and proposed developments (i.e. developments with a valid application or awaiting determination following appeal/public inquiry). In this instance, the assessment focuses on schemes within 20 km of the Proposed Development because of the limited scope for significant cumulative effects beyond this distance, based on professional judgement. Other wind farms within 40 km are listed in **Table 5.6:** below and shown on the wirelines in **Figures 5.2.1** to **5.2.18** to illustrate the wider cumulative context.

5.4.2 Wind energy developments located within the 20 km radius study area, which are considered likely to give rise to significant cumulative effects, were selected as follows:

- a) Single wind turbines of ≥50 m blade tip height within a 5 km radius of the proposed outermost wind turbines; and
- b) Wind farms (e.g. clusters of 2 or more wind turbines) with wind turbines of ≥80 m blade tip height within a 20 km radius of the proposed outermost wind turbines.

5.4.3 Proposals at Scoping stage were not considered within the assessment as the lack of information available did not allow for a robust assessment.

5.4.4 A cut-off date of 28th May 2024 was applied for the inclusion of developments within the cumulative assessment. These developments are listed in **Table 5.6:**below and shown on **Figure 5.1.8**.

Table 5.6: Other Wind Farm Developments within 40 km

Distance (km)[26]	Name	Status	Blade Tip Height (m)	Number of Turbines
Operational / Under Construction				
2.0	Knocknain Farm	Operational	53.7	1
3.8	Glenhead of Aldouran	Operational	46.5[27]	1
7.0	North Rhins	Operational	100	11
16.1	Glenn App	Operational	126.5	11
22.0	Stranoch	Under Construction	175	20
25.9	Balmurrie Fell	Operational	79.5	7
26.0	Carscreugh	Operational	70	18
26.0	Glenchamber	Operational	126.5	11
26.1	Barlockhart Moor	Operational	115	4
26.4	Arecleoch	Operational	118.4	60
26.9	Artfield Fell	Operational	76	15

[26] Approximate distance between the centre point of the Proposed Development and the centre point of the wind energy development listed.
[27] As this scheme is just under the 50m tip height it has been included in the cumulative assessment.

Distance (km)[26]	Name	Status	Blade Tip Height (m)	Number of Turbines
27.9	Kilgallioch	Operational	146.5	96
30.9	Airies	Operational	137	14
36.9	Mark Hill	Operational	110	28
41.5	Assel Valley	Operational	110	11
Consented				
4.0	Glenhead of Aldouran Extension	Consented	46.5[28]	1
26.9	Barlockhart Moor Extension	Consented	115	4
27.2	Chirmorie	Consented	149.9	21
27.8	Artfield Forest	Consented	180	12
28.5	Kilgallioch Extension	Consented	180	9
29.0	Gass	Consented	126.5	9
29.2	Arecleoch Extension	Consented	200	13
Application Submitted				
16.0	Mid Moile	Application Submitted	230	15
24.1	Garvilland Farm	Application Submitted	149.5	5
39.90	Knockodhar	Application Submitted	200	16

Current and Future Baseline

5.4.5 There are a number of operational wind farms located across the study area, as listed in **Table 5.6:** and shown on **Figure 5.1.8**. Operational wind farms are part of the current baseline, and cumulative interactions with these wind farms are therefore considered as part of the primary assessment as described in the methodology (**Technical Appendix 5.1**).

5.4.6 In order to consider potential future cumulative effects, it is also necessary to assess the effects of the addition of the Proposed Development into a speculative future baseline. Given the varied status, and therefore certainty, associated with un-built wind farms across the study area, the LVIA also reports on two future baseline scenarios:

- a) Scenario 1: Higher level of certainty: the addition of the Proposed Development to a landscape with operational, under construction and consented wind farms; and
- b) Scenario 2: Lower level of certainty: the addition of the Proposed Development to a landscape with operational, under construction and consented wind farms, and wind farms with undetermined valid planning applications or at appeal (and noting that there are currently no appeal stage wind farms considered in the cumulative LVIA).

5.4.7 It should be noted that this baseline situation is constantly changing, and there may be changes to the wind energy developments listed in **Table 5.6**: between carrying out the assessment and the submission and determination of the application. Unless there are substantial changes to proposals that will materially alter the pattern of cumulative

[28] As this scheme is just under the 50m tip height it has been included in the cumulative assessment.

development (such as the addition of a large wind farm located within a 10 km radius of the Proposed Development), it is considered that the cumulative assessment undertaken will remain relevant, and it will be the responsibility of other applicants to consider the cumulative effects of any forthcoming scheme with the Proposed Development once in planning.

Approach to Cumulative Assessment – against primary and future baseline scenarios

5.4.8 The cumulative assessment focuses on describing the 'additional' cumulative change which may result from the introduction of the Proposed Development into a future and speculative cumulative baseline (i.e. in addition to other development which may or may not be present). The approach to cumulative assessment is presented in the methodology (**Technical Appendix 5.1**) and summarised below.

5.4.9 GLVIA3 makes reference to 'combined cumulative effects', i.e. an assessment which considers the effects if all current, past and future proposals are deemed present, including the Proposed Development. GLVIA3 (paragraph 7.13) acknowledges that "*assessing combined effects involving a range of different proposals at different stages in the planning process can be very complex*". Therefore, this type of cumulative effect is only described where it is considered likely to be a relevant consideration in the determination of the Proposed Development.

5.4.10 For each of the three baseline scenarios (primary assessment, Scenario 1, and Scenario 2) a separate assessment of effects is made. The approach does not assess the 'difference' between scenarios but treats each as a separate scenario. It is important to note that in practice only one situation will arise at any one time, so effects as set out should be interpreted as an either/or situation and should not be double counted.

Cumulative Wind Farm Pattern Observations

5.4.11 The following sections present general observations on the location, pattern and scale of existing and proposed wind energy development across the wider study area. It also provides some high-level commentary on how the Proposed Development relates to this pattern, and the potential for wider effects of landscape character and views.

5.4.12 Cumulative ZTVs for each scenario were prepared to show where ZTVs overlap and where cumulative effects may arise and are shown on **Figures 5.1.9** to **5.1.11**.

5.4.13 Although all wind farms across the 40 km Study Area are considered in the cumulative assessment, the assessment focuses on the relationship of the Proposed Development with the closest wind farms or groups of wind farms. For the cumulative assessment, these include:

- Knocknain Farm (single operational turbine) located approximately 2 km to the north. It will typically be seen in close-range to middle distance views, often in combination with the Proposed Development, particularly in views from the north-east of the Rhins Peninsula;
- Glenhead of Aldouran located approximately 3.8 km to the north-east. A single operational and further single consented turbine. These turbines will be seen in short to longer distance views, often in combination with the Proposed Development, from higher ground along the ridge to the north of the Rhins Peninsula, and higher ground to the north-east of the Rhins; and
- North Rhins Wind Farm located approximately 7 km to the south-east of the Proposed Development. Typically seen in combined views when looking south from the Rhins; sequential views from areas between the two wind farms on the Rhins; and in longer distance combined views, when looking west towards the Rhins Peninsula, more so from areas to the east of Loch Ryan.

5.4.14 Across the wider LVIA Study Area, the main focus of wind farms is in the Plateau Moorlands on the higher ground to the east of Loch Ryan. This includes the operational Glen App and application stage Mid Moile Wind Farms, within 20km of the Site, and further schemes beyond 20km to the east. Here there are a large number of larger operational wind farms. These wind farms tend to be seen in longer distance successive views, from higher ground on the Rhins Peninsula. Views of wind farms in this area will intensify, should all consented, and application stage schemes gain consent. This includes the application stage Mid Moile, which will bring wind farm development closer to Loch Ryan, should it be constructed.

5.5 Implications of Climate Change for Existing Conditions

5.5.1 **Chapter 12: Climate Change** provides details of the climate change projections over the potential operational lifespan of the project. In summary, the projections highlight that in the 2060s, summer and winter temperatures are

likely to be greater than the current baseline (greater for summer), with winter rainfall increasing and summer rainfall decreasing. The Landscape Institute's Position Statement on Climate Change acknowledges that changes in average temperatures, precipitation and extreme weather events will have an effect on the landscape. However, whilst a change in rainfall and rising temperatures are anticipated, it is not considered that this will appreciably change the baseline landscape conditions. Mitigation associated with reducing climate change is likely to be a more noticeable change in the landscape.

5.6 Future Baseline in the Absence of the Proposed Development

5.6.1 In the absence of the Proposed Development, it is likely that the land will continue under the same land use, and the character of the Site is unlikely to significantly change. However, the landscape and visual amenity of the study area is likely to be influenced by a number of 'forces for change', including further wind energy development in the surrounding context.

5.6.2 Forces for change are those factors affecting the evolution of the landscape and which may affect the perception of the study area in the near or distant future. Although prediction of these is necessarily speculative, those of particular relevance are discussed below.

5.6.3 Wind farm development is a clear force for change and is likely to continue, as discussed in the preceding sections on future baseline. **Figure 5.1.8** illustrates the location and extent of operational, consented and proposed wind farms within the study area. In addition, there are an increasing number of operational, consented and proposed domestic wind turbines of varying heights and rotor diameters, located within the surrounding landscape. As farmers and landowners diversify income and seek opportunities to generate energy for domestic and commercial use, interest in this type of development may continue.

5.6.4 Agriculture and forestry within the study area, including land management practices, pastoral grazing, arable farming and commercial forestry are likely to remain important land uses. Other land uses may include settlement expansion and reinforcements to the electricity grid.

5.7 Embedded Design Mitigation

5.7.1 Potential landscape and visual effects associated with the Proposed Development were a key consideration in the design evolution, to be balanced against onsite constraints and optimising wind yield. Landscape and visual objectives included:

- To seek to respond to the 'grain' of the landscape of the western Rhins Peninsula coastal edge, by having a north to south linear arrangement of turbines;
- To seek to consider the composition of the layout in key views, including key views looking along the coastal edge from Killantringan Lighthouse (see LVIA Viewpoint 11) and South Cairn (see LVIA Viewpoint 12);
- To propose a turbine of less than 150 m to blade tip height, to avoid the need for permanent aviation safety lighting, which would result in additional nighttime effects; and
- To seek to consider effects on residential visual amenity from nearby properties. Design development has sought to keep effects associated with the proposed turbines below the Residential Visual Amenity Threshold (refer to **Technical Appendix 5.2** for further details).

5.7.2 Further information on the design process is included in **Chapter 3**.

5.8 Good Practice Measures

5.8.1 Measures such as arrangements for vegetation and soil removal, storage and replacement and the restoration of disturbed areas after construction will be detailed in a Construction Environmental Management Plan (CEMP) produced following consent and prior to construction, which will also include reference to Construction Method Statements (CMS).

5.9 Enhancement

5.9.1 The following landscape mitigation and habitat enhancement measures are proposed (see **Technical Appendix 7.5** for further details):

- Rhododendron removal/ management; and
- Peatland restoration.

5.10 Micrositing

5.10.1 Micrositing of turbines (up to 100 m as specified in **Chapter 4**) is considered unlikely to result in substantial changes to the predicted landscape or visual effects, and therefore will not materially alter the findings of this assessment.

