

6 Landscape and Visual

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6 Landscape and Visual

6.1 Executive Summary

- 6.1.1 The Landscape and Visual Impact Assessment (LVIA) considers the effects of the Proposed Development on landscape character and visual amenity within a study area up to 45 km from the site with a focussed 20km study area for landscape character and cumulative assessment as agreed with statutory consultees. The assessment has been undertaken in accordance with all relevant published guidance and has involved desk studies and field-based assessments. The approach and scope of the assessment was agreed through scoping and through consultation with NatureScot and South Ayrshire Council (SAC).
- 6.1.2 The baseline for the assessment includes landscape and visual receptors and information relating to cumulative developments in the area. The landscape of the site and study area is described through observations made in the field along with published landscape character assessments and topic specific capacity documents, which also contain landscape characterisation information. Visual receptors include people in settlements, using the local area for recreation, and travelling through the area on roads. As a result of the need for aviation lighting, visual receptors at night are also considered. Representative viewpoints have been selected to assess the range of visual receptors, and these viewpoints were agreed through consultation.
- 6.1.3 The assessment of landscape and visual effects considers the embedded mitigation achieved through the design process. In particular, the Proposed Development turbine layout has been designed to minimise effects on the Water of Girvan valley landscape by reducing the heights of the three turbines closest to the valley and setting turbines back from the valley sides and away from conspicuous edge of valley hills. In doing so, the Proposed Development has made the best use of the site topography and surrounding hill forms to help to settle the Proposed Development into the landscape. The Proposed Development has a compact layout which for most views appears as a cohesive and consistently spaced grouping of turbines. The Proposed Development would be located on an upland landscape (Foothills with Forest and Windfarm) which has an overall large scale and upland characteristics considered to be suitable for wind farm development.
- 6.1.4 Physical landscape effects that would occur during construction are found to be localised and not significant. Significant landscape character effects are assessed to occur within a maximum of 4 km from the nearest turbine of the Proposed Development. Significant visual effects have been identified as occurring out to 9 km although the vast majority of significant visual effects are found to lie within 5km. In landscape and visual terms, it is considered that there is scope for wind farm development within the large scale upland landscape of the Foothills with Forest and Wind Farm LCT 17c in South Ayrshire.
- 6.1.5 Significant effects are also predicted for representative night time viewpoints within this localised area as a result of turbine lighting, however, the overall effect of the visible aviation lighting on the Dark Sky Park is considered to be Not Significant. Whilst the RVAA found that 8 of the 14 properties within 2km would experience Significant visual effects but concluded that none of these effects have the potential to be overbearing in respect of the visual amenity of residents. The LVIA found that whilst there would be significant visual effects from elevated locations in the northern part of the Merrick WLA the effects on the wild land qualities of the Merrick Wild Land Area would not be significant.
- 6.1.6 At greater distances, the effect on the wider landscape and visual resource would not be significant due to the level of screening from intervening landform such as upland ridgelines and interconnecting hills that contain views of the site from the surrounding landscape and screening by other landscape elements such as shelterbelt and woodland planting within surrounding valleys and large blocks of commercial forestry within the upland itself but also on the valley sides.



- 6.1.7 In relation to cumulative effects, for the majority of receptors, the Proposed Development only contributes to a small part of the overall spread of development, often with Proposed Development turbines in the same context as the baseline or application scenario turbines.
- The closest applications to the Proposed Development are Clauchrie and Craiginmoddie wind farms. There are instances in the application scenario where the Proposed Development would extend the wind farm development further along developed horizons and so increasing visual effects. Therefore, this outcome results in only a slight intensification of effect in the application scenario across receptors. When considering the influence of the Carrick wind farm in the scoping scenario it is important to note the uncertainty of the scoping scenario. Carrick wind farm in its current design would be located immediately to the south and west of the Proposed Development which for the majority of landscape and visual receptors results in the Proposed Development having a far lesser degree of change than in other scenarios assessed which in turn results in a reduced effect in the scoping scenario, noting a slight intensification would occur.
- 6.1.9 Significant effects on the existing landscape character or visual amenity have been found to be localised in nature and wider landscape and visual effects are relatively limited in extent and severity as a result of localised topographical containment.
- 6.1.10 The compact nature of the layout reduces the effect experienced when viewing the Proposed Development from within the wider landscape context. It is consistently viewed as occupying a small part of a larger upland either as a backdrop to the Ayrshire lowlands to the north or viewed together with the large scale upland hills and plateau that the site is a part of and it is considered in the LVIA that the landscape is capable of accommodating the Proposed Development.

6.2 Introduction

Background

- 6.2.1 This landscape and visual impact assessment (LVIA), which has been undertaken by Optimised Environments Limited ('OPEN'), considers effects on the landscape resource both direct effects and effects on how the landscape is perceived and the effect on visual amenity (views) within the Study Area (Figure 6.1). Cumulative effects arising from the addition of the Proposed Development to other wind farms are also considered. Technical Appendices to this LVIA should be read in conjunction with the Chapter as follows:
 - Volume 4, Technical Appendix 6.1: Landscape and Visual Assessment Methodology;
 - Volume 4, Technical Appendix 6.2: WLA assessment;
 - Volume 4, Technical Appendix 6.3: RVAA; and
 - Volume 4, Technical Appendix 6.4: Lighting assessment.
- 6.2.2 This Chapter is also supported by figures and visualisations as follows:
 - Volume 3: Plan Figures 6.1 to 6.20;
 - Volume 3: LVIA Visualisations Viewpoints 1-23 Figures 6.21 to 6.49.

The Proposed Development

3.1.1 The Proposed Development is entirely located within South Ayrshire Council, as shown on Figure 6.1a. The LVIA is based on the construction, operation, and decommissioning of a wind farm development of turbines as described in Chapter 3, shown on Figure 1.1 and overlain on aerial mapping on Figure 6.1b. The turbine dimensions assessed in this Chapter are for six turbines with 200 m maximum tip heights (155 m rotor diameter, 122.5 m hub height) and 3 turbines with 180 m maximum tip heights (155 m rotor diameter, 102.5 m hub height). These dimensions are indicative and final turbine dimensions will be determined based upon turbine availability and procurement prior to construction, but will not exceed the maximum dimensions that have been assessed.



6.2.3 Other elements of infrastructure of the Proposed Development assessed in this Chapter, which includes turbine access tracks, control building and substation, energy storage compound, borrow pits and a temporary construction compound, are also described in Chapter 3. Access to the turbine development area from the public highway is still under consideration with two routes identified as shown on Figures 1.1 and 6.1b. Both access routes are considered in the LVIA but only one route to site will be progressed and utilised. The landscape and visual aspects of the site selection and design are described in full in Chapter 2.

6.3 Legislation, Policy and Guidelines

6.3.1 The following legislation, policy and guidelines have been taken into consideration during the assessment of landscape and visual effects.

Key Guidance Documents

- 6.3.2 The LVIA follows OPEN's methodology, devised specifically for the assessment of wind farm developments (see Technical Appendix 6.1) and generally accords with 'Guidelines for Landscape and Visual Impact Assessment: Third Edition' (Landscape Institute and IEMA, 2013) ('GLVIA3'), the key source of guidance for LVIA.
- 6.3.3 Other sources of guidance used and referenced in the LVIA include the following:
 - Carys Swanwick Department of Landscape University of Sheffield and Land Use Consultants for The Countryside Agency and NatureScot (2002). Landscape Character Assessment Guidance for England and Scotland;
 - NatureScot (2012). Assessing the Cumulative Impact of Onshore Wind Energy Developments;
 - NatureScot (2020). Assessing impacts on Wild Land Areas Technical Guidance;
 - NatureScot (2017). Siting and Designing Wind Farms in the Landscape Version 3a;
 - NatureScot (2017). Visual Representation of Wind Farms, Version 2.2;
 - NatureScot (DRAFT 2018-2019 or as updated). Guidance for Assessing the Effects on Special Landscape Qualities;
 - Landscape Institute (2019). Technical Guidance Note 2/19 Residential Visual Amenity Assessment;
 and
 - Landscape Institute (2019). Visual representation of Development Proposals: Landscape Institute Technical Guidance Note 06/19.

Strategic Policy

European Landscape Convention (ELC)

- 6.3.4 The ELC is devoted exclusively to the protection, management and planning of all landscapes in Europe. Landscape is described as "an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors" (ELC, 2000). The definition applies to all urban and peri-urban landscapes, towns, villages, rural areas, the coast and inland areas. In addition, it applies to ordinary or even degraded landscape as well as those areas that are of outstanding value or protected.
- 6.3.5 The ELC became binding in the UK from 1 March 2007. As a signatory, the UK government has therefore undertaken to adopt general policies and measures to protect, manage and plan landscapes as follows:
 - to recognise landscapes in law as an essential component of people's surroundings, an expression of the diversity of their shared cultural and natural heritage, and a foundation of their identity;
 - to establish and implement landscape policies aimed at landscape protection, management and planning through the adoption of the specific measures. These include awareness-raising, training



- and education, identification and assessment of landscapes, definition of landscape quality objectives and the implementation of landscape policies;
- to establish procedures for the participation of the general public, local and regional authorities, and other parties with an interest in the definition and implementation of the landscape policies mentioned in the bullet above; and
- to integrate landscape into regional and town planning policies and in cultural, environmental, agricultural, social and economic policies, as well as in any other policies with possible direct or indirect impact on landscape.
- 6.3.6 The ELC provides a framework for NatureScot's work for Scotland's landscapes based on the following five guiding principles:
 - Our landscape people, from all cultures and communities, lie at the heart of efforts for landscape, as we all share an interest in, and responsibility for, its well-being;
 - All landscapes the landscape is important everywhere, not just in special places and whether beautiful or degraded;
 - Changing landscapes landscapes will continue to evolve in response to our needs, but this change needs to be managed;
 - Understanding landscapes better awareness and understanding of our landscapes and the benefits they provide is required; and
 - Tomorrow's landscapes an inclusive, integrated and forward-looking approach to managing the landscapes we have inherited, and in shaping new ones, is required.
- 6.3.7 Given the UK's adoption of the ELC and its aims, the ELC gives an appropriate basis for the importance placed on the Scottish landscape.

National Planning Framework 3 (NPF3)

- 6.3.8 Scotland's third National Planning Framework (NPF3) was published by the Scottish Government in June 2014. NPF3 is a long-term strategy for Scotland and is the spatial expression of the Government's Economic Strategy and plans for development and investment in infrastructure.
- 6.3.9 Scotland's fourth National Planning Framework (NPF4) will set out a new plan for Scotland in 2050. The NPF4 position statement was published in November 2020. Scottish Government ministers acknowledge in the position statement the 'ambitious targets for addressing climate change demand a fresh approach and significant investment in infrastructure, as well as a new understanding of how zero carbon living might work.' Also recognising that 'As a priority, our strategy will need to facilitate the roll-out of renewable electricity and renewable and zero emissions heat technologies.'
- 6.3.10 In November 2021, a consultation draft of NPF4 was published, however this was released following completion of the assessment. Chapter 5 of the EIA Report provides more detail on NPF 4 consultation draft.

Scottish Planning Policy (SPP)

6.3.11 The key national policy document in relation to land use planning is Scottish Planning Policy (SPP) (Scottish Government, 2014). As part of Scotland's commitment to sustainable economic growth it is recognised in Paragraph 2 that the planning system should "...take a positive approach to enabling high-quality development and making efficient use of land to deliver long-term benefits for the public while protecting and enhancing natural and cultural resources".

National Scenic Areas

6.3.12 Paragraph 212 of SPP sets out the following policy in respect of National Scenic Areas: "Development that affects a National Park, National Scenic Area, Site of Special Scientific Interest or a National Nature Reserve should only be permitted where:



- the objectives of designation and the overall integrity of the area will not be compromised; or
- any significant adverse effects on the qualities for which the area has been designated are clearly outweighed by social, environmental or economic benefits of national importance."

Gardens and Designed Landscapes

6.3.13 In Paragraph 148 of SPP protection is given to Gardens and Designed Landscapes: "Planning authorities should protect and, where appropriate, seek to enhance gardens and designed landscapes included in the Inventory of Gardens and Designed Landscapes and designed landscapes of regional and local importance."

SPP Spatial Framework

- In Table 1: Spatial Framework, SPP sets out the basis for a spatial framework in relation to wind farm development in which a hierarchy of protection is defined. Group 1 areas are based on National Parks and National Scenic Areas and are defined as 'Areas where wind farms will not be acceptable'. Group 2 areas are based on the following criteria: a range of national designations, other nationally important environmental interests (such as wild land or carbon rich soils, deep peat and priority peatland habitat), and community separation (2 km from cities, towns and villages identified on the Local Development Plan). Group 2 areas are defined as 'Areas of Significant Protection', within which wind farms can be appropriate if any significant adverse effects on the qualities of these areas can be substantially overcome by siting, design or other mitigation. Group 3 areas are defined as 'Areas with potential for wind farm development' and described as follows: "Beyond groups 1 and 2, wind farms are likely to be acceptable, subject to detailed consideration against identified policy criteria."
- 6.3.15 Having checked against the Group 2 criteria, it is considered that parts of the Proposed Development site are Group 3 and parts are Group 2.

NatureScot's Spatial Planning for Onshore Wind Turbines

- 6.3.16 NatureScot's Spatial Planning for Onshore Wind Turbines (NatureScot, 2015) sets out the main natural heritage considerations that should be taken into account when planning for onshore wind turbines. It accords with SPP and provides further information and data that should underpin both spatial frameworks and wider information on planning for wind turbines in the LDP.
- 6.3.17 Annex 1 set out landscape objectives, as follows:
 - Landscape Protection The aim of landscape protection is to maintain the existing landscape and visual resource, retaining or reinforcing its present character and protecting its quality and integrity. This approach is likely to only be acceptable in those areas defined within group 1 and potentially group 2 of table 1 in SPP.
 - Landscape Accommodation The aim of landscape accommodation is to retain the overall character of the landscape, yet accepting that development may be allowed which will have an impact on the landscape at the local scale. Within local landscape designations and Wild Land Areas, the degree of landscape protection will be less than for National Scenic Areas. In these areas, an appropriate objective may be to accommodate wind farms, rather than seek landscape protection.
 - Landscape Change This objective recognises that the area is one whose landscape character may be allowed to change, which could result in a perception of a wind farm landscape. Landscape change does not imply that 'anything goes', nor that change should occur across the whole area: good landscape design principles still need to be followed to ensure that the development is appropriate for the scale and character of the landscape.
- 6.3.18 The Proposed Development falls within the Foothills with Forest and Wind Farms LCT (17C) where 'landscape change' has already taken place as a result of wind farm development (as recognised in the characterisation of this LCT as a with 'Wind Farm' landscape character type). The Proposed Development does not fall within a Group 1 area of SPP. Whilst parts of the site lie within a Group 2 area of SPP the specific reasoning behind the Group 2 areas on some parts of the site are not as a result of WLA or settlement constraints and therefore are not Group 2 for landscape and visual



reasons.. Taking this into account, it is considered that a strategy of 'landscape protection' for the site is therefore not applicable in this instance and that a strategy of 'landscape accommodation' is more appropriate from a landscape and visual perspective.

Wild Land

- 6.3.19 Wild Land is recognised in the SPP and planning policy as a nationally important resource (not a designation), which should be afforded protection for its wildness qualities, but it is not statutorily protected in the way that National Parks and National Scenic Areas are for their scenic qualities.
- 6.3.20 Paragraph 200 of SPP states the importance of Wild Land: "Wild land character is displayed in some of Scotland's remoter upland, mountain and coastal areas, which are very sensitive to any form of intrusive human activity and have little or no capacity to accept new development. Plans should identify and safeguard the character of areas of wild land as identified on the 2014 SNH map of wild land areas."
- 6.3.21 Paragraph 215 further explores the ability of Wild Land to accommodate development within Wild Land Areas: "In areas of wild land (see paragraph 200), development may be appropriate in some circumstances. Further consideration will be required to demonstrate that any significant effects on the qualities of these areas can be substantially overcome by siting, design or other mitigation." The Proposed Development is not within the Merrick WLA but is considered in relation to the effects on the WLA qualities within Technical Appendix 6.2 of the LVIA.
- 6.3.22 The status of Wild Land Areas (WLA) is also clearly set out in Para 8 of SNH's 'Assessing Impacts on Wild Land technical guidance' (NatureScot2020) 'WLAs have not been identified on scenic grounds and are not a statutory designation.' There is also an acceptance (paragraph 9) that WLAs are not 'wilderness' and that human influences can and do form part of the baseline character of WLAs.

Local Policy

South Ayrshire Local Development Plan Policy

6.3.23 The South Ayrshire Local Development Plan was adopted in September 2014 (the SALDP). In June 2019, South Ayrshire Council approved the Proposed Replacement South Ayrshire Local Development Plan (PLDP2) for publication and public consultation. When adopted, PLDP2 will supersede the adopted South Ayrshire Local Development Plan (2014). Until then, the SALDP 2014 remains the adopted LDP.

LDP Policy: Wind Energy Policy

- 6.3.24 Proposals will be supported if:
 - "a) they are capable of being accommodated in the landscape in a manner which respects its main features and character (as identified in the South Ayrshire Landscape Wind Capacity Study or in any subsequent updates to that study), and which keeps their effect on the landscape and the wider area to a minimum (through a careful choice of Site, layout and overall design);
 - b) they do not have a significant detrimental visual impact, taking into account views experienced from surrounding residential properties and settlements, public roads and paths, significant public viewpoints, and important recreational assets and tourist attractions;
 - c) they do not have any other significant detrimental effect on the amenity of nearby residents, including from noise and shadow flicker;
 - d) they do not have a significant detrimental effect on natural heritage features, including protected habitats and species, and taking into account the criteria in LDP policy: natural heritage;
 - e) they do not have a significant detrimental effect on the historic environment, taking into account the criteria in LDP policy: historic environment and LDP policy: archaeology;
 - f) they do not adversely affect aviation, defence interests and broadcasting installations; and



g) their cumulative impact in combination with other existing and approved wind energy developments, and those for which applications for approval have already been submitted, is acceptable."

LDP Policy: Landscape Quality

- 6.3.25 "We will maintain and improve the quality of South Ayrshire's landscape and its distinctive local characteristics. Proposals for development must conserve features that contribute to local distinctiveness, including:
 - a. community settings, including the approaches to settlements, and buildings within the landscape;
 - b. patterns of woodland, fields, hedgerow and tree features;
 - c. special qualities of rivers, estuaries and coasts;
 - d. historic landscapes; and
 - e. skylines and hill features, including prominent views."

LDP Policy: Protecting the Landscape

- 6.3.26 "We will consider proposals within or next to (South Ayrshire) Scenic Areas (as defined on the LDP environment map) against the following conditions.
 - a. The significance of impacts and cumulative impacts on the environment, particularly landscape and visual effects as informed by the Ayrshire Landscape Character Assessment (SNH 1998)".
 - b. How far they would benefit the economy.
 - c. Whether they can be justified in a rural location."

LDP Policy: Dark Skies

6.3.27 "We will support the Galloway Forest Dark Sky Park and will presume against development proposals within the boundaries of the park that would produce levels of lighting that would adversely affect its 'dark sky' status. The boundaries of the Dark Sky Park [and of the buffer zone] are shown on the map on page 40. Development will have to be in line with the supplementary guidance on lighting within the Galloway Forest Dark Sky Park, which we will produce jointly with the adjoining planning authorities and Forestry Commission Scotland. This will also provide guidance for proposed developments within the buffer zone which may have a lighting impact on the Dark Sky Park. [The supplementary guidance will define the geographical extent of the buffer zone.]"

LDP Policy: Galloway and Southern Ayrshire Biosphere

- 6.3.28 The Galloway and Southern Ayrshire is confirmed in the LDP as a location for a UNESCO biosphere reserve because of its unique combination of special landscapes and wildlife areas, rich cultural heritage and communities that care about their environment and culture and want to develop it sustainably.
- 6.3.29 SALDP states the following: "We will support development that promotes the aims of the biosphere and shows an innovative approach to sustainable living and the economy, and supports improving, understanding and enjoying the area as a world-class environment".
- A core area lies at the heart of the Biosphere and includes the areas of mountain, moorland, freshwater lochs and rivers primarily within the Merrick Uplands/Galloway Hills. A buffer zone covering the Galloway Forest Park is a working landscape managed to protect the natural heritage of the core areas. The Proposed Development is located outside of this buffer zone within the Biosphere transition area. The Biosphere is a non-statutory designation that in itself has no formal status within the planning system, however the effect of the Proposed Development on the 'Sense of Place' and landscape value of the core and buffer of the Biosphere is assessed in relation to the Merrick Wild Land Area (WLA).



South Ayrshire Local Landscape Areas

- 6.3.31 In accordance with 2017 draft SNH guidance on the harmonisation and selection of local landscape area designations across Scotland, South Ayrshire Council commissioned a consultant to review the extensive, existing sensitive landscape character area and scenic area designations in South Ayrshire. This included consideration of the need for new Local Landscape Areas (LLAs), with a view to defining candidate LLAs (cLLAs) that:
 - "(1) conform with Scottish Planning Policy and
 - (2) recognise LLAs may not just be of scenic value, but may have other attributes like nature conservation, cultural heritage or recreational value, and finally
 - (3) are sufficiently robust to protect and enhance South Ayrshire Council's local landscapes."
- 6.3.32 The copy of the final report informed the preparation of the approved replacement South Ayrshire Local Development Plan (PLDP2). As PLDP2 has only recently been published for public consultation, the cLLAs within it remain candidate sites, indicative of the Council's intention for protecting important landscapes in South Ayrshire.

South Ayrshire LDP Supplementary Guidance: Wind Energy (2015)

- 6.3.33 The Supplementary Guidance (SG): Wind Energy (2015) document outlines the Spatial Framework for wind energy development within South Ayrshire. This Spatial Framework identifies areas which have potential for wind farm development and those which do not, or those which require significant protection. In addition to this the Supplementary Guidance refers to the South Ayrshire Landscape Wind Capacity Study (2013) (now superseded by the 2018 SALWCS), which provides advice on landscape sensitivities, thresholds and cumulative issues amongst other things. It assesses the landscape sensitivity, the capacity of landscape units to accommodate change and provides advice on how the scale, siting and design of development should be informed by local landscape character.
- 6.3.34 The first part of the SG establishes the spatial framework, whilst the second part provides further detail on how policy criteria will be applied in the assessment of proposals.
- 6.3.35 The spatial framework associated with this SG indicates that the site includes both 'areas of potential for wind farm development' and 'areas of significant protection'.
- 6.3.36 Within the areas which are identified as having potential for wind energy developments, the SG notes on page 5 that 'a wide range of turbine typologies of various heights may be acceptable', and that 'opportunities to accommodate turbines above 70m will focus on the less sensitive upland landscapes where the more extensive scale of these landscapes can better accommodate and provide an appropriate setting for larger turbines.' Within the areas of significant protection, the SG identifies that 'there may be some limited opportunities for development, where it can be demonstrated that the significant effects on the qualities of these areas can be substantially overcome by siting, design or other mitigation'.
- 6.3.37 The specific reasoning behind the 'significant protection' of some parts of the site does not relate to any specific landscape and visual constraint and from a landscape and visual perspective the site is therefore considered to be within an 'area of potential for wind farm development'.
- 6.3.38 Supplementary Guidance on landscape character is set out in the SG as follows:
 - A. Landscape Character "We will support proposals if: they are capable of being accommodated in the landscape in a manner which respects its main features and character (as identified in the SALWCS), and which keeps their effect on the landscape and the wider area to a minimum (through a careful choice of site, layout and overall design)."
- 6.3.39 Proposals will be assessed against the objectives set out in the Landscape Strategy in Table 2 of the SG (p11). Objectives of the Landscape Strategy that are relevant to the Proposed Development include:



- "Rugged scenery and sense of wildness associated with Loch Doon and the Carrick Hills Wind farm development will be directed away from this landscape, developers will also be required to demonstrate that development sited in surrounding landscapes avoid significant impact on its setting and experiential qualities."
- "Landmark Hills and their setting Protect landmark hills (Figure 7) and their setting. They form highly visible backdrops and diverse skylines to the Girvan and Stinchar valleys and the South Ayrshire coast. Wind turbine development on or near these hills would detract from their distinct form and character and would also be visually prominent from sensitive valleys."
- "Less sensitive upland landscapes Within South Ayrshire the upland landscapes are a more extensive scale and can better accommodate larger scale turbines. The strategy will seek to consolidate the generally successful association of larger turbines with this particular landscape character type. Mitigation of their visual impact will be sought by setting development well back into the upland interior and considering limitations in the height of turbines."

"Sensitive Cumulative Zones – Minimise Cumulative impacts. Cumulative landscape and visual issues have been identified in the following areas this will limit the capacity for further development: including A714 and Duisk River; and the Stinchar Valley."B. Visual Impact - "We will support proposals if: they do not have a significant detrimental visual impact, taking into account views experienced from surrounding residential properties and settlements, public roads and paths, significant public viewpoints, and important recreational assets and tourist attractions."

G. Cumulative Impact – "We will support proposals if: Their cumulative impact in combination with other existing and approved wind energy developments, and those for which applications for approval have already been submitted, is acceptable."

- 6.3.40 The SG states that the threshold of acceptability will be monitored and where it is judged the limit of acceptable cumulative impact has been reached this will limit the capacity for further development. Existing and potential impacts which may limit the scope for development include:
 - "Simultaneous and sequential cumulative visual effects experienced from the A714, an important tourist route into South Ayrshire, where large wind farms such as Arecleoch and Mark Hill are already prominent in more open and elevated sections of this route south-east of Barrhill.
 - Cumulative landscape and visual effects on the Stinchar Valley where Mark Hill wind farm is prominent and in the Poundland area and where Hadyard Hill forms a dominant feature.
 - Cumulative effects on the character and setting of the Merrick if wind farms were to extend northwards."
- 6.3.41 The SG considers that "establishing boundaries and maintaining visual separation from other wind farms would allow for a clear distinction to be perceived between the wind-farmed landscape and the landscape beyond". The SG therefore proposes "to provide significant protection to the sensitive foothills and valley areas in the immediate vicinity of these wind farm landscapes in order that the integrity of local landscapes and their character can be retained". These areas have been incorporated within Table 2 (Landscape Strategy) of the SG.

South Ayrshire Landscape Wind Capacity Study (2018)

The 2013 Wind Capacity Study was updated by SAC in August 2018. The updated South Ayrshire Landscape Wind Capacity Study of August 2018 (SALWCS) is strategic level guidance that informs the assessment of site-specific proposals, as set out on page 10 of the South Ayrshire Supplementary Guidance: Wind Energy. It provides an initial overview in the assessment of a windfarm proposal, but it is not a substitute for a detailed landscape and visual impact assessment. SALWCS acknowledges this point at paragraph 4.2.3 which states that 'The combined sensitivity scores set out in this report represent an average across broad character types and areas and considerable variation can occur across these landscapes. The assessment identifies constraints in analysis and at a strategic scale and developers would need to consider landscape and visual effects at a more detailed level.'