5.11 Scope of the Assessment

Effects Assessed in Full

5.11.1 The following potential effects were identified in the EIA Scoping Report (September 2023) for consideration in this assessment:

- Effects on the physical landscape of the Site, during construction and operation of the Proposed Development;
- Effects on the perceived landscape character of the Peninsula Landscape Character Type (LCT) during construction and operation;
- Effects on the key characteristics / special qualities of the Rhins Coast Regional Scenic Area (RSA) during construction and operation;
- Effects on visual receptors at representative viewpoints within the 40 km LVIA study area;
- Effects on visual receptors within settlements and travelling on major roads during operation (within 20 km);
- Effects on recreational receptors during operation e.g. those at recognised attractions including along the coastal edge and those on recognised walking routes including the Southern Upland Way (SUW) and Core Path network (within 20 km);
- Effects on residential visual amenity, In the form of a detailed Residential visual Amenity Assessment (RVAA), for residential properties within a 2.5 km radius of the turbines of the Proposed Development (see **Technical Appendix 5.2**); and
- Cumulative landscape and visual effects (including combined, successive and sequential visual effects).

Effects Scoped Out

5.11.2 On the basis of the desk based and field survey work undertaken, the professional judgement of the EIA team, experience from other relevant projects and policy guidance or standards, the following topic areas were 'scoped out' of detailed assessment, as proposed in the Scoping Report:

- Indirect effects on wider areas of non-host LCTs during construction and operation;
- Indirect effects on wider landscape designations during construction and operation;
- Effects on visual amenity during construction (including cumulatively) given its transient nature;
- Effects on visual receptors on routes (major A roads) and settlements (as defined in the Local Development Plan (LDP)) with limited theoretical visibility and where the potential for significant visual and sequential effects is limited; and
- Landscape and visual receptors in the cumulative LVIA, where the potential for significant cumulative landscape and visual effects is limited.

5.12 Assessment Effects

5.12.1 The assessment of effects is based on the project description as outlined in **Chapter 4,** and takes into account the embedded mitigation by design, good practice measures, enhancement measures and the assumptions noted above. As all mitigation for landscape and visual effects is embedded within the final design for the Proposed Development, all effects discussed in this section are effectively residual effects as no additional mitigation is proposed. Unless otherwise stated, all effects are considered to be adverse.

Construction Effects

Sources of Effects during Construction

5.12.2 During the estimated 12-month construction phase, there will be potential short-term landscape and visual effects arising from the presence of partially constructed infrastructure and the undertaking of construction activities on the Site. Effects occurring during the construction phase are reversible unless otherwise stated, as construction works will cease on completion. Some effects may be longer lasting e.g. felling of trees or creation of new landform such as turbine platforms or borrow pits which will remain as permanent features.

5.12.3 The change arising from the construction of the Proposed Development will be primarily associated with:

- The introduction of construction activity and vehicular/personnel movements around the Site and on local roads;
- Removal of trees/vegetation at the Site entrance to facilitate access;
- The potential need for lighting during construction if work extends into hours of darkness;
- Changes to the landform and disturbance to surface vegetation at borrow pit and substation locations, turbine bases, and along the access tracks;
- The excavation of trenches for cables adjacent to the Site tracks;
- The construction and use of the construction compound; and,
- The introduction of tall structures including turbines, and the use of cranes.

5.12.4 Most of the effects which will occur during the construction phase will be limited to the Site and the immediate surroundings from which construction activity may be perceptible. The main exception to this is the construction and erection of the proposed turbines. The landscape and visual effects arising from the presence of partially constructed turbines, and the cranes used to do this, will be comparable to operational effects (although arguably to a lesser degree as construction-related effects will be of a shorter duration and transient in nature).

Landscape Effects during Construction

5.12.5 Potential effects on the landscape character and resources of the Site are considered in **Table 5.7** below. Landscape effects during construction will be largely limited to the host LCT, as effects beyond the extents of the Site will be indirect and largely related to the construction of the partially erected turbines. As such, effects on the wider LCT are not considered to be any greater than operational effects, and therefore have not been assessed here.

Table 5.7: Construction Effects on the Site

The Site
Location and Baseline Description: The Site is located at Larbrax Moor, to the west of the B738 and east of Salt Pans Bay, on the west coast of the Rhins Peninsula. The topography of the Site consists of gently undulating landforms, with a high point of approximately 82 m AOD (Hind Hill). The terrain falls in elevation towards the coastal edge, to the west. The coastal edge consists of sea cliffs, approximately 20 m in height, with small sandy bays and shingle beaches further south. The landcover across the Site consists of a mosaic of moorland heath and rough pasture. There are a small number of coniferous shelterbelts to the north and south of the Site. In terms of hydrology, there are a number of small lochans, with small tributaries and field drains draining to the west, towards the coastal edge. The settlement pattern around the Site is low density. There is a small cluster of properties at Meikle Galdenoch, to the north-east and properties dispersed along the B738, to the east and south-east of the Site. The Site has a rural and exposed coastal character, with large scale seaward views to the west influencing character.
Sensitivity: Given the simple landform and landcover, and exposed coastal character, the susceptibility of the Site to development of the type proposed is judged to be medium. The Site is located within a locally designated landscape, indicating a higher landscape value. **The overall sensitivity is judged to be medium-high.**

The Site
Magnitude of Change and Significance of Landscape Effects: Construction activities will result in direct landscape effects on the Site. Changes primarily relate to: excavations and track construction; disturbance to land cover (farmland and moorland heath); the presence of tall cranes and partially built towers whilst turbines are being erected; and construction activity including the movement of construction vehicles and plant and the establishment and use of the construction compound. Site access will be taken via the B738 to the east of the Site. There will be some localised disturbance associated with tree/vegetation clearance and earthworks to provide suitable access to the Site. The scale of effect on the Site is therefore judged to be **large**. The geographic extent of these changes will be at the Site level and is therefore judged to be small. The construction works are expected to last approximately 12 months, so will be temporary and short-term. The level of reversibility will be varied, from fully reversible changes associated with ground disturbances (albeit that vegetation will take some time to recover) to irreversible changes associated with infrastructure that forms part of the operational scheme. **Given the large scale of effect, small geographical extent, short-term and reversible to irreversible nature of effects, overall, the magnitude of change is judged to be high. Taking account of the medium-high sensitivity, this will result in a Major (significant) landscape effect for the Site.**

Visual Effects during Construction

5.12.6 In terms of visual effects during the construction phase, beyond those experienced at the Site level where low-level construction activity will be apparent in certain views, these will largely relate to views of tall cranes (potentially with lights if present at night) and turbine construction experienced from the wider study area. These effects will be transient and change throughout the construction period as the wind turbines are gradually constructed in sections. As such, visual effects during the construction phase are unlikely to exceed the level of effect associated with operational visual effects and are not assessed separately.

Committed Additional Mitigation

5.12.7 No committed mitigation measures are proposed in addition to the embedded design measures, good practice measures and enhancement measures outlined above.

Residual Construction Effects

5.12.8 The assessment of effects above assumes all construction-related best practice measures are implemented, therefore the residual effects arising from construction will remain as identified in the section above.

5.12.9 From the limited areas where there will be direct impacts, the re-establishment of ground level vegetation will take approximately three to five years, depending on the vegetation and soils, and levels of effect will decline over this period.

5.12.10 There will be **no significant** landscape or visual effects associated with temporary ground disturbance after restoration works have been completed, and vegetation has regenerated. The effects of the permanent changes to landform are considered as operational effects.

Potential Operational Effects

5.12.11 The main likely effects of the operational Proposed Development on the landscape will be associated with the presence of the wind turbines and ancillary infrastructure including access tracks and substation, as shown on **Figure 4.1**.

Operational Effects on the Fabric of the Site

5.12.12 This section describes the operational effects resulting from the Proposed Development on the landscape fabric of the Site and the LCT which has been identified as requiring detailed consideration in **Table 5.2:**. Further information on key characteristics is provided in the tables below.

5.12.13 All operational effects are considered to be **long-term, reversible,** and **adverse** unless stated otherwise.

Table 5.8: Operational Effects on the Site

The Site
Location and Baseline Description: The Site is described in **Table 5.7:** above.
Sensitivity: **The overall sensitivity is judged to be medium-high.**
Magnitude of Change and Significance of Landscape Effects: Direct operational effects on the landscape will be introduced through the presence of four turbines (149.9 m to tip) and associated infrastructure, including access tracks and a substation, as well as the permanent changes associated with the borrow pit (although this will be partially reinstated after construction with surplus excavated material to provide a more aesthetic appearance and prevent any unstable and steep rock faces). Landscape mitigation and habitat enhancement including rhododendron removal/ management and peatland restoration will enhance the existing characteristics of the Site. The Site is quite open and exposed in nature, with a coastal farmland/ moorland character. The proposed turbines will form notable new features. At the operational phase there will be a large-scale change to the Site relating to the introduction of new features including turbines and associated infrastructure (including access tracks, hardstandings and a substation). This will change the character of the Site from an area of coastal farmland/moorland to an area of coastal farmland/moorland with a wind farm. The geographic extent of these changes will be at the Site level and is therefore judged to be small. **The overall magnitude of change will be large. Taking account of the medium-high sensitivity this will result in a Major (significant) landscape effect.**

Operational Effects on Landscape Character

5.12.14 LCTs within 40 km of the Proposed Development are illustrated on **Figure 5.1.5**, with theoretical visibility from those LCTs within 20 km illustrated on **Figure 5.1.6**. **Table 5.9:** below describes the potential effects on the Peninsula LCT resulting from the Proposed Development during the operational phase. Consideration is also given to the potential cumulative effects on the landscape, arising in conjunction with other existing, consented and/or proposed wind farms. Operational effects are considered long-term, reversible, and adverse unless otherwise stated.

Table 5.9: Operational Effects on LCT 156: Peninsula (host)

NatureScot (2019) LCT	LCT 156: Peninsula
Location and Baseline Description: The Site is located within the Peninsula LCT (156). There is a further unit of this LCT, to the east of Luce Bay and located beyond 20 km. Visibility from here is limited so the following assessment focuses on the LCT unit of the Rhins Peninsula. Key characteristics include: ■ *"Medium scale landscape rising from boggy hollows, to rolling pastureland, up to gorsey moorland.* ■ *Narrow intertidal range with abrupt end to inland land use.* ■ *Intimate sheltered bays with stony beaches or occasional narrow strips of exposed flat land, used for transport routes.* ■ *Medium scale field systems, enclosed by drystone dykes or hedgerows although Mull of Galloway has distinctive shore turf on flat land, no field boundaries and steep cliffs to the sea.* ■ *Few, but well developed, policy landscapes.* ■ *Numerous evenly spaced farmsteads, and few small settlements.* ■ *Old forts and castles defend rocky western coasts.* ■ *Early Christian settlement and abbeys.*	

NatureScot (2019) LCT	LCT 156: Peninsula
■ *Inland areas less influenced by the sea."* This LCT contains the operational North Rhins Wind Farm (11 turbines at 100 m to tip), plus a number of smaller scale domestic schemes within the more immediate landscape context of the Site (refer to **Figure 5.1.8**).	
Sensitivity: This LCT overlaps with the Rhins Peninsula LCT, as identified in the Dumfries and Galloway Wind Farm Landscape Capacity Study[29]. This study identifies this LCT as being of high landscape and visual sensitivity for larger turbines (80-150 m) and high-medium value. The study notes that "*there is some very limited scope for additional large turbines to be accommodated in this landscape as an extension to the operational North Rhins wind farm*." This study was published in 2017, and did not take account of the Consented Larbrax Wind Farm (eight turbines at 100 m to tip). **The overall sensitivity is judged to be high**.	
Magnitude of Change and Significance of Landscape Effects: The turbines of the Proposed Development will be located towards the north-western edge of the LCT. The Proposed Development will introduce turbines into the Site area and will have direct effects on the landscape character of the Site. This will include subtle changes to the gently undulating terrain and the characteristic landcover of coastal farmland/ moorland. The Site will change from an area of coastal farmland/moorland to an area of coastal farmland/moorland with a wind farm. The impacts on the Site are considered in more detail in **Table 5.8:** above. In terms of wider effects on landscape character, the ZTV (refer to **Figure 5.1.5**) indicates more widespread visibility across western parts of this LCT, extending approximately 7 km to the north and south of the Site. The central spine of the Rhins Peninsula will contain the effects on landscape character to the east, within approximately 4 km. Actual visibility will be reduced in places, by areas of forestry, shelterbelts and woodland, particularly to the east of the Site through mixed woodland associated with Lochnaw Castle GDL. Although it is recognised that the landscape is smaller scale and more complex in places, particularly along the coastal edge, the Proposed Development is in close proximity to the North Channel. Wider views of the Proposed Development will tend to be focused along the coast, or from more elevated slightly inland areas, which also reveal views of the sea. As such, the scale of the turbines in relation to the expansive sea views will reduce the perceived scale of the wind farm and associated effects on landscape character. Whilst it is recognised that the coastline is mostly undeveloped, it represents a working agricultural landscape, with farmed fields, plantations, houses and modern farm buildings, poles and overhead lines, as well as a number of smaller wind turbines which already exist in the landscape. The Proposed Development will be seen in this context. A large scale of change is predicted within approximately 4 km, to the north and south of the Site, reducing to medium within 7 km, and small beyond. Policy woodland to the east will closely contain effects on landscape character in this direction. **The magnitude of change will be large (within 4 km), medium (between 4 km and 7 km) and small beyond this. Taking account of the high sensitivity, this will result in a Major (significant) effect within approximately 4 km, to the north and south of the Site. This will reduce to Moderate (significant) within approximately 7 km and Minor (not significant) beyond.**	
Potential for Effects under Future Baseline Scenarios (Cumulative Assessment): Under scenario 1 the single consented turbine (Glenhead of Aldouran Extension) will slightly increase the influence of turbines on the central spine of the Rhins, approximately 4 km to the north-east of the Site. There are no application stage wind farms within the Peninsula LCT. This change will not substantially alter the baseline situation, in the Peninsula LCT. As such, landscape effects will reflect those as identified in the primary assessment – **Major (significant)** within approximately 4 km, to the north and south of the Site, reducing to **Moderate (significant)** within approximately 7 km and **Minor (not significant)** beyond.	

[29] Wind_Energy_Appendix_C_Landscape_June_2017.pdf (dumgal.gov.uk)

Operational Effects on Designated Landscapes

5.12.15 Designated landscapes within 40 km of the Proposed Development are illustrated on **Figure 5.1.6**, and theoretical visibility from those designations within 20 km is illustrated on **Figure 5.1.7**. **Table 5.10:** below describes the potential effects on the Rhins Coast RSA resulting from the Proposed Development during the operational phase. Consideration is also given to the potential cumulative effects on the landscape, arising in conjunction with other existing, consented and/or proposed wind farms. Operational effects are considered long-term, reversible, and adverse unless otherwise stated.

Table 5.10: Operational Effects on Rhins Coast RSA

Rhins Coast RSA
Location and Baseline Description The Rhins Coast RSA covers the northern, western and southern coastal edges and inland strip of the Rhins Peninsula, along with a small area to the east of Loch Ryan. The Site is located within the north-western area of the RSA. The Dumfries and Galloway Council Local Development Plan Technical Paper on Regional Scenic Areas, published in September 2014, provides a description of the RSA, as follows: *"The coast is characterised by steep cliffs of varying height, plus raised beaches and rocky foreshores, with small rocky and sandy bays connected by a ribbon of low lying land. It is relatively inaccessible, approached only at intervals by a network of narrow lanes which serve scattered farmsteads, plus occasional coastal villages connected by more major roads. There are several camping, caravanning and chalet sites, and the area is subject to a degree of interest in further tourist facilities. Inland the topography is gently undulating, with a pattern of smooth hills and valleys, and the landscape is an open one of improved pastures, bounded by walls or hedges, but with few trees. Views of the coast generally tend to be lost over near ground horizons within a kilometre or so from the shore, other than from the crests of hills. The exception is the narrow southern peninsula leading down to the Mull of Galloway, where the proximity of the two coasts means the sea is always evident."*
Changes There will be some localised and direct effects on the RSA at the Site level, relating to subtle changes to the gently undulating terrain and the characteristic landcover of coastal farmland/ moorland. The impacts on the Site are considered in more detail in **Table 5.8:** above. In terms of wider effects on the RSA, the ZTV (refer to **Figure 5.1.7**) indicates widespread visibility along the coastal edge of the RSA between Portobello, approximately 4 km to the north, and Knock Bay, approximately 4 km to the south. Within approximately 4 km to 7 km, to the north and south of the Site (and within the RSA boundary) the pattern of visibility becomes more intermittent. Beyond 7 km theoretical visibility from within the RSA is limited. The character of the RSA in the area of the Site is relatively indistinct, mainly comprising agricultural land, pasture, and moorland extending across a low lying gently rolling topography, with existing man-made infrastructure such as smaller scale turbines and farm buildings. The typical focus of views from the RSA is to the west, out to sea, as well as along the coastal edge, with views along the coast which include the Proposed Development being locally but not more widely affected (for example at Viewpoint 12 and 11). Wider access to the coastal edge is relatively limited, as recognised in the description for the RSA. However, this may change as path networks are developed as part of the proposed Rhins of Galloway Coastal Path project. Furthermore, the area of the Site appears to be less popular with recreational users than the southern part of the Rhins peninsula, with there being a lack of parking provision, a general lack of facilities, and little evidence of very frequent use of the Core Paths. The immediate coastal edge (bays, cliffs and interface with the sea), which is the area of greater interest in terms of its landscape qualities, is located below the Site, and will often be protected from the influence of the Proposed Development, because of the 'raised beach' topography. The 'step' up to the Site, which the former cliff line delineates, will help to screen the Proposed t from views at sea level.
Potential to affect qualities of designated landscape

Rhins Coast RSA
As recognised in the landscape assessment from the Peninsula LCT, there will be localised and significant effects on landscape character within approximately 7 km to the north and south of the Site, and within the RSA. Beyond this, effects will fall below the threshold of significance. These localised effects on landscape character are not judged to compromise the overall integrity of the RSA, for the reasons as set out above. Furthermore, and from large areas of this locally designated landscape, the qualities of the RSA will be able to be experienced unaltered.
Potential for Effects under Future Baseline Scenarios (Cumulative Assessment): Under both cumulative assessment scenarios there are no consented or proposed wind farms within the Rhins Coast RSA. A consented scheme (single turbine at Glenhead of Aldouran) on the central spine of the Rhins, and outside the RSA, will not notably change the baseline, when visible in views outside of the RSA. Distant views of further consented and proposed wind farms, seen on the plateau moorland to the east of Loch Ryan, will also be limited from the RSA. Effects will reflect those as identified in the primary assessment.

Operational Visual Effects

Predicted Operational Effects

5.12.16 The assessment of visual effects from the 17 viewpoints selected to represent views of the Proposed Development (as listed in **Table 5.3:** above and shown on **Figures 5.1.2 and 5.1.3**) are set out below. This assessment assumes that all effects are long-term, during the proposed 35-year operational lifespan of the Proposed Development, and reversible, unless stated otherwise. A summary of effects on visual receptors is provided at the end of the report in **Table 5.30:**.

5.12.17 Accompanying visualisations for each assessment viewpoint are contained in **Volumes 3b and 3c** of the EIA Report. The visualisations were prepared in accordance with the methodology set out in **Technical Appendix 5.1**.

Table 5.11: Viewpoint 1: Core Path, west of Meikle Galdenoch

Viewpoint 1: Core Path, west of Meikle Galdenoch			
Grid Reference (NGR)	196588, 563144	**Figure Number**	5.2.1
LCT	Peninsula LCT	**Designated Landscape**	Rhins Coast RSA
Direction of View	South	**Distance to nearest turbine (km)**	0.6
Number of hubs theoretically visible	4	**Number of turbines with blades theoretically visible**	4
Location, description of existing view and potential receptors: This viewpoint is representative of recreational receptors, travelling east and west along the Core Path network to the north of the Site. The following baseline description is from the 2015 LVIA[30]: *"Views from this location are mixed with extensive views out to sea to the west towards the North Channel, which include views of Northern Ireland on clear days. Views along the coastline are medium-scale and usually terminate at prominent headlands which end abruptly where the landform drops to the sea. Inland views are generally open and medium to small in scale as a result of the undulating topography and forestry which can be found on foreground ridgelines. From this location the single turbine at Knocknain can be experienced to the north-east where the blade tip would be visible above the foreground ridgeline. A number of small-scale domestic turbines can also be experienced from the location, in particular, around Meikle Galdenoch."* Fieldwork in 2023 confirmed this description remains valid.			

[30] Larbrax Wind Farm Landscape and Visual Impact Assessment 2015 - AECOM

Viewpoint 1: Core Path, west of Meikle Galdenoch
Sensitivity: Recreational receptors are considered to be of medium susceptibility. The viewpoint is within a designated landscape (Rhins Coast RSA) and on the Core Path network, indicating a high value. **On balance, taking account of the judgements of susceptibility and value, the overall sensitivity of this viewpoint is judged to be medium-high.**
Assessment of visual effects: Four turbines (hubs and blades) will be visible at a distance of approximately 0.6 km. The Proposed Development will read as a single coherent group of turbines, with no overlapping of turbines. The proposed turbines will be seen on the skyline above the gently undulating horizon, formed by the gently undulating moorland of Larbrax Moor and areas of forestry. The Proposed Development will be seen in successive views from smaller scale operational turbines, visible to the north. The three small scale turbines at Meikle Galdenoch, in views to the west, will be removed. The intervening undulating landform will screen the bases of the turbines and low-level ancillary features including tracks. The scale of change is judged to be large. The geographical extent is judged to be medium. This viewpoint is representative of closer proximity views from a section of the Core Path network (approximately 1 km in length) to the north of the Site. **The overall magnitude of change is judged to be high and taking account of the medium-high sensitivity will result in a Major (significant) visual effect.**
Potential for Effects under Future Baseline Scenarios (Cumulative Assessment): Under scenario 2 Mid Moile (application stage) will add distant views of turbines on the horizon in successive views to the north-east. This scheme will be seen in the context of distant views of the operational Glen App Wind Farm, on the plateau moorlands to the east of Loch Ryan. This will not notably change the theoretical future cumulative baseline scenario. Effects will reflect those as identified under the primary assessment (**Major and significant**).

Table 5.12: Viewpoint 2: Core Path, Larbrax Moor

Viewpoint 2: Core Path, Larbrax Moor			
Grid Reference (NGR)	198091, 561442	**Figure Number**	5.2.2
LCT	Peninsula LCT	**Designated Landscape**	On edge of Rhins Coast RSA
Direction of View	North-west	**Distance to nearest turbine (km)**	1.1
Number of hubs theoretically visible	4	**Number of turbines with blades theoretically visible**	4
Location, description of existing view and potential receptors: This viewpoint is representative of recreational receptors, travelling north-east and south-west along the Core Path network to the south of the Site. The Core Path links the B738 to the coast. The following baseline description is from the 2015 LVIA: *"Views from this route are limited as a result of the surrounding rounded hills and woodland found adjacent to the B738 road. This results in views being focussed on the immediate foreground farmland rather than on distant views. To the north lies the single operational turbine of Knocknain Farm… although this is just visible above the foreground ridgeline. To the south-east lies North Rhins Wind Farm which is largely screened behind existing trees along a ridgeline."* Fieldwork in 2023 confirmed this description remains valid. Visibility of the single operational turbine at Knocknain Farm will vary, as users move along the Core Path.			