- 6.3.43 SALWCS places the site largely within Character Type 17C: Foothills with Forest and Wind Farm, this includes the turbine locations and the majority of the wind farm infrastructure. The northern part of the site and a section of access track lies within Character Type 13: Intimate Pastoral Valley, connecting to the road network at the southern edges of Character Type 12: Middle Dale.
- 6.3.44 The main findings of SALWCS note that "There may be some very limited scope to accommodate additional large turbines (70-130m high) within the Foothills with Forest and Wind Farms landscape character type although effects on the adjacent Stinchar and Girvan valleys, the Carrick Forest and cumulative effects with existing wind farms present key constraints likely to severely limit the extent of development that can be accommodated."
- The 2018 SALWCS further notes in relation to the very large turbine typology (130m+) that "The interior of the more extensive eastern area of these foothills may be less sensitive to turbines towards the lower height band of this typology although there would be relatively close views from the Carrick Hills within the Rugged Uplands, Lochs and Forest (21). Fixed lighting on turbines >150m could additionally affect dark skies and wilder landscapes in LCT 21 and 18c" and that "Turbines >150m would be likely to dominate the lower relief and the reduced extent of these foothills in the west. Broader areas of plateau in the east would be less sensitive in terms of scale although this is not an extensive upland landscape and effects on adjacent smaller scale valleys will be a key constraint." SALWCS assesses this LCT strategically as having an overall High sensitivity to the Very Large typology (+130 m) and notes that this is "due principally to the likely effects on surrounding sensitive valleys, the remote Carrick Hills and the coast."
- 6.3.46 SALWCS concludes that "There is no scope for very large turbines (>130m high) to be accommodated in this landscape." For the Large typology the SALWCS notes that "Turbines should be well set back from the more sensitive outer edge of these foothills to avoid significant impact on the 'landmark' hills which form highly visible containing edges to the smaller-scale settled Stinchar and Girvan Water valleys and to reduce cumulative effects on these valleys. The adjacent Rugged Uplands, Lochs and Forest character type (21) is also highly sensitive and some impact on the character and views from this landscape is likely to be unavoidable if development were located in the broader eastern basin of these foothills. There is likely to be little scope for an extensive number of turbines/multiple wind farm developments to be accommodated due to the limited extent/narrowness of these foothills and the need to avoid the higher, more defined prominent hills on the edges of this landscape."
- 6.3.47 The Intimate Pastoral Valley LCT (13) covers the northern part of the site (although as noted above no turbines would be located within this LCT) and forms the eastern boundary to this part of the Foothills with Forest and Wind Farm. SALWCS assesses this LCT as having a High sensitivity to the Large typology (+70 m) and does not include an assessment of the Very Large typology. In relation to scale of this landscape it notes the following "These gently sinuous valleys are strongly contained by adjacent uplands with occasional higher and more pronounced summits occurring along the edges of the valleys, particularly where they abut the Foothills (17b/17c/17e)."

6.4 Consultation

6.4.1 Table 6.1 summarises the consultation responses received regarding landscape and visual and provides information on where and/or how they have been addressed within this assessment.

Table 6.1 – Consultation Responses

Consultee	Issues Raised	Applicant Action
and Date		
SAC Scoping	'We agree that the Landscape Character Types (LCTs)	Landscape Character Effects within
Opinion	used in the 2018 South Ayrshire Landscape Wind	the LVIA are focussed on an area of
4/3/21	Capacity Study should form the basis for the LVIA and	20 km.
	that the assessment of effects on landscape character	Landscape Character Effects are
	should focus on an area within 20 km of the wind	considered in Section 6.8 and 6.9.
	farm. The key concerns of the Council are likely	



Consultee	Issues Raised	Applicant Action
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	significant adverse effects on the character of the Intimate Pastoral Valley LCT which covers the Upper Girvan and Stinchar valleys and on the Rugged Uplands with Lochs and Forest LCT.'	
SAC Scoping Opinion 4/3/21	The Council is in agreement with the proposed approach in terms of assessing effects only on the Local Landscape Areas (LLAs) which will replace the existing South Ayrshire Scenic Area designation in the forthcoming Local Development Plan. Significant adverse effects are likely to occur on the character and special qualities of the Water of Girvan Valley and the High Carrick Hills LLAs; The Stinchar Valley LLA could also be significantly affected. Other valued landscapes which could be significantly affected by this proposal include the Merrick Wild Land Area (WLA) and the Galloway Dark Sky Park, as identified in section 4.7 of the Scoping Report. It is agreed that detailed assessment should be provided of all the valued landscapes noted above in the LVIA.	The LVIA assesses the effects on the candidate Local landscape Areas (cLLAs) rather than the existing South Ayrshire Scenic Area designation. Landscape Designations are considered in Section 6.8 and 6.9. The Merrick WLA is assessed in Technical Appendix 6.2 and the Dark Sky Park is Assessed in Technical Appendix 6.4.
SAC Scoping Opinion 4/3/21	The representative viewpoints shown on the ZTV and listed in the Scoping Report should be supplemented with additional viewpoints from: Cornish Hill – which is a popular destination for walkers and where some visibility is indicated from its summit in Figure 4.3 in the Scoping Report (GR.404 941) The B741 east of Straiton where it descends into the village near Largs Farm and offers views over the upper Girvan valley and adjacent uplands (approximately GR.390 052) A wireline visualisation should also be produced from the minor road in the upper Stinchar valley between Barr and South Balloch where visibility of 1-3 turbines is indicated in the ZTV. It is expected that forestry may provide some screening from this road but it would be useful to establish to what extent. If visibility proves likely to be limited there would be no need to select this viewpoint for detailed assessment in the LVIA.	These additional viewpoints were added to the viewpoint list before the viewpoints were agreed through the pre-application discussions. A wireline has also been included on the minor road between Barr and South Balloch. Visual Effects are considered in Sections 6.11 and 6.12.
SAC Scoping Opinion 4/3/21	It is additionally requested that wireline or photo-wire visualisations are produced from the B741 west of the Ladyburn junction in the Girvan valley looking towards the Kilkerran GDL and from within the Blairquhan GDL. These wirelines should either be included in the LVIA or Cultural Heritage sections of the EIA-R in order to fully assess potential effects on views to Kilkerran House and its designed landscape, on views from the Blairquhan designed landscape and also to inform the	These additional wirelines are provided in the Chapter 11. Effects on the Blairquhan GDL are also assessed in this chapter in Section 6.9.



Consultee and Date	Issues Raised	Applicant Action
	assessment of effects on the Water of Girvan Valley LLA.	
SAC Scoping Opinion 4/3/21	It is not considered necessary to include a representative viewpoint from the Royal Troon Golf Course (Viewpoint 20 listed in Table 4-1 of the Scoping	The viewpoint at the Troon Golf Course was removed from the viewpoint list before the viewpoints
4,3,21	Report) as this area lies some 30 km from the proposal and effects on views are therefore unlikely to be significant. Consideration should also be given to	were agreed through the pre- application discussions. Wireframes are provided from the
	visibility and key views from the Barr Trails recreational routes in the Stinchar Valley.	Barr Trails and these are considered in Section 6.11.
SAC Scoping Opinion 4/3/21	Lighting effects should be assessed from each of the representative viewpoints and not just from the viewpoints selected to illustrate night-time effects.	The visual assessment of turbine lighting has considered the visible aviation lights from all viewpoints in relation to number, intensity and distance. A lighting intensity ZTV has
		also been provided illustrating the relative intensity of the lights across the study area within the extent of theoretical visibility of the visible aviation lights. However, the detailed
		assessment of the effects of visible aviation lighting is typically carried out from only a selection of
		representative viewpoints as this is sufficient to form a professional judgement on the likely significance of lighting effects. See Technical Appendix 6.4.
NatureScot	'Aviation lighting is a key issue for this proposal given	The visual effect of turbine aviation
Scoping	the height of the turbines and the site's proximity to	lighting has been assessed in
Opinion	the Merrick WLA and the Galloway Dark Skies Park.	Technical Appendix 6.4, including
17/2/21	Our advice on the assessment for turbine lighting is	effects on the Dark Sky Park and
	that the proposal alone and in combination with other	visual effects from viewpoint 20 at
	lit schemes could result in adverse impacts on the wild	the edges of the Merrick WLA.
	land qualities of the Merrick WLA.'	Effects are assessed for both 2000cd
	'We advise that the Applicant assesses the potential	and 200cd and also for a worst case
	for adverse impacts of aviation lighting on the wild	(all turbines lit) and proposed
	land qualities of the Merrick WLA.'	reduced case scenario, see Technical
	'The turbine lighting assessment should consider the	Appendix 6.4 for more detail on these
	cumulative effects of lights from other relevant	worst case parameters.
	consented or application stage schemes e.g. Clauchrie	Aviation warning lights, are not
	and Craiginmoddie wind farms. It should also include	required to be switched on until
	the proposed Carrick and Knockodhar wind farms	'Night' has been reached i.e. not
	which are currently at scoping. The proposed lighting	during 'twilight', when landscape
	of the cumulative schemes should be illustrated on the night-time photomontage from e.g. Shalloch on	character may be discerned. The 2017 Merrick WLA description, whilst



Consultee Issues Raised Applicant Action					
and Date	issues raised	Applicant Action			
	Minnoch (or a suitable agreed viewpoint) and any other night time photomontages. Despite potential mitigation, we advise that lights should be shown at 2000cd on all 12 turbines, as this is the worst case scenario. If directional lighting is to be employed as a form of mitigation, then it would also be useful to include a lighting intensity ZTV within the assessment (this ZTV should also show the boundaries for the Galloway Dark Skies Park and the Merrick WLA).'	mentioning the Dark Sky Park, does not include darkness as one of the wild land qualities. The wild land qualities that are described in the 2017 Merrick WLA description are evident within the context of landscape characteristics experienced during the day that are not readily perceived at night in darkness. Cumulative lighting has been considered at representative night time viewpoints. And cumulative visualisations are included for viewpoint 20 Cornish Hill.			
Crosshill, Straiton and Kirkmichael Community Council (CSKCC) Scoping Opinion 23/2/21	Follow the 'Guidelines for Landscape and Visual Impact Assessments: 3 rd Edition' rather than OPEN methodology.	GLVIA3 is guidance and not methodology which needs to be developed for projects using GLVIA3 as its basis. OPEN methodology is based on GLVIA 3, albeit with adaptions which are set out transparently and justified in the methodology for this chapter which is set out in Technical Appendix 6.1.			
	The physical effects should not be limited to the area within the site: access tracks, off-site borrow pits and any other development not on the site should also be included.	Physical effects are considered in section 6.7.			
	Residential Visual Amenity Assessment should definitely be extended outwith 2 km given the height of the proposed turbines.	The RVAA assesses all properties within 2 km. 2019 Landscape Institute (LI)guidance on RVAA is very clear that effects out with 2 km are disproportionate and fails to recognise that RVAA is a stage beyond LVIA. More detail on this is provided in Technical Appendix 6.3 RVAA.			
	As all turbines hubs would be seen from the Dark Sky Observatory (DSP) then any lighting could compromise viewing objects low down in the sky (such as the recent planetary conjunction). Lighting would also have negative impacts on those viewing the night sky from other viewing locations within the Dark Sky Park. The Dark Skies can also be viewed from many areas outwith the boundaries of the actual Park including Straiton and the upper Girvan valley.	None of the turbine lights would be visible from the DSP Observatory. Effects on the DSP and representative viewpoints are considered in Technical Appendix 6.4. Note that the DSP Observatory burned down in June 2021, however, there are plans to rebuild it.			



Consultee	Issues Raised	Applicant Action		
and Date				
	Wind farms at Scoping stage should be included in cumulative assessments.	Scoping Stage Carrick Wind Farm, due to its close proximity has been included in the detailed cumulative assessment.		
	This is a huge issue. In an area renowned for its World famous Dark Skies Park, superb star gazing opportunities etc having turbines at over 150 m high will have an enormous detrimental effect on the very unique night environment. A night-time impact assessment must be included in any EIA.	Effects on the DSP and representative viewpoints are considered in Technical Appendix 6.4.		
	Additional viewpoints on the B7023 at a point 200 metres north of Gartlea Farm. And on the Kirkmichael to Crosshill Road, just as it approaches Crosshill.	The viewpoint to the north of Gartlea Farm was included in the agreed viewpoints. Whilst there is theoretical visibility on the Kirkmichael to Crosshill Road there is only limited visibility of turbines, this limited visibility is further restricted by intervening woods and forestry. Wire overlays on photography were provided at exhibition and to CSKCC by the Applicant to demonstrate this.		
Dailly Community Council Scoping Opinion	Hardly any viewpoints from the Western side of the Proposed Development – such as Wallacetown, and all along that ridge to Girvan and towards Crosshill. Viewpoints should be demonstrated without any obstructions, ie forestry, buildings, hedges.	There is no visibility from Wallacetown. Viewpoint 22 is located on the ridge described, to the north- east of Crosshill.		
	All viewpoints should include visuals for night-time turbine lighting as well as during daylight hours.	The visual assessment of turbine lighting has considered the visible aviation lights from all viewpoints in relation to number, intensity and distance. A lighting intensity ZTV has also been provided illustrating the relative intensity of the lights across the study area within the extent of theoretical visibility of the visible aviation lights. However, the detailed assessment of the effects of visible aviation lighting is typically carried out from only a selection of representative viewpoints as this is sufficient to form a professional judgement on the likely significance of lighting effects. See Technical Appendix 6.4.		
	All of the proposed/scoped/operational and in construction wind farms must be included.	Scoping Stage Carrick Wind farm, due to its close proximity has been		



Consultee	Issues Raised	Applicant Action
and Date		
		included in the detailed cumulative
		assessment.
NatureScot	Given the theoretical visibility of the majority of the	Additional viewpoints included in
email	turbines from within the northern part of the WLA we	agreed viewpoint list at Cornish Hill
consultation	advise that the viewpoint list includes a viewpoint at	and Loch Girvan Eye.
13/5/21	Cornish Hill and Shalloch on Minnoch and a viewpoint	
	from the area around Loch Girvan Eye /	
	Craignasheenie Hill.	
	'We advise that two night time viewpoints are	A night time viewpoint has been
	included from within the WLA. Given that the	included from Cornish Hill
	assessment should be cumulative and include lights on	However, NatureScot later advised
	the Clauchrie wind farm (at Appeal stage) we propose	that this advice was not consistent
	that Shalloch on Minnoch is included for this purpose.	with that given to the Craiginmoddie
	This accords with night time visualisations and	applicant in an email dated 20 May
	assessment submitted for the application stage	2021 stating they 'would be content
	Craiginmoddie wind farm.	with the nighttime from Cornish Hill
	In addition, a night time visual from Cornish hill should	as a standalone night time
	also be provided.'	representation of the impact of the
NatureScot	We advise that a night time visual from Cornish hill is	proposal on the WLA.'
email	provided from within the WLA to help provide a	
consultation	sufficiently robust cumulative assessment of night	
13/5/21	time lighting on the WLA. This would need to take	
	Clauchrie as well as Arecleoch extension / Kilgallioch	
	extension etc into account.	

6.5 Assessment Method and Significance Criteria

Study Area

- 6.5.1 The initial step in the LVIA is the establishment of the Study Area for the assessment. Guidance developed by NatureScot (Visual Representation of Windfarms Version 2.2, February 2017) indicates that an area with a radius of 45 km from the nearest turbine is appropriate for the turbines of the size proposed in the Proposed Development. The 45 km radius is shown on Figure 6.1a.
- 6.5.2 Large sections of the study area between 20 km and 45 km have limited or no theoretical visibility of the Proposed Development, where theoretical visibility is shown on the ZTV potentially significant effects are limited by distance and intervening woodland or forestry. SAC agreed in their scoping response that the landscape character assessment be focussed on a 20 km study area. NatureScot also suggested a reduced study area for the cumulative assessment to provide a focus to the consideration of potential cumulative effects with the Proposed Development (suggesting around 25 km). Taking all of this into account and in order to focus the assessment on potential for significant effects, the LVIA includes a focussed study area of 20 km for both the landscape character and cumulative assessment.
- 6.5.3 Visual receptors have been considered within a 45 km study area, with a more detailed focus for those receptors found closer to the site i.e. Public Rights of Way and local recreational routes within 10 km. For individual properties, an RVAA has been carried out within a 2 km study area, in accordance with LI guidance. See appendix 6.3 for further description of the RVAA study area.



Desk Study

- 6.5.4 The assessment is initiated through a desk study of the site and Study Area as described above. ZTV analysis of the Proposed Development has been carried out for the Study Areas outlined above (including cumulative ZTVs, CZTVs), as has mapping of landscape character, landscape related designations, wild land areas and principal visual receptors. The Study Areas are not intended to provide a boundary beyond which the Proposed Development would not be seen, but rather to define the areas within which it may have a significant landscape or visual effect. A significant effect is, in reality, very unlikely to occur towards the edges of the identified Study Areas.
- 6.5.5 The desk study also utilises Geographic Information System (GIS) and Resoft Windfarm software to explore the potential visibility of the Proposed Development. The resultant ZTV diagrams and wirelines provide an indication of which landscape and visual receptors are likely to be key in the assessment.

Field Survey

- 6.5.6 To inform the LVIA and layout design process, field survey was undertaken between September 2020 and September 2021. Viewpoint photography was captured during field survey visits in periods of good visibility. Field surveys were carried out throughout the 45 km radius area, although surveys were concentrated within the areas shown on the ZTV to gain theoretical visibility of the Proposed Development.
- 6.5.7 Field survey included visits to viewpoints as well as extensive travel around the Study Area to consider potential effects (including cumulative) on landscape character and on the experience of views seen from travel routes through the landscape. These visits have allowed the landscape character and the visual amenity of the Study Area to be experienced in a range of different conditions and seasonal variation. The field survey allows the assessors to judge the likely scale, distance, extent and prominence of the Proposed Development directly.
- 6.5.8 The landscape of the site was assessed for any particular features that contribute to the landscape character of the site or are important to the wider landscape setting. In particular, the form and pattern of the land was assessed from the site and surrounding area to better understand its character and to take these qualities into account in the siting and design of the Proposed Development. The landscape character types for the Study Area were reviewed and the key characteristics of the landscape were identified. The field surveys provided an experience of the character types of the Study Area and verification of how these areas might be affected by the Proposed Development. Visual amenity was surveyed including both static and sequential views, from receptors representative of the range of views and viewer types likely to experience the Proposed Development. Views from a variety of distances, aspects, elevations and extents were included. Receptor types include individual properties and settlements; main transport routes; main visitor locations; areas of cultural significance; the range of landscape character types within the Study Area; and the cumulative effects of the Proposed Development in combination with other existing or proposed wind farms in the Study Area.

Assessment Methods

Introduction

- 6.5.9 The detailed methodology for the assessment is described in detail in Technical Appendix 6.1. The broad principles used in the assessment of the significance of effects are also described here.
- 6.5.10 The objective of the assessment of the Proposed Development is to predict the likely significant effects on the landscape and visual resource. In accordance with the EIA Regulations the landscape and visual effects are assessed to be either significant or not significant. The LVIA does not define intermediate levels of significance as the EIA Regulations do not provide for these.
- 6.5.11 The significance of effects is assessed through a combination of two considerations; the sensitivity of the landscape receptor or view and the magnitude of change that would result from the addition of the Proposed Development.



Sensitivity of Receptor

6.5.12 Sensitivity is an expression of the ability of a landscape receptor or view to accommodate the Proposed Development. Sensitivity is determined through a combination of the value of the receptor and its susceptibility to the Proposed Development. The factors that determine these criteria are described in Technical Appendix 6.1. Levels of sensitivity - high, medium-high, medium, medium-low and low - are applied in order that the judgement used in the process of assessment is transparent.

Magnitude of Change

6.5.13 Magnitude of change is an expression of the extent of the effect on landscape receptors and views that would result from the introduction of the Proposed Development. The magnitude of change is assessed in terms of a number of variables, including the size and scale of the impact and the extent of the affected area. The factors that determine these criteria are described in Technical Appendix 6.1. Levels of magnitude of change - high, medium-high, medium, medium-low, low and negligible - are applied in order that the judgement used in the process of assessment is transparent.

Categories of Effects

- 6.5.14 The LVIA is intended to determine the effects that the Proposed Development would have on the landscape and visual resource. For the purposes of assessment, the potential effects on the landscape and visual resource are grouped into four categories:
 - Physical Effects are restricted to the area within the site boundary and are the direct effects on the existing fabric of the site, such as alteration to ground cover. This category of effects is made up of landscape elements, which are the components of the landscape such as rough grassland and moorland that may be directly and physically affected by the Proposed Development.
 - Effects on Landscape Character: landscape character is the distinct and recognisable pattern of elements that occurs consistently in a particular type of landscape, and the way that this pattern is perceived. Effects on landscape character arise either through the introduction of new elements that physically alter this pattern of elements, or through visibility of the Proposed Development, which may alter the way in which the pattern of elements is perceived. This category of effects is made up of landscape character receptors, which fall into two groups: landscape character types and landscape-related designated areas.
 - Effects on Views: the assessment of effects on views is an assessment of how the introduction of the Proposed Development would affect views. The assessment of effects on views is carried out in two parts:
 - an assessment of the effects that the Proposed Development would have on a series of viewpoints; and
 - an assessment of the effects that the Proposed Development would have on views from principal visual receptors (relevant settlements and routes found throughout the Study Area).
 - Cumulative Effects arise where the study areas for two or more wind farms (or in some cases other
 relevant development) overlap so that both of the wind farms/developments are experienced at a
 proximity where they may have a greater incremental effect, or where wind farms/other
 developments may combine to have a sequential effect.
- It is important to remember that the objective of the cumulative assessment is different from the assessment of effects of the Proposed Development itself. In the cumulative assessment the intention is to establish whether or not the addition of the Proposed Development, in combination with other relevant existing and proposed wind farms, may lead to a landscape character or view that is characterised primarily by wind farms so that other patterns and components are no longer definitive. The assessment of the effects of the Proposed Development itself focusses on the effect that the Proposed Development would have on the viewpoints, principal visual receptors and



landscape character receptors, taking baseline wind farms into consideration. Baseline (operational and under construction) cumulative wind farms are taken into consideration in both the assessment of the Proposed Development itself and the cumulative assessment, while consented and application stage wind farms are considered only in the cumulative assessment.

6.5.16 In accordance with guidance (NatureScot, 2012), the LVIA for each receptor considered assesses the effect arising from the addition of the Proposed Development to the cumulative situation, and not the overall effect of multiple wind farms. However, in considering the detailed cumulative effects described within the LVIA, a broad statement relating to the combined cumulative effect of multiple wind farms in the area has also been provided in the LVIA summary.

Potential Effects

6.5.17 Potential effects are those which could result from the construction and operation of the Proposed Development. Table 6.2 below describes the typical landscape and visual effects that can arise from the construction and operation of a wind farm; it should be noted that their inclusion in this table does not imply that they will occur, or be significant, in the case of the Proposed Development.

Table 6.2 - Potential Effects

Activity	Specific Element	Potential Effects	Potential
			Sensitive
			Receptors
Construction	Construction plant,	Temporary physical effects on	Physical
	borrow pit	landscape fabric	landscape
	excavation,	Permanent physical effects on	features
	temporary	landscape fabric (i.e. permanent	Landscape
	construction	removal of vegetation / forestry /	character
	facilities, temporary	ground cover)	receptors
	meteorological	Temporary effects on landscape	Visual receptors
	mast, construction	character	
	cranes, construction	Temporary effects on views	
	of onsite	Temporary cumulative effects	
	substations		
Operation –	Turbines, access	Long term effects on landscape	Landscape
day time	tracks, restored	character including cumulative	character
	borrow pits,	effects	receptors
	operations building,	Long term effects on views including	Visual receptors
	permanent	cumulative effects	
	meteorological		
	mast		
Operation –	Turbine lighting on	Long term effects on views	Visual receptors
night time	turbines		

6.5.18 The effects of the construction and operation of the Proposed Development on the landscape and visual resource would arise principally from the construction and operation of the turbines and access tracks. The temporary construction facilities, such as cranes, construction vehicles, borrow pits, construction compound and delivery vehicles required during the construction would also have effects on the landscape and visual resource during the 18-month construction period. The operational lifespan of the Proposed Development would be 30 years, after which it would be appropriately decommissioned. It is expected that decommissioning would take approximately 12-months and that associated activities would be similar in nature to construction.



6.5.19 Operational and construction effects are assessed and reported together in this chapter. Due to the large scale of the wind farm proposed, it is considered that there would be no instances where construction effects trigger a significant effect for receptors where operational effects are found to be not significant.

Turbine Lighting

- 6.5.20 The wind turbines would be fitted with visible aviation lighting in accordance with the Air Navigation Order (2016) and Civil Aviation Authority (CAA) requirements. As such, there is potential for the Proposed Development to be visible at night. The LVIA assesses the visual effects of visible aviation lighting in Appendix 6.4 which includes specific lighting ZTVs and night time visualisations.
- 6.5.21 Specific requirements for aviation and navigational lighting would be agreed with the relevant stakeholder's post-consent and prior to construction but would not exceed the worst case scenario which has been assessed (see further below). The CAA requires that all obstacles at or above 150 m above ground level are fitted with visible lighting and in the case of wind turbines these should be located on the nacelle. There is an additional requirement for lights to be provided at an intermediate level of half the nacelle height. These would need to be fitted around the towers to allow for 360-degree horizontal visibility.
- 6.5.22 A description of the turbine lighting requirements and a proposed turbine lighting is found within Chapter 3 and Chapter 14. Based on this, two differing lighting scenarios have been assessed in Technical Appendix 6.4 as follows:
 - Worst Case Aviation Lighting Scheme which assumes visible aviation lighting located on all nine turbine hubs and intermediate lighting on all towers; and
 - Proposed Reduced Aviation Lighting Scheme which assumes visible aviation lighting located on only six of the nine turbine hubs and intermediate lighting on only four of the nine turbine towers.
- 6.5.23 See also Technical Appendix 6.4, which describes the lighting parameters and approach to assessing night time effects in more detail in relation to the Proposed Development.

Nature of Effects

The effects of a proposed wind farm may be assessed as 'beneficial' or 'adverse' under the term 'Nature of effect'. The landscape and visual effects of wind farms are difficult to categorise in either of these brackets as, unlike other disciplines, there are no definitive criteria by which the effects of wind farms can be measured as being categorically 'beneficial' or 'adverse'. Generally, in the development of 'new' wind farms, a precautionary approach is adopted by OPEN, which assumes that significant landscape and visual effects will be weighed on the adverse side of the planning balance. Beneficial effects may, however, arise where a proposed wind farm contributes to the enhancement of desirable characteristics such as the restoration of a degraded landscape (e.g. through peatland restoration) and neutral effects may occur where the proposed wind farm fits with the existing landscape character. Unless it is stated otherwise, the significant effects identified in this assessment are considered to be adverse. Judgements on the nature of effect are based on professional experience and reasoned opinion informed by best practice guidance.

Duration and Reversibility of Effects

- 6.5.25 The effects of the Proposed Development are of variable duration, and are assessed as short-term or long-term, and permanent or reversible.
- 6.5.26 It is anticipated that the operational life of the Proposed Development would be 30 years. The turbines, site access tracks control building and substation compounds would be apparent during this time, and these effects are considered to be long-term.
- 6.5.27 Other infrastructure and operations such as the construction processes and plant (including tall cranes for turbine erection) and construction and storage compounds would be apparent only during the initial construction period of the Proposed Development and are considered to be short-term effects. Borrow pit excavation would also be short-term as borrow pits would be restored at



the end of the construction process, although a permanently altered ground profile may remain evident

6.5.28 The reversibility of effects is variable. The most apparent effects on the landscape and visual resource, which arise from the presence of the turbines, are reversible as the turbines would be removed on decommissioning. The effects of the tall cranes and heavy machinery used during the construction and decommissioning periods are also temporary and reversible. In order to avoid repetition, the duration and reversibility of effects are not reiterated throughout the assessment.

Assessment of Significance

- 6.5.29 The significance of effects is assessed through a combination of the sensitivity of the landscape receptor or view and the magnitude of change that would result from the addition of the Proposed Development. While this methodology is not reliant on the use of a matrix to determine the conclusion of a significant or not significant effect, a matrix is included in Table 6.3 below to illustrate how combinations of sensitivity and magnitude of change ratings can give rise to significant effects. On this basis potential impacts are assessed as of Negligible, Minor, Moderate-Minor, Moderate, Moderate-Major and Major. In those instances where the magnitude has been assessed as 'no change' and the level of effect is recorded as 'No effect'.
- For the purposes of this assessment, any effects with a significance level of Major and Moderate-Major have been deemed significant in EIA terms (dark grey shaded boxes in Table 6.3). 'Moderate' levels of effect have the potential, subject to the assessor's professional judgement, to be considered as significant or not significant, depending on the sensitivity and magnitude of change factors evaluated (light grey shaded boxes in Table 6.3). These assessments are explained as part of the assessment, where they occur. Significance can therefore occur at a range of levels depending on the magnitude and sensitivity, however in all cases, a significant effect is considered more likely to occur where a combination of the variables results in the Proposed Development having a defining effect on the landscape character or view. Definitions are not provided for the individual categories of significance shown in the matrix and the reader should refer to the detailed definitions provided for the factors that combine to inform sensitivity and magnitude.
- 6.5.31 Effects assessed as being either Moderate-Minor, Minor or Negligible level are assessed as not significant (white boxes in Table 6.3).
- 6.5.32 In line with the emphasis placed in GLVIA3 upon the application of professional judgement, an overly mechanistic reliance upon a matrix is avoided through the provision of clear and accessible narrative explanations of the rationale underlying the assessment made for each landscape and visual receptor.