Viewpoint 2: Core Path, Larbrax Moor
Sensitivity: Recreational receptors are considered to be of medium susceptibility. The viewpoint is on the edge of a designated landscape (Rhins Coast RSA) and on the Core Path network, indicating a high value. **On balance, taking account of the judgements of susceptibility and value, the overall sensitivity of this viewpoint is judged to be medium-high.**
Assessment of visual effects: Four turbines (hubs and blades) will be visible at a distance of approximately 1.1 km. The Proposed Development will read as a single coherent group of turbines, with no overlapping of turbines. The proposed turbines will be seen on the skyline above the gently undulating horizon, formed by the gently rising farmland in the foreground, and areas of forestry in Galdenoch/ Larbrax Moor. The Proposed Development will be seen in combined views with the single operational turbine at Knocknain Farm, when visible (and noting that this forms a very small feature in the view). The intervening undulating landform will screen the bases of the turbines and low-level ancillary features including the proposed substation and tracks. The scale of change is judged to be large. The geographical extent is judged to be medium. This viewpoint is representative of closer proximity views from a section of the Core Path network (approximately 1.5 km in length) to the south of the Site. **The overall magnitude of change is judged to be high and taking account of the medium-high sensitivity will result in a Major (significant) visual effect.**
Potential for Effects under Future Baseline Scenarios (Cumulative Assessment): Under both assessment scenarios there are no changes to the theoretical future cumulative baseline, from this viewpoint. Effects will reflect those as identified under the primary assessment (**Major and significant**).

Table 5.13: Viewpoint 3: Meikle Galdenoch, near Parking Area

Viewpoint 3: Meikle Galdenoch, near Parking Area			
Grid Reference (NGR)	197360, 563149	**Figure Number**	5.2.3
LCT	Peninsula LCT	**Designated Landscape**	On edge of Rhins Coast RSA
Direction of View	South-west	**Distance to nearest turbine (km)**	1.2
Number of hubs theoretically visible	4	**Number of turbines with blades theoretically visible**	4
Location, description of existing view and potential receptors: This view is representative of those experienced by residents, to the north-east of the Site. It is also representative of views experienced by recreational receptors, on the Core Path network to the east of the Site. The following baseline description is from the 2015 LVIA: *"Views experienced from this location tend to be limited as a result of the surrounding topography and trees, which are found adjacent to roads and as field boundary features. The receptors have a mixed orientation of view, though generally focussed on the foreground fields; the extent of these views is limited, due to the screening by the vegetation and topography."* Fieldwork in 2023 confirmed this description remains valid. The small turbines at Meikle Galdenoch are visible on the horizon in views to the west. The property at Greenburn is visible in the foreground to the south.			
Sensitivity: Residential receptors are considered to be of high susceptibility.			

Viewpoint 3: Meikle Galdenoch, near Parking Area
The viewpoint is on the edge of a designated landscape (Rhins Coast RSA) and on the Core Path network, indicating a high value. **On balance, taking account of the judgements of susceptibility and value, the overall sensitivity of this viewpoint is judged to be high.**
Assessment of visual effects: Four turbines (hubs and blades) will be theoretically visible at a distance of approximately 1.2 km. Views of the turbine to the far south of the layout (T1) will be screened by woodland and buildings in the foreground but will open up as you move south along the Core Path. The Proposed Development will read as a single coherent group of turbines, with no overlapping of turbines. The proposed turbines will be seen on the skyline above the undulating horizon formed by gently rounded hills and farmland/ areas of forestry on Galdenoch/ Larbrax Moor. The small scale turbines at Meikle Galdenoch, in views to the west, will be removed. The intervening undulating landform will screen the bases of the turbines and low-level ancillary features including tracks. The scale of change is judged to be large. The geographical extent is judged to be medium. This viewpoint is representative of closer proximity views from a section of the Core Path network (approximately 1 km in length) to the east of the Site. **The overall magnitude of change is judged to be high and taking account of the high sensitivity will result in a Major (significant) visual effect.**
Potential for Effects under Future Baseline Scenarios (Cumulative Assessment): Under both assessment scenarios there are no changes to the theoretical future cumulative baseline, from this viewpoint. Effects will reflect those as identified under the primary assessment (**Major and significant**).

Table 5.14: Viewpoint 4: B738, near Lochlaw Cottage

Viewpoint 4: B738, near Lochlaw Cottage			
Grid Reference (NGR)	198228, 561801	**Figure Number**	5.2.4
LCT	Peninsula	**Designated Landscape**	N/A
Direction of View	West	**Distance to nearest turbine (km)**	1.8
Number of hubs theoretically visible	4	**Number of turbines with blades theoretically visible**	4
Location, description of existing view and potential receptors: This view is representative of those experienced by residents, located along the B738 to the east of the Site. Similar (glimpsed and oblique) views will be experienced by road users travelling along this route. The following baseline description is from the 2015 LVIA: *"Views are mostly open, across the foreground pond; these views are framed by woodland located to the south-west and north-west. Within the view, an overhead wood pole transmission line is visible as a vertical feature within the landscape in conjunction with the three domestic scale turbines located at Meikle Galdenoch."* Fieldwork in 2023 confirmed this description remains valid. The tips of the single turbine at Knocknain Farm are also just apparent, above intervening vegetation in views to the north-west.			
Sensitivity: Residents are considered to be of high susceptibility. The viewpoint is not located within a designated or protected landscape, indicating a lower value. **On balance, taking account of the judgements of susceptibility and value, the overall sensitivity of this viewpoint is judged to be medium-high.**			
Assessment of visual effects:			

Viewpoint 4: B738, near Lochlaw Cottage
Four turbines (hubs and blades) will be theoretically visible at a distance of approximately 1.8 km. Intervening vegetation will provide partial screening, and the nature of views will change as road users move along the B738. The Proposed Development will read as a single coherent group of turbines, with no overlapping of turbines. The proposed turbines will be seen on the skyline above the middle distance undulating horizon formed by moorland/ forestry on Galdenoch/ Larbrax Moor. The small scale turbines at Meikle Galdenoch, in views to the west, will be removed. The intervening undulating landform will screen the bases of the turbines and low-level ancillary features including tracks. The scale of change is judged to be large. The geographical extent is judged to be small. This represents a more open view from a small property cluster and more fleeting views from the B738. **The overall magnitude of change is judged to be high and taking account of the medium-high sensitivity will result in a Major (significant) visual effect.**
Potential for Effects under Future Baseline Scenarios (Cumulative Assessment): Under both assessment scenarios there are no changes to the theoretical future cumulative baseline, from this viewpoint. Effects will reflect those as identified under the primary assessment (**Major and significant**).

Table 5.15: Viewpoint 5: B738, near Meikle Galdenoch

Viewpoint 5: B738, near Meikle Galdernoch			
Grid Reference (NGR)	198044, 563431	**Figure Number**	5.2.5
LCT	Peninsula LCT	**Designated Landscape**	N/A
Direction of View	South-west	**Distance to nearest turbine (km)**	1.7
Number of hubs theoretically visible	4	**Number of turbines with blades theoretically visible**	4
Location, description of existing view and potential receptors (taken from 2014 LVIA): This view is representative of those experienced by road users, travelling west along the B738 to the north-east of the Site. Views south-west for residents near this viewpoint will largely be screened by large outbuildings/ vegetation. The following baseline description is from the 2015 LVIA: *"The views are open over Galdenoch Moor, featuring successive ridgelines with coniferous plantations, leading to a rolling coastline and rounded hills, viewed in the middle distance. To the north-west, the woodland at Little Galdenoch provides some screening in an otherwise open landscape. The operational Knocknain Farm Wind Turbine lies to the north-west; however, this is largely screen by the woodland around Little Galdenoch. North Rhins Wind Farm is located to the south-east and is largely screened within the view by woodland located along the ridgeline."* Fieldwork in 2023 confirmed this description remains valid. The small turbines at Meikle Galdenoch are visible on the horizon in views to the west.			
Sensitivity: Road users are considered to be of low susceptibility. The viewpoint is not located within a designated or protected landscape, indicating a lower value. **On balance, taking account of the judgements of susceptibility and value, the overall sensitivity of this viewpoint is judged to be medium-low.**			
Assessment of visual effects: Four turbines (hubs and blades) will be visible at a distance of approximately 1.7 km. The Proposed Development will read as a single coherent group of turbines, with no overlapping of turbines. The proposed turbines will be seen on the skyline above the middle distance gently undulating horizon formed by moorland/ forestry on Galdenoch and Larbrax Moor. The small scale turbines at Meikle Galdenoch, in views to the west, will			

Viewpoint 5: B738, near Meikle Galdernoch
be removed. The intervening undulating landform and vegetation cover will screen the bases of the turbines and most low-level ancillary features. A short section of track would be visible in the vicinity of **T**1. The scale of change is judged to be large. The geographical extent is judged to be small. This represents a more open view from a short section (less than 1 km) of the B738 to the east of Galdenoch. **The overall magnitude of change is judged to be high and taking account of the medium-low sensitivity will result in a Moderate (significant) visual effect.**
Potential for Effects under Future Baseline Scenarios (Cumulative Assessment): Under scenario 2 Mid Moile (application stage) will add distant views of turbines on the horizon in successive views to the north-east. It will be partially screened by intervening woodland. This scheme will be seen in the context of distant views of the operational Glen App Wind Farm, on the plateau moorlands to the east of Loch Ryan. Views of other consented and proposed wind farms will be very limited. This will not notably change the theoretical future cumulative baseline scenario. Effects will reflect those as identified under the primary assessment (**Moderate and significant**).

Table 5.16: Viewpoint 6: Agnew Monument

Viewpoint 6: Agnew Monument			
Grid Reference (NGR)	200834, 564617	**Figure Number**	5.2.6
LCT	**Peninsula LCT**	**Designated Landscape**	N/A
Direction of View	South-west	**Distance to nearest turbine (km)**	4.9
Number of hubs theoretically visible	4	**Number of turbines with blades theoretically visible**	4
Location, description of existing view and potential receptors (taken from 2014 LVIA): Represents views for recreational receptors on the ascent/ decent of the minor summit at Agnew Monument. Views from the summit itself (to the south-west) are screened by overgrown rhododendron. The following baseline description is from the 2015 LVIA: *"Views are extensive and generally open; to the east these are across Loch Ryan, towards the Galloway hills; to the west, views are over farmland, towards the North Channel. The monument also experiences views of a number of operational wind farms and domestic turbines. To the south-east lies North Rhins Wind Farm which can clearly be viewed above the ridgeline approximately 6.3km away. The remaining operational developments are further away and barely perceptible within the views experienced. These include Barlockhart Moor (23.1km) and Arecleoch (19.1km)."* Fieldwork in 2023 confirmed this description remains valid. Wind farm development, in long distance views to the north-east (and in more open views from the summit), has intensified since 2015.			
Sensitivity: Recreational receptors are considered to be of medium susceptibility. The viewpoint is not located within a designated or protected landscape, indicating a lower value. **On balance, taking account of the judgements of susceptibility and value, the overall sensitivity of this viewpoint is judged to be medium.**			
Assessment of visual effects: Four turbines (hubs and blades) will be visible at a distance of approximately 4.9 km. The Proposed Development will read as a single coherent group of turbines, with no overlapping of turbines. The proposed turbines will be seen on the skyline above the distant horizon formed by the North Channel. The Proposed Development will be seen in combined views with the single turbines of Glenhead of Aldouran and Knocknain Farm but read as a distinct wind farm. The intervening undulating landform and vegetation cover will screen the bases of the turbines and low-level ancillary features including tracks.			