Table 6.3 – Matrix used to guide determination of effect significance.

Sensitivity Sensitivity	High	Medium-High	Medium	Wedium-Low	Гом	Negligible
High	Major (Significant)	Major (Significant)	Moderate- Major (Significant)	Moderate (Significant / Not Significant)	Moderate - Minor (Not significant)	Minor (Not significant)



Medium-High	Major (Significant)	Moderate- Major (Significant)	Moderate (Significant / Not Significant)	Moderate (Significant / Not Significant)	Moderate - Minor (Not significant)	Minor (Not significant)
Medium	Moderate- Major (Significant)	Moderate (Significant / Not Significant)	Moderate (Significant / Not Significant)	Moderate - Minor (Not significant)	Minor (Not significant)	Minor (Not significant)
Medium-Low	Moderate (Significant / Not Significant)	Moderate (Significant / Not Significant)	Moderate - Minor (Not significant)	Minor (Not significant)	Minor (Not significant)	Negligible (Not significant)
Low	Moderate (Significant / Not Significant)	Moderate - Minor (Not significant)	Minor (Not significant)	Minor (Not significant)	Negligible (Not significant)	Negligible (Not significant)

Mitigation

Embedded Mitigation

6.5.33 The layout of the Proposed Development is a vital part of the EIA process and is the stage where the biggest contribution can be made to mitigate potential landscape and visual effects, creating a wind farm which is appropriate for the existing landscape character and visual features of an area. The design of the Proposed Development has evolved as part of an iterative process which has aimed to provide an optimal design in environmental, as well as technical and economic terms and landscape and visual mitigation measures have been a central consideration in the design process.

Mitigation of Physical Landscape Effects

6.5.34 Ground disturbance on-site would be restricted as far as practicable and any soil materials excavated would be retained on the site for re-use on areas to be re-vegetated following the construction phase. The locations of proposed borrow pits, construction compound and tracks have been considered throughout the design process to minimise landscape and visual impacts where possible. The reuse of existing tracks for sections of access tracks would minimise the amount of new and upgraded track required as part of the Proposed Development, and so minimising further landscape and visual effects.

Mitigation of Landscape Character and Visual Effects

- 6.5.35 The landscape and visual design strategy for the Proposed Development is described in Chapter 2. The proposed turbine layout has been designed to minimise the effect on the surrounding landscape and visual resource.
- 6.5.36 The Proposed Development turbine layout has been designed to minimise effects on the valley landscape of the Water of Girvan Valley by reducing the heights of the three turbines closest to the valley, and setting turbines back from the valley sides and away from conspicuous edge of valley hills. In doing so, the Proposed Development has made the best use of the site topography and surrounding hill forms to help to settle the Proposed Development into the landscape.



- 6.5.37 The Proposed Development has a compact layout which for most views appears as a cohesive and consistently spaced grouping of turbines. The reduced height of the easternmost turbines also helps the turbines closest to the valley appear more similar in height to the more distant turbines in the group, due to natural perspective which prevents these turbines from appearing overly prominent in close valley views.
- 6.5.38 The compact nature of the layout also results in a relatively small horizontal field of view when viewing the Proposed Development from the wider landscape context. Therefore, the Proposed Development is consistently viewed as occupying a small part of a larger upland either as a backdrop to the Ayrshire lowlands to the north or viewed together with the large scale upland hills and plateau that the site is a part of. Therefore, the turbine layout design has evolved with the intention of presenting a simple, well-balanced image of the Proposed Development in the majority of views.

Turbine Lighting Mitigation

- 6.5.39 Chapter 14 includes an assessment of the turbine lighting requirements of the Proposed Development and a resulting proposed turbine lighting scheme. The proposed turbine lighting scheme presents a proposal for a reduced number of visible aviation lights, in line with CAA guidance. The Proposed Reduced Aviation Lighting Scheme proposes visible aviation lighting located on only six of the nine turbine hubs and intermediate lighting on only four of the nine turbine towers.
- As described in Appendix 6.4, it is proposed that visibility sensors are installed on relevant turbines to measure prevailing atmospheric conditions and visibility range. Should atmospheric conditions (for example an absence of low cloud cover, rain, mist, haze or fog) mean that visibility around the site is greater than 5 km from the Proposed Development, CAA policy permits lights to operate in a lower intensity mode of 200 candela (being a minimum of 10% of their capable illumination). If visibility is restricted to 5 km or less, the lights would operate at 2000 candela. It is also proposed to explore the possibility of using 'smart' aviation lighting (aviation obstruction lighting detection system) whereby the lights would only be switched on when low altitude aircraft enter a specified volume of airspace around the proposed turbines.

Assumptions and Limitations

Zone of Theoretical Visibility Analysis

- 6.5.41 There are limitations in the theoretical production of ZTVs, and these should be borne in mind in their consideration and use:
 - The ZTVs illustrate the 'bare ground' situation, and do not take into account the screening effects of vegetation, buildings, or other local features that may prevent or reduce visibility;
 - The ZTVs do not indicate the reduction in visibility that occurs with increased distance from the Proposed Development. The nature of what would be visible from 3 km away would differ markedly from what would be visible from 20 km away, although both are indicated on the ZTVs as having the same level of visibility; and
 - There is a wide range of variation within the visibility shown on the ZTV. For example, an area shown on the blade tip ZTV as potentially having visibility of all of the turbines may gain views of the smallest extremity of blade tips, or of full turbines. This can make a considerable difference in the effects of the Proposed Development on that area.
- 6.5.42 These limitations mean that while the ZTVs are used as a starting point in the assessment, providing an indication of where the Proposed Development theoretically would be visible, the information drawn from the ZTVs should not be completely relied upon to accurately represent visibility of the Proposed Development.

Visualisations

Photographs and other graphic material such as wirelines and photomontages used in the assessment are for illustrative purposes only and, whilst useful tools in the assessment, are not



considered to be completely representative of what would be apparent to the human eye. NatureScot provides the following information on the limitations of visualisations that are produced according to the NatureScot guidance 'Visual Representation of Windfarms' (February 2017): "Visualisations of wind farms have a number of limitations which you should be aware of when using them to form a judgement on a wind farm proposal. These include:

- a visualisation can never show exactly what the wind farm will look like in reality due to factors such
 as: different lighting, weather and seasonal conditions which vary through time and the resolution of
 the image;
- the images provided give a reasonable impression of the scale of the turbines and the distance to the turbines, but can never be 100% accurate;
- a static image cannot convey turbine movement, or flicker or reflection from the sun on the turbine blades as they move;
- the viewpoints illustrated are representative of views in the area, but cannot represent visibility at all locations;
- to form the best impression of the impacts of the wind farm proposal these images are best viewed at the viewpoint location shown;
- the images must be printed at the right size to be viewed properly (260mm by 820mm); and
- you should hold the images flat at a comfortable arm's length. If viewing these images on a wall or board at an exhibition, you should stand at arm's length from the image presented to gain the best impression."

6.6 Baseline Conditions

Introduction

- 6.6.1 The landscape and visual baseline provides a description of the existing landscape and visual conditions in the area that may be affected. Establishing the baseline will, when reviewed alongside the description of the Proposed Development, form the basis for the identification and description of the landscape and visual effects of the Proposed Development.
- The baseline description of the landscape that may be affected is primarily determined by the physical footprint of the Proposed Development components and their ZTV (Figures 6.9 6.17). The baseline also describes current pressures that may cause change in the landscape in the future, in particular drawing on information for wind energy developments that are not yet present in the landscape but are at other stages in the planning process. Operational and under construction wind energy developments are regarded as part of the baseline landscape character of the area. Any changes resulting from the Proposed Development are assessed within this context in the assessment of landscape and visual effects.
- 6.6.3 This section provides a baseline overview of the landscape and visual resource in the Study Area. A preliminary assessment has identified those landscape and visual receptors that may have the potential to experience significant effects, which require to be assessed in full. Detailed baseline descriptions are provided separately within the assessment section for each receptor considered to have potential for significant effects following the preliminary assessment.

Landscape Baseline Overview

Site Context

6.6.4 The site area is located approximately 4.8 km to the south of Straiton village and 11.3 km to the south-west of Dalmellington and to the north of the Galloway Forest Park. The site area in relation to the landscape and visual study area is shown on Figure 6.1a and also in more detail on Figure 6.1b where it is overlain on aerial mapping.



Topography varies across the site as shown on Figure 6.2 which shows the topography of the site and immediately surrounding landscape. The majority of the landscape of the site is made up of a series of undulated, moorland covered slopes and small hills. The most elevated part of the site (Knockbuckle at 315 m AOD) is in the south-east corner and the lowest part of the site is in the north-east corner (Girvan Water at 120 m AOD). Big Benyaw and Knockcronal are the most distinct hills in the site area at 313 m AOD and 286 m AOD respectively and are located centrally within the site. The site is surrounded by large scale, commercial forest to the south, west and north. Smaller strips of riparian woodland can also be found associated with the burns at lower elevations and in particular the Palmullan Burn. Lower elevated farmland character found in the north-eastern corner of the site area contrasts with the higher elevated upland moorland of the majority of the other parts of the site area and its surrounding, large scale, commercial forest.

Landscape Character

- 6.6.6 The landscape assessment considers the effect of the Proposed Development on the Landscape Character Types / units (LCTs) within the site and the surrounding area. The LCTs found in the Study Area are shown on Figure 6.3 (Figure 6.14 shows LCTs with the blade tip ZTV of the Proposed Development).
- In early 2019, NatureScot published an update to the characterisation of Scotland's landscape as a digital resource. The information builds on the characterisation studies published in the 1990's. NatureScot describe the recent publication as now superseding the 1990s landscape character descriptions and mapping adding that 'Where there are topic-specific landscape capacity or sensitivity studies, they would take precedence for informing that development type, e.g. wind farms.'
- 6.6.8 The 'topic specific' characterisation studies relevant to the study area include the following studies:
 - South Ayrshire Council Area South Ayrshire Landscape Wind Capacity Study, 2018 (SALWCS);
 - East Ayrshire Council Area East Ayrshire Landscape Wind Capacity Study, 2018 (EALWCS);
 - Dumfries & Galloway Council area Dumfries & Galloway Windfarm Landscape Capacity Study, 2017 (DGWLCS);
 - North Ayrshire Council Area North Ayrshire Landscape Wind Capacity Study, 2018 (NALWCS); and
 - South Lanarkshire Council area South Lanarkshire Landscape Capacity Study for Wind Energy, 2016 (SLLCS).
- These form the most up to date characterisation studies in the area and the landscape character boundaries used in these studies therefore form the basis of character assessment in this LVIA. Key landscape characteristics have been summarised from these texts for those LCTs assessed in detail and for additional reference the 2019 NatureScot description of key characteristics has also been included. The SALWCS defines the site area's landscape characteristics as lying within the 'Foothills with Forest and Wind Farms' Landscape Character Type (LCT).

Landscape Designations

- A landscape designation is an area of landscape identified as being of importance at international, national or local level, either defined by statute or identified in development plans or other documents. The landscapes are designated in relation to their special qualities or features which warrant special consideration through the planning system. National and local designations occur in parts of the Study Area and are designated at a national level by Scottish Ministers or NatureScot and at a local level by the local planning authority.
- 6.6.11 There are three ways in which such designations are relevant to the LVIA:
 - The presence of a designation can give an indication of a recognised value that may increase the sensitivity of a landscape character receptor, viewpoint or visual receptor, and may therefore affect the significance of the effect on that receptor;



- The presence of a relevant designation can lead to the selection of a representative viewpoint within the designated area, as the viewpoint will provide a representative outlook from that area; and
- Designated areas may be included as landscape character receptors so that the effects of the Proposed Development on these features of the landscape that have been accorded particular value can be specifically assessed.
- 6.6.12 In relation to the Proposed Development, landscape designations within the Study Area include:
 - Fleet Valley National Scenic Area (NSA).
 - South Ayrshire Local Landscape Areas (cLLAs) Water of Girvan Valley; High Carrick Hills; Stinchar Valley; Glen App Coast & Hills; Ailsa Craig; Culzean; Doon Valley; The Ayr Valley; The Turberry Coast; Brown Carrick Hills & Coast; and Girvan to Ballantrae Coast & Hills.
 - North Ayrshire Special Landscape Areas (SLAs) Pladda; and Holy Island.
 - East Ayrshire Special Landscape Areas (SLAs).
 - Dumfries and Galloway Regional Scenic Areas (RSAs) Galloway Hills, Rhins Coast Mochrum Lochs;
 and Thornhill Uplands.
 - Gardens and Designed Landscapes (GDLs) there are 20 GDLs within the Study Area Blairquhan;
 Kilkeran; Craigengillan; Bargany; Culzean Castle; Skeldon House; Dumfries House; Rozelle;
 Auchincruive; Carnell; Caprington Castle; Lanfine; Loudoun Castle; Rowallan; Annick Lodge; Eglington Castle; Drumlanrig Castle; Glenapp; Lochryan; and Castle Kennedy.
 - Dumfries and Galloway Non-Inventory Garden and Designed Landscapes (NIGDL) there are 33 within the south-eastern quadrant of the Study Area.
- 6.6.13 Landscape designations found in the Study Area are shown on Figures 6.4 and 6.5. Figure 6.15 shows landscape designations with the blade tip ZTV of the Proposed Development overlaid.
- 6.6.14 Whilst not landscape designations the Galloway Forest Park and Dark Sky Park are valued recreational destinations as recognised within the SAC LDP. The Merrick Wild Land Area (WLA) also lies to the south within the centre of Galloway Forest Park area. These areas have been included on Figures 6.4, 6.5 and 6.15 for reference to illustrate where the WLA, the park and its boundaries intersect with other landscape designations and landscape character types / units. See also appendix 6.2 which specifically assesses the Proposed Development in relation to the Merrick WLA.
- 6.6.15 The UNESCO Galloway and Southern Ayrshire Biosphere is a non-statutory designation that in itself has no formal status within the planning system, however the effect of the Proposed Development on the 'Sense of Place' and landscape value of the core and buffer of the Biosphere will be considered in relation to the underlying value and sensitivity of the Landscape Character and the Merrick WLA.

Visual Baseline Overview

Zone of Theoretical Visibility (ZTV)

Blade Tip ZTV

- 6.6.16 The blade tip ZTV is shown alongside landscape character, designations and visual receptors on Figures 6.14-6.17 and alongside viewpoints on detailed 50k mapping at A1 size on Figure 6.10 which for greater legibility has been produced for an approximate 20 km area within which the majority of ZTV extent is found.
- 6.6.17 The landform of the site and surrounding area has a notable influence on the extent of visibility across the study area and the pattern of theoretical visibility produced by the Proposed Development responds to the surrounding landform in the following ways.
- 6.6.18 Blade tip theoretical visibility is relatively consistent across a localised area around the site which extends across upland and forested areas to the north and west by approximately 2 to 3 km and to the south by approximately 6 to 8 km. Theoretical visibility also extends east along the northern side



of the Girvan Water valley for approximately 8 km and north along the valley towards Straiton village.

- In the wider landscape the extent of theoretical visibility is more varied and can be summarised as follows. To the south, the northern hills in the Merrick range limit the theoretical visibility of the Proposed Development such that beyond around 6 to 8 km to the south theoretical visibility becomes fragmented and limited to the more elevated hill tops and north facing slopes. To the east, theoretical visibility is first limited by the uplands between the Girvan Water valley and Loch Doon, particularly by the west facing ridge of upland (approximately 7 to 8 km from the site), and is then further limited by the more elevated west facing slopes of the uplands of the Carsphairn Forest (approximately 12 to 14 km from the site) with patches of theoretical visibility found on elevated land to the north of the A713 road corridor at 11 to 13 km.
- To the west, theoretical visibility is limited by successive layers of hills and uplands both close to the site area (approximately 3 to 6 km from the site) including Black Hill of Garleffan, Glenalla Fell and Barony Hill, such that theoretical visibility is limited to patches on elevated hills or east facing slopes of the Stinchar valley.
- 6.6.21 To the north-west a swathe of theoretical visibility extends across the settled landscape that follows the lower River Doon and Girvan Water between Straiton and Maybole and the A77 before being partly contained by the Brown Carrick Hills to the north-west (approximately 16 to 18 km from the site).
- To the north and north-west the ZTV shows a band of distant theoretical visibility that follows the settled Ayrshire coastline including the towns of Ayr, Troon, Irvine and Ardrossan. This northern band of ZTV also extends to patches on elevated land on the plateau moorlands of East Ayrshire at +32 km to the north-east and to Arran at +40 km from the site area. Elsewhere in the study area to the east, south and west, distant visibility beyond 20 km is very limited.

Hub ZTV

- The hub height ZTV for the proposed wind farm is shown in Figure 6.11 and in detail on Figure 6.12. The hub height ZTV is run at the turbine hub (or nacelle) height, of 122.5 m for the 200 m tip turbines and 102.5 m for the 180 m tip turbines and shows potential visibility of any part of a wind turbine up to the height of its hub or nacelle (but not all of the wind turbine tower would necessarily be seen). Comparison between ZTVs to blade tip and hub allows identification of those areas from which the turbine towers might not be visible, but the blades (or part of these) would. The areas of visibility shown on the blade tip ZTV (Figures 6.9 and 6.10) but not on the hub height ZTV (Figures 6.11 and 6.12) are the areas from which parts of the blades may be visible, and not the towers. The overall pattern of theoretical visibility shown in the hub height ZTV is broadly similar to the blade tip ZTV, but with notably reduced theoretical visibility to the north and west across the lowland and foothills landscapes of South Ayrshire; the wider landscape of Ayrshire to the north, the seascape of the Firth of Clyde/North Channel to the north-west and the hills and valleys to the east including within the Southern Uplands and Glenkens.
- Further smaller reductions in extent of theoretical visibility occur within the Stinchar Valley to the west and the WLA to the south. Whilst it is recognised that the reduction in ZTV extent is not as pronounced for these areas as it is with the Ayrshire lowlands to the north, for example, it should also be noted that the blade tip ZTV extent is less extensive in these areas and the reductions are therefore notable in that regard.

6.6.25 <u>Horizontal Angle ZTV</u>

The Horizontal Angle ZTV is shown on Figure 6.13. The Horizontal Angle ZTV measures how much of the horizontal field of view is theoretically occupied by the Proposed Development. It measures the maximum lateral spread from the furthest left to the furthest right theoretically visible turbine of the Proposed Development. The information is presented as a horizontal angle in degrees. The horizontal angle ZTV provides further information on the likely magnitude of effect of the Proposed Development because the results reflect the effect that distance has on the apparent size of the Proposed Development: a large object up-close has more visual impact than the same sized object



further away (all other things being equal). The horizontal angle ZTV is displayed using coloured bands showing incremental degrees of horizontal angle, in order to highlight areas of higher effect.

- The horizontal angle ZTV shows that the widest, theoretical, horizontal field of view is occupied in close proximity to the Proposed Development, particularly within the footprint of the proposed turbines themselves, where the turbines could occupy more than 180 degrees (50 %) of the field of view. Within around 500 m of the proposed turbines the HZTV drops to between 90-180 degrees (25 to 50%) and within around 1.5 km of the proposed turbines would be between 50-90 degrees (14 to 25%).
- 6.6.28 The Proposed Development will have a slightly wider horizontal extent in views from the north and south, where the proposed wind farm will appear more spread out on the skyline across the width of the site, but will have a reduced horizontal extent in views from the east and west, where the proposed turbines will be appear more clustered within a smaller part of the skyline.
- 6.6.29 The HZTV is notable for the magnitude at which the horizontal angle occupied by the Proposed Development decreases with distance. From 3 km, the horizontal angle occupied by the Proposed Development drops to less than 30 degrees (8%); beyond 7 km to less than 10 degrees (3%); and beyond 12 km to less than 5 degrees (1%) of the field of view.
- 6.6.30 The visual effect of the Proposed Development will therefore diminish with distance; generally resulting in a higher magnitude of change from locations at closer proximity, where the Proposed Development occupies a wider horizontal extent (or 'lateral spread'), and a lower magnitude of change from distant locations for much of the study area where the extent of the horizon occupied by the Proposed Development is small.

Principal Visual Receptors

Settlements

- The primary settlements in the area are shown in Figure 6.6 and in detail on 6.7 and include the towns and villages of Straiton (~4.8 km); Crosshill (~7 km); Kirkmichael (~7.7 km); Dailly (~6.5 km); Barr (~10 km); Dalmellington (~11.3 km); Maybole (~11 km); and Girvan (~17.4 km). The larger towns of Ayr, Troon and Kilmarnock to the north-west are more distant at approximately 17 km, 28 km and 33 km from the Proposed Development respectively.
- 6.6.32 <u>Residential Properties</u>
- 6.6.33 The upland landscape of the site area and immediately surrounding landscape context is sparsely populated, with extensive areas of either remote moorland or commercial coniferous woodland to the west and south with individual properties largely located in lower elevated valley landscape of the Girvan Water Valley to the north and east.
- The following properties lie within the 2 km buffer from the Proposed Development turbines and have been identified for assessment within the RVAA Craigard; Craigencallie Cottage; Dalmorton Farm; Dalmorton House; 2 Dalmorton Cottage; Genoch; Genoch Cottage; Glenlinn Cottage; Knockskae; Linfairn; Palmullan Cottage; Tairlaw Toll Cottage; Tairlaw Toll House and Tallyminnoch. Residential properties are shown on Figure 6.3-1, overlain with the Blade Tip ZTV.

<u>Roads</u>

There are a number of A and B class roads within the Study Area as shown on Figures 6.6 and 6.7. Key routes for the Proposed Development include - the A77 which cuts across the north-western half of the study area before following the coast to Stranraer; the A713 which cuts across the north eastern half of the study area connecting Ayr, Patna and Dalmellington to the Ken valley and ultimately to Castle Douglas in Dumfries and Galloway; the A70 which crosses the northern half of the Study Area between Ayr and Muirkirk passing through Cumnock; the A76 which cuts across the north-eastern quadrant of the study area between Kilmarnock and Sanquhar; the B741 between Straiton and Dalmellington; the B7045 between Straiton and Kirkmichael; and the minor road between Straiton and Tairlaw.



Rail

6.6.36 The rail routes within the study area comprise the Glasgow to Stranraer railway line and the Glasgow to Dumfries railway line. There is a connecting section of between these lines at Troon and Kilmarnock and a spur from the Glasgow to Stranraer line to Ardrossan and Largs.

Ferry Routes

6.6.37 Passenger Ferry routes within the study area include - from Cairnryan to Larne and Belfast; From Ayr to Arran and Millport; from Ardrossan to Arran and Campbeltown; and from Arran to Campbeltown.

Recreational Routes

6.6.38 Long distance walking routes in the Study Area include the Southern Upland Way, River Ayr Way, Ayrshire Coastal Path, Mull of Galloway Trail and the Arran Coastal Way. National Cycle Route (NCR) 7 passes the site area to the west on the minor road the crosses Carrick Forest.

Core Paths

There are no core paths within the main site area of the Proposed Development, where the turbines and majority of the infrastructure would be located. Core path SA47, which follows a similar route to the Straiton to Dalwhyne identified by SAC on their local path network, crosses the north-east corner of the site close to the site boundary. The routes of core paths in the area will not be altered in any way as a result of the Proposed Development, however, whilst path SA47 is away from the majority of the Proposed Development infrastructure, the access track options that connect the site to the road network will cross this path.

Galloway Forest Park

The Galloway Forest Park (GFP), managed by Forestry and Land Scotland (FLS) lies immediately to the south of the Proposed Development site boundary. GFP covers the Galloway Hills including The Merrick, Mulwharcher and the Rhins of Kells hill ranges and the recreational trails found across and leading up to these hills. The GFP is not a designation and has no formal status within the planning system, however it is considered as a recreational area within which people could experience views of the Proposed Development while exploring the forest trails, three visitor centres and cycling/mountain biking trails. The GFP's three visitor centres, which are the hubs for activities that extend from these centres, Kirroughtree, Glentrool and Clatteringshaws.

Galloway Forest Dark Sky Park

- The GFP was awarded status as a Dark Sky Park (DSP) in 2009 and was subsequently extended to land to the north and east in 2012 to include an area outside the GFP. The DSP is composed of two zones, namely a Core and Buffer Zone. The conditions for DSP status require stringent lighting guidance for the Core Zone. The Buffer Zone is required around the Core Zone to protect the status of the Core but does not in itself need to reach to the same dark sky class in order for the DSP to keep its status. SAC supports the DSP in LDP policy: Dark Skies. The Proposed Development lies immediately to the north of the DSP Buffer Zone and the DSP Core Zone lies approximately 3 km to the south of the nearest Proposed Development turbine.
- The park attracts people wishing to appreciate the night time sky with an absence of night time light pollution. Forestry Land Scotland (FLS) promotes ten viewing locations in the DSP buffer zone which offer stopping points to view the night sky. The sensitivity of the ten viewing locations to the potential effects of the turbine lights is higher than other areas of the DSP, as visitors will come to these sites with the express intention of viewing the night sky and this experience could be affected by other sources of light.
- 6.6.43 Of the ten viewpoints promoted by FLS for the DSP, there is no visibility of the Proposed Development either of the turbine lights or the turbines themselves (to blade tip). While these ten viewing locations are identified as being suitable viewing sites, people could feasibly be viewing the night sky from any part of the DSP. Parts of the Core Zone of the DSP around the Merrick uplands,



which offer visibility of the Proposed Development are remote upland areas and they are not generally somewhere that people are likely to go at night to view the night sky (in general, people would tend to use the viewing locations).

Viewpoints

- The viewpoints used in the assessment have been selected to cover points of specific importance such as recognised viewpoints, designated landscapes, settlements, important routes and attractions, and to inform the definition of the likely extent of significant visual effects arising from the Proposed Development. A variety of landscape character areas and points from different directions and distances have also been represented in the selected views.
- Twenty-three viewpoints for the landscape and visual assessment have been selected in consultation with SAC and NatureScot. Table 6.4 lists the viewpoints and provides information on their location, the receptors which may experience views at these locations, viewpoint distance, elevation and view direction to the Proposed Development. Viewpoint locations are shown in conjunction with the blade tip ZTV on Figures 6.9 (A3 size) and 6.10 (A1 size) and the hub height ZTV on Figures 6.11 (A3 size) and 6.12 (A1 size). Viewpoint visualisations have been prepared (Figures 6.21–6.49) to meet the requirements of NatureScot (Visual Representation of Wind Farms Version 2.2, December 2017).