Viewpoint 6: Agnew Monument
The scale of change is judged to be medium. The geographical extent is judged to be small. This represents a very localised view on the approach to Agnew Monument. **The overall magnitude of change is judged to be medium and taking account of the medium sensitivity will result in a Moderate (significant) visual effect.**
Potential for Effects under Future Baseline Scenarios (Cumulative Assessment): Under scenario 1 and 2 consented and proposed wind farms, on the plateau moorland to the east of Loch Ryan, will be theoretically visible in successive views to the north-east and east. Dense vegetation cover around the viewpoint location will screen these views. However, it is possible to get more open views from the summit (but from where views to the Site are screened). Under scenario 1 the single consented turbine at Glenhead of Aldouran will also be visible in combined views to the south-west. This will slightly intensify the influence of turbines in views in this direction. The Proposed Development will continue to read as a discreet wind farm, seen beyond the two smaller turbines at Glenhead of Aldouran. Effects will reflect those as identified in the primary assessment (**Moderate and significant**).

Table 5.17: Viewpoint 7: Lochnaw Loch Shore

Viewpoint 7: Lochnaw Loch Shore
Scoped out, refer to Table 5.3:. A viewpoint to support the Cultural Heritage assessment has been provided from here (refer to Figure 5.2.7).

Table 5.18: Viewpoint 8: Slewdown Hill

Viewpoint 8: Slewdown Hill			
Grid Reference (NGR)	198729, 564451	**Figure Number**	5.2.8
LCT	Peninsula LCT	**Designated Landscape**	N/A
Direction of View	South-west	**Distance to nearest turbine (km)**	3.1
Number of hubs theoretically visible	4	**Number of turbines with blades theoretically visible**	4
Location, description of existing view and potential receptors: This view represents those experienced by road users, travelling south-west on a minor road towards the B7043 to the north-east of Galdenoch Moor. The following baseline description is from the 2015 LVIA: *"The viewpoint represents views from a relatively elevated location, and includes extensive views over a mixture of farmland and moorland, with more distant views of the North Channel to the west. To the north, the top of Ailsa Craig can be glimpsed above the northern skyline of the peninsula. Numerous domestic scale turbines can be seen from this location, including the larger operational Knocknain Farm Wind Turbine to the west and the blade tips of North Rhins Wind Farm to the south-east."* Fieldwork in 2023 confirmed this description remains valid. The three small scale turbines at Meikle Galdenoch are apparent in views towards the Site. Wind farm development, in long distance views to the north-east (on upland moorland to the east of Loch Ryan) has also intensified since 2015.			
Sensitivity: Road users are considered to be of low susceptibility. The viewpoint is not located within a designated or protected landscape, indicating a lower value. **On balance, taking account of the judgements of susceptibility and value, the overall sensitivity of this viewpoint is judged to be medium-low.**			

Viewpoint 8: Slewdown Hill
Assessment of visual effects: Four turbines (hubs and blades) will be visible at a distance of approximately 3.1 km. The Proposed Development will read as a single coherent group of turbines, with no overlapping of turbines. The proposed turbines will be seen on the skyline above the distant horizon formed by the North Channel. The Proposed Development will be seen in combined views with the single turbine at Knocknain Farm but read as a distinct wind farm. The three small scale turbines at Meikle Galdenoch will be removed from the view. The intervening undulating landform and vegetation cover will screen the bases of the turbines. Access tracks will be visible. The scale of change is judged to be medium. The geographical extent is judged to be medium. This represents a localised section of road as it crosses higher ground near Garchie Moss. **The overall magnitude of change is judged to be medium and taking account of the medium-low sensitivity will result in a Moderate (significant) visual effect.**
Potential for Effects under Future Baseline Scenarios (Cumulative Assessment): Under scenario 1 and 2 consented and proposed wind farms, on the plateau moorland to the east of Loch Ryan, will be visible in distant successive views to the north-east and east. These will be seen in the context of distant operational wind farms in this direction. Under scenario 1 the single consented turbine at Glenhead of Aldouran will also be visible in successive views to the south-east, marginally intensifying the effects of turbines seen in this direction of view. The Proposed Development will continue to read as a discreet wind farm, seen in successive views to the south-west. Effects will reflect those as identified in the primary assessment (**Moderate and significant**).

Table 5.19: Viewpoint 9: High Aucheneel

Viewpoint 9: High Aucheneel			
Grid Reference (NGR)	197193, 565572	**Figure Number**	5.2.9
LCT	Peninsula LCT	**Designated Landscape**	N/A
Direction of View	South	**Distance to nearest turbine (km)**	3
Number of hubs theoretically visible	4	**Number of turbines with blades theoretically visible**	4
Location, description of existing view and potential receptors: This viewpoint represents views experienced from scattered properties in the area, with open views to the south. Similar views will also be experienced by road users on the B738, travelling south from High Aucheneel. The following baseline description is from the 2015 LVIA: *"This section of the road runs north to south, parallel to the coastline, and has wide open views. The properties are of mixed orientation, with some orientated east to west whilst the others face south-west views generally feature pastoral fields in the foreground, which rise to a ridgeline, screening more distant views. There is a strong prevalence of small-scale domestic turbines within the views from this location. In particular, the two blade development on Knockgour Hill forms a prominent focal point in views to the south-east. Behind this lies the Knocknain 3 bladed turbine and to the south-east 2 small-scale turbines at High Mark. This leads to a cluttered view in which turbines of varying heights and styles can be experienced. Further to the south, the tips of North Rhins Wind Farm can just be viewed above a ridgeline."* Fieldwork in 2023 confirmed this description remains valid. One of the small scale turbines at Meikle Galdenoch is also apparent on the skyline, in views to the south.			
Sensitivity: Residents are considered to be of high susceptibility. The viewpoint is not located within a designated or protected landscape, indicating a lower value.			

Viewpoint 9: High Aucheneel
On balance, taking account of the judgements of susceptibility and value, the overall sensitivity of this viewpoint is judged to be medium-high.
Assessment of visual effects: Four turbines (hubs and blades) will be visible at a distance of approximately 3 km. The Proposed Development will read as a single coherent group of turbines, with no overlapping of turbines. The proposed turbines will be seen on the skyline above the rounded and undulating horizon form by rolling farmland on the Rhins Peninsula. The Proposed Development will be seen in combined views with the single turbine at Knocknain Farm, and other small scale domestic turbines seen in views to the south. Due to difference in turbine scale and viewing distances, these will read as distinct schemes. The small scale turbine at Meikle Galdenoch will be removed from the view. The intervening undulating landform and vegetation cover will screen the bases of the turbines and low-level ancillary features including tracks. The scale of change is judged to be medium. The geographical extent is judged to be medium. This represents a localised section of road, to the south of High Aucheneel. **The overall magnitude of change is judged to be medium and taking account of the medium-high sensitivity will result in a Moderate (significant) visual effect.**
Potential for Effects under Future Baseline Scenarios (Cumulative Assessment): Under scenario 2 Mid Moile (application stage) will add distant views of turbines on the horizon in successive views to the north-east. Views of other consented and proposed wind farms will be very limited. This will not notably change the theoretical future cumulative baseline scenario. Effects will reflect those as identified under the primary assessment (**Moderate and significant**).

Table 5.20: Viewpoint 10: Southern Upland Way, near Mulloch Hill

Viewpoint 10: Southern Upland Way, near Mulloch Hill			
Grid Reference (NGR)	201350, 559055	**Figure Number**	5.2.10
LCT	Peninsula LCT	**Designated Landscape**	N/A
Direction of View	North-west	**Distance to nearest turbine (km)**	5
Number of hubs theoretically visible	4	**Number of turbines with blades theoretically visible**	4
Location, description of existing view and potential receptors: Represents views experienced by recreational receptors on the SUW as it crosses the higher ground to the centre of the Rhins Peninsula at Broad Moor. The following baseline description is from the 2015 LVIA: *"From this viewpoint, 360° degree views can be experienced, featuring a combination of farmland, moorland and coniferous forestry plantations. To the south, the operational wind farm of North Rhins is in close proximity to the viewpoint location; the North Rhins turbines can be viewed in three distinct groups in a linear progression from this location. To the north the views are foreshortened by the commercial forestry, which has been partially wind-damaged."* Fieldwork in 2023 confirmed this description remains valid. Other smaller scale wind turbines are visible on the Rhins Peninsula, to the north-west and south-west. Wind farm development on upland moorland to the east of Loch Ryan, in distant views to the north-east, is also apparent and has intensified since 2015.			
Sensitivity: Recreational receptors are considered to be of medium susceptibility. The viewpoint is not located within a designated or protected landscape but is located on the SUW (one of Scotland's Great Trails), indicating a higher value. **On balance, taking account of the judgements of susceptibility and value, the overall sensitivity of this viewpoint is judged to be medium.**			

Viewpoint 10: Southern Upland Way, near Mulloch Hill
Assessment of visual effects: Four turbines (hubs and blades) will be theoretically visible at a distance of approximately 5 km. Coniferous forest in the middle distance will partially screen three turbine hubs, and the level of screening will increase as this forestry matures. The Proposed Development will read as a single coherent group of turbines, with some partial overlapping of turbine blades to the centre of the layout. The proposed turbines will be seen on the distant skyline above the North Channel. The Proposed Development will be seen in combined views with other smaller turbines visible in views to the north-west but will read as a distinct scheme. The intervening undulating landform and vegetation cover will screen the bases of the turbines and low-level ancillary features including tracks. The scale of change is judged to be small. The geographical extent is judged to be small. This represents views from a short (less than 1 km) elevated section of the SUW, as it crosses Mulloch Hill. **The overall magnitude of change is judged to be low and taking account of the medium sensitivity will result in a Minor (Not significant) visual effect.**
Potential for Effects under Future Baseline Scenarios (Cumulative Assessment): Due to the viewpoint's elevated position, on the central spine of the Rhins, a number of consented and proposed wind farms on the plateau moorland to the east of Loch Ryan will be visible. These will be seen in distant and successive views to the north-east and east, and in the context of operational wind farms in this direction. The Proposed Development will continue to read as a discreet wind farm, seen in successive views to the north-west (partially screened by the landform and intervening vegetation). Effects will reflect those as identified in the primary assessment (**Minor and not significant**).

Table 5.21: Viewpoint 11: Parking Area, near Killantringan Lighthouse

Viewpoint 11: Parking Area, near Killantringan Lighthouse			
Grid Reference (NGR)	198245, 556742	**Figure Number**	5.2.11
LCT	Peninsula LCT	**Designated Landscape**	Rhins Coast RSA
Direction of View	North-west	**Distance to nearest turbine (km)**	4.8
Number of hubs theoretically visible	4	**Number of turbines with blades theoretically visible**	4
Location, description of existing view and potential receptors: This represents views experienced by recreational receptors and tourist, at a parking area overlooking Killantringan Bay (there is also a bench oriented to the north with a similar view). The viewpoint is near the start/ end of the SUW, and on the Core Path network. The following baseline description is from the 2015 LVIA: *"This viewpoint represents a typical view experienced of the coastline within the Rhins Coast RSA. The main view is orientated north-west along the coastline, and is medium in scale, although in western direction, more extensive views can {be] experienced across the North Channel. Inland views are curtailed by the rising coastal landform."* Fieldwork in 2023 confirmed this description remains valid. Some small scale turbines are just apparent, in views north, on the horizon.			
Sensitivity: Recreational receptors are considered to be of medium susceptibility. The viewpoint is within a designated landscape (Rhins Coast RSA), and on the SUW, indicating a high value. **On balance, taking account of the judgements of susceptibility and value, the overall sensitivity of this viewpoint is judged to be high.**			
Assessment of visual effects:			

Viewpoint 11: Parking Area, near Killantringan Lighthouse
Four turbines (hubs and blades) will be visible at a distance of approximately 4.8 km. The Proposed Development will read as a single coherent group of turbines, with no overlapping of turbines. The proposed turbines will be seen on the skyline above the western rocky coastal edge/ undulating farmland/ moorland of the Rhins Peninsula. It will be seen in combined views with smaller scale turbines in views north but will read as a distinct scheme. Due to the viewing distance and partial screening provided by the undulating landform, the bases of the turbines and low-level ancillary features will be screened, with the exception of a short section of access track. The scale of change is judged to be medium. The geographical extent is judged to be small. This represents the view from a localised section near the start/ end of the SUW. **The overall magnitude of change is judged to be medium and taking account of the high sensitivity will result in a Major (Significant) visual effect.**
Potential for Effects under Future Baseline Scenarios (Cumulative Assessment): Under both assessment scenarios there are no changes to the theoretical future cumulative baseline from this viewpoint. Effects will reflect those as identified under the primary assessment (**Major and significant**).