Table 6.4 – LVIA Viewpoints

VP No	Viewpoint Name	Grid Ref		ewpoint Name Grid Ref Receptor Type / LCT / Designation		Nearest proposed turbine (km) / Elevation (AOD m) / View Direction		
1	Minor Road near Tairlaw	240104	600868	Road Users / Intimate Pastoral Valley - LCT 13 / Water of Girvan Valley cLLA	2.4	139.66	SW	
2	Minor Road near Craig	238581	602491	Road Users - Residents – walkers on local path network / Intimate Pastoral Valley - LCT 13 / Water of Girvan Valley cLLA	2.7	126.91	S	
3	Minor Road near Stinchar Bridge	239597	595494	Road Users / Rugged Uplands with Loch and Forest LCT 21 / High Carrick Hills cLLA / DSP Buffer	3.5	360.21	NW	
4	Craigengower Monument	239137	603928	Visitors – walkers on local path network / Foothills with Forest west of Doon Valley LCT 17b / Water of Girvan Valley cLLA	4.1	321.47	S	
5	NCN7, near Palmullan Bridge	233036	600354	Cyclists - Road Users – walkers on local path network / Foothills with Forest and Wind Farm LCT 17c / DSP Buffer	3.8	313.05	E	
6	Straiton, minor road south of settlement	238293	604673	Road Users – Settlement – walkers on local path network / Middle Dale LCT 12 / Water of Girvan Valley cLLA	4.7	109.1	S	
7	Straiton	237983	605039	Residents – Settlement / Middle Dale LCT 12 / Water of Girvan Valley cLLA	5	107.87	S	
8	Shalloch on Minnoch	240467	590705	Walkers / Rugged Uplands with Loch and Forest LCT 21 / High Carrick Hills cLLA / DSP Core / Merrick WLA	8.7	766.62	N	



	T	1	1		1	1	
9	Craigengillan GDL, Shear Hill	246726	603675	Walkers – Visitors / Upland River Valley LCT 10 / Craigengillan GDL / Doon Valley area of EA SLA	9.4	274.2	W
10	B7045, west of Kirkmichael	233558	608730	Road Users – Settlement / Middle Dale LCT 12 / Water of Girvan Valley cLLA	9.5	66.85	SE
11	Auchensoul Hill	226394	594542	Walkers / Foothills with Forest and Wind Farm LCT 17c	11.5	307.3	E
12	Maybole	229905	609666	Residents – Settlement / Maybole Foothills LCT 17d	11.8	76.46	SE
13	A713 Eriff	251721	599914	Road Users / Southern Uplands with Forest LCT 19a(ii) Carsphairn / Galloway Hills RSA	13.6	276.24	W
14	B741 near Clawfin	250682	607455	Road Users / Southern Uplands and Forestry LCT 20c / Doon Valley area of EA SLA	14.2	267.81	SW
15	Merrick	242746	585542	Walkers / Rugged Granite Upland LCT 21(ii) / DSP Core / Merrick WLA / Galloway Hills RSA	14.3	835.05	N
16	A713 and B742 Road Junction	237908	616734	Road Users / East Ayrshire Lowlands LCT 7c	16.6	102.34	S
17	Brown Carrick Hill	228363	615950	Walkers / Brown Carrick Hills LCT 4b / Brown Carrick Hills and Coast cLLA	18	283.29	SE
18	Cairnsmore of Carsphairn	259446	597989	Walkers / Southern Uplands LCT 19(v) Carsphairn / Galloway Hills RSA	21.3	793.81	W
19	A77, Ayr	236730	622935	Road Users – Settlement / Urban LCT	22.9	26.56	S
20	Cornish Hill	240261	594403	Walkers / Rugged Uplands with Loch and Forest LCT 21 / High Carrick Hills cLLA / DSP Core	5.2	450.32	NW
21	B741 nr Largs Farm	238690	605212	Road users / Middle Dale LCT 12 / Water of Girvan Valley cLLA	4.8	134.99	S
22	B7023 north of Gartlea Farm	232293	607622	Road users / Middle Dale LCT 12 / Water of Girvan Valley cLLA	9.1	54.1	SE
23	Loch Girvan Eye	241088	592703	Walkers / Rugged Uplands with Loch and Forest LCT 21 / High Carrick Hills cLLA / DSP Core / Merrick WLA	6.9	465.37	N

6.6.46 'Wireline only' illustrative viewpoints were also agreed in consultation with SAC and although not included as assessment viewpoints, wireline visualisations have been prepared for these locations. In addition, wireline have also been included to support the assessment of the local core path network. Table 6.5 below lists these wireline locations along with information on their location.

Table 6.5 – Wireline only Viewpoints

VP No	Viewpoint Name	Grid Ref		Nearest proposed turbine (km) / Elevation (AOD m) / View Direction		
Α	Minor Road between Barr and South Balloch	230603	595759	7.1	142.39	NE
В	Barr Trails	232999	594568	5.9	253.32	NE
С	Core path SA47 / Bennan Walk - Minor Road South of Straiton (LVIA Viewpoint 6)	238293	604673	4.7	109.1	S



D	Core path SA47 / Bennan Walk - Minor Road near Craig (LVIA Viewpoint 2)	238581	602491	2.7	126.91	S
Е	Core path SA47 / Bennan Walk – Track near Knockskae	237453	601607	1.7	170.26	S
F	Core path SA47 / Bennan Walk – Knockoner Burn crossing	237003	600538	0.7	207.2	S

Wind Energy Development Baseline

Introduction

6.6.47 The cumulative assessment set out in the LVIA assesses only the additional landscape and visual effects of the *Proposed Development, in the context of different baseline scenarios that make assumptions about existing and proposed wind farms. It does not present an assessment of the combined effects of all of the relevant wind farms on the landscape.*

Scope of Cumulative Assessment

- During scoping stages, a review of the broad wind farm context within a 45 km radius was undertaken and it was considered that any cumulative effects that would occur, would arise as a result of the pattern of development within the 45 km Study Area radius, rather than as a result of changes beyond this. For the LVIA, a detailed map of cumulative sites within this study area has been produced to provide the baseline context for the cumulative assessment, as shown on Figure 6.18. This cumulative map includes operational, consented and application stage wind energy developments and where the turbines are greater than 50 m to blade tip, as of August 2021. Any changes in the cumulative situation after this date are not incorporated in the assessment. Scoping stage sites are also included on this map for reference.
- 6.6.49 Based on surrounding topography, the scale of the Proposed Development and the locations of groups of wind farm developments within the wider study area it is considered unlikely that significant cumulative effects would occur between the Proposed Development and any of the cumulative sites located at the outer portions of this 45 km study area. As described in section 6.7 the detailed assessment within the LVIA has focussed on the cumulative sites within 20 km of the Proposed Development. These are listed below in table 6.6.
- 6.6.50 Cumulative wind farms within 20 km are shown on Figure 6.19 and diagrams showing Cumulative Zone of Theoretical Visibility (CZTV) for those developments within 20 km of the Proposed Development are shown on Figures 6.20a-j. Whilst not assessed in detail, in the LVIA cumulative developments beyond 20 km are included in wireframe diagrams to support the approach to cumulative assessment.

Table 6.6 - Cumulative Windfarms within 20 km

			Distance from
		No of	Proposed
Wind farm	Status	Turbines	Development
Assel Valley	Operational	10	15.41
Dersalloch	Operational	23	4.39
Dowhill Farm	Operational	1	16.19
Hadyard Hill	Operational	52	7.00
Leffinwyne Farm	Operational	1	12.64
Maclachrieston Farm	Operational	1	17.83
Mark Hill	Operational	28	16.80
North Threave	Operational	1	13.75
Penwhapple	Operational	1	11.62



Tralorg	Operational	8	14.71
South Kyle	Under Construction	50	15.63
Torrs Hill	Under Construction	2	17.52
Benbrack Variation	Consented	18	15.04
Chapleton Farm	Consented	3	13.46
Enoch Hill	Consented	16	19.35
Kirk Hill	Consented	8	11.42
Knockshinnoch	Consented	2	14.52
Over Hill	Consented	10	17.75
Polquhairn	Consented	9	16.79
Windy Standard III	Consented	20	18.60
Windy Standard III	Consented	20	19.67
Clauchrie	Application	18	10.25
Craiginmoddie	Application	14	3.80
North Kyle	Application	54	14.35
Carrick	Scoping	13	0.43
Knockodhar	Scoping	32	13.47
Knockower	Scoping	16	13.22
Quantans Hill	Scoping	21	19.81
Balunton	Scoping	7	18.02
Torrs Hill B	Scoping	12	17.40

Existing Wind Energy Developments

Operational wind energy developments are a long-established feature of the immediate and wider upland landscape context within the Study Area. The wider area does however include some under construction wind farms. Operational wind farms in the immediate area include Dersalloch Wind Farm (23 turbines at 125 m to tip) approximately 3.5 km to the north-east and Hadyard Hill Wind Farm (52 turbines at 101 m to tip) approximately 6.9 km to the west.

Consented Wind Energy Scenario

In addition to the existing wind energy developments, there is potential for further change to the landscape and visual baseline as a result of consented wind energy developments being built. The 'consented scenario' assumes that all consented stage wind energy developments have become operational and are part of a theoretical baseline situation that also includes the existing and under construction stage wind farms. Consented wind farms closest to the Proposed Development occur in the 10 to 20 km part of the study area and include Kirk Hill and Chapleton Farm to the west; Polquhairn and Over Hill to the north-east; and Benbrack Variation, South Kyle and Enoch Hill to the east.

Application Wind Energy Scenario

Similar to the consented scenario, the 'application scenario' assumes that all application stage wind energy developments have become operational and are part of a theoretical baseline situation that also includes existing, under construction and consented stage wind farms. There is greater uncertainty in the prediction of potential changes resulting from wind farm planning applications, as they may or may not ultimately become built features in the landscape. In the area of landscape between the site area and Hadyard Hill Wind Farm, Craiginmoddie Wind Farm (14 turbines at 200m to tip) has recently been submitted as an application. Clauchrie Wind Farm (18 turbines at 200m to tip) has recently been the subject of a Public Local Inquiry and is approximately 11 km to the south west. Other applications in the area are more distant and include North Kyle Wind Farm, Greenburn Wind Farm, Windy Standard III and Shepherds Rig.



Scoping Wind Energy Scenario

6.6.54 Scoping stage sites are mapped on Figures 6.18 and 6.19 for reference but are generally not considered further due to layout and design uncertainties at the pre-application stages. The exception to this is Carrick Wind Farm (13 turbines at 200m to tip) which has been included in the cumulative assessment in the LVIA as a result of its close proximity to the Proposed Development site. It should be noted however that a large degree of uncertainty applies to this assessment scenario.

6.7 Assessment of Physical Landscape Effects

Introduction

- 6.7.1 The first category of effects covered in the assessment is physical effects, which are direct effects on the fabric of the site, such as changes to ground cover. Physical effects are found only on the Site, where existing landscape elements may be removed or altered by the Proposed Development. The methodology for the assessment of physical effects is described in full in Technical Appendix 6.1. It should be noted that landscape elements are assessed with reference to their contribution to the landscape character rather than in ecological terms.
- 6.7.2 The areas of the site in which the turbines and the majority of infrastructure would be located are almost entirely within moorland ground cover. Please also see Chapter 8 which identifies the amount of physical disturbance across the site in relation to ground cover.
- 6.7.3 The access route option from the north includes areas of commercial forestry and whilst much of this is already used for forestry operations a new section of track would be required to connect to the Proposed Development and minor alterations may be required to the existing tracks to allow larger rotors access to the site. It should be noted that the northernmost section of this route has recently undergone some upgrading in order to facilitate ongoing forestry operations.
- 6.7.4 The access route option from the west is largely located on sections of existing access tracks or where new tracks are required, the tracks follow the existing breaks in the forestry avoiding large amounts of forestry removals. Please also see Technical Appendix 3.3 which identifies the amount of forestry removal required.
- 6.7.5 Taking all of this into account, the physical landscape effect of the Proposed Development on the moorland elements is assessed in detail below. Given the small amount of forestry removal required to accommodate small sections of access tracks, there is no potential for a significant effect and this element is not considered further in the assessment.

Moorland

Sensitivity

6.7.6 The moorland on the site comprises grasses and heathers typical of the Scottish uplands and upland areas within South Ayrshire. Within the immediate context of the site (Foothills with Forest and Wind Farm LCT 17c), moorland ground cover is an abundant landscape element, it is not rare and is not specifically recognised for its value within the site area. As a result, moorland ground cover is considered to have a medium-low landscape value. The susceptibility to change of this landscape element is medium-low due to the potential for reinstatement and restoration of the ground cover following construction. The combination of value and susceptibility results in a **Medium-Low** sensitivity for the moorland ground cover found within the site.

Magnitude of Change

6.7.7 All of the Proposed Development turbines would be located on moorland. The proposed turbines would have concrete foundations that would remove the moorland ground cover at the base of each turbine. Much of the infrastructure required would also be located on moorland, including access tracks (except sections of access tracks that utilise existing tracks), crane hardstandings, meteorological mast, gatehouse and construction compounds, operations building, borrow pits and



cable routes are all proposed to be located within this land cover. The Proposed Development would result in an alteration to the moorland ground cover from the removal of small areas of this landscape element during the construction phase. Following construction, moorland would be reinstated over the areas not permanently occupied by infrastructure that have been disturbed by landform change including the restored construction compound, cable routes and borrow pits. The remaining moorland within the site would be retained over the lifetime of the Proposed Development.

6.7.8 The area of moorland to be permanently removed in the construction and operation of the Proposed Development is very limited in relation to the total area of moorland on the site and elsewhere within the Foothills with Forest and Wind Farm LCT 17c. The magnitude of change of this removal is therefore considered to be **Low.**

Significance of the Effect

6.7.9 The effect of the Proposed Development on moorland is considered to be **Minor and Not Significant.** The extent of moorland removal is not considered to constitute a redefinition of this landscape element as a component of the site area or the wider landscape.

6.8 Landscape Character Assessment

Introduction

- 6.8.1 Landscape character is the distinct and recognisable pattern of elements that occurs consistently in a particular type of landscape, and the way that this pattern is perceived. Effects on landscape character occur both on the site, where the pattern of elements that characterises the landscape would be directly altered by the addition of the Proposed Development to the landscape; and offsite, around the Study Area, where visibility of the Proposed Development may alter the way in which this pattern of elements is perceived.
- 6.8.2 It should be noted that levels of magnitude of change on landscape character receptors are generally found to be lower than the magnitude of change on viewpoints that lie within these receptors. This means, for example, that if a viewpoint is assessed to undergo a medium-high magnitude of change it does not necessarily follow that the landscape character types within which it lies would also undergo a medium-high magnitude of change but may undergo a medium magnitude of change instead. This is because the effects on viewpoints are assessed within the context of a specific outlook of the Proposed Development and are usually specifically selected to gain a direct view over the site. The landscape character of a receptor is not necessarily determined so specifically by the outlook over the Proposed Development, and there are many other considerations, both visual and perceptual, that may combine to give an area its landscape character. This means that the Proposed Development may have a lesser degree of influence on landscape character than on a specific view. This is particularly true of areas that lie slightly further away from the Proposed Development. In the immediate vicinity of the site, up to around 2 km away - the magnitude of change on viewpoints and landscape character is likely to be similar, but beyond this, the magnitude of change on landscape character is found to often diminish more rapidly as the influence of the turbines is subsumed in the many other influences on landscape character. Viewpoints are referred to in this assessment as they do give a useful indication of the appearance of the Proposed Development from specific locations within the various landscape receptors, but the level of magnitude of change may vary between the viewpoint assessment and the landscape character assessment. As described in the baseline overview, in order to focus the assessment on assessing potential significant effects, the LVIA has focussed its assessment of Landscape Character receptors within 20 km.

Preliminary Assessment

Landscape Character Types

6.8.3 LCTs in the Study Area are assessed using ZTV analysis (Figure 6.14), to identify which of the LCTs are likely to be influenced by the Proposed Development. Using this analysis, Table 6.7 identifies the



LCTs within 20 km that have the potential to undergo significant effects and require to be assessed in detail

Table 6.7 – Preliminary Assessment LCTs

Status – Potential for significant effects and included in detailed assessment.		
Landscape Character Type (LCT)	Comment	
South Ayrshire 17c - Foothills with Forest & Wind Farm	All of the turbines and the majority of proposed site infrastructure would be located within this LCT.	
South Ayrshire 13 - Intimate Pastoral Valley (Girvan Valley) 13 - Intimate Pastoral Valley (Stinchar Valley)	Neighbouring LCT that fringes LCT 17c to the east (Girvan Valley) and west (Stinchar Valley). Sections of the proposed access tracks would be located within the Girvan Valley part of the LCT. Potential for significant effects to both the Girvan and Stinchar valley sections of this LCT due to proximity and close relationship with surrounding upland character, in particular the upland setting of LCT 17c.	
South Ayrshire 12 - Middle Dale	Neighbouring LCT that fringes LCT 17c to the north. Whilst there are large areas of this LCT that show no theoretical visibility of the Proposed Development, there is the potential for significant effects for the easternmost parts of this LCT where theoretical visibility is more widespread.	
South Ayrshire 17b - Foothills with Forest west of Doon Valley	Theoretical visibility within this LCT is limited to two upland areas. The closest of these is also the upland occupied by Dersalloch Wind Farm. The other is an area of upland to the north of Straiton that includes Cloncaird Moor and Lambdoughty Hill which is forested limiting visibility of the Proposed Development. Whilst these factors moderate the influence of the Proposed Development on the character of this LCT, there is potential for significant effects on the closest parts of the LCT (in the south west) including cumulative effects with the operational Dersalloch Wind Farm.	
South Ayrshire 21 - Rugged Uplands with Loch & Forest	Neighbouring LCT that fringes LCT 17c to the south. Whilst there are large areas of this LCT that show no theoretical visibility of the Proposed Development, there is the potential for significant effects for the northernmost part of this LCT where theoretical visibility occurs on north facing slopes.	
Status – Considered further in prelin effects and not included in detailed	ninary assessment but found to have no potential for significant assessment.	
Landscape Character Type (LCT)	Comment	
South Ayrshire 17d - Maybole Foothills 4b - Brown Carrick Hills	The ZTV shows theoretical visibility across elevated ridges that cross these LCTs, including the Maybole settlement itself. However, the intervening ridgeline landform seen in the distance to the south of the B741 limits the view of the wider plateau beyond. Where visible the Proposed Development would be seen beyond this ridgeline in a similar way that other existing wind turbines along this ridgeline are viewed from these LCTs (e.g. Hadyard Hill, Penwhapple, Assel Valley and Dersalloch). Whilst this may result in potential cumulative	



effects, the limiting factors described are considered to moderate the effect (including cumulative effect) such that there is no potential for the character of these LCTs to be significantly affected.
Theoretical visibility is limited and whilst there are patches on elevated areas of these LCTs the Proposed Development would be seen with the context of the other existing wind farms within LCT 17c to the west. This moderates the potential additional influence that the Proposed Development would have on the characteristics of these LCTs. It is considered therefore that there is no potential for the character of these LCTs to be significantly affected.
Theoretical visibility is limited to the western parts of this LCT where forestry and mining activities are an underlying characteristic. This in combination with the distance moderates the potential for significant effects.
Theoretical visibility occurs on large areas of forestry to the west of Dalmellington. It is considered therefore that there is no potential for the character of these LCTs to be significantly affected.
the defining characteristics, due to limited / restricted or distant ent, such that there is no potential for significant effects.
Dumfries and Galloway 9(ii) - Upper Dale (Valley), Upper Glenkens 17a - Plateau Moorland with Forest, Glentrool 19a(ii) - Southern Uplands with Forest, Carsphairn 19(v) - Southern Uplands, Carsphairn 21(i) - Rugged Granite Upland, Rhinns of Kells 21(ii) - Rugged Granite Upland, Merrick 21a(iii) - Rugged Granite Upland with Forest, Merrick East Ayrshire 9(iv) - Lowland River Valley 10(v) - Upland River Valley 7c(ii) - East Ayrshire Lowlands 20a(ii) - East Ayrshire Southern Uplands
Dumfries and Galloway 18a(iii) - Foothills with Forest, Rhinns of Kells 21a(ii) - Rugged Granite Upland with Forest, Merrick

KNOCKCRONAL WIND FARM 6-36 LANDSCAPE AND VISUAL



Landscape Designations

6.8.4 Landscape Designations in the Study Area are assessed using ZTV analysis (Figure 6.15), to identify which are likely to be influenced by the Proposed Development. Using this analysis, Table 6.8 identifies the landscape designations within 45 km that have the potential to undergo significant effects and require to be assessed in detail.

Table 6.8 - Preliminary Assessment Landscape Designations

Landscape Designation	Comment	
Water of Girvan Valley cLLA High Carrick Hills cLLA	These cLLAs are found within close proximity to the north, east and south of the Proposed Development site. Theoretical visibility is extensive within 4 km for the Water of Girvan Valley cLLA and within 6 to 7 km for the High Carrick Hills cLLA. Potential for significant effects due to close relationship with the upland setting of the site area.	
Stinchar Valley cLLA	Whilst theoretical visibility is more limited than the Water of Girvan Valley and Carrick Hills cLLAs, there are patches of theoretical visibility on the valley floor of the upper Stinchar Valley that introduce the potential for a significant effect.	
Blairquhan GDL	Theoretical visibility of the Proposed Development is found across an extensive part of the northern half of this GDL to the north of Blairquhan Mains and Castle.	
Status – Considered further in preliminary assessment but found to have no potential for significant effects and not included in detailed assessment.		
Landscape Designation Comment		
East Ayrshire Sensitive Landscape Areas Doon Valley area of SLA	Theoretical visibility is limited and whilst there are patches on elevated areas of these designated areas the Proposed Development would be seen at distance within the context of the other existing wind farms to the west of the site. This moderates the potential additional influence that the Proposed Development would have on the characteristics of the designation. It is considered therefore that there is no potential for the designation to be significantly affected.	
Craigengillan GDL	Theoretical visibility is limited to elevated western parts of the GDL in the area of Carwaur and Shear Hill. From these elevated parts, the Proposed Development would be seen at distance with the context of the other existing wind farms to the west of the site. This moderates the potential additional influence that the Proposed Development would have on the characteristics of the GDL. Views from the area surrounding Craigengillan House, within Ness Glen, at the Dark Sky Observatory, Activity Fort or along the Doon Valley would be unaffected by the Proposed Development. It is considered therefore that there is no potential for the designation to be significantly affected. See also Viewpoint 9 which is located within the GDL on Shear Hill.	

included in detailed assessment.



South Ayrshire Local Landscape Areas

Girvan to Ballantrae Coast & Hills cLLA

Glen App Coast & Hills cLLA

The Ayr Valley cLLA

Brown Crrick Hills and Coast cLLA

Doon Valley cLLA

Culzean cLLA

Dumfries and Galloway Regional Scenic

Areas

Mochrum Lochs RSA

Thornhill Uplands RSA

Galloway Hills RSA

North Ayrshire Special Landscape Areas

Pladda SLA

Holy Island SLA

Gardens and Designed

Landscapes

Auchincuive GDL

Annick Lodge GDL

Glenapp GDL

Kilkerran GDL

Rozelle (La Rochelle) GDL

Loudon Castle GDL

Rowallan GDL

Eglinton Castle GDL

East Ayrshire Sensitive Landscape

Areas

Avr Valley area of SLA

Doon Valley area of SLA

Carsphairn to Cairn Table area of

SLA

Status – No theoretical visibility of the Proposed Development. No potential for significant effects and not included in detailed assessment.

Dumfries and Galloway Regional Scenic

Areas

Rhins Coast RSA

South Ayrshire Local Landscape Areas

The Turnberry Coast cLLA

National Scenic Areas

Fleet Valley NSA

Gardens and Designed Landscapes

Caprington Castle GDL

Carnell GDL

Castle Kennedy GDL

Culzean Castle GDL

Drumlanrig Castle GDL

Dumfries House GDL

Lanfine GDL

Lochryan GDL

Maxwelton (Glencairn Castle) GDL

Skeldon House GDL

Bargany GDL

Kilkerran GDL

Dumfries and Galloway Non-Inventory Gardens

Airds (of Parton) Ho NIGDL;

Balkail NIGDL,

Bargaly NIGDL,

Barholm NIGDL,

Barscobe Castle NIGDL,

Barwhillanty NIGDL,

Cairnsmore NIGDL,
Castle Stewart NIGDL,

Corsewall House NIGDL,

Corsock House NIGDL, Craigdarroch NIGDL,

Craighlaw NIGDL,

Crawfordton House NIGDL,

Eliock NIGDL,

Garroch NIGDL,

Glencaird NIGDL,

Glenlee Park NIGDL,

Glentrool Lodge NIGDL,

Hannaston NIGDL,

Hensol House NIGDL,

Holme NIGDL,

Kenmure Castle NIGDL,

Kirroughtree NIGDL,

Knockgray NIGDL,

Knocknalling NIGDL,

Laurieston Hall NIGDL,

Merton Hall NIGDL,

Mochrum Park NIGDL,

Parton House (Place) NIGDL,

Shennanton Hall NIGDL,

Slogarie NIGDL,

Torwood NIGDL,

Tower NIGDL,

Summary of Preliminary Landscape Character Assessment

The preliminary assessment has identified the following principal landscape receptors that require to be assessed in detail as a result of the potential effects of the Proposed Development.



Landscape Character Types

- Foothills with Forest & Wind Farm LCT 17c
- Intimate Pastoral Valley LCT 13 (Girvan Valley)
- Intimate Pastoral Valley LCT 13 (Stinchar Valley)
- Middle Dale LCT 12
- Foothills with Forest west of Doon Valley LCT 17b
- Rugged Uplands with Loch & Forest LCT 21

Landscape Designations

- Water of Girvan Valley cLLA
- High Carrick Hills cLLA
- Stinchar Valley cLLA
- Blairquhan GDL

6.9 Detailed Assessment of Landscape Character Effects

Table 6.9 - Detailed Assessment: Foothills with Forest & Wind Farm - LCT 17c

Baseline Conditions

Baseline Description

The Proposed Development is located within this LCT. Parts of this LCT are modified by large areas of commercial forestry and wind farm developments found to the west of the Proposed Development. The key characteristics identified within SALWCS for the LCT are summarised below -

- "The South Ayrshire Foothills with Forestry and Wind Farms (17c) character type forms a gently undulating upland plateau separating the Lower Dale (11), Middle Dale (12) and Intimate Pastoral Valleys (13) of the Stinchar and Girvan Water valleys.
- These foothills are larger in extent to the east but form a relatively narrow band of hills between the valleys and close to the coast to the west. Although landform is generally gently undulating with indistinct rounded hills and lower-lying basins characterising the core of this landscape, some more pronounced, higher hills lie on the outer fringes of these foothills and form 'landmark' features seen from the adjacent well-settled Stinchar and Girvan valleys. Land cover is simple, dominated by extensive coniferous forestry and grass moorland.
- This landscape is very sparsely settled although a number of minor public roads, one of these designated as National Cycle Route 7, cross the core of these hills. The operational wind farm of Hadyard Hill is located in a shallow basin within a relatively narrow band of foothills in the west of this character type and the Tralorg and Assel Valley wind farms are sited on a more prominent group of hills close to Girvan and the coast.
- Although the large scale and simple landform and land cover of these uplands could relate in principle to the large turbine typologies, the narrowness of parts of this landscape and its proximity to the well settled Stinchar and Girvan valleys and the sensitive Rugged Hills, Lochs and Forest (21) are key constraints, especially to very large turbines.
- The extent of wind farm development already accommodated in the western part of these foothills also increases potential for significant cumulative effects to arise in combination with any additional development."

For reference, the NatureScot 2019 character assessment identifies this area as part of a much larger character area named Foothills, key characteristics are described by NatureScot as follows –



- "Dissected landform of incised valleys cut between rounded ridges, frequently having a slightly conical form with long shoulder slopes, and plateaux occasionally rising to undramatic summits.
- Underlain by red sandstones in the west and coal measures in the east.
- Variety of landcover types: lower slopes typically have a pastoral character; with increasing altitude the proportion of rougher grazing rises; and summits are dominated by moorland vegetation.
- Swathes of dark green coniferous forest cover many of the rounded peaks and descend on to the lower slopes.
- The eastern part of this area, comprising the south eastern part of the Ayrshire Coalfield, has a concentration of large open-cast coal mines.
- Scatter of villages and farms in the northern parts of the Landscape Character Type, and very little settlement in more upland areas to the south and east.
- Remnants of historic settlement patterns still evident in areas that are unsettled and uncultivated.
- Enclosed nature of forested areas, with their foreshortened views, can create a remote, isolated feel.
- Simple, largely undeveloped landscape, with foothills often providing scenic backdrops to the settled valleys which surround them."

Sensitivity for each of the landscape criteria considered in SALWCS for the Very Large Typology (>130 m) is described as:

<u>Landscape Context – High</u> "Turbines of this size sited within the narrower western part of these foothills would be likely to be highly visible from Girvan and the coast and from the smaller scale, well-settled Girvan and Stinchar valleys. The interior of the more extensive eastern area of these foothills may be less sensitive to turbines towards the lower height band of this typology although there would be relatively close views from the Carrick Hills within the Rugged Uplands, Lochs and Forest (21). Fixed lighting on turbines >150m could additionally affect dark skies and wilder landscapes in LCT 21 and 18c."

<u>Scale – Medium</u> "Turbines >150m would be likely to dominate the lower relief and the reduced extent of these foothills in the west. Broader areas of plateau in the east would be less sensitive in terms of scale although this is not an extensive upland landscape and effects on adjacent smaller scale valleys will be a key constraint (see Landscape Context above)."

<u>Landform – High-Medium</u> "The predominantly simple, gently undulating landform lying at the core of this landscape reduces sensitivity although wind turbines of this size sited on or nearby more pronounced hills which tend to lie on the outer fringes of these Foothills would significantly detract from these 'landmark' features."

<u>Landscape pattern – Medium-Low</u> "The relatively simple land cover pattern of this landscape reduces sensitivity."

<u>Built environment – Low</u> "This typology could be accommodated with minimal effects on this sparsely settled character type."