Table 5.22: Viewpoint 12: South Cairn

Viewpoint 12: South Cairn			
Grid Reference (NGR)	196890, 569230	**Figure Number**	5.2.12
LCT	Peninsula LCT	**Designated Landscape**	Rhins Coast RSA
Direction of View	South	**Distance to nearest turbine (km)**	6.6
Number of hubs theoretically visible	4	**Number of turbines with blades theoretically visible**	4
Location, description of existing view and potential receptors: This viewpoint is located on the minor road network to the east of Dounan Bay. It is representative of views experienced by road users including those accessing the coastline. The following baseline description is from the 2015 LVIA: *"There are extensive views to the west across the North Channel, whereas views along the coastline tend to be of a more medium scale, due to the topography, and feature smooth rounded hills sloping towards the coastline. With the exception of domestic scale turbines, only the tip of Knocknain Farm wind turbine can be experienced to the south."* Fieldwork in 2023 confirmed this description remains valid.			
Sensitivity: Road users are considered to be of low susceptibility. The viewpoint is within a designated landscape (Rhins Coast RSA), indicating a high value. **On balance, taking account of the judgements of susceptibility and value, the overall sensitivity of this viewpoint is judged to be medium.**			
Assessment of visual effects: Four turbines (hubs and blades) will be visible at a distance of approximately 6.6 km. The Proposed Development will read as a single coherent group of turbines, with some partial overlapping of turbine blades to the west of the layout. The proposed turbines will be seen on the skyline above the western rocky coastal edge and undulating farmland of the Rhins Peninsula. It will be seen in combined views with smaller scale turbines in views south but will read as a distinct scheme. The intervening undulating landform will screen the bases of the turbines and low-level ancillary features, including tracks. The scale of change is judged to be medium. The geographical extent is judged to be medium. This represents intermittent views from the minor road network in this area.			

Viewpoint 12: South Cairn
The overall magnitude of change is judged to be medium and taking account of the medium sensitivity will result in a Moderate (Significant) visual effect.
Potential for Effects under Future Baseline Scenarios (Cumulative Assessment): Under scenario 2 Mid Moile (application stage) will add distant views of turbines on the horizon in successive views to the east. This scheme will be seen in the context of distant views of the operational Glen App Wind Farm, on the plateau moorlands to the east of Loch Ryan (views of this scheme will open up north of the dry-stone wall in the foreground). Views of other consented and proposed wind farms will be very limited. This will not notably change the theoretical future cumulative baseline scenario. Effects will reflect those as identified under the primary assessment (**Moderate and significant**).

Table 5.23: Viewpoint 13: Marian Tower

Viewpoint 13: Marian Tower			
Grid Reference (NGR)	199547, 568847	**Figure Number**	5.2.13
LCT	Peninsula LCT	**Designated Landscape**	N/A
Direction of View	South-west	**Distance to nearest turbine (km)**	7
Number of hubs theoretically visible	4	**Number of turbines with blades theoretically visible**	4
Location, description of existing view and potential receptors: Represents views experienced by recreational receptors visiting Marian Tower monument. The monument is in an open and elevated location, north of the Rhins Peninsula. The following baseline description is from the 2015 LVIA: *"From this location, panoramic views are possible, including the top of Ailsa Craig to the north, views across Loch Ryan to the Galloway Hills to the east, and across the North Channel to the west. The view features rough pasture and improved pasture, over rounded hills."* Fieldwork in 2023 confirmed this description remains valid. There are a number of operational wind farms visible in this open, elevated and panoramic view. This includes North Rhins Wind Farm, seen in views to the south and operational schemes on the upland moorland to the east of Loch Ryan, in views to the east.			
Sensitivity: Recreational receptors are considered to be of medium susceptibility. The viewpoint is not located within a designated or protected landscape, indicating a lower value. **On balance, taking account of the judgements of susceptibility and value, the overall sensitivity of this viewpoint is judged to be medium.**			
Assessment of visual effects: Four turbines (hubs and blades) will be visible at a distance of approximately 7 km. The Proposed Development will read as a single coherent group of turbines, with no overlapping of turbine blades. The proposed turbines will be seen on the skyline above the undulating farmland of the Rhins Peninsula. It will be seen in combined views with North Rhins Wind Farm, and other smaller scale turbines in views south-west. It will read as a distinct scheme. The intervening undulating landform will screen the bases of the turbines and low-level ancillary features, including tracks. The scale of change is judged to be medium-small. The geographical extent is judged to be small. This represents localised views for visitors to the monument. **The overall magnitude of change is judged to be low and taking account of the medium sensitivity will result in a Minor (Not significant) visual effect.**			
Potential for Effects under Future Baseline Scenarios (Cumulative Assessment):			

Viewpoint 13: Marian Tower
Under scenario 2 Mid Moile (application stage) will add middle distance views of turbines on the horizon in successive views to the east. This scheme will be seen in the context of middle distance views of the operational Glen App Wind Farm, on the plateau moorlands to the east of Loch Ryan. Views of other consented and proposed wind farms will be very limited. This will not notably change the theoretical future cumulative baseline scenario. Effects will reflect those as identified under the primary assessment (**Minor and not significant**).

Table 5.24: Viewpoint 14: High Ardwell

Viewpoint 14: High Ardwell			
Grid Reference (NGR)	200526, 571037	**Figure Number**	5.2.14
LCT	Peninsula LCT	**Designated Landscape**	N/A
Direction of View	South-west	**Distance to nearest turbine (km)**	9.4
Number of hubs theoretically visible	3	**Number of turbines with blades theoretically visible**	4
Location, description of existing view and potential receptors: Representative of views experienced by road users, from the minor road network to the north of the Rhins Peninsula. The following baseline description is from the 2015 LVIA: *"Views from this location are of rounded hills with a pastoral land cover in the foreground; whilst there are distant views to the Galloway Hills in the east, and to the south there are medium to long distance views along the peninsula."* Fieldwork in 2023 confirmed this description remains valid. The operational North Rhins Wind Farm is visible in longer distance views to the south. Glen App Wind Farm is visible in longer distant views to the east, on upland moorland to the east of Loch Ryan.			
Sensitivity: Road users are considered to be of low susceptibility. The viewpoint is not located within a designated or protected landscape, indicating a lower value. **On balance, taking account of the judgements of susceptibility and value, the overall sensitivity of this viewpoint is judged to be low.**			
Assessment of visual effects: Three turbine hubs and four turbine blades are theoretically visible at a distance of 9.4 km. Dry stone walls and farm buildings/ infrastructure on the middle-distance horizon will provide partial screening of turbine hubs. The Proposed Development will read as a single coherent group of turbines, with no overlapping of turbine blades. The proposed turbines will be seen on the skyline above the undulating farmland of the Rhins Peninsula. It will be seen in combined views with North Rhins Wind Farm, and other smaller scale turbines in views south-west. It will read as a distinct scheme. The intervening undulating landform will screen the bases of the turbines and low-level ancillary features, including tracks. The scale of change is judged to be small. The geographical extent is judged to be small. This represents localised views for a short section of the minor road network, on higher ground near High Ardwell. **The overall magnitude of change is judged to be low and taking account of the low sensitivity will result in a Minor (Not significant) visual effect.**			
Potential for Effects under Future Baseline Scenarios (Cumulative Assessment): Under scenario 2 Mid Moile (application stage) will add middle distance views of turbines on the horizon in successive views to the east. This scheme will be seen in the context of middle distance views of the operational Glen App Wind Farm, on the plateau moorlands to the east of Loch Ryan. Views of other consented and proposed wind farms will be very limited. This will not notably change the theoretical future cumulative baseline scenario. Effects will reflect those as identified under the primary assessment (**Minor and not significant**).			

Table 5.25: Viewpoint 15: Minor Road, west of North Point o' Spittal

Viewpoint 15: Minor Road, west of North Point o' Spittal			
Grid Reference (NGR)	202111, 552881	**Figure Number**	5.2.15
LCT	Peninsula LCT	**Designated Landscape**	Rhins Coast RSA
Direction of View	North-west	**Distance to nearest turbine (km)**	10
Number of hubs theoretically visible	3	**Number of turbines with blades theoretically visible**	4
Location, description of existing view and potential receptors: Representative of views experienced by road users, from a minor road to the south-east of Portpatrick. The following baseline description is from the 2015 LVIA: *"From this elevated location, the main view is of the North Channel to the west, and is extensive in nature. Inland, views are over surrounding farmland, and are of short to medium scale, due to the rising, undulating topography. Despite its rural location, a number of different elements can be viewed from this location, including: to the north-west, the static caravan park at Dunskey; to the north-east, the North Rhins Wind Farm; and to the north, the Enoch Radio Station mast."* Fieldwork in 2023 confirmed this description remains valid. Longer distance glimpsed views to the north-east are also obtainable, and wind farm development on upland moorland to the east of Loch Ryan is apparent.			
Sensitivity: Road users are considered to be of low susceptibility. The viewpoint is within a designated landscape, indicating a high value. **On balance, taking account of the judgements of susceptibility and value, the overall sensitivity of this viewpoint is judged to be medium-low.**			
Assessment of visual effects: Three turbine hubs and four turbine blades are theoretically visible at a distance of 10 km. Woodland on the middle distance horizon will provide partial screening of turbine hubs and blades. The Proposed Development will read as a single group of turbines, with overlapping of three turbines to the east of the layout. The proposed turbines will be seen on the skyline above undulating farmland and areas of woodland on the Rhins Peninsula. It will be seen in combined views with North Rhins Wind Farm. It will read as a distinct scheme. The intervening undulating landform and vegetation will screen the bases of the turbines and low-level ancillary features, including tracks. **The overall magnitude of change is judged to be low and taking account of the medium-low sensitivity will result in a Minor (Not significant) visual effect.**			
Potential for Effects under Future Baseline Scenarios (Cumulative Assessment): Under scenario 1 and 2, consented and proposed wind farms will intensify the effects of turbines seen in distant and successive views to the north-east. In other viewing directions, views of consented and proposed wind farms will be very limited. The Proposed Development will continue to read as a discreet wind farm, seen beyond (and distinct from) the operational North Rhins Wind Farm, in views to the north-west. This will not notably change the theoretical future cumulative baseline scenario. Effects will reflect those as identified under the primary assessment (**Minor and not significant**).			