<u>Perceptual qualities – Medium-Low</u> "Although this landscape is modified to some degree, wind farm development could affect the sense of seclusion that can be experienced within the less accessible eastern part of these foothills."

<u>Visual Amenity – High</u> "The largely unsettled nature of this landscape reduces sensitivity to some degree although turbines of this size would be likely to have a significant effect on views from minor roads/NCR 7. Turbines of this size could increase visibility of wind farm development across the Stinchar and Girvan Valleys and also potentially along the coast and form dominant features seen from surrounding roads and settlement. Fixed lighting on turbines >150m could additionally contribute to adverse effects on visual amenity."

<u>Cumulative effects – High</u> "Turbines of this size could result in cumulative effects with operational and consented wind farms located in this landscape particularly if sited close-by. Development sited in the eastern



part of these foothills (to minimise obvious contrasts of scale with operational and consented turbines) would be likely to result in cumulative effects on the sensitive Intimate Pastoral Valley (13) of the Upper Girvan (seen in combination with the Dersalloch wind farm) and on the (21) Rugged Uplands, Lochs and Forest contributing to the diminishment of the sense of wildness (already incurred by the Dersalloch wind farm in particular) and views from popularly accessed hills."

SALWCS summarises that the overall sensitivity to a 'very large turbine typology' (>130 m tip height) for this LCT is 'High', 'principally due to the 'likely effects on surrounding sensitive valleys, the remote Carrick Hills and the coast'. On this basis SALWCS concludes there is no scope for the very large turbine type within this LCT and so no specific development guidance is provided for the very large typology. SALWCS also presents an 'opportunity' however, in that development could be accommodated within the 'less visually prominent densely forested lower hills and shallow basins within the eastern core of these uplands which could provide a degree of visual containment for wind turbines while minimising effects on adjacent sensitive landscapes.'

With specific relation to the sensitivity assessment provided for the 'Landscape Context' criteria, SALWCS finds that 'the interior of the more extensive eastern area of these foothills may be less sensitive' an observation made in contrast to the 'narrower western part of these foothills'. Whilst the observation is somewhat caveated with reference to the 'lower height band of this typology' it is clear that SALWCS considers the eastern part of the LCT less sensitive than the western narrower part. This is supported by the lower sensitivity of the 'Scale' criteria which again notes the 'broader areas of plateau in the east would be less sensitive in terms of scale'.

The Hadyard Hill cluster of operational wind developments (Hadyard Hill, Penwhapple, Assel Valley and Tralorg) occupies the western part of this LCT. Dersalloch is visible from this LCT within relatively close proximity to the east. Viewpoints within this LCT include – Viewpoint 5 - NCN7, near Palmullan Bridge and Viewpoint 11 - Auchensoul Hill.

Value	Susceptibility	Sensitivity
This LCT is not subject to any national designations. The edges of the Water of Girvan Valley, High Carrick Hills and Stinchar Valley cLLAs are found at the edges of this LCT but do not extend across it. Taking this into account, the value of this LCT is considered to be Medium.	This LCT is a medium-large scale landscape dominated by simple land cover such as large areas of undulating moorland and forestry plantations. The overall character is typified by these characterising elements and it is considered that this LCT is an appropriate receiving landscape for wind energy development. The baseline wind farm influence located in the western part of this LCT reduces susceptibility to change and whilst the 'sense of seclusion' described by SALWCS potentially increases susceptibility in the eastern area, other characteristic attributes such as scale and landscape context in the eastern parts of this LCT are considered to have lower susceptibility (as supported by the sensitivity assessment in SALWCS described above). On balance, the susceptibility of this LCT to the Proposed Development is Medium.	Medium.

Assessment (including operational and under construction cumulative sites)

Magnitude of Change

The ZTV shows that theoretical visibility is extensive across the eastern parts of this LCT. The actual visibility of the Proposed Development is however moderated by the substantial forestry within the LCT which restricts the potential for landscape effects to areas of moorland which are also not always afforded unrestricted views towards the Proposed Development.



Factors that increase the magnitude of change are:

- Change to the experience of the landscape character of the LCT resulting from the addition of large scale wind turbines and associated infrastructure within it;
- The Proposed Development would increase the influence of wind energy development across the LCT;
- The Proposed Development would introduce wind energy development to the eastern area of this LCT;
- The potential reduction in open moorland character within the character type; and
- The level of Proposed Development construction activity experienced within this LCT.

Factors that decrease the magnitude of change are:

- The change to key characteristics would be restricted from large areas of the LCT which are forested, this is
 particularly the case for areas immediately to the west and south that enclose the site area (albeit that
 forestry is a dynamic feature in the landscape which changes over time with continuous felling and
 replanting);
- The ZTV shows that visibility is limited in western parts of this LCT;
- Whilst the proposed turbines would introduce elements to the eastern part of this LCT but that are not uncharacteristic to the LCT as a whole;
- The Proposed Development would be set back from the 'pronounced higher hills' highlighted by SALWCS
 as 'landmark features' in the area including Glenalla Fell to the north west, Craig Hill to the north east and
 Genoch Inner Hill to the east; and
- As a result of the location of the Proposed Development within the larger eastern part of this LCT the surrounding hills and ridges within this LCT combine to limit the extent of the ZTV within the wider landscape.

Taking these factors into account the magnitude of change for this LCT is considered to be **High** locally (the area of LCT 17c within the site area) reducing to **Medium-Low** in other parts of this LCT largely due to the large areas of forestry which restrict changes to key characteristics and beyond that as a result of distance and reduced overall visibility.

Significance of Effect

The effect of the Proposed Development on the landscape character of the eastern part of this LCT, centred around where the site is located, would be **Moderate-Major and Significant**. The significant effect is limited to the area of open moorland of the site and the area that extends north-eastwards towards the Girvan Valley (approximately 1.5 km north and east of the proposed turbines up to the edges of the LCT).

Other areas of this LCT are found to experience a **Moderate Minor and Not Significant effect.** This is due to the following factors – The landscape immediately surrounding the site in the eastern part of the LCT is within forestry which substantially restricts changes to key characteristics; and areas further to the west have less extensive visibility, are already affected at closer range by operational wind farms within the Hadyard Hill cluster and are distant from the Proposed Development.

Cumulative Assessment (See CZTVs on Figures 6.13a-j)

Cumulative Assessment (consented scenario)

There is little cumulative interaction between the consented schemes and the Proposed Development due to the separation between the different upland landscapes on which these will be located and the upland in which the Proposed Development would be located. When considering the addition of these schemes to the operational baseline situation the influence on this LCT is therefore minimal.



For the introduction of the Proposed Development to this scenario, the level of change is considered to be broadly similar to the assessment against the operational baseline. The magnitude of change therefore remains High locally reducing to Medium-Low in other parts of the LCT. The cumulative effect in this scenario is therefore **Moderate-Major and Significant** local to the site and **Moderate Minor and Not Significant effect** in other parts of the LCT.

Cumulative Assessment (application scenario)

The Craiginmoddie wind farm application would be located within this LCT. The addition of this application site to the cumulative context would increase the influence of wind development within this LCT. It would extend the existing Hadyard Hill cluster of wind farm development to the east, thereby having greatest influence on the central and eastern parts of the LCT.

Clauchrie wind farm would have an influence on this LCT although the cumulative interaction between Clauchrie and the Proposed Development is limited in extent and largely found in western parts of this LCT where the Proposed Development has less influence. North Kyle would have very limited cumulative influence when considered with the Proposed Development.

When considering the introduction of the Proposed Development to this scenario, the scale of change predicted against the existing baseline / consented schemes would increase slightly due to the added influence of Craiginmoddie to the central part of the LCT and the closer proximity of the Proposed Development to this increased wind farm presence. The Proposed Development would extend the wind farm influence further to the east albeit with some separation remaining between Craiginmoddie and the Proposed Development. Taking this into account the magnitude of change in this scenario remains High locally but increases to Medium in other parts of the LCT.

The cumulative effect in this scenario is therefore **Moderate-Major and Significant** local to the site and **Moderate Minor and Not Significant effect** in other parts of the LCT.

Cumulative Assessment (scoping scenario)

In a scenario that includes Carrick Wind Farm in addition to the other operational, consented and application wind farms, the presence of Carrick at such close proximity to the Proposed Development and within its immediate landscape context potentially moderates the additional cumulative influence that the Proposed Development would have. The Carrick Wind Farm in this scenario bridges the gap between the Hadyard Hill Cluster, Craiginmoddie and the Proposed Development site. As a result, the Proposed Development would not be perceived as extending wind farm development to the east and instead would add to a landscape context already locally influenced by large scale wind farms, that has already been extended across most parts of the LCT from west to east. Taking this into account the magnitude of change would reduce in this scenario to Medium locally and Low in other parts of the LCT.

The cumulative effect in this scenario is therefore **Moderate and Not Significant** local to the site and **Minor** and **Not Significant** effect in other parts of the LCT.

Table 6.10 - Detailed Assessment: Intimate Pastoral Valley - LCT 13 (Girvan Valley)

Baseline Conditions	
Baseline Description	



The Intimate Pastoral Valley character type within the study area includes the Girvan Water and Stinchar valleys. The key characteristics within SALWCS for the LCT are experienced to a varying degree depending on the specific valley or valley section, characteristics with most relevance to the Girvan Valley are summarised below -

- "These valleys are relatively narrow and strongly contained by adjacent upland character types.
- A number of prominent hills with open rugged slopes and defined summits occur on the edge of the Foothills (17b/17c/17e) and Rugged Uplands Lochs and Forest (21) character types which contain the Stinchar and Girvan Valleys.
- These gently sinuous valleys are strongly contained by adjacent uplands with occasional higher and more pronounced summits occurring along the edges of the valleys, particularly where they abut the Foothills (17b/17c/17e);
- The lower Stinchar has a relatively open and broad floodplain although in general these valleys are narrow with the upper Girvan and Stinchar constricted by dramatic steep-sided hills;
- A small to medium scale landscape. Scale increases on more open and less settled upper valley sides;
- A series of steep-sided rugged hills, well-defined and cut by incised side valleys, occurs on the north-western
 edge of the Stinchar valley and fringing the Girvan valley. These 'landmark' hills include the Big Hill of the
 Baing, Kildoach Hill and Genoch Hill on the edge of the upper Girvan valley;
- The rolling landform and presence of woodlands, hedgerows and trees restricts long views from roads and settlement in some areas although open views are possible where roads are more elevated or the floodplain more open;
- Popularly accessed hills such as Knockdolian and Craigengower Hill also offer elevated views over these valleys; and
- The operational Dersalloch wind farm is visible from parts of the upper Girvan valley."

For reference, the NatureScot 2019 character assessment identifies this area (albeit with subtly different borders) as 'Pastoral Valley' and describes key characteristics as follows –

- "Narrow, intimate medium to small scale valleys with steep slopes and relatively flat bottoms cut into the foothills and moorlands of the Ayrshire uplands;
- Strongly contained by adjacent uplands with occasional higher and more pronounced summits;
- Diverse land cover dominated by broadleaf woodland including shelterbelts, riparian woodland and policy woodlands separating the valley into small parcels of pasture;
- Network of tree-lined winding roads;
- Number of hill forts, hilltop cairns, castles and strongholds, and mansion houses, resulting in a rich heritage and a strong sense of timelessness;
- Settlement comprises a dispersed scatter of houses and farms;
- Well settled, intricately patterned landscape which has a rural, picturesque quality;
- Views tend to be short to medium distance, focused along the valley in the direction of travel with the surrounding upland landscape forming the enclosing, often dramatic, ridgeline in views. More pronounced 'landmark' hills form key foci. Open views are available from elevated roads and where floodplain is more open; and
- Popular walks and hill views provide elevated views over this landscape."

Viewpoints within the Girvan Valley part of LCT 13 include Viewpoints 1 – Minor Road near Tairlaw and 2 - Minor Road near Craig. The operational Dersalloch wind farm is visible from parts of the Girvan valley.

	Value	Susceptibility	Sensitivity	
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This LCT is not subject to any national landscape designations it is however within the Water of Girvan Valley cLLA. The Girvan Valley is also a locally valued landscape for visitors and residents in the area who can easily appreciate its scenic qualities from the roads that follow the valley floor. The value of this LCT is considered to be Medium-High.

The intimate, small to medium scale nature of the landscape increases susceptibility to wind farm development. Susceptibility is partially moderated by the visual presence of existing wind farm development from parts of the valley floor and sides, however, this also increases susceptibility due to the potential for cumulative effects to arise. On balance, susceptibility is considered to be Medium-High.

Medium-High.

Assessment (including operational and under construction cumulative sites)

Magnitude of Change

The ZTV shows that theoretical visibility is relatively extensive across this LCT. Theoretical visibility is found largely on the south facing slopes of the upper Girvan valley to the east of the Proposed Development with sections of patchy, limited or no theoretical visibility for north facing slopes. Theoretical visibility is more uniformly spread across the western reaches of the upper Girvan Valley to the north of the Proposed Development.

Factors that increase the magnitude of change are:

- change to the experience of the landscape character of the LCT resulting from addition of large scale wind turbines to the south and west of the Girvan valley;
- the Proposed Development would introduce further large scale wind energy development at closer proximity into views from within the Girvan valley in addition to the views of the operational Dersalloch Wind Farm;
- the scale of the Proposed Development turbines would contrast with the smaller scale of the landscape features within the Girvan valley;
- The Proposed Development turbines would create a new focus for parts of the valley floor to the northwest, where views towards the site area are not limited by other features such as the undulating steep sided topography or trees and woods on the valley floor; and
- the position of the Proposed Development above the ridgeline of hills on the southern valley side increases its visual presence within this smaller scale valley landscape, for some areas that have clear line of sight (such as from the minor road near viewpoint 2) the turbines would be a prominent feature.

Factors that decrease the magnitude of change are:

- Where visibility occurs the Proposed Development would appear to occupy the larger upland landscape (Foothill with Forest and Wind Farm) that sits beyond the undulated ridgeline of hills that define the southern edges of the Girvan valley;
- The presence of Dersalloch wind turbines in views from this LCT means that the proposed turbines would be introducing elements that are not entirely uncharacteristic within the Girvan valley, albeit as an intensification of wind turbines at closer proximity than previously experienced;
- Whilst the Proposed Development would create a new focus in the north-west of this LCT where clear views of the Proposed Development are predicted, eastern parts of the LCT would not experience such open views. From this eastern half, proposed turbines would appear set back from the transitional upper valley sides that are closest to the site;
- Within these valleys, potential visibility is often restricted by intervening vegetation, woods and forestry. This is particularly evident for areas in the north-west of this LCT; and



When the Proposed Development is viewed from the LCT, the proposed turbines would generally appear set back from the leading ridge of the southern valley side. Careful layout design has sought to avoid positioning turbines to the north of these leading ridgelines to minimise encroachment on this LCT.

Taking all of this into account, the experience of the key characteristics of the LCT would be affected and whilst there are areas of this LCT that would not experience the same degree of change, the magnitude of change is nevertheless predicted to be **Medium-High** for this LCT.

Significance of Effect

The effect on landscape characteristics in this LCT as a result of the Proposed Development is considered to be **Moderate-Major and Significant.** This is largely due to the degree of change experienced in the north-west part of the LCT. It is a relatively small LCT and the affected area contains many of the varied aspects that characterise the LCT. Other parts of the LCT (to the east of Tairlaw Bridge) would not be significantly affected.

Cumulative Assessment (See CZTVs on Figures 6.20a-j)

Cumulative Assessment (consented scenario)

The consented schemes will not be visible from this LCT and therefore no cumulative interaction occurs between the consented schemes and the Proposed Development. As a result, there is no cumulative change or cumulative effect in this scenario.

Cumulative Assessment (application scenario)

The cumulative ZTVs show that for the applications Craiginmoddie, Clauchrie and North Kyle that there is little visibility within this LCT. The resulting cumulative interaction is considered to be minimal for this scenario within this LCT. When considering the introduction of the Proposed Development to this scenario, the level of change is therefore considered to be broadly similar to the assessment against the operational baseline. The magnitude of change therefore remains **Medium-High** resulting in a **Moderate-Major and Significant effect**.

Cumulative Assessment (scoping scenario)

The cumulative ZTV for shows that the Proposed Development has a very similar extent of theoretical visibility as the Carrick Wind Farm in the local area, albeit that the Carrick is more extensive in the wider area. When considering the introduction of the Proposed Development to this scenario, the presence of Carrick at such close proximity to the Proposed Development and within its immediate landscape context moderates the additional cumulative influence that the Proposed Development would have on this LCT.

The Proposed Development would intensify the experience of wind farm development from western parts of the LCT that are closest to the Proposed Development. However, the Carrick Wind Farm in this scenario strongly influences the experience of wind farm development experienced from the Water of Girvan Valley and as a result the Proposed Development would not be perceived as introducing large scale wind farm development to parts of the Water of Girvan valley that would not already experience it.

On balance the magnitude of change would reduce in this scenario to **Medium** resulting in a **Moderate and Not Significant** effect.

Table 6.11 – Detailed Assessment: Intimate Pastoral Valley – LCT 13 (Stinchar Valley)

Baseline Conditions	
Baseline Description	



The Intimate Pastoral Valley character type within the study area includes the Girvan Water and Stinchar valleys. The key characteristics within SALWCS for the LCT are experienced to a varying degree depending on the specific valley or valley section, characteristics with most relevance to the Stinchar Valley are summarised below -

- These valleys are relatively narrow and strongly contained by adjacent upland character types.
- A number of prominent hills with open rugged slopes and defined summits occur on the edge of the Foothills (17b/17c/17e) and Rugged Uplands Lochs and Forest (21) character types which contain the Stinchar and Girvan Valleys.
- The Plateau Moorland with Forest and Windfarms (18c) generally forms more simple even skylines seen from these valleys;
- These gently sinuous valleys are strongly contained by adjacent uplands with occasional higher and more pronounced summits occurring along the edges of the valleys, particularly where they abut the Foothills (17b/17c/17e);
- The lower Stinchar has a relatively open and broad floodplain although in general these valleys are narrow with the upper Girvan and Stinchar constricted by dramatic steep-sided hills;
- A small to medium scale landscape. Scale increases on more open and less settled upper valley sides;
- A series of steep-sided rugged hills, well-defined and cut by incised side valleys, occurs on the north-western
 edge of the Stinchar valley and fringing the Girvan valley. These 'landmark' hills include the craggy-topped
 Knockdolian, Craig and Bargain Hills and Craig of Dalwine along the Stinchar valley;
- The rolling landform and presence of woodlands, hedgerows and trees restricts long views from roads and settlement in some areas although open views are possible where roads are more elevated or the floodplain more open;
- Popularly accessed hills such as Knockdolian and Craigengower Hill also offer elevated views over these valleys; and
- The Hadyard Hill wind farm is visible in close proximity from parts of the upper Stinchar valley in the Barr area.'

For reference, the NatureScot 2019 character assessment identifies this area (albeit with subtly different borders) as 'Pastoral Valley' and describes key characteristics as follows —

- 'Narrow, intimate medium to small scale valleys with steep slopes and relatively flat bottoms cut into the foothills and moorlands of the Ayrshire uplands;
- Strongly contained by adjacent uplands with occasional higher and more pronounced summits;
- Diverse land cover dominated by broadleaf woodland including shelterbelts, riparian woodland and policy woodlands separating the valley into small parcels of pasture;
- Network of tree-lined winding roads;
- Number of hill forts, hilltop cairns, castles and strongholds, and mansion houses, resulting in a rich heritage and a strong sense of timelessness;
- Settlement comprises a dispersed scatter of houses and farms;
- Well settled, intricately patterned landscape which has a rural, picturesque quality;
- Views tend to be short to medium distance, focused along the valley in the direction of travel with the surrounding upland landscape forming the enclosing, often dramatic, ridgeline in views. More pronounced 'landmark' hills form key foci. Open views are available from elevated roads and where floodplain is more open; and
- Popular walks and hill views provide elevated views over this landscape.'



There are no assessment viewpoints within the Stinchar Valley part of LCT 13, however, a wireline has been generated from an area of theoretical visibility on the Minor Road between Barr and South Balloch – Wireline Only Viewpoint A. The operational Hadyard Hill, Assel Valley, Mark Hill and Arecleoch wind farms are visible from the Stinchar Valley.

Value	Susceptibility	Sensitivity
This LCT is not subject to any national landscape designations it is however within the Stinchar Valley cLLA. The Stinchar Valley is also a locally valued landscape for visitors and residents in the area who can easily appreciate its scenic qualities from the roads that follow the valley floors and sides. The value of this LCT is considered to be Medium-High.	The intimate, small to medium scale nature of the landscape increases susceptibility to wind farm development. This is moderated by the separation of this valley from the upland landscape within which the Proposed Development would be located; the intervening upland forestry which reduces the degree of intervisibility; and the modification of key characteristics evident in surrounding, closer uplands including extensive commercial forestry and wind farms. Taking this into account, susceptibility is considered to be Medium-Low.	Medium.

Assessment (including operational and under construction cumulative sites)

Magnitude of Change

The ZTV shows that theoretical visibility is relatively limited within this LCT. Patches of theoretical visibility is found on upper slopes of the Stinchar valley and with smaller areas found on the valley floor. Theoretical visibility tends to be limited to the upper Stinchar valley which is the eastern part of this LCT.

Factors that increase the magnitude of change are:

- change to the experience of the landscape character of the LCT resulting from addition of large scale wind turbines to the east of the Stinchar valley;
- the Proposed Development would add further development to the existing spread of wind energy development currently visible from the various parts of the Stinchar valley; and
- The Proposed Development turbines would create a partial focus to the east for parts of the valley floor, albeit to a limited extent.

Factors that decrease the magnitude of change are:

- the change to key characteristics would be minimal from large areas of the LCT that have little or no visibility. This is particularly true of much of the lower Stinchar valley;
- Where visibility occurs, the Proposed Development would appear to sit clearly within the larger upland landscape (Foothill with Forest and Wind Farm) beyond the undulated ridgeline of hills that define the northern and eastern edges of the Stinchar valley;
- The presence of existing wind turbines in views from this LCT means that the proposed turbines would not be introducing elements that are uncharacteristic within the Stinchar valley and the existing turbines in view are closer and larger than the Proposed Development for much of the affected areas of the Stinchar valley;
- The Proposed Development appears set back into a core area of upland that is clearly separated from the smaller scale valley landscape of this LCT; and



LANDSCAPE AND VISUAL

• Within this valley, potential visibility is often restricted by intervening vegetation, woods and forestry.

Taking all of this into account, the experience of the key characteristics of the LCT would only be affected to a small extent and the magnitude of change is predicted to be **Low**.

Significance of Effect

The effect on landscape characteristics in this LCT as a result of the Proposed Development is considered to be **Minor and Not Significant.** Whilst visible from parts of this LCT the Proposed Development would have a limited effect on the key characteristics of the Stinchar valley.

Cumulative Assessment (See CZTVs on Figures 6.20a-j)

Cumulative Assessment (consented scenario)

The cumulative ZTVs show that the consented schemes would only be visible from elevated parts of this LCT above the valley floor and sides and cumulative interaction is therefore considered to be minimal. When considering the introduction of the Proposed Development to this scenario, the level of change is therefore considered to be broadly similar to the assessment against the operational baseline. The magnitude of change therefore remains **Low** resulting in a **Minor and Not Significant effect**.

Cumulative Assessment (application scenario)

Similar to the consented scenario, application development within the wider landscape would have little influence on this LCT. However, within the immediate context of the LCT Clauchrie and Craiginmoddie would have a notable influence on this LCT.

The Clauchrie application spans across a wide part of the ridgeline of hills on the south side of the Stinchar valley and Craiginmoddie would appear on the upland hills to the north of the Stinchar valley within the Foothills with Forest and Wind Farm character type, appearing to extend the Hadyard Hill cluster further to the east. When considering the Proposed Development in this scenario it is important to note that from the valley floor visibility of the Proposed Development is much more limited than it would be for these applications. The Proposed Development therefore would only slightly add to the cumulative situation as a more distant development which on the whole would only be experienced from more elevated areas of the LCT away from the valley floor.

On balance it is considered that the scale of change predicted for the Proposed Development against the baseline situation would reduce and as a result the magnitude of change is predicted to be **Negligible** for this scenario resulting in a **Minor and Not Significant** effect.

Cumulative Assessment (scoping scenario)

The Carrick Wind Farm would appear to extend development further across the horizon to the east when viewed from locations within the Stinchar valley. From some locations it would almost appear to connect to the eastern edges of the Craiginmoddie Windfarm.

The Proposed Development would sit behind Carrick Wind Farm and would appear diminutive in comparison. Taking this into account, the magnitude of change is predicted to be **Negligible** for this scenario resulting in a **Minor and Not Significant** effect.



Table 6.12 - Detailed Assessment: LCT 12 - Middle Dale

Baseline Description

Middle Dale is a broad valley that lies immediately to the north of the host LCT 17c Foothills with Forest and Windfarm. The key characteristics within SALWCS for the LCT are summarised below –

- "This valley is strongly contained by adjacent Foothills character types (17b, 17c and 17d), restricting widespread inter-visibility with other landscapes.
- The landscape increases in scale on upper slopes particularly at the transition with the more sparsely settled Foothills with Forestry and Wind Farm (17c) and Foothills with Forest west of Doon Valley (17b).
- A number of prominent hills with open, often rugged slopes and defined summits and more settled and farmed hill slopes occur on the edge of the Foothills that contain the Middle Dale.
- A broad valley but with a predominantly rolling landform which combines with an often strongly enclosed field pattern and regularly spaced dispersed small farms, houses and extensive woodland cover to create a small to medium scale landscape. Scale increases on open and less settled upper valley sides, particularly at the transition with the Foothills (17b and 17c).
- The narrow flat valley floor gives way to more complex rolling lower side slopes and occasional interlocking knolly landform.
- Much of the valley floor and lower hill slopes are covered with small hedged and walled pastures with many
 mature field and roadside trees. The large number of historic houses and castles, many with associated
 policies and designed landscapes gives this landscape a richly wooded, parkland character.
- The small villages of Straiton, Daily and Kirkmichael are sited within the valley floor and there is a rich heritage of archaeological sites, castles and mansion houses.
- This character type is criss-crossed by a dense network of minor roads and the B741 and it is also very well settled.
- The rolling landform and presence of woodlands, hedgerows and trees restricts long views from roads and settlement in some areas."

For reference, the NatureScot 2019 character assessment also identifies this area as Middle Dale with almost identical boundaries and describes key characteristics as follows –

- "Relatively complex topography, with valley flanks sloping gently towards the river with subtle terraces and undulations while the floodplain merges with the hill slopes.
- Valley is formed between two parallel fault lines, with red sandstone to the north and south giving way to limestone within the valley.
- Pastoral use on much of the valley floor, and some of the lower slopes.
- Large number of policy and designed landscapes give the valley floor a richly wooded, parkland character.
- Proliferation of defensive sites reflecting the historically important corridor for communication and resulting in a rich heritage of archaeological sites and a strong sense of timelessness.
- Network of tree-lined winding roads.
- Scattered farmstead and small hamlets sited on the valley floor.
- Secluded, small to medium scale landscape of high historic value.
- Views are defined by localised woodland and the surrounding foothills and tend to be focused along the valley in the direction of travel."



Viewpoints within this LCT include Viewpoints – 6 Straiton, minor road south of settlement; 21 B741 nr Largs Farm; 7 Straiton; 22 B7023 north of Gartlea Farm; 10 B7045, west of Kirkmichael. The operational Dersalloch and Hadyard Hill wind farms are visible from many parts of the Middle Dale LCT.

Value	Susceptibility	Sensitivity
This LCT is not subject to any national landscape scenic designations it is however within the north-west area of Water of Girvan Valley cLLA. The area also contains designated landscapes at Blairquhan, Kilkerran and Bargany. The value of this LCT is considered to be Medium-High.	The small to medium scale nature of the landscape in combination with the historic interest of the policy landscapes increases susceptibility to wind farm development. This is moderated by the separation of this shallow valley from the upland landscape to the south within which the Proposed Development would be located and existing wind farm development on the same ridgeline, albeit further to the west. Taking this into account, susceptibility is considered to be Medium-Low.	Medium.

Assessment (including operational and under construction cumulative sites)

Magnitude of Change

The ZTV shows that theoretical visibility is relatively limited within this LCT and only potentially affecting the easternmost parts of the LCT.

Factors that increase the magnitude of change are:

- change to the experience of the landscape character of the LCT resulting from addition of large scale wind turbines to the south;
- the Proposed Development would add further development to the existing spread of wind energy development currently visible from the LCT; and
- The Proposed Development turbines would create a partial focus to the east for eastern parts of the LCT, albeit within a limited part of the overall rural scene in views towards the foothills to the south that already contain large scale wind farm development.

Factors that decrease the magnitude of change are:

- the change to key characteristics would be minimal from large areas of the LCT that have little or no visibility. This is particularly true of much of the lower Water of Girvan Valley;
- Where visibility occurs, the Proposed Development would appear to sit clearly within the larger upland landscape to the south and beyond the immediate context of pastoral valley;
- The presence of existing wind turbines in views from this LCT means that the proposed turbines would not be introducing elements that are uncharacteristic; and
- Within this shallow valley, potential visibility is often restricted by intervening vegetation, woods and forestry.

Taking all of this into account, the experience of the key characteristics of the LCT would only be affected to a small extent and the magnitude of change is predicted to be **Low**.

Significance of Effect



The effect on landscape characteristics in this LCT as a result of the Proposed Development is considered to be **Minor and Not Significant.** Whilst visible from parts of this LCT the Proposed Development would have a limited effect on the key characteristics of this area of the Water of Girvan valley landscape.

Cumulative Assessment (See CZTVs on Figures 6.20a-j)

Cumulative Assessment (consented scenario)

The cumulative ZTVs show that the consented schemes have theoretical visibility across the central area of this LCT, however, theoretical visibility of the Proposed Development is largely found within a different part of the LCT to the east. The exception to this is for the consented Kirk Hill and Chapleton Farm developments which in addition to widespread theoretical visibility across the central area of the LCT, also have similar areas of theoretical visibility to the east. Cumulative interaction in this scenario is still very limited, however, as Kirk Hill and Chapleton Farm will be located in the successive view to the north-west of this LCT, but at distance from the area potentially affected by the Proposed Development. When considering the introduction of the Proposed Development to this scenario, the level of change is therefore considered to be broadly similar to the assessment against the operational baseline. The magnitude of change therefore remains **Low** resulting in a **Minor and Not Significant effect**.

Cumulative Assessment (application scenario)

Similar to the consented scenario, application development within the wider landscape would have little influence on this LCT with theoretical visibility extents of North Kyle and the Proposed Development only slightly overlapping.

Theoretical visibility for the Clauchrie application shows only a small extent and in itself would have little influence on this LCT. However, Craiginmoddie would have an influence on this LCT with theoretical visibility extending across much of the central and eastern areas of the LCT. There are areas in the east of the LCT where the Proposed Development would be viewed within the same upland backdrop to this LCT as Craiginmoddie and the operational Dersalloch and Hadyard Hill Wind Farms and in doing so would extend this developed context further along the horizon to the south further affecting the characteristics of the LCT. It should be noted however, that this cumulative effect only occurs within a limited area where the Proposed Development is assessed as having a minor effect on the key characteristics.

On balance it is considered that the scale of change predicted for the Proposed Development against the baseline and consented situation would only very slightly increase and as a result the magnitude of change is considered to remain **Low** resulting in a **Minor and Not Significant effect**.

Cumulative Assessment (scoping scenario)

Carrick Windfarm would appear to extend development further across the southern horizon of foothills and from some locations it would almost appear to connect to the eastern edges of the Craiginmoddie Windfarm. From this LCT, the Proposed Development would sit immediately in front of Carrick Windfarm but would occupy far less extent with Carrick Windfarm often spreading across the hill form of Glenalla and Back Fell. Whilst the Proposed Development would slightly intensify the experience of wind farm development from eastern parts of the LCT, it would do so within the context of a scenario that already includes the large scale Carrick Windfarm within its immediate context, moderating the magnitude of change experienced.

Taking this into account, the magnitude of change is predicted to be **Negligible** for this scenario resulting in a **Minor and Not Significant** effect.



Table 6.13 - Detailed Assessment: LCT 17b - Foothills with Forest west of Doon Valley

Baseline Description

Foothills with Forest west of Doon Valley is located to the north-east of the Girvan Valley area of Intimate Pastoral Valley LCT. The key characteristics within SALWCS for the LCT are summarised below –

- "This upland landscape forms a fairly narrow band of low hills lying at the head of the Girvan Valley and on the west side of the Doon Valley.
- The designed landscapes of Craigengillan, Cloncaird and Blairguhan lie at the foot of these uplands.
- The very gently undulating plateau in the north, rises to form subtly rounded hills to the south including occasional more pronounced hills with steep slopes and defined tops.
- The more pronounced hills, including Auchenroy and Big Hill of the Baing, and the steep complex slopes of Kildoach Hill, lying on the outer fringes of this landscape form highly visible 'landmark' features seen from the Middle Dale (12), the Intimate Pastoral Valley (13) and the Upland River Valley (10).
- This landscape has a simple land cover pattern dominated by heather-flecked grass moorland and extensive coniferous plantations.
- Smaller scale features are rare within this sparsely settled landscape.
- The B741 crosses the interior of this landscape. Access tracks are present within forestry and a high voltage electricity transmission line is aligned through this landscape.
- This landscape is seen in close proximity from popular hill walks to Craigengower Hill above Straiton and from the summit of Auchenroy Hill. The peripheral hills of these uplands are also highly visible from settlements and roads in surrounding valleys."

For reference, the NatureScot 2019 character assessment identifies this area as part of a much larger character area named Foothills, which also extends across the site area including the host LCT 17c Foothills with Forest and Wind Farm. The Foothills key characteristics are described by NatureScot as follows –

- "Dissected landform of incised valleys cut between rounded ridges, frequently having a slightly conical form with long shoulder slopes, and plateaux occasionally rising to undramatic summits.
- Underlain by red sandstones in the west and coal measures in the east.
- Variety of landcover types: lower slopes typically have a pastoral character; with increasing altitude the proportion of rougher grazing rises; and summits are dominated by moorland vegetation.
- Swathes of dark green coniferous forest cover many of the rounded peaks and descend on to the lower slopes.
- The eastern part of this area, comprising the south eastern part of the Ayrshire Coalfield, has a concentration of large open-cast coal mines.
- Scatter of villages and farms in the northern parts of the Landscape Character Type, and very little settlement in more upland areas to the south and east.
- Remnants of historic settlement patterns still evident in areas that are unsettled and uncultivated.
- Enclosed nature of forested areas, with their foreshortened views, can create a remote, isolated feel.
- Simple, largely undeveloped landscape, with foothills often providing scenic backdrops to the settled valleys which surround them."



Viewpoint 4 Craigengower Monument is located within this LCT. The operational Dersalloch wind farm occupies a large area of upland plateau in the southern part of this LCT. Other Operational wind farms visible from this location include the Hadyard cluster (Hadyard Hill, Penwhapple, Assel Valley, Tralorg) to the west and Whitelee in the distance to the north-east.

Value	Susceptibility	Sensitivity
This LCT is not subject to any national landscape designations. Only the western fringes of the LCT are within the Water of Girvan Valley cLLA. The value of this LCT is considered to be Medium.	Wind farm development is an existing characteristic experienced from this LCT in views west and at close range in relation to Dersalloch Windfarm which is within the LCT. The LCT is susceptible to further wind farm development including within the surrounding LCTs, however, wind turbine development would not be uncharacteristic in the area as a whole. On balance, susceptibility is considered to be Medium-Low.	Medium.

Assessment (including operational and under construction cumulative sites)

Magnitude of Change

The ZTV shows that theoretical visibility is relatively extensive across this LCT. Theoretical visibility is found largely on the south facing slopes of the upper Girvan valley to the east of the Proposed Development with sections of patchy, limited or no theoretical visibility for north facing slopes. Theoretical visibility is more uniformly spread across the western reaches of the upper Girvan Valley to the north of the Proposed Development.

Factors that increase the magnitude of change are:

- change to the experience of the landscape character of the LCT resulting from addition of large scale wind turbines to the south west;
- The Proposed Development would increase the existing influence of development already experienced at close proximity with the Dersalloch Windfarm; and
- The degree to which the Proposed Development would encroach upon the view south along valley landscape of the Water of Girvan valley which forms a part of the wider setting to this upland LCT.

Factors that decrease the magnitude of change are:

- Where visibility occurs the Proposed Development would appear to occupy the larger upland landscape (Foothill with Forest and Wind Farm) that sits beyond the undulated ridgeline of hills that define the southern edges of the Girvan valley;
- The presence of Dersalloch wind turbines within this LCT means that the proposed turbines would be introducing elements that are not entirely uncharacteristic within the wider context of the Girvan valley;
- The large scale of the upland landscape and simple upland landcover of open moorland and forestry associated with the site area are similar in character (albeit larger in scale) to the upland characteristics of this LCT. This relationship provides a large scale surrounding landscape context to the experience of wind farm developments and of the Proposed Development; and
- the experience of the key characteristics of the LCT would only be noticeably affected in areas that are not already affected by the existing Dersalloch Windfarm. These areas are limited in extent and are only found at the edges of the LCT where the characteristics are more transitional in nature.

Taking all of this into account, the magnitude of change is predicted to be **Medium-Low** for this LCT.



LANDSCAPE AND VISUAL

Significance of Effect

The effect on landscape characteristics in this LCT as a result of the Proposed Development is considered to be **Moderate-Minor and Not Significant.**

Cumulative Assessment (See CZTVs on Figures 6.20a-j)

Cumulative assessment (consented scenario)

The cumulative ZTVs show that the consented schemes have quite different theoretical visibility extent across this LCT. Whilst there are small overlapping patches of theoretical visibility at the western edges of the LCT for Kirk Hill and Chapelton Farm, these schemes are distant and in a successive view north-west from this LCT and cumulative interaction with consented developments in this scenario is therefore very limited.

When considering the introduction of the Proposed Development to this scenario, the level of change is therefore considered to be broadly similar to the assessment against the operational baseline. The magnitude of change therefore remains **Medium-Low** resulting in a **Moderate-Minor and Not Significant effect**.

Cumulative Assessment (application scenario)

Similar to the consented scenario, application development within the wider landscape would have little influence on this LCT with theoretical visibility extents of North Kyle and the Proposed Development only slightly overlapping.

The CZTVs show that theoretical visibility for the Clauchrie and Craiginmoddie applications have similar extents across the LCT and the Proposed Development is overlapping with these extents in areas to the west of the LCT away from the largest influence of Dersalloch. These schemes are located to the west and would be seen to extend wind farm development further east and towards the LCT further affecting the characteristics of the LCT.

On balance it is considered that the scale of change predicted for the Proposed Development against the baseline and consented situation would slightly increase and as a result the magnitude of change is considered to be **Medium** resulting in a **Moderate and Not Significant effect**.

Cumulative Assessment (scoping scenario)

From much of the affected area of this LCT, the Carrick Windfarm would extend across the horizon in the view south-west spanning across the same part of the view as the Proposed Development but occupying a greater horizontal extent. It would appear to span across the horizon from close to the summit Glenalla Fell and where Craiginmoddie is visible to the east of the Proposed Development.

Whilst the Proposed Development would slightly intensify the experience of wind farm development from eastern parts of the LCT, it would do so within the context of a scenario that already includes the large scale Carrick Windfarm within its immediate context, moderating the magnitude of change experienced.

Taking this into account, the magnitude of change is predicted to be **Medium-Low** for this scenario resulting in a **Moderate-Minor and Not Significant** effect.

Table 6.14 - Detailed Assessment: LCT 21 Rugged Uplands with Lochs & Forests



Baseline Sescription

The Rugged Uplands with Lochs and Forests character type within the study area is contiguous with an LCT of similar name and characteristics located further east in East Ayrshire as illustrated on Figure 6.3. The preliminary assessment, however, determined that the area of Rugged Uplands with Loch and Forest with East Ayrshire would not experience significant effects and as such this detailed assessment focusses on the area of Rugged Uplands with Loch and Forest within South Ayrshire. The key characteristics within SALWCS for the LCT are summarised below -

- "This character type is generally remote from more settled lowland areas although lower rugged hills in the north of this landscape provide an integral part of the setting to the diverse Upland River Valley (10) of the Doon Valley which accommodates Craigengillan House and its designed landscape.
- The higher hills lying at the core of this landscape form a rugged mountainous backdrop in distant views from elevated roads within the more open parts of the Foothills (17c) and Plateau Moorland (18c) landscapes of South Ayrshire.
- with the higher hills forming a setting to the low lying landscapes to the north and the Upland River Valley of the Doon Valley. The provide a rugged mountainous backdrop in distant views from the nearby foothills and plateau moorland landscapes.
- The complex form of this landscape creates myriad narrow valleys and loch basins which are strongly contained and of a smaller scale.
- Exposed crags and boulders give a notably 'Highland' appearance to steep-sided north/south orientated granite ridges. The landform of the western Southern Uplands is less craggy but still features steep-sided interlocking rounded hills and the dramatic cleft of the Nick of the Balloch.
- While vegetation cover is simple, largely comprising grass moorland with patchy heather, the landscape is strongly patterned in places with exposed rock.
- A number of lochs, of which Loch Doon is the largest, are located on the lower northern edge of the more pronounced granite peaks and these add to the diversity of this landscape. Coniferous forestry extends into some of the valleys on lower hill slopes and fringing lochs.
- This landscape is very sparsely settled with small farms and occasional estate houses sited on the west side of Loch Doon and with some archaeological features on small knolly hills.
- The very sparsely settled nature of this landscape and difficulty of access, particularly to the higher and more rugged hills extending north from Merrick, can give a strong sense of seclusion.
- This landscape is popular with walkers and cyclists.
- The Merrick and Rhinns of Kells in Dumfries and Galloway, Cornish Hill and Shalloch on Minnoch offer elevated views and there are a number of footpaths in the area west of Loch Doon.
- Extensive wind farm development is/will be a key feature in the nearby uplands of Southern Uplands with Forestry (20c) and the South Ayrshire Plateau Moorlands with Forest and Wind Farms (18c) and is clearly visible from the open hills within this landscape."

For reference, the NatureScot 2019 character assessment divides the landscape character into types very differently within this same geographical area. Whilst the NatureScot assessment more usually consists of larger geographical areas defined at a regional scale compared with the more local level of the capacity studies, in this area it has seen fit to sub-divide into smaller areas of distinct character.

The NatureScot 2019 character assessment suggests that there are some characteristics that are divergent across the area defined by the SALWCS as Rugged Uplands with Forest and it is broken down into four separate areas as follows - Rugged Upland (the largest area within LCT 21); Foothills (found at the



northernmost edges of LCT 21 and extends north beyond LCT 21 across the site area and LCT 17c); Southern Uplands (fringes LCT 21 to the north-west; and Southern Uplands with Forest (an area of forested upland in the west of LCT 21). NatureScot describes key characteristics of these areas as follows -

Rugged Uplands (NatureScot) -

- "Large, elevated and complex mountain ranges formed by granite intrusions which have been significantly modified by glacial erosion.
- Dramatic, craggy, mountainous scenery.
- Land cover dominated by heather moorland, rough grassland and areas of exposed rock outcrops.
- Woodland absent with the exception of areas of coniferous forest which have altered the character of some
 of the lower slopes.
- Scarce signs of human influence, limited to tracks and walkers' footpaths with roads running around the fringes.
- Grand, large scale, remote landscape with wild character, from the summits there are dramatic and extensive views in all directions."

Foothills (NatureScot) -

- "Dissected landform of incised valleys cut between rounded ridges, frequently having a slightly conical form with long shoulder slopes, and plateaux occasionally rising to undramatic summits.
- Underlain by red sandstones in the west and coal measures in the east.
- Variety of landcover types: lower slopes typically have a pastoral character; with increasing altitude the proportion of rougher grazing rises; and summits are dominated by moorland vegetation.
- Swathes of dark green coniferous forest cover many of the rounded peaks and descend on to the lower slopes.
- The eastern part of this area, comprising the south eastern part of the Ayrshire Coalfield, has a concentration of large open-cast coal mines.
- Scatter of villages and farms in the northern parts of the Landscape Character Type, and very little settlement in more upland areas to the south and east.
- Remnants of historic settlement patterns still evident in areas that are unsettled and uncultivated.
- Enclosed nature of forested areas, with their foreshortened views, can create a remote, isolated feel.
- Simple, largely undeveloped landscape, with foothills often providing scenic backdrops to the settled valleys which surround them."

Southern Uplands (NatureScot) -

- "Steep, smooth slopes rising to rounded summits.
- Series of distinctive valleys cut into the uplands created by glacial erosion, with U-shaped cross sections, precipitous side slopes, hanging valleys, waterfalls, crags and screes.
- Relatively simple landcover.
- Heather-flecked grassland on summits.
- Scarce semi-natural woodland is, limited to a few more sheltered glens, gullies and clefts.
- Occasional forested areas and shelterbelts on lower side slopes leaving the domed peaks exposed.
- Absence of modern settlement in these exposed uplands, it being concentrated in river valleys and the larger glens.
- Expansive, remote and largely untamed landscape, most parts of the uplands are accessible on foot only.



Long distance and panoramic views encompass the settled Ayrshire lowlands to the north and west and remote Galloway Hills to the south and east."

Southern Upland with Forest (NatureScot) -

- "Steep, smooth slopes rising to rounded summits.
- Series of distinctive valleys cut into the uplands created by glacial erosion, with U-shaped cross sections, precipitous side slopes, hanging valleys, waterfalls, crags and screes.
- Relatively simple landcover: coniferous forest is dominant. It generally extends over the summits or is concentrated on the side slopes leaving the domed peaks exposed.
- Heather-flecked grassland on unforested summits.
- Scarce semi-natural woodland is limited to a few more sheltered glens, gullies and clefts.
- Absence of modern settlement in these exposed uplands, it being concentrated in river valleys and the larger alens.
- Network of upland tracks, often associated with the forestry.
- Enclosure and foreshortened views created by forest cover contribute to create a remote, isolated character."

There are clearly several overlapping characteristics within the NatureScot character descriptions of Rugged Uplands and Southern Uplands (including with Forestry) that are similar to the key characteristics identified in SALWCS for LCT 21. For example, the scarcity of settlement, ruggedness of terrain and simplicity of landcover. The key divergence appears to largely relate to the NatureScot Foothills which has more in common with Foothills with Forest and Wind Farm LCT 17c. This highlights the transitional nature of the northern edges of LCT 21- Rugged Uplands with Lochs & Forests, which is characterised by NatureScot as a much less rugged and perceptually remote landscape than is described in SALWCS.

There are no operational wind farms within this LCT. The Dersalloch Windfarm lies to the north, the Mark Hill Windfarm to the south-west with the Hadyard Hill Windfarm to the north-west. At greater distances to the south-west lie Arecleoch and Kilgallioch wind farms. All of these wind farms have a contextual influence on the LCT. Viewpoints within this LCT include - Viewpoint 3 Minor Road near Stinchar Bridge; Viewpoint 20 Cornish Hill; Viewpoint 23 Loch Girvan Eye; and Viewpoint 8 Shalloch on Minnoch.

Value	Susceptibility	Sensitivity
The value of this LCT is considered to be Medium-High. This LCT is not subject to any national landscape designations. The vast majority of the LCT is designated locally with the High Carrick Hills cLLA which has an almost identical boundary to the LCT. The LCT lies within the DSP buffer and the northern part of the DSP core area cuts across the southern part of the LCT in a similar position to the Merrick WLA.	The perceptual qualities of remoteness within much of this LCT increases susceptibility to the Proposed Development. The Proposed Development would be seen on the foothills found to the north of this LCT and it is considered that the transition from rugged upland to foothills and forestry occurs within this LCT, as described in the baseline context above. This transition to a less rugged and remote landscape, combined with an increase in forestry activities, slightly moderates susceptibility in the northern parts of this LCT. On balance the susceptibility of this LCT to the Proposed Development is Medium.	Medium-High.



Assessment (including operational and under construction cumulative sites)

Magnitude of Change

Factors that increase the magnitude of change are:

- Change to the key characteristics resulting from addition of large scale wind turbines to the north within the neighbouring Foothills with Forest and Wind Farm LCT;
- The degree to which the Proposed Development would affect the wildness qualities found within this LCT (particularly the area defined as the northern reaches of the Merrick WLA);
- The Proposed Development would introduce further wind energy development in the view north increasing the existing influence that development visible at Dersalloch and in the Hadyard Hill cluster already has.

Factors that decrease the magnitude of change are:

- The Proposed Development would have an association with the wind farm influenced landscape to the north of this LCT within the Foothills with Forest and Wind Farm LCT and also with Dersalloch in the Foothills with Forest west of Doon Valley LCT;
- The large scale of the upland landscape and simple upland landcover of open moorland and forestry within the landscape immediately surrounding the site, provides a large scale landscape context considered appropriate for the scale of development proposed;
- The simpler upland landscape to the north is clearly separated from the more complex and rugged landscape experienced in parts of this LCT; and
- The Proposed Development would not be experienced as entirely uncharacteristic within the surrounding operational wind farm context.

Taking all of this into account, the experience of the key characteristics of the LCT would only be affected to a small extent and the magnitude of change is predicted to be **Low**.

Significance of effect

The effect on landscape characteristics in this LCT as a result of the Proposed Development is considered to be **Moderate-Minor and Not Significant.** Whilst visible from parts of this LCT the Proposed Development would have a limited effect on the key characteristics of this LCT and is separated from the Proposed Development by large areas of upland moorland and forestry which provides a buffer from the more complex and rugged landscape characteristics found in the southern parts of this LCT.

Cumulative Assessment (See CZTVs on Figures 6.20a-j)

Cumulative Assessment (consented sites)

Consented development visible from this LCT is found within or visually overlapping with operational or under construction developments in the distant views to the west, north and east. The addition of these consented schemes would therefore have a minimal influence on the baseline situation. The scale of change predicted for the Proposed Development against the baseline situation would therefore still broadly apply to this scenario. As a result, the magnitude of change is predicted to remain **Low** for this scenario resulting in a **Moderate-Minor and Not Significant** effect.

Cumulative Assessment (application scenario)



Similar to the consented scenario, application development would be visible within or visually overlapping with other schemes in the operational or under construction baseline, in distant views to the west, north and east

The Clauchrie application would be located partly within this LCT and would be experienced at closer proximity to the west than other more distant schemes such as Arecleoch and Kilgallioch. Craiginmoddie would appear to the north on the Foothills with Forest and Wind Farm character type, appearing to extend the Hadyard Hill cluster further to the east. The addition of these application schemes in itself would have an additional effect on the characteristics of the LCT compared to the baseline and consented scenarios. Clauchrie in particular would introduce wind farm development at closer proximities than previously experienced diminishing the sense of remoteness for a localised area of the LCT.

When considering the overall cumulative interaction of the Proposed Development within a changed baseline that includes these application schemes, it is considered that the Proposed Development would extend the spread of development viewed to the north and west and increase the cumulative influence within the LCT. However, the Proposed Development would not be perceived as introducing development at closer proximity in this situation due to Clauchrie Windfarm's much closer proximity and would not appear uncharacteristic in this scenario.

On balance it is considered that whilst the magnitude of change would be moderated slightly by these factors, the magnitude of change would remain **Low** for this scenario resulting in a **Moderate-Minor and Not Significant** effect.

Cumulative assessment (scoping scenario)

The ZTV shows that Carrick Windfarm shares a similar pattern of theoretical visibility as the Proposed Development, albeit that the Carrick ZTV extent is more extensive to the west and south within this LCT.

The Carrick Windfarm would extend across the horizon in the view north spanning across the same part of the view as the Proposed Development but occupying a much wider horizontal extent. From many areas of visibility within this LCT, it would appear to span across the horizon from the eastern edges of Craiginmoddie Windfarm across the site and to the edges of the Water of Girvan Valley. The Proposed Development would appear immediately behind the Carrick Windfarm in this scenario only intensifying the influence of turbines in a part of this view north and part of the Carrick Windfarm extent.

The Proposed Development would therefore only add slightly to a scenario that includes large scale wind farm development viewed at closer proximity and would appear modest in comparison with the wider extent of the Carrick Windfarm. The magnitude of change is therefore considered to reduce in this scenario to **Negligible** resulting in a **Minor and Not Significant** effect.

Table 6.15 – Detailed Assessment: Water of Girvan Valley cLLA

Baseline conditions

Baseline description

This cLLA is located to the east and north of the site of the Proposed Development. It extends across northern parts of LCT 13 Intimate Pastoral Valley; the majority of LCT 12 Middle Dale; and the northern edges of LCT 17c Foothills with Forest and Wind Farm. The cLLA covers a large area of South Ayrshire and at its north and west edges also covers small parts of LCT 17d Maybole Foothills and LCT 11 Lower Dale.



The SALLDR provides the following reason for designation which also offers a summary and broader context for the special qualities of the cLLA as a whole: "This cLLA is an attractive settled valley, with an outstanding assemblage of historic houses, castles, designed grounds and policy landscapes. Moorland hills with distinctive profiles provide the backdrop to views across and along the valley. Prominent and accessible monuments (Kildoon, and the Hunter-Blair monument near Straiton) provide panoramic elevated views across the area. The Water of Girvan Valley is popular for walking, with local routes promoted and waymarked around Straiton and Dailly."

The SALLDR also includes the following relevant sensitivities to change: "This landscape is sensitive to tall structures (masts and wind turbines) sited within upland areas and prominent on containing skylines where they would affect views and the character of this scenically rich valley.' With the following corresponding management recommendations: 'Carefully consider development proposals sited within adjacent upland areas which could adversely affect the character and views from the Water of Girvan Valley."

There is no Operational wind farm development within the cLLA, however, Dersaloch and the Hadyard Hill cluster are within close proximity to the east and south.

Value	Susceptibility	Sensitivity
It is considered that the value of this area of cLLA principally derives from the setting of the distinctive valley landscape of the Water of Girvan valley. Value is considered to be Medium - High.	Whilst the Proposed Development turbines are not located within the cLLA parts of the access tracks to the north are. It is also susceptible to wind farm development at its edges 'on containing skylines', as noted within SALLDR. The existing wind farm context clearly influences the experience of those characteristics associated with the lower Water of Girvan valley across the northern parts of the cLLA. Dersalloch has some influence on the upper Water of Girvan valley but to a lesser extent. Whilst wind turbines are not an uncharacteristic feature from large areas of this cLLA, there are parts of the upper valley landscape that are not influenced by wind farm development. Susceptibility is considered to be Medium-High.	Medium-High

Assessment (including operational and under construction cumulative sites)

Magnitude of change

The ZTV shows that theoretical visibility is contained to within the eastern parts of this cLLA and is particularly consistent across the upper Water of Girvan valley which is immediately to the east of the site. Theoretical visibility is concentrated on the south facing slopes of the upper Water of Girvan valley with sections of patchy, limited or no theoretical visibility on north facing slopes. Part of the site area lies within this cLLA although none of the proposed turbines are located within it.

Factors that increase the magnitude of change are:

- change to the experience of the landscape character of the cLLA resulting from addition of large scale wind turbines to the south and west of the Water of Girvan valley;
- the Proposed Development would introduce further large scale wind energy development at closer proximity into views from within the Water of Girvan valley in addition to the views of the operational Dersalloch Wind Farm;



- the scale of the Proposed Development turbines would contrast with the smaller scale of the landscape features within the Water of Girvan valley;
- The Proposed Development turbines would create a new focus for parts of the valley floor to the northwest, where views towards the site area are not limited by other features such as the undulating steep sided topography or trees and woods on the valley floor; and
- the position of the Proposed Development above the ridgeline of hills on the southern valley side increases its visual presence within this smaller scale valley landscape, for some areas that have clear line of sight (such as from the minor road near viewpoint 2) the turbines would be a prominent feature.

Factors that decrease the magnitude of change are:

- Where visibility occurs the Proposed Development would appear to occupy the larger upland landscape (Foothill with Forest and Wind Farm) that sits beyond the undulated ridgeline of hills that define the southern edges of the Water of Girvan valley;
- The presence of Dersalloch wind turbines in views from this cLLA means that the proposed turbines would be introducing elements that are not entirely uncharacteristic within the Water of Girvan valley, albeit as an intensification of wind turbines at closer proximity than previously experienced;
- Whilst the Proposed Development would create a new focus in the south east part of this cLLA where clear views of the Proposed Development are predicted, northern parts of the cLLA would not experience such open views;
- Within the Water of Girvan valley landscape, potential visibility is often restricted by intervening vegetation, woods and forestry. This is particularly evident for areas in the northern part of this cLLA; and
- When the Proposed Development is viewed from the upper Water of Girvan valley part of the cLLA, the proposed turbines would generally appear set back from the leading ridge of the southern valley side. Careful layout design has sought to avoid positioning turbines to the north of these leading ridgelines to minimise encroachment on the valley landscape.