Table 5.26: Viewpoint 16: Stranraer to Belfast Ferry

Viewpoint 16: Stranraer to Belfast Ferry			
Grid Reference (NGR)	191948, 568780	**Figure Number**	5.2.16
LCT	N/A	**Designated Landscape**	N/A

Viewpoint 16: Stranraer to Belfast Ferry			
Direction of View	South-east	**Distance to nearest turbine (km)**	7.4
Number of hubs theoretically visible	4	**Number of turbines with blades theoretically visible**	4
Location, description of existing view and potential receptors: This viewpoint is representative of sequential views experienced by workers, travellers, recreational users and tourists on the Stranraer to Belfast Ferry. Due to the difficulties of capturing panoramic photography from a moving vessel, this viewpoint has been provided as a wireline only visualisation. The location has been selected as it represents some of the closest proximity views from the ferry, towards the Site.			
Sensitivity: Recreational receptors are considered to be of medium susceptibility. The viewpoint is not within a designated or protected landscape, indicating a lower value. **On balance, taking account of the judgements of susceptibility and value and taking a precautionary approach to the assessment, the overall sensitivity of this viewpoint is judged to be medium.** **Effects will fall below the threshold of significance with increasing distance from the Site.**			
Assessment of visual effects: Four turbine hubs and blades are theoretically visible at a distance of 7.4 km. The Proposed Development will read as a single group of turbines, with some overlapping of turbine blades between T1, T2 and T4. The proposed turbines will be seen on the skyline above the rocky coastline and undulating farmland on the western coastline of the Rhins Peninsula. It will be seen in combined views with North Rhins Wind Farm. It will read as a distinct scheme. At this viewing distance, features such as ancillary elements and access tracks will be difficult to perceive. **The overall magnitude of change is judged to be medium and taking account of the medium sensitivity will result in a Moderate (Significant) visual effect.** As the ferry moves west, and with increasing distance from the Proposed Development, effects will fall below the threshold of significance.			
Potential for Effects under Future Baseline Scenarios (Cumulative Assessment): Under scenario 2 Mid Moile (application stage) will add distant views of turbines on the horizon in successive views to the east. This scheme will be seen in the context of distant views of the operational Glen App Wind Farm, on the plateau moorlands to the east of Loch Ryan. Views of other consented and proposed wind farms will be limited. This will not notably change the theoretical future cumulative baseline scenario. Effects will reflect those as identified under the primary assessment (**Moderate and significant**).			

Table 5.27: Viewpoint 17: Little Laight

Viewpoint 17: Little Laight			
Grid Reference (NGR)	206238, 570808	**Figure Number**	5.2.17
LCT	Upland Fringe	**Designated Landscape**	Rhins Coast RSA
Direction of View	South-west	**Distance to nearest turbine (km)**	12.9
Number of hubs theoretically visible	4	**Number of turbines with blades theoretically visible**	4
Location, description of existing view and potential receptors:			

Viewpoint 17: Little Laight
Represents views experienced by recreational receptors, including walkers on the Loch Ryan Coastal Path, to the east of Loch Ryan. This viewpoint is presented with a wireline visualisation as noted in **Table 5.3**.
Sensitivity: Recreational receptors are considered to be of medium susceptibility. The viewpoint is within a designated landscape (Rhins Coast RSA), indicating a high value. **On balance, taking account of the judgements of susceptibility and value, the overall sensitivity of this viewpoint is judged to be medium-high.**
Assessment of visual effects: Four turbines (hubs and blades) will be visible at a distance of approximately 12.9 km. The Proposed Development will read as a single coherent group of turbines, with no overlapping of turbine blades. The proposed turbines will be seen on the skyline behind the central ridge of the Rhins Peninsula. It will be seen in combined views with North Rhins Wind Farm, and other smaller scale turbines in views south-west. It will read as a distinct scheme. The intervening undulating landform will screen the bases of the turbines and low-level ancillary features, including tracks. The scale of change is judged to be small. The geographical extent is judged to be medium-small. This represents localised views from an elevated section of the Loch Ryan Coastal Path, to the north-east of the Loch. **The overall magnitude of change is judged to be low and taking account of the medium-high sensitivity will result in a Minor (Not significant) visual effect.**
Potential for Effects under Future Baseline Scenarios (Cumulative Assessment): Under scenario 2 Mid Moile (application stage) will add close proximity views of turbines on the horizon in successive views to the east. This scheme will be seen in the context of close proximity views of the operational Glen App Wind Farm. Views of other consented and proposed wind farms will be limited. The single consented turbine at Glenhead of Aldouran will be visible in combined views to the south-west, marginally intensifying the effect of turbines seen on the Rhins. The Proposed Development will continue to read as a discreet wind farm, seen beyond these smaller turbines. Effects will reflect those as identified under the primary assessment (**Minor and not significant**).

Table 5.28: Viewpoint 18: Braid Fell

Viewpoint 18: Braid Fell			
Grid Reference (NGR)	211201, 566459	**Figure Number**	5.2.18
LCT	**Plateau Moorland LCT**	**Designated Landscape**	N/A
Direction of View	West	**Distance to nearest turbine (km)**	15.1
Number of hubs theoretically visible	4	**Number of turbines with blades theoretically visible**	4
Location, description of existing view and potential receptors: Viewpoint is located on Balker Moor. It is representative of longer distance views experienced by recreational receptors from the western edge of the upland plateau moorland to the east of Loch Ryan. This viewpoint is presented with a wireline visualisation as noted in **Table 5.3**.			
Sensitivity: Recreational receptors are considered to be of medium susceptibility.			

Viewpoint 18: Braid Fell
The viewpoint is not located within a designated or protected landscape, indicating a lower value. **On balance, taking account of the judgements of susceptibility and value, the overall sensitivity of this viewpoint is judged to be medium-low.**
Assessment of visual effects: Four turbines (hubs and blades) will be visible at a distance of approximately 15.1 km. The Proposed Development will read as a single coherent group of turbines, with no overlapping of turbine blades. The proposed turbines will be seen on the skyline behind the central ridge to the north of the Rhins Peninsula. It will be seen in combined views with North Rhins Wind Farm, and other smaller scale turbines in views west. It will read as a distinct scheme. The intervening undulating landform will screen the bases of the turbines and low-level ancillary features, including tracks. The scale of change is judged to be small. The geographical extent is judged to be medium-small. This represents intermittent views experienced from higher ground to the west of the upland plateau moorland, east of Loch Ryan. **The overall magnitude of change is judged to be low and taking account of the medium-low sensitivity will result in a Minor (Not significant) visual effect.**
Potential for Effects under Future Baseline Scenarios (Cumulative Assessment): Under Scenario 1 and 2 consented and proposed wind farms, on the plateau moorlands to the east of Loch Ryan, will intensify the effects of turbines seen in close to middle distance successive views to the north and east. This will include close proximity views of the application stage Mid Moile, to the north of the viewpoint. The single consented turbine at Glenhead of Aldouran will be visible in combined views to the west, marginally intensifying the effect of turbines seen on the Rhins. The Proposed Development will continue to read as a discreet wind farm, seen beyond these smaller turbines. Effects will reflect those as identified in the primary assessment (**Minor and not significant**).

Effects on Routes

5.12.18 Sequential visual effects are assessed through considering the likely effects on the Proposed Development both in isolation, and in the context of other existing, consented and proposed wind energy developments on key routes through the study area. The routes to be assessed were identified through analysis of the ZTVs shown on **Figures 5.1.2 and 5.1.3**. The assessment of likely effects on sequential views from these routes is detailed in **Table 5.29:** below.

Table 5.29: Sequential Route Assessment

Route	Baseline Description	Sensitivity (susceptibility and value)	Representative Viewpoints and Scale of Change	Conclusion
Southern Upland Way	The Southern Upland Way originates on the west coast of the Rhins of Galloway, approximately 7 km to the south, and passes the Site at 2.5 km at its nearest point. The route follows a short section of the west coast of the Rhins of Galloway heading north before turning east and continuing across southern Scotland to the east coast where it terminates at Cockburnspath, near Dunbar. Theoretical	This route is primarily for the use of hikers and other recreational users, indicating a higher susceptibility. The route is a nationally important long distance trail, indicating a higher value. **Overall sensitivity is**	VP10 - Small VP11 - Medium	When visible, the proposed turbines will generally be seen in medium to longer distance oblique views (when travelling east and west) from the section between Killantringan and Mulloch Hill. The findings of the representative viewpoint assessments from this route suggest that there will be significant sequential effects from sections of this route within an approximate radius of approximately 7 km (and when there are open views).

Route	Baseline Description	Sensitivity (susceptibility and value)	Representative Viewpoints and Scale of Change	Conclusion
	visibility shows intermittent views towards the Site along the initial section of the route, including the initial northerly section where the Proposed Development would be largely visible as a feature above the horizon in the middle distance.	**judged to be high**.		Beyond this, sequential effects from this route are likely to fall below the threshold of significance. This is not judged to result in significant sequential effects overall from this route, given the relatively localised section which will be affected, and the influence of existing wind farms. This includes North Rhins Wind Farm, which can be seen in close proximity successive views to the south, as the route crosses the ridge of the Rhins Peninsula.
Rhins of Galloway Coastal Path	The Rhins of Galloway Coast path is a new long distance route that encircles the Rhins of Galloway, starting in Stranraer and navigating in an anticlockwise direction. The route follows the outer cliffs and rocky coastline along the western coast, passing through the Site along the western edge, and within the Site boundary, before continuing south towards Portpatrick.	This route is primarily for the use of hikers and other recreational users, indicating a higher susceptibility. The route is a locally important long distance trail, indicating a medium to high value. **Overall sensitivity is judged to be medium-high**.	VP1 - Large VP11 - Medium VP12 - Medium	The proposed turbines will be notable features in close proximity views, as the route passes through the Site. The Proposed Development will also be visible in more direct views, on the northern and southern approach to the Site from the coastal edge to the west of the Rhins. Given this context and the findings of the representative viewpoint assessments of this route (medium to large scale changes are predicted), this is judged to translate into significant sequential effects, from sections of the route within 7 km to the north and south of the Site. Visibility through this section will also be intermittent, given the complex nature of the coastline. Beyond this, sequential effects from this route will fall below the threshold of significance. This is not judged to result in significant sequential effects overall from this route, given the relatively localised section affected.
Core paths	There are a number of Core Paths within 5 km of the Proposed Development, as shown on **Figures 5.1.2** and **5.1.3**. A number of core paths overlap with the long distance routes above,	These Core Paths are used by recreational receptors such as walkers (and road users and cyclists where Core Paths	VP1 - Large VP2 -Large VP3 - Large VP5 - Large VP11 - Medium	The proposed turbines will be notable features in close-proximity and more open views from the local Core Path network. Views will be a combination of direct and oblique as receptors move around the Core Path network.

Route	Baseline Description	Sensitivity (susceptibility and value)	Representative Viewpoints and Scale of Change	Conclusion
	located along the western edge of the coastline and where they follow the SUW, extending beyond 5 km distance. There are also Core Paths which link the coastal edge to Leswalt, passing east to west over Galdenoch Moor.	follow roads). This indicates a susceptibility of medium-high. A number of the Core Paths are related to named long distance routes and are within the Rhins Coast RSA. This indicates higher value. **Overall sensitivity is judged to be medium-high**.		Given this context, and the findings of the representative viewpoint assessments of this route (up to large scale changes are predicted), this is judged to translate into significant sequential effects, from the Core Path network within 5 km, where there are open views towards the Proposed Development. Significant effects may also extend further, up to 7 km distance, from the coastal edge to the north and south of the Site and when the Proposed Development is visible in more direct views.