Taking all of this into account, the experience of the key characteristics and scenic qualities of the southernmost area of cLLA would be most affected with the area to the north affected to a lesser degree. The magnitude of change for the southern area (upper Water of Girvan valley) is considered to be **Medium-High** and the magnitude of change for the northern area (lower Water of Girvan valley) is considered to be **Low.**

Significance of effect

The effect on the landscape characteristics and scenic qualities in this cLLA as a result of the Proposed Development is considered to be **Moderate-Major and Significant** for the upper Water of Girvan valley and **Moderate-Minor and Not Significant** for the lower Water of Girvan valley.

Cumulative Assessment (See CZTVs on Figures 6.20a-j)

Cumulative Assessment (consented scenario)

The consented schemes will not be visible from the upper Water of Girvan valley and therefore no cumulative interaction occurs between the consented schemes and the Proposed Development.

From the lower Water of Girvan valley, the cumulative ZTVs show that the consented schemes have theoretical visibility across the central area of the valley, however, theoretical visibility of the Proposed Development is largely found within a different part of the valley to the east.

Kirk Hill and Chapleton Farm developments are the exception and have widespread theoretical visibility across much of the lower Water of Girvan valley landscape. Cumulative interaction in this scenario is still very limited, however, as Kirk Hill and Chapleton Farm will be located in the successive view to the north-west of this cLLA,



but at distance from the area potentially affected by the Proposed Development. When considering the introduction of the Proposed Development to this scenario, the level of change is therefore considered to be broadly similar to the assessment against the operational baseline.

The magnitude of change therefore remains **Medium-High** for the upper Water of Girvan valley and **Low** for the lower Water of Girvan valley. This results in effects of **Moderate-Major and Significant** for the upper Water of Girvan valley and **Moderate-Minor and Not Significant** for the lower Water of Girvan valley.

Cumulative Assessment (application scenario)

For the upper Water of Girvan valley, the cumulative ZTVs show that for the applications Craiginmoddie, Clauchrie and North Kyle that there is little visibility within this LCT. The resulting cumulative interaction is considered to be minimal for this scenario within this LCT.

For the lower Water of Girvan valley, the application cumulative situation is similar to the consented scenario within the wider landscape, which would have little influence with theoretical visibility extents of North Kyle and the Proposed Development only slightly overlapping. Theoretical visibility for the Clauchrie application shows only a small extent and in itself would have little influence. However, Craiginmoddie would have an influence on the lower Water of Girvan valley with theoretical visibility extending across much of its central and eastern areas. There are areas in the east of the cLLA where the Proposed Development would be viewed within the same upland backdrop to this cLLA as Craiginmoddie and the operational Dersalloch and Hadyard Hill Wind Farms. In doing so would extend this developed context further along the horizon to the south-east further affecting the characteristics of the lower Water of Girvan valley. It should be noted however, that this cumulative effect only occurs within a limited area where the Proposed Development is assessed as having a minor effect on the key characteristics. On balance it is considered that the scale of change predicted for the Proposed Development against the baseline and consented situation would only very slightly increase and as a result the magnitude of change is considered to remain unchanged.

The magnitude of change therefore remains **Medium-High** for the upper Water of Girvan valley and **Low** for the lower Water of Girvan valley. This results in effects of **Moderate-Major and Significant** for the upper Water of Girvan valley and **Moderate-Minor and Not Significant** for the lower Water of Girvan valley.

Cumulative Assessment (scoping scenario)

The cumulative ZTVs show that the Proposed Development has a very similar extent of theoretical visibility as the Carrick Wind Farm. When considering the introduction of the Proposed Development to this scenario, the presence of Carrick at such close proximity to the Proposed Development and within its immediate landscape context potentially moderates the additional cumulative influence that the Proposed Development would have on this cLLA.

The Proposed Development would intensify the experience of wind farm development from the upper Water of Girvan valley that are closest to the Proposed Development. However, the Carrick Wind Farm in this scenario strongly influences the experience of wind farm development experienced from throughout the Water of Girvan Valley and as a result the Proposed Development would not be perceived as introducing large scale wind farm development to parts of the Water of Girvan valley that do not currently experience it. Taking this into account it is considered that the magnitude of change would reduce in this scenario.

The magnitude of change therefore reduces to **Medium** for the upper Water of Girvan valley and **Negligible** for the lower Water of Girvan valley. This results in effects of **Moderate and Not Significant** for the upper Water of Girvan valley and **Minor and Not Significant** for the lower Water of Girvan valley.



Table 6.16 - Detailed Assessment: High Carrick Hills cLLA

Baseline Description

The SALLDR provides the following reason for designation which also offers a summary and broader context for the special qualities of the cLLA as a whole: 'The High Carrick Hills are important in that they comprise a little modified upland area comprising the highest and most rugged hills in South Ayrshire. This landscape is unusual in having a Highland character in a Lowland context due to the craggy landform, the presence of peaty lochs and the qualities of wildness that can be experienced in the area. It borders the Galloway Hills Regional Scenic Area and a locally important Sensitive Landscape Character Area in East Ayrshire. Part of this area is covered by the Merrick Wild Land Area and it also lies wholly within the Galloway Dark Sky Park which validates its remote character.'

SALLDR also includes the following relevant sensitivities to change: 'This landscape is highly sensitive to tall structures such as masts and wind turbines including those sited in adjacent upland areas where they would intrude on views from open hill tops and diminish the sense of wildness experienced. The more remote hills of this landscape would be sensitive to new building and infrastructure and also to larger buildings and any associated lighting located on less remote sparsely settled lower slopes and forested areas.'

Value	Susceptibility	Sensitivity
It is considered that the value of this area of cLLA principally derives from the distinctive characteristics of the upland landscape and rugged hills within and to the south of the cLLA. Part of the Merrick WLA lies within this cLLA. Value is considered to be Medium - High.	Whilst the Proposed Development is not located within the cLLA, the designated area is susceptible to wind farm development located in adjacent upland areas, as noted within SALLDR. The existing wind farm context influences the experience of this cLLA which reduces susceptibility to change as wind turbines are not an uncharacteristic feature from this upland landscape, including in the direction of the site to the north. Susceptibility is also moderated by the separation of the cLLA from the upland landscape within which the Proposed Development would be located and the intervening upland forestry which reduces the degree of intervisibility. Taking this into account, susceptibility is considered to be Medium-Low.	Medium.

Assessment (including operational and under construction cumulative sites)

Magnitude of Change

Factors that increase the magnitude of change are:



- Change to the key characteristics resulting from addition of large scale wind turbines within the adjacent uplands of the Foothills with Forest and Windfarm LCT to the north;
- The degree to which the Proposed Development would affect the wildness qualities found within this cLLA (particularly the area defined as the northern reaches of the Merrick WLA); and
- The Proposed Development would introduce further wind energy development in the view north increasing the existing influence that development visible at Dersalloch and in the Hadyard Hill cluster already has.

Factors that decrease the magnitude of change are:

- The Proposed Development would have an association with the wind farm influenced landscape to the north of the cLLA within the Foothills with Forest and Wind Farm LCT and also with Dersalloch in the Foothills with Forest west of Doon Valley LCT;
- The large scale of the upland landscape and simple upland landcover of open moorland and forestry within the landscape immediately surrounding the site, provides a large scale landscape context considered appropriate for the scale of development proposed;
- The simpler upland landscape to the north is clearly separated from the more complex and rugged landscape experienced in parts of this cLLA; and
- The Proposed Development would not be experienced as entirely uncharacteristic within the surrounding operational wind farm context.

Taking all of this into account, the experience of the key characteristics of the cLLA and scenic qualities would only be affected to a small extent and the magnitude of change is predicted to be **Low**.

Significance of Effect

The effect on landscape characteristics and scenic qualities in this cLLA as a result of the Proposed Development is considered to be **Moderate-Minor and Not Significant.** Whilst visible from parts of this cLLA the Proposed Development would have a limited effect on its key characteristics and scenic qualities and is separated from the Proposed Development by large areas of upland moorland and forestry which provides a buffer from the more complex and rugged landscape characteristics found in the southern parts of this cLLA and beyond within the central part of the Merrick range and WLA.

Cumulative Assessment (See CZTVs on Figures 6.20a-j)

Cumulative Assessment (consented sites)

Consented development visible from this cLLA is found within or visually overlapping with operational or under construction developments in the distant views to the west, north and east. The addition of these consented schemes would therefore have a minimal influence on the baseline situation. The scale of change predicted for the Proposed Development against the baseline situation would therefore still broadly apply to this scenario. As a result, the magnitude of change is predicted to remain **Low** for this scenario resulting in a **Moderate-Minor and Not Significant** effect.

Cumulative Assessment (application scenario)

Similar to the consented scenario, application development would be visible within or visually overlapping with other schemes in the operational or under construction baseline, in distant views to the west, north and east.

The Clauchrie application would be located partly within this cLLA and would be experienced at closer proximity to the west than other more distant schemes such as Arecleoch and Kilgallioch. Craiginmoddie



would appear to the north on the Foothills with Forest and Wind Farm character type, appearing to extend the Hadyard Hill cluster further to the east. The addition of these application schemes in itself would have an additional effect on the characteristics and scenic qualities of the cLLA compared to the baseline and consented scenarios. Clauchrie in particular would introduce wind farm development at closer proximities than previously experienced diminishing the sense of remoteness for a localised area of the cLLA.

When considering the overall cumulative interaction of the Proposed Development within a changed baseline that includes these consented schemes, it is considered that the Proposed Development would extend the spread of development viewed to the north and west and increase the cumulative influence within the cLLA. However, the Proposed Development would not be introducing development at closer proximity in this situation due to Clauchrie Windfarm much closer in proximity and would not appear uncharacteristic in this scenario.

On balance it is considered that whilst the magnitude of change would be moderated slightly by these factors, the magnitude of change would remain **Low** for this scenario resulting in a **Moderate-Minor and Not Significant** effect.

Cumulative Assessment (scoping scenario)

The ZTV shows that Carrick Windfarm shares a similar pattern of theoretical visibility as the Proposed Development, albeit that the Carrick ZTV extent is more extensive to the west and south within this cLLA.

The Carrick Windfarm would extend across the horizon in the view north spanning across the same part of the view as the Proposed Development but occupying a much wider horizontal extent. From many areas of visibility within this cLLA, it would appear to span across the horizon from the eastern edges of Craiginmoddie Windfarm across the site and to the edges of the Water of Girvan Valley. The Proposed Development would appear immediately behind the Carrick Windfarm in this scenario only slightly intensifying the influence of turbines in a part of this view north and part of the Carrick Windfarm extent.

The Proposed Development would therefore only add slightly to a scenario that includes large scale wind farm development viewed at closer proximity and would appear modest in comparison with the wider extent of the Carrick Windfarm. The magnitude of change is therefore considered to reduce in this scenario to **Negligible** resulting in a **Minor and Not Significant** effect.

Table 6.17 - Detailed Assessment: Stinchar Valley cLLA

Baseline Conditions

Baseline Description

The SALLDR provides the following reason for designation which also offers a summary and broader context for the special qualities of the cLLA as a whole: "The Sinchar Valley has a hidden, secretive quality being narrow, incised and undisturbed by major communications. Lush valley floor pastures contrast with more complex wooded slopes and a string of well-defined hills located on the northern edges of the valley, including the singular peak of Knockdolian, add to the rich scenic composition and harmony of this landscape. Both the Stinchar and the lower Duisk valleys are enhanced by many cultural heritage features including some notable 19th/early 20th century grand houses and historically interesting villages. Well-used walking routes are present throughout the valley and within Changue Forest."



The SALLDR also includes the following relevant sensitivities to change: "This landscape is sensitive to tall structures such as masts and wind turbines sited on skyline of prominent hills containing the valley and to some buildings, for example very large agricultural sheds, which could adversely affect the small-scale and relatively little developed character of this valley as well as key views.' With the following corresponding management recommendations: 'Discourage large scale buildings and mast/wind farm development which could adversely affect the appreciation of the scenic qualities of this landscape."

There are no assessment viewpoints within the Stinchar Valley cLLA, however, a wireline has been generated from an area of theoretical visibility on the Minor Road between Barr and South Balloch – Wireline Only Viewpoint A. The operational Hadyard Hill, Assel Valley, Mark Hill and Arecleoch wind farms are visible from the Stinchar Valley.

Value	Susceptibility	Sensitivity
It is considered that the value of this area of cLLA principally derives from the setting of the distinctive valley landscape of the River Stinchar. Value is considered to be Medium - High.	Whilst the Proposed Development is not located within the cLLA, the designated area is susceptible to wind farm development at its edges, as noted within the management recommendations. The existing wind farm context influences the experience of this cLLA which reduces susceptibility to change as wind turbines are not an uncharacteristic feature from the valley landscape. Susceptibility is also moderated by the separation of the cLLA from the upland landscape within which the Proposed Development would be located and the intervening upland forestry which reduces the degree of intervisibility. Taking this into account, susceptibility is considered to be Medium-Low.	Medium

Assessment (including operational and under construction cumulative sites)

Magnitude of Change

The ZTV shows that theoretical visibility is relatively limited within this cLLA with patches of theoretical visibility found on upper slopes of the Stinchar valley and with smaller areas found on the valley floor. Theoretical visibility tends to be limited to the upper Stinchar valley which is the eastern part of the cLLA. The Duisk valley and lower Stinchar towards the coast would be largely unaffected.

Factors that increase the magnitude of change are:

- change to the experience of the character and scenic qualities of the cLLA resulting from addition of large scale wind turbines to the east of the Stinchar valley;
- the Proposed Development would add further development to the existing spread of wind energy development currently visible from the various parts of the Stinchar valley; and
- The Proposed Development turbines would create a partial focus to the east for parts of the valley floor, albeit to a limited extent.

Factors that decrease the magnitude of change are:

- the change to key characteristics and scenic qualities would be minimal from large areas of the cLLA that have little or no visibility. This is particularly true of much of the Duisk valley and lower Stinchar valley;
- Where visibility occurs, the Proposed Development would appear to sit clearly within the larger upland landscape (Foothill with Forest and Wind Farm) beyond the undulated ridgeline of hills that define the northern and eastern edges of the Stinchar valley;



- The presence of existing wind turbines in views from within this cLLA means that the proposed turbines would not be introducing elements that are uncharacteristic within the Stinchar valley and the existing turbines in view are closer and larger than the Proposed Development for much of the affected areas of the Stinchar valley;
- The Proposed Development appears set back into a core area of upland that is clearly separated from the smaller scale valley landscape of the Stinchar valley; and
- Within this valley, potential visibility is often restricted by intervening vegetation, woods and forestry.

Taking all of this into account, the experience of the key characteristics and scenic qualities of the cLLA would only be affected to a small extent and the magnitude of change is predicted to be **Low**.

Significance of Effect

The effect on this cLLA as a result of the Proposed Development is considered to be **Minor and Not Significant.** Whilst visible from parts of this cLLA the Proposed Development would have a limited effect on the key characteristics and Scenic Qualities of the Stinchar valley.

Cumulative Assessment (See CZTVs on Figures 6.20a-j)

Cumulative Assessment (consented scenario)

The cumulative ZTVs show that the consented schemes would only be visible from elevated parts of this cLLA above the valley floor and sides and cumulative interaction is therefore considered to be minimal. When considering the introduction of the Proposed Development to this scenario, the level of change is therefore considered to be broadly similar to the assessment against the operational baseline. The magnitude of change therefore remains **Low** resulting in a **Minor and Not Significant effect**.

Cumulative Assessment (application scenario)

Similar to the consented scenario, application development within the wider landscape would have little influence on this cLLA. However, within the immediate context of the cLLA, Clauchrie and Craiginmoddie would have a more noticeable influence.

The Clauchrie application spans across a wide part of the ridgeline of hills on the south side of the Stinchar valley and Craiginmoddie would appear on the upland hills to the north of the Stinchar valley within the Foothills with Forest and Wind Farm character type, appearing to extend the Hadyard Hill cluster further to the east. When considering the Proposed Development in this scenario it is important to note that from the valley floor visibility of the Proposed Development is much more limited than it would be for these applications. The Proposed Development therefore would only slightly add to the cumulative situation as a more distant development which on the whole would only be experienced from more elevated areas of the cLLA away from the valley floor.

On balance it is considered that the scale of change predicted for the Proposed Development against the baseline situation would reduce and as a result the magnitude of change is predicted to be **Negligible** for this scenario resulting in a **Minor and Not Significant** effect.

Cumulative Assessment (scoping scenario)



The Carrick Windfarm would appear to extend development further across the horizon to the east when viewed from locations within the Stinchar valley. From some locations it would almost appear to connect to the eastern edges of the Craiginmoddie Windfarm.

The Proposed Development would sit behind Carrick Windfarm and would appear diminutive in comparison. Taking this into account, the magnitude of change is predicted to be **Negligible** for this scenario resulting in a **Minor and Not Significant** effect.

Table 6.18 - Detailed Assessment: Blairquhan GDL

Baseline Conditions

Baseline Description

Blairquhan is a relatively large estate and parkland, the majority of which lies to the north of the Blairquhan Mains extending north towards the remains of Cloncaird Castle near Aitkenhead. The Blairquhan Mains house, stables, walled garden and terrace lie within and immediately to the north of Broad Wood. The parkland is well wooded particularly at its edges and along the banks of the Girvan Water creating an enclosed character. The estate planting includes an arboretum to the north of the walled garden. From elevated parts of the GDL in the north-east edges of the GDL views across the parkland to the south and west can be obtained.

The operational Dersalloch Windfarm is visible from much of the designated landscape including from the area immediately surrounding the house, gardens, avenues and parkland.

Value	Susceptibility	Sensitivity
GDLs are highly valued as a national resource. Value is therefore High.	The susceptibility of this GDL to the Proposed Development is moderated by the amount of woodland present within the designated area and surrounding landscape, reducing the potential for views to the wider landscape and uplands to the south where the Proposed Development is located. There are however some opportunities for more open views south from the north-eastern parts of the designated area. On balance, it is considered that the susceptibility to change of this GDL is medium.	Medium-High

Assessment (including operational and under construction cumulative sites)

Magnitude of Change

The ZTV shows theoretical visibility is found across the centre of the designated area. The area where the house, gardens, avenues and stables are located is shown to have no visibility and the parkland within its immediate context to the west and north also has no visibility with some limited visibility to the east across the access from the B741.

Where theoretical visibility is found in the central part of the GDL, fields are subdivided by woodland blocks, shelterbelt planting and the wide swathes of woodland that follow the Water of Girvan as it winds through the designated landscape from south to north. Eastern parts of the designated area are slightly more elevated and would have clearer line of sight towards the Proposed Development than most other parts of the GDL which have restricted visibility due to the screening potential of the intervening Bennan Hill which tends to limit the



potential visibility from this area. Changes to the characteristics of this GDL would therefore be limited to fields set within estate woodlands away from the main house and gardens.

The Proposed Development would be experienced within the context of existing wind farm development and would therefore introduce elements that are not uncharacteristic, albeit as an intensification of wind turbines to the east and south west from parts of the designated landscape.

Taking all of this into account, the magnitude of change for this GDL is considered to be Low.

Significance of Effect

The effect on this GDL as a result of the Proposed Development is considered to be **Moderate-Minor and Not Significant.**

Cumulative Assessment (See CZTVs on Figures 6.20a-j)

Cumulative Assessment (consented scenario)

The cumulative ZTVs show that only Kirk Hill and Chapleton Farm consented schemes have theoretical visibility within the GDL. Cumulative interaction in this scenario is very limited, however, as Kirk Hill and Chapleton Farm will be located in the successive distant view to the north-west of this LCT.

When considering the introduction of the Proposed Development to this scenario, the level of change is therefore considered to be broadly similar to the assessment against the operational baseline. The magnitude of change therefore remains **Low** resulting in a **Moderate-Minor and Not Significant effect**.

Cumulative Assessment (application scenario)

North Kyle and Clauchrie would not be visible from the GDL.

Craiginmoddie would have an influence on this GDL with theoretical visibility extending across much of the designated landscape.

Where visible, the Proposed Development would likely be viewed within the same upland backdrop as Craiginmoddie to the west and the operational Dersalloch Wind Farm to the east and in doing so would extend this developed context further along the horizon between these two other developments.

On balance it is considered that the scale of change predicted for the Proposed Development against the baseline and consented situation would slightly increase and as a result the magnitude of change is considered to be **Medium-Low** resulting in a **Moderate and Not Significant effect**.

Cumulative Assessment (scoping scenario)

The Carrick Windfarm would appear to extend development further across the southern horizon of foothills and would almost appear to connect to the eastern edges of the Craiginmoddie Windfarm. The Proposed Development would sit immediately in front of Carrick Windfarm but would occupy far less extent with Carrick Windfarm spreading behind the hill form of Glenalla and Back Fell. Whilst the Proposed Development would slightly intensify the experience of wind farm development from eastern parts of the LCT, it would do so within the context of a scenario that already includes the large scale Carrick Windfarm within its immediate context, moderating the magnitude of change experienced.

Taking this into account, the magnitude of change is predicted to be **Negligible** for this scenario resulting in a **Minor and Not Significant** effect.



LANDSCAPE AND VISUAL

6.10 Assessment of Effects on Views

Introduction

6.10.1 Effects on views are the changes to views experienced by people that result from the introduction of the Proposed Development. As described in the baseline overview, the assessment of effects on views includes effects on people at representative viewpoints and on principal visual receptors (i.e. groups of people in settlements, motorists on roads or users of recreational routes). The following preliminary assessment identifies which of these views and visual receptors may experience significant effects and therefore which require to be assessed in full. A detailed baseline description is provided separately within the assessment section for each viewpoint and visual receptor identified as requiring more detailed assessment.

6.11 Preliminary Assessment of Effect on Views

Viewpoints

- 6.11.1 Viewpoint locations are shown in conjunction with the blade tip ZTV on Figures 6.9 and 6.10 and at a detailed scale in the visualisations in Figures 6.21 6.49.
- 6.11.2 Visualisations have been prepared to meet the requirements of NatureScot (Visual Representation of Windfarms Version 2.2, December 2017). Photomontages are provided for those viewpoints that are within 20 km and that are requiring a detailed assessment (see preliminary assessment of viewpoints in Table 6.20). It should be noted that the 53.5 degree photomontage view does not always include a view of key existing wind farms in the view. It is important therefore that the 90 degree baseline panoramas provided are reviewed alongside the 53.5 degree photomontages when reviewing the visualisations, so that these existing wind farms are properly taken into account.
- 6.11.3 Table 6.19 identifies the numbers of turbines in the Proposed Development that are theoretically visible at each viewpoint, based on the bladeand hub ZTVs shown on Figures 6.10 and 6.12.

Table 6.19 - Viewpoint Theoretical Visibility Summary

VP	Viewpoint Name	Distance (nearest	Turbines Theoretically Visible	
No		turbine) (km)	Blades	Hubs
1	Minor Road near Tairlaw	2.4	2	0
2	Minor Road near Craig	2.7	9	9
3	Minor Road near Stinchar Bridge	3.5	9	9
4	Craigengower Monument	4.1	9	9
5	NCN7, near Palmullan Bridge	3.8	9	9
6	Straiton, minor road south of settlement	4.7	3	2
7	Straiton	5	0	0
8	Shalloch on Minnoch	8.7	9	9



9	Craigengillan GDL, Shear Hill	9.4	9	8
10	B7045, west of Kirkmichael	9.5	9	7
11	Auchensoul Hill	11.5	9	2
12	Maybole	11.8	8	2
13	A713 Eriff	13.6	9	5
14	B741 near Clawfin	14.2	9	7
15	Merrick	14.3	0	0
16	A713 and B742 Road Junction	16.6	9	9
17	Brown Carrick Hill	18	9	7
18	Cairnsmore of Carsphairn	21.3	9	9
19	A77, Ayr	22.9	9	0
20	Cornish Hill	5.2	9	9
21	B741 nr Largs Farm	4.8	9	9
22	B7023 north of Gartlea Farm	9.1	6	0
23	Loch Girvan Eye	6.9	9	9

6.11.4 Table 6.20 identifies which viewpoints require more detailed assessment in the LVIA because they have the potential to undergo significant effects (including cumulative effects), and which viewpoints do not require further detailed assessment (highlighted grey).

Table 6.20 – Preliminary Assessment of Viewpoints

VP No	Viewpoint Name	Status Comment	Visualisation Provided
1	Minor Road near Tairlaw	Included in the detailed assessment due to proximity to the Proposed Development.	Photomontage
2	Minor Road near Craig	Included in the detailed assessment due to proximity and level of visibility of the Proposed Development.	Day and Night Photomontage
3	Minor Road near Stinchar Bridge		Photomontage
4	Craigengower Monument	Included in the detailed assessment due to level of visibility of the	Photomontage



VP No	Viewpoint Name	Status Comment	Visualisation Provided
		Proposed Development and existing cumulative development.	
5	NCN7, near Palmullan Bridge	Included in the detailed assessment due to proximity and level of visibility of the Proposed Development.	Photomontage
6	Straiton, minor road south of settlement	Represents views from the southern edges of the Straiton settlement. Included in the detailed assessment.	Photomontage
7	Straiton	Proposed Development not visible. Not included in the detailed assessment.	Baseline photo and wireline
8	Shalloch on Minnoch	WLA viewpoint with wide views of the cumulative context. Included in detailed assessment.	Photomontage
9	Craigengillan GDL, Shear Hill	Elevated position within GDL. Included in detailed assessment.	Photomontage
10	B7045, west of Kirkmichael	Very limited visibility due to successive layers of trees and forestry in the intervening landscape. Receptors would only have a glimpsed view from a winding section of road. No potential for significant effects and not included in the detailed assessment.	Photomontage
11	Auchensoul Hill	Elevated position above the Stinchar Valley, included in detailed assessment.	Photomontage
12	Maybole	Represents views from a key settlement and included in the detailed assessment.	Day and Night Photomontage
13	A713 Eriff	Represents views from a key route and	Photomontage
14	B741 near Clawfin	included in the detailed assessment.	Photomontage
15	Merrick	Proposed Development not visible. Not included in the detailed assessment.	Wireline Only



VP No	Viewpoint Name	Status Comment	Visualisation Provided
16	A713 and B742 Road Junction	Represents views from key routes and included in the detailed assessment.	Photomontage
17	Brown Carrick Hill	Cumulative baseline and distance limits potential for significant effects.	Photomontage
18	Cairnsmore of Carsphairn	Cumulative baseline and distance limits potential for significant effects.	Baseline photo and wireline (Beyond 20km)
19	A77, Ayr	Very limited visibility of Proposed Development	Baseline photo and wireline (Beyond 20km)
20	Cornish Hill	Requested by NatureScot. Included in detailed assessment.	Day and Night Photomontage
21	B741 nr Largs Farm	Represents views along the Girvan Valley from a key route. Included in the detailed assessment.	Photomontage
22	B7023 north of Gartlea Farm	Theoretical visibility suggests 6 visible turbines, however, the turbines are only visible as very small blade tips with no potential for significant effects.	Photomontage
23	Loch Girvan Eye	Requested by NatureScot. Included in detailed assessment.	Photomontage

Principal visual receptors

6.11.5 The principal visual receptors in the Study Area are shown on Figures 6.6 and 6.7 and with the Proposed Development blade tip ZTV on Figures 6.16 and 6.17. Tables 6.21 to 6.24 identify which of the principal visual receptors have the potential to undergo significant effects (including cumulative effects), and which of them do not require further detailed assessment.

Table 6.21 – Preliminary assessment of settlements

Status – Potential for significant effects and included in detailed assessment.		
Receptor	Comment	
Straiton	Theoretical visibility is limited for much of this settlement, however, it is included in detailed assessment due to its relatively close proximity to the Proposed Development.	