5.13 Combined Cumulative Effects

5.13.1 With regard to combined cumulative effects, GLVIA3 states that this should include "*all past, present and future proposals together with the new project*". GLVIA3 (paragraph 7.13) acknowledges that "*assessing combined effects involving a range of different proposals at different stages in the planning process can be very complex*". The following assessment of combined effects provides a high-level appraisal of all built and unbuilt wind farms, including the Proposed Development.

5.13.2 As shown on **Figure 5.1.8** and **Table 5.6**, operational and proposed wind farm development on the Rhins Peninsula is relatively limited. The operational North Rhins Wind Farm (11 turbines at 100 m to tip) is the only commercial scale wind farm on the peninsula. Other operational and proposed schemes are more modest in scale, limited to single turbines or very small scale groups of turbines.

5.13.3 The key focus of wind farm development in the 40 km LVIA study area is in the area of upland plateau moorland to the east of Loch Ryan, and west of the Galloway Hills. As shown on **Figure 5.1.8**, this area includes some large scale operational, consented and proposed wind farms. Combined cumulative ZTV are presented in figures 5.1.9 to 5.1.11.

5.13.4 In combination with operational, consented and proposed wind farms, the Proposed Development will increase the influence of wind farm development on the Rhins Peninsula. However, the Proposed Development will generally read as a distinct scheme. This is due to the separation between it and the operational North Rhins Wind Farm, and difference in scale between the Proposed Development, and some of the operational and proposed smaller scale turbines in closer proximity (refer to Viewpoints 10 and 13).

5.13.5 Cumulative interactions between the Proposed Development, and the larger emerging cluster of wind farms on the upland plateau moorland to the east of Loch Ryan, will also be limited in nature. The Proposed Development will affect a very different landscape context. Where views of the Proposed Development, and this larger emerging cluster are available, they will typically be successive and long distance.

5.13.6 In summary, the potential for significant combined cumulative effects is recognised. These significant combined cumulative effects are generally focused to the upland moorland plateau to the east of Loch Ryan, which is well suited to wind farm development. The contribution the Proposed Development makes to these combined cumulative effects is slight. The Proposed Development will introduce a distinct wind farm into a very different landscape context, with clear visual separation between it, and other operational, consented and proposed larger scale wind farms.

5.14 Summary of Likely Significant Effects

5.14.1 The following section provides a summary of the landscape and visual effects associated with a new proposed wind farm (4 turbines at 149.9m to tip height) at the Larbrax Moor Site. The Site is subject to a planning consent for a wind farm of 8 turbines at 100m to tip height, which was granted on appeal in October 2016 (planning reference PPA-170-2105).

5.14.2 It should be noted that wind turbines, as tall man-made structures, introduce features which are likely to bring about landscape and visual changes. Measures to reduce effects upon the landscape resource and upon views and visual amenity are predominantly achieved through the design process, as described in **Chapter 3** and the supporting **Design and Access Statement**. As all mitigation for landscape and visual effects is embedded within the final design for the Proposed development, all effects summarised in this section are effectively residual effects as no additional mitigation is proposed.

Landscape Effects

5.14.3 Significant effects are predicted on the landscape resource of the Site during construction and operation (**Major**). This is not unusual for a wind farm development. The Site will change from an area of moorland near the coast to an active wind energy generating site.

5.14.4 During operation, significant (**Moderate** and above) effects on landscape character from the host LCT (Peninsula LCT, in which the development is proposed) are predicted. This will result in **Major** effects within approximately 4 km, to the north and south of the Site, reducing to **Moderate** within approximately 7 km and **Minor** beyond. Policy woodland to the east will closely contain effects on landscape character in this direction. The Site is located on the coastal edge to the west of the Rhins Peninsula, so effects on character to the west will be sea based.

5.14.5 Although it is recognised that the landscape is smaller scale and more complex in places, particularly along the coastal edge, the Proposed Development is located in close proximity to the sea. Wider views of the Proposed Development tend to be focused along the coastal edge, or from more elevated slightly inland areas, which also reveal views of the sea. As such, the scale of the turbines in relation to the expansive sea views will reduce the perceived scale of the wind farm and associated effects on landscape character. Whilst it is recognised that the coastline is not very developed, it represents a working agricultural landscape, with farmed fields, plantations, houses and modern farm buildings, poles and overhead lines, as well as a number of smaller wind generators which already exist in the landscape. The Proposed Development will be seen in this context.

Effects on Designated Landscapes

5.14.6 The Proposed Development is located in the Rhins Coast RSA, a local level landscape designation in Dumfries and Galloway. As recognised in the landscape assessment from the Peninsula LCT, there will be localised and significant effects on landscape character within approximately 7 km to the north and south of the Site, and within the RSA. Beyond this, effects will fall below the threshold of significance. These localised effects on landscape character are not judged to compromise the overall integrity of the RSA. Furthermore, and from large areas of this locally designed landscape, the qualities of the RSA will be able to be experienced unaltered.

Visual Effects

5.14.7 Significant (**Moderate** and above) effects on views are predicted at 11 of the 17 LVIA viewpoints assessed. The majority of significant visual effects are contained within 5 km, representing closer proximity and more open views to the north, east and south of the Site.

5.14.8 Viewpoint 12 represents middle distance views looking south along the coastal edge. This viewpoint is located within 7 km. Viewpoint 16 represents a sequential view from the Belfast Ferry, at 7.4 km distance. This viewpoint is on the edge of where significant visual effects may be experienced. As the ferry moves west, towards Belfast, effects will fall below the threshold of significance from this viewpoint.

5.14.9 In general terms the Proposed Development will read as a distinct wind farm, on the eastern coastal edge of the Rhins Peninsula. There are a number of small-scale operational turbines around the Proposed Development, which are visible in certain combined views. However, given the difference in turbine scale between these and the Proposed Development, they will read as distinct schemes. Furthermore, the three small turbines at Meikle Galdenoch will be removed from the baseline view should the Proposed Development be granted planning permission. The layout of the Proposed Development has been designed to respond to the north to south alignment

of the coastal edge. The small number of turbines (4 No.) will allow it to be read as a coherent single group of turbines, in the majority of views.

5.14.10 Significant (**Moderate** and above) effects are also predicted from routes including from a localised section of the Southern Upland Way (within approximately 7 km between Killantringan and Mulloch Hill); from the Rhins of Galloway Coastal Path, within 7 km to the north and south of the Site; and from the Core Path network within 5 km (and extending slightly further from the Core Path network on the coastal edge, where direct views towards the Proposed Development are available).

Cumulative Landscape and Visual Effects

5.14.11 As shown on **Figure 5.1.8** and noted in **Table 5.6**, operational and proposed wind farm development on the Rhins Peninsula is relatively limited. The operational North Rhins Wind Farm (11 turbines at 100 m to tip) is the only larger scale wind farm on the peninsula. Other operational and proposed schemes are modest in scale, limited to single turbines or very small-scale groups of turbines.

5.14.12 The key focus of wind farm development in the 40 km LVIA study area is in the area of upland plateau moorland to the east of Loch Ryan, and west of the Galloway Hills. As shown on **Figure 5.1.8**, this area includes some large scale operational, consented and proposed wind farms.

5.14.13 In an alternative theoretical future cumulative baseline, which includes operational, consented and proposed wind farms, the Proposed Development will increase the influence of wind farm development on the Rhins Peninsula. However, the Proposed Development will generally read as a distinct scheme. This is due to the separation between it and the operational North Rhins Wind Farm, and difference in scale between the Proposed Development, and some of the operational and proposed smaller scale turbines in closer proximity on the Rhins.

5.14.14 Cumulative interactions between the Proposed Development, and the larger emerging cluster of wind farms on the upland plateau moorland to the east of Loch Ryan, will be limited in nature. The Proposed Development will affect a very different landscape context. Where views of the Proposed Development, and this larger emerging cluster are available they will typically be successive and long distance.

5.14.15 As such, effects identified in the cumulative assessment will reflect those identified in the primary assessment (which considers operational and under construction wind farms as part of the baseline).

Tabulated Summary of Likely Significant Effects

5.14.16 **Table 5.30**: below sets out the summary of predicted significant effects on landscape and visual receptors within the study area.

Table 5.30: Summary of Likely Significant Effects

Predicted Effects	Primary LVIA Assessment Findings (operational and under construction wind farms included in the baseline)	Cumulative Assessment Findings
Construction Effects on Landscape Receptors		
The Site	Major	N/A
Operational Effects on Landscape Receptors		
The Site	Major	N/A
156 – Peninsula LCT	Major effect within approximately 4 km, to the north and south of the Site reducing to Moderate within approximately 7 km. Effects to east will be contained by policy woodland.	Will reflect findings of primary assessment.
Rhins Coast Regional Scenic Area (RSA)	Localised and significant effects on landscape character within approximately 7 km to the north and south of the Site, and within the RSA (see LCT assessment	Will reflect findings of primary assessment.

Predicted Effects	Primary LVIA Assessment Findings (operational and under construction wind farms included in the baseline)	Cumulative Assessment Findings
	findings). Beyond this, effects will fall below the threshold of significance. **These localised effects on landscape character are not judged to compromise the overall integrity of the RSA**. Furthermore, and from large areas of this locally designed landscape, the qualities of the RSA will be able to be experienced unaltered.	
Operational effects on Visual Receptors (Viewpoints)		
Viewpoint 1- Core Path, west of Meikle Galdenoch	Major	Will reflect findings of primary assessment.
Viewpoint 2 – Core Path, Larbrax Moor	Major	Will reflect findings of primary assessment.
Viewpoint 3 – Meikle Galdenoch, near Parking Area	Major	Will reflect findings of primary assessment.
Viewpoint 4 – B738, near Lochlaw Cottage	Major	Will reflect findings of primary assessment.
Viewpoint 5 – B738, near Meikle Galdernoch	Moderate	Will reflect findings of primary assessment.
Viewpoint 6 – Agnew Monument	Moderate	Will reflect findings of primary assessment.
Viewpoint 8 – Slewdown Hill	Moderate	Will reflect findings of primary assessment.
Viewpoint 9 – High Aucheneel	Moderate	Will reflect findings of primary assessment.
Viewpoint 11 – Parking Area, near Killantringan Lighthouse	Major	Will reflect findings of primary assessment.
Viewpoint 12 – South Cairn	Moderate	Will reflect findings of primary assessment.
Viewpoint 16 – Stranraer to Belfast Ferry	Moderate	Will reflect findings of primary assessment.
Operational effects on Visual Receptors (Routes)		
Southern Upland Way	Major to moderate, within 7 km from sections with visibility	Will reflect findings of primary assessment.
Rhins of Galloway Coastal Path	Major to moderate, within 7 km from sections with visibility	Will reflect findings of primary assessment.
Core Paths within 5 km	Major within 5 km. This may extend up to 7 km from Core Paths along the coastal edge, where direct views towards the Proposed Development are available.	Will reflect findings of primary assessment.

Glossary/Abbreviations

Table 5.31: Glossary

Term in Full	Abbreviation	Meaning
Landscape and Visual Impact Assessment	LVIA	An assessment of effects on the landscape and visual resource of an area.
Cumulative Landscape and Visual Impact Assessment	Cumulative LVIA	An assessment of cumulative effects on the landscape and visual resource of an area.
Scottish Natural Heritage	SNH	National stakeholder, now referred to as NatureScot.
Dumfries and Galloway Council	DGC	Local planning authority.
Zone of Theoretical Visibility	ZTV	A plan which presents the theoretical visibility of a proposed development.
Regional Scenic Area	RSA	A locally designated landscape in DGC.
Landscape Character Type	LCT	A unit of homogenous landscape character.