Maybole	Extensive theoretical visibility from much of the settlement and included in detailed assessment.		
	Status – Considered further in preliminary assessment but found to have no potential for significant effects and not included in detailed assessment.		
Receptor	Comment		
Crosshill	Theoretical visibility of the Proposed Development, approximately 3.5 km away, is low from a large proportion of the settlement. Built form limits actual visibility of the Proposed Development to the edges of Crosshill.		
Kirkmichael	Theoretical visibility is limited in extent and only found on the northern more elevated parts of the settlement. Actual visibility from this settlement is restricted by intervening layers of trees, woodlands and forestry.		
Status – Limited level of influence to the defining characteristics, due to limited / restricted or distant visibility of the Proposed Development, such that there is no potential for significant effects and not			

included in detailed assessment

Ayr, Annbank, Loans, Troon, Dalmellington, Bellsbank, Crosshouse, Kilmarnock, Kilmaurs, Mossblown, Symington, Fenwick, Irvine, Kilwinning, Mauchline, Saltcoats, Whiting Bay.

Status - No theoretical visibility of the Proposed Development. No potential for significant effects and not included in detailed assessment.

Auchinleck, Catrine, Coylton, Creetown, Cumnock, Dailly, Dalrymple, Darvel, Drongan Dundonald, Galston, Girvan, Hillhead, Kirkconnel, Logan, Moniaive, Muirkirk, New Cumnock, Newmilns, Newton, Ochiltree, Sanquhar Springside, Stewart, Tarbolton.

Table 6.22 - Preliminary assessment of transportation routes

Status – Potential for significant effects and included in detailed assessment.		
Receptor	Comment	
A713	Potential for significant effects due to patches of theoretical visibility that occur to the north and east of the site	
B741	Potential for significant effects due to patches of theoretical visibility that occur to the north of the site that have views along the Girvan valley to the south and towards the Proposed Development.	
Status – Considered further in preliminary assessment but found to have no potential for significant effects and not included in detailed assessment.		



Receptor	Comment	
A77	Whilst intermittent theoretical visibility occurs for long sections of this road to the north of Maybole, roadside vegetation limits actual visibility. Where visible the Proposed Development would be seen in glimpsed views, at speed in the distance to the south / south-west. It is considered therefore that there is no potential for significant effects.	
Status – Limited level of influence to the defining characteristics, due to limited / restricted or distant visibility of the Proposed Development, such that there is no potential for significant effects. And not included in detailed assessment		
A79, A719, A735, A A76, A78, A841	736, A737, A738, A759, A70, A71,	B734, B7024, B7022, B7013, B730, B742, B7024, B7034, B747, B739, B7037, B744, B743, B7081, B7082, B751, B769, B785.
1. Ardrossan - Arran (Brodick) ferry route 2. Campbeltown - Ardrossan ferry route 3. Campbeltown - Arran (Brodick) ferry route 4. Arran (Lamlash) - Holy Island ferry route 5. Ayr (Compass Pier) - Great Cumbrae (Millport) ferry route 6. Arran (Brodick) - Ayr (Compass Pier) ferry route 7. Cairnryan – Larne ferry route 8. Cairnryan (Loch Ryan) – Belfast ferry route		Glasgow to Stranraer railway line. Glasgow to Stranraer railway line (Troon and Kilmarnock spur). Glasgow to Stranraer railway line (Ardrossan and Largs spur). Glasgow to Dumfries railway line.
Status – No theoretical visibility of the Proposed Development. No potential for significant effects and not included in detailed assessment.		

A75, A712, A714, A702, A747, A762.

B797, B740, B729, B7000, B796, B7005, B733, B735, B7079, B7027, B7035, B713, B705, B7036, B7046, B7038.

Table 6.23 – Preliminary assessment of long distance recreational routes

Status – Potential for significant effects and included in detailed assessment.		
Receptor Comment		
NCN 7	Potential for significant effects due to patches of theoretical visibility that occur to the west of the site that have views across the Proposed Development site to the Galloway Hills in the east.	



effects and not included in detailed assessment.		
	The ZTV illustrates that there is no theoretical visibility on the Fairy Knowe Trail route of the Barr Trails or at any of the recognised viewpoints, Kirsties Cairn or the starting point to the routes at the Car Park. The ZTV shows a small amount of theoretical visibility is found on a small section of the Barr Trails named 'other	

Status - Considered further in preliminary assessment but found to have no potential for significant

Barr Trails

route of the Barr Trails or at any of the recognised viewpoints, Kirsties Cairn or the starting point to the routes at the Car Park. The ZTV shows a small amount of theoretical visibility is found on a small section of the Barr Trails named 'other Trails' at the eastern end of the trail on the east facing slopes of Balloch Hill. Much of this section is lined with forestry plantation restricting clear views towards the site from the trail. Where visibility is possible from this part of the trail, the extent of visibility of the Proposed Development is also limited. Taking these factors into account it is considered that the Proposed Development does not have the potential to significantly effect the Barr Trails. (See also wireframe only view B – Barr Trails).

Status – Limited level of influence to the defining characteristics, due to limited / restricted or distant visibility of the Proposed Development, such that there is no potential for significant effects. And not included in detailed assessment.

NCN 753

NCN 73

River Ayr Way

Arran Coastal Way

Ayrshire Coastal Path

Southern Upland Way

Status – No theoretical visibility of the Proposed Development. No potential for significant effects and not included in detailed assessment.

Mull of Galloway Trail

Table 6.24 - Preliminary assessment of local recreational routes (within 5 km)

Status – Potential for significant effects and included in detailed assessment.		
Receptor	Comment	
Core path SA47 / Straiton to Dalwhyne SAC local path	Potential for significant visual effects due to the close proximity of this route.	
Core path SA48	Potential for significant visual effects due to theoretical visibility from elevated sections of this route near Craigengower Monument.	



Core Path SA01 (also the route of NCN 7)	Potential for significant effects due to patches of theoretical visibility that occur to the west of the site that have views across the Proposed Development site to the Galloway Hills in the east.
Bennan Walk (Links with Straiton to Dalwhyne SAC local path)	Potential for significant visual effects due to the views from the floor of the Girvan valley towards the Proposed Development site.

Status – Limited level of influence to the defining characteristics, due to limited / restricted or distant visibility of the Proposed Development, such that there is no potential for significant effects. And not included in detailed assessment.

Core Paths SA39, SA43, SA56, SA49, SA57

Lady Hunter Blair's Walk

Straiton to Patna Hill Track

Straiton Hill Wood Track

Straiton Church Walk

Straiton to Fowlers Croft

Loch Braden to Riecawr

Knockdon to Dalcairney (Bogton Loch)

Summary of Preliminary Assessment on Views

6.11.6 The preliminary assessment has identified the viewpoints and principal visual receptors that require to be assessed in full as a result of the potential visual effects of the Proposed Development, these are listed as follows:

Viewpoints

- 1 Minor Road near Tairlaw
- 2 Minor Road near Craig
- 3 Minor Road near Stinchar Bridge
- 4 Craigengower Monument
- 5 NCN7, near Palmullan Bridge
- 6 Straiton, minor road south of settlement
- 8 Shalloch on Minnoch
- 9 Craigengillan GDL, Shear Hill
- 11 Auchensoul Hill
- 12 Maybole
- 13 A713 Eriff
- 14 B741 near Clawfin
- 16 A713 and B742 Road Junction



- 20 Cornish Hill
- 21 B741 nr Largs Farm
- 23 Loch Girvan Eye

Principal Visual Receptors

- Visual assessment at night of viewpoints 2, 12 and 20 (see Technical Appendix 6.4);
- Straiton settlement, represented at viewpoints 6 and 7 and assessed in detail at viewpoint 6;
- Maybole settlement assessed at viewpoint 12;
- A713 assessed at viewpoints 13 and 16;
- B741 assessed at viewpoints 14 and 21;
- NCN 7 assessed at viewpoint 5;
- Core path SA47 / Straiton to Dalwhyne SAC local path and the Bennan Walk, assessed within chapter and at viewpoints 2 and 6;
- Core path SA48, assessed at viewpoints 2 and 4; and
- Core Path SA01, assessed at viewpoint 5.

6.12 Detailed Assessment of Effect on Views

Table 6.25 - Detailed Assessment: Viewpoint 1 - Minor Road near Tairlaw

Baseline Conditions

Baseline Description

This viewpoint is located on the minor road south of Straiton near Tairlaw on the Tairlaw Bridge. The bridge is located close to the point at which the Tairlaw Burn flows from the south into the Water of Girvan. The bridge is narrow and the combination of sharp blind turns onto the bridge and frequency of traffic passing through this area prevents receptors from stopping to admire the view. There is also a bench in the large turning area to the south that would otherwise have views to the north along the upper Girvan valley, however, the vegetation is overgrown and views to the north are restricted.

Due to the riparian trees and vegetation that surrounds the Water of Girvan and the bridge, views from this location are restricted. The existing view towards the site to the north-west is across the tops of these trees, with the rounded top and steep slopes of Halfmark Rig central to the view, Bennan Hill only just visible above the treeline and the steep rocky slopes of Genoch Inner Hill more conspicuous in close views to the west.

The operational Dersalloch Windfarm is theoretically visible to the north, and whilst there is a slight break in the tree cover in this direction allowing views of the hill pasture, the closely intervening trees obscure the Dersalloch turbines from view.

Receptor type	Value	Susceptibility	Sensitivity
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Road Users	This viewpoint is within the Water of Girvan Valley cLLA and value is considered to be Medium-High.	This viewpoint is located on a minor road with oblique and restricted views towards the Proposed Development. The winding nature of the road and narrow bridge reduce susceptibility as the focus for road users is on the road. Susceptibility for road users at this viewpoint is Low.	Medium-Low
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Assessment (including operational and under construction cumulative sites)

Description of change:

- The proposed turbines would be visible at 2.4 km to the nearest turbine to the south-west of the viewpoint;
- Only two blades of the Proposed Development turbines would be visible from this location; and
- The proposed turbines theoretically occupy 27 degrees of the view.

Magnitude of Change

Factors that increase the magnitude of change are:

- Change in the view resulting from addition of wind turbines within close proximity from the viewpoint;
- The degree to which the Proposed Development would affect the visible valley landscape of the Water of Girvan; and
- The Proposed Development would introduce wind energy development to a view which currently has none
 visible.

Factors that decrease the magnitude of change are:

- The undulated upland ridgeline of successive hill tops, beyond which the Proposed Development would appear, provides a large scale upland landscape context to views of the Proposed Development;
- The vast majority of the Proposed Development would be obscured by intervening landform;
- The rougher textured moorland landcover of the upland ridgeline provides visual separation from the riparian nature of the valley landscape as seen from the context of this viewpoint creating a sense of visual separation between the Proposed Development turbines and the setting of the viewpoint.

The magnitude of change for the Proposed Development is considered to be Low.

Significance of Effect

The effect on road users at this viewpoint is considered to be **Minor and Not Significant.** There is no particular sensitivity attached to the view and despite the relatively close proximity of the Proposed Development, the scale of change is such that a significant visual effect would not occur.

Cumulative Assessment

Cumulative Assessment (consented, application and scoping scenario)

The consented, application or scoping schemes will not be visible from this viewpoint and therefore no cumulative interaction occurs between the consented schemes and the Proposed Development. As a result, there is no cumulative change or cumulative effect in these scenarios.



Table 6.26 - Detailed Assessment: Viewpoint 2 - Minor Road near Craig

Baseline Conditions

Baseline Description

This viewpoint is located on the minor road south of Straiton near Craig on the east side of the bridge over the Water of Girvan. The viewpoint is located at a point on the minor road where visibility towards the site and the ridgeline that is immediately to the north-east of the site becomes more evident, with sections of the minor road north of this location having more restricted visibility of this ridgeline.

From this location a view west along the Balbeg Glen is also evident, along with the string of farmsteads and properties that are found to the west of this location on the lower undulated valley slopes. The viewpoint location has woodland along the eastern side of the road that combines with steep topography to limit views due south along the valley, however, it also frames the view and visually connects the location to the other trees and woods found on the valley floor and along the Water of Girvan.

The pattern of fields on the valley floor are mainly in grazing use, medium scale and largely bounded by hedgerows. The part wooded, pastoral valley floor is in contrast to the high moorland covered hills, the slopes of which create the upper sides of the valley and the sometimes rocky hill tops contribute to the undulated upland horizon in views to the south-west. Conifer trees can be seen on lower slopes and plantation edges are apparent on the upland plateau beyond. There are no existing wind farms visible from this location.

Receptor type	Value	Susceptibility	Sensitivity
Road Users	This viewpoint is within the Water of Girvan Valley cLLA and value is considered to be Medium-High.	This viewpoint is located on a minor road with direct views towards the Proposed Development when travelling southbound. Whilst the attention of road users is likely to be largely focussed on the road the location is on a bend from which the view opens up towards the site, potentially changing the focus of southbound road users. Susceptibility for road users at this viewpoint is Medium-High.	Medium-High

Assessment (including operational and under construction cumulative sites)

Description of change:

- The proposed turbines would be visible at 2.7 km to the nearest turbine to the south-west of the viewpoint;
- All nine of the proposed turbines would be visible from this location, five with around half of the towers visible and four with only the tops of towers visible;
- All turbine blades would be visible sweeping behind the intervening ridge; and
- The proposed turbines theoretically occupy 27 degrees of the view.

Magnitude of Change

Factors that increase the magnitude of change are:

 Change in the view resulting from addition of large scale wind turbines within close proximity from the viewpoint;



- The degree to which the Proposed Development would affect the smaller scale valley landscape of the Water of Girvan; and
- The Proposed Development would introduce wind energy development to a view which currently has none
 visible.

Factors that decrease the magnitude of change are:

- The upland ridgeline, beyond which the Proposed Development would appear, provides a large scale upland landscape context to views of the Proposed Development; and
- The rougher textured moorland landcover of the upland ridgeline provides visual separation from the smaller scaled pastoral landscape of the valley below creating the appearance of setting back turbines from the leading ridgeline of hills above the valley sides.

The magnitude of change for the Proposed Development is considered to be High.

Significance of Effect

The effect on road users at this viewpoint is considered to be **Major and Significant.** A similar effect would be experienced between this viewpoint and the Craigencallie property to the south. Beyond this roadside vegetation, topography and / or distance moderate the effect and reduce its significance.

Cumulative Assessment

Cumulative Assessment (consented and application scenario)

The consented or application schemes will not be visible from this viewpoint and therefore no cumulative interaction occurs between these schemes and the Proposed Development. As a result, there is no cumulative change or cumulative effect in these scenarios.

Cumulative Assessment (scoping scenario)

The Carrick Windfarm would extend across the horizon in the view south-west spanning across the same part of the view as the Proposed Development but occupying a greater horizontal extent, albeit further away. It would appear to span across the horizon from close to the summit Glenalla Fell, to the east of the Proposed Development turbines occupying a wide part of the upland ridgeline. The Proposed Development would appear immediately in front of the Carrick Windfarm in this scenario, intensifying the influence of turbines in this view but would not increase its horizontal extent. The Proposed Development would however increase the vertical extent of the visible turbines in this view, with the Proposed Development turbines closer and so appearing taller than the Carrick turbines central to the view. On balance, the magnitude of change is considered to be **Medium** resulting in a **Moderate and Significant** cumulative effect.

Table 6.27 – Detailed Assessment: Viewpoint 3 - Minor Road near Stinchar Bridge

Baseline Conditions	
Baseline Description	



This viewpoint is located on the minor road that connects Straiton to Glen Trool, to the north of Stinchar Bridge. There is a car park at Stinchar Bridge which has a picnic area and is a popular starting point for walkers and cyclists accessing the recreational routes of the Carrick Forest. This location on the road is elevated to the surrounding landscape and other sections of road to the north. It also has an area of recently felled forest to the north and west. As a result, the viewpoint offers a worst case view towards the site to the north from this road and it is important to note that other nearby sections of this road do not share similar open views towards the site (albeit that forestry is a dynamic feature in the landscape which changes over time with continuous felling and replanting).

The view across the surrounding landscape is dominated by forestry but also has occasional patches of moorland and brash of felled forestry. Views to the south are restricted by nearby forestry which lines the road at this location and around the area of the Stinchar Bridge car park. Views to the north towards the site also have a distant view of Glenalla Fell which is recognisable due to its domed moorland top encircled by an apron of forestry. There are no existing wind farms visible from this location.

Receptor type	Value	Susceptibility	Sensitivity
Road Users	This viewpoint is within the High Carrick Hills cLLA and value is considered to be Medium-High.	This viewpoint is located on a minor road with direct facing views towards the Proposed Development when travelling northbound. Susceptibility is considered to be Medium.	Medium

Assessment (including operational and under construction cumulative sites)

Description of change:

- The proposed turbines would be visible at 3.5 km to the nearest turbine to the north of the viewpoint;
- All nine of the proposed turbines would be visible from this location with the turbine towers visible to varying degree above the intervening forestry;
- Turbines 3 & 7 appear stacked in this view and the turbine blades of turbines 4, 5 & 8 would have closely overlapping blades; and
- The proposed turbines theoretically occupy 16 degrees of the view.

Magnitude of Change

Factors that increase the magnitude of change are:

- Change in the view resulting from addition of large scale wind turbines within relatively close proximity from the viewpoint;
- The degree to which the Proposed Development encroaches upon Glenalla Fell which is recognised as a 'Landmark Hill' in SALWCS; and
- The Proposed Development would introduce wind energy development to a view which currently has none visible.

Factors that decrease the magnitude of change are:

 The large scale of the upland landscape and simple upland landscover of open moorland and forestry in views towards the site and within the surrounding landscape, provides a large scale surrounding landscape context to views of the Proposed Development;



- The Proposed Development turbines would not be visible / be less visible from other nearby locations on this road due to the extensive plantation forestry found in the surrounding landscape context; and
- Glenalla Fell in this view appears as part of a wider ridge of elevated ridges that form part of the undulated forest covered plateau and in this view is not considered to be as immediately distinguishable as it is from other parts of the South Ayrshire landscape. It is therefore considered that the Proposed Development would not overly diminish the qualities that distinguish this hill in other views.

The magnitude of change for the Proposed Development is considered to be Medium.

Significance of Effect

The effect on road users at this viewpoint is considered to be **Moderate and Significant.** There is no particular sensitivity attached to the view, however, the scale of change experienced combined with the proximity to the Proposed Development is such that a significant visual effect would occur.

Cumulative Assessment

Cumulative Assessment (consented scenario)

The consented schemes will not be visible from this viewpoint and therefore no cumulative interaction occurs between the consented schemes and the Proposed Development. As a result, there is no cumulative change or cumulative effect in this scenario.

Cumulative Assessment (application scenario)

The only application wind farm visible from this location would be Craiginmoddie which would appear beyond a forested ridge to the west of the Proposed Development site. The addition of Craiginmoddie would bring development to a view that currently has none and when considering the Proposed Development against this altered baseline, the Proposed Development would appear to have a visual association with this wind farm influenced landscape. There is however a degree of separation between Craiginmoddie and the Proposed Development and it is considered that the Proposed Development would be seen to increase this wind farm influence by extending across a wider part of the remaining view. Taking all of this into account it is considered that the magnitude of change for the application scenario is considered to remain **Medium** resulting in a **Moderate and Significant** in this scenario.

Cumulative Assessment (scoping scenario)

The Carrick Windfarm would extend across the horizon in the view north at 2.4 km spanning across the same part of the view as the Proposed Development but occupying all of the available framed view. The Proposed Development would appear immediately behind the Carrick Windfarm in this scenario only intensifying the influence of turbines in a part of this view and part of the Carrick Windfarm extent. The Proposed Development would therefore only add slightly to a scenario that includes large scale wind farm development viewed at closer proximity. The magnitude of change is considered to reduce in this scenario to **Medium-Low** resulting in a **Moderate-Minor and Not Significant** effect.

Table 6.28 – Detailed Assessment: Viewpoint 4 - Craigengower Monument

Baseline Conditions



Baseline Description

This viewpoint is located on Highgate Hill which is the easternmost summit of the high plateau that also includes Dersalloch Hill, Trostan Hill and Kildoach Hill. The monument is Colonel Hunter Blair's Monument which is a stone obelisk memorial that dates back to 1856. It is a tall structure that is seen from much of the surrounding landscape but in particular from the area of the Blairquhan Estate to the north-west which is the family home for Colonel Hunter Blair. Craigengower is the name given to the steep rocky slopes that fall into the Girvan valley to the west and hence the reason for the monument known locally as the Craigengower Monument.

The viewpoint can be accessed via a short walk across a well-established track from Straiton village. Receptors at this viewpoint are hill walkers and visitors to the monument. The existing view is a 360 degree panorama that includes views across the Ayrshire lowlands to the north the plateau moorlands to the east with the Glenkens in the distance with Carrick Forest and the Merrick range to the south. The view to the south also includes a view along the upper Girvan valley which has fields of pasture and wooded areas along the Girvan Water and associated with farms in the valley changing to forestry blocks and moorland on the steep valley side and across the plateau edge hills.

The operational Dersalloch Windfarm is in close proximity to this location to the east. Other Operational wind farms visible from this location include the Hadyard cluster (Hadyard Hill, Penwhapple, Assel Valley, Trolorg) to the west and Whitelee in the distance to the north-east.

Receptor type	Value	Susceptibility	Sensitivity
Recreational Walkers / Visitors	This viewpoint is within the Water of Girvan Valley cLLA and value is considered to be Medium-High.	Hillwalkers will have an appreciation of the surrounding landscape and will be focussed on views. Susceptibility is slightly moderated by existing wind farms in the immediate context to the east and distance to the west. Susceptibility is considered to be Medium.	Medium - High

Assessment (including operational and under construction cumulative sites)

Description of change:

- The proposed turbines would be visible at 4.1 km to the nearest turbine to the south of the viewpoint;
- All nine of the proposed turbines would be visible from this location with most of the turbine towers visible albeit with some turbine bases obscured by localised topography;
- turbine tracks would be visible from this location where they cross the immediate site area and where localised topography or forestry does not obscure from view; and
- The proposed turbines theoretically occupy 18 degrees of the view.

Magnitude of Change

Factors that increase the magnitude of change are:

 Change in the view resulting from addition of large scale wind turbines within relatively close proximity from the viewpoint;



- The degree to which the Proposed Development would encroach upon the view south along valley landscape of the Water of Girvan valley;
- The Proposed Development would introduce wind energy development in the view south increasing the
 existing influence of development seen at close proximity to the east (Dersalloch) and in the distance to the
 west (Hadyard Hill cluster); and
- Whilst Dersalloch is much closer to the east of the viewpoint at 1.3 km, intervening topography restricts views of Dersalloch and the Proposed Development would introduce wind turbines to the view that are more visible at relatively close proximity.

Factors that decrease the magnitude of change are:

- The large scale of the upland landscape and simple upland landscover of open moorland and forestry in views towards the site and within the surrounding landscape, provides a large scale surrounding landscape context to views of the Proposed Development;
- The Proposed Development turbines would appear on an upland plateau that has a simple and gently undulating upland backdrop, away from the more complex and rugged terrain of the Merrick and ridgelines of the Awful Hand which are visible further to the south / south-east; and
- Whilst the view of operational development would be successive and minimal due to restricted and or distant visibility, the Proposed Development would not be experienced as entirely uncharacteristic within the surrounding context which includes this influence.

The magnitude of change for the Proposed Development is considered to be Medium.

Significance of Effect

The effect on recreational walkers / visitors at this viewpoint is considered to be Moderate and Significant.

Cumulative Assessment

Cumulative Assessment (consented sites)

Consented developments include Chapleton Farm and Kirk Hill in the view west and GSK Shewalton, Low Bowhill and Knockshinnoch to the north. The addition of these consented schemes would have a minimal influence on the baseline situation either as a result of their distance from the viewpoint or as a result of their locations being in similar parts of the view as the operational schemes.

The scale of change predicted for the Proposed Development against the baseline situation would therefore still broadly apply to this scenario. As a result, the magnitude of change is predicted to remain **Medium** for this scenario resulting in a **Moderate and Significant effect.**

Cumulative Assessment (application sites)

Application wind farms that would be visible from this location include Clauchrie and Craiginmoddie to the south-west. Alton Muirhouse would be visible in the distance to the north but lies within the same part if the view as the operational and consented schemes within the context of Whitelee and has very little cumulative influence. Clauchrie would be partly obscured by intervening landform with only four turbines visible, Craiginmoddie is closer with a greater level of visibility although would again appear beyond a forested upland ridge.

Factors that increase the cumulative magnitude of change are:

• the addition of these application schemes would intensify the potential for cumulative effects for recreational receptors by introducing development to the south-west part of the view;



- the Proposed Development would appear alongside this wind farm development to the south-west in a simultaneous view where the Proposed Development would appear to further extend development along the horizon; and
- the Proposed Development would also increase the cumulative effect in this scenario by bringing development closer to / but in the same context as Clauchrie and Craiginmoddie and so increasing the relative scale of development visible in the view.

Factors that decrease the cumulative magnitude of change are:

- the Proposed Development would appear in the same part of the view as the application scenario wind farm developments. As a result, the Proposed Development would have a visual association with the wind farm influenced landscape to the south-west; and
- the Proposed Development would not be an entirely uncharacteristic addition to the local upland context in a scenario that includes Dersalloch and Craiginmoddie.

On balance the magnitude of change for the application scenario is considered to be **Medium-High** resulting in a **Moderate-Major and Significant effect.**

Cumulative Assessment (scoping scenario)

The Carrick Windfarm would extend across the horizon in the view south-west spanning across the same part of the view as the Proposed development but occupying a greater horizontal extent. It would appear to span across the horizon from close to the summit Glenalla Fell and where Craiginmoddie is visible to the east of the Proposed Development. The Proposed Development would appear immediately in front of the Carrick wind farm in this scenario intensifying the influence of turbines in this view but would not increase its extent. The Proposed Development would therefore only add slightly to a scenario that includes large scale wind farm development viewed at similar proximity and visible within a similar upland landscape context as the Proposed Development. The magnitude of change is therefore considered to be **Medium-Low** resulting in a **Moderate and Not Significant** cumulative effect.

Table 6.29 - Detailed Assessment: Viewpoint 5 - NCN7, near Palmullan Bridge

Baseline Conditions

Baseline Description

This viewpoint is located on the minor road that stretches between Crosshill to the north and the upper Stinchar valley to the south. The road continues on through Carrick and Glentrool Forests to connect with Glentrool Village and the A714. NCN7 follows the road along this route providing a key cycling route across this part of South Ayrshire and Dumfries and Galloway.

The viewpoint is located on a short section of the route where there is clearing within the surrounding forestry allowing a view towards the location of the Proposed Development to the east. Forestry also frames the view east as it climbs the slopes of the hills of Knockinculloch, Black Hill of Garleffan, Glenalla Fell and Knockoner. These hills and associated forestry restrict views to the east from other nearby sections of this road. The foreground view is across wet and boggy moorland that is incised by the tributaries of the Palmullan Burn that cross the road close to the viewpoint location. Beyond the forestry the distant view includes the northern reaches of the Glenkens and western hills of the Carsphairn Forest area.

Operational wind farms in the view include Windy Standard I & II and Afton in the distance. The under construction Windy Rig and South Kyle Windfarms are also in this same distant context.



Receptor Type	Value	Susceptibility	Sensitivity
Road Users	This viewpoint is not within any landscape designated areas. Value is considered to be medium-low	This is minor road across a remote area of upland plateau and for motorists and cyclists alike, some attention would be to the surrounding upland landscape as well as to the road itself. The viewpoint has oblique views east towards the Proposed Development framed by large blocks of plantation forestry. Susceptibility for road users at this viewpoint is Medium.	Medium

Assessment (including operational and under construction cumulative sites)

Description of change:

- The proposed turbines would be visible at 3.8 km to the nearest turbine to the east of the viewpoint;
- All nine of the proposed turbines would be visible from this location with most of the turbine towers visible albeit with some turbine bases obscured by localised topography and intervening forestry;
- Turbine tracks would be largely obscured by intervening topography and forestry in this view; and
- The proposed turbines theoretically occupy 12 degrees of the view.

Magnitude of Change

Factors that increase the magnitude of change are:

- Change in the view resulting from addition of large scale wind turbines within relatively close proximity from the viewpoint; and
- The Proposed Development would bring additional and closer proximity wind energy development in the view east increasing the existing influence of development seen in this eastern view.

Factors that decrease the magnitude of change are:

- The large scale of the upland landscape and simple upland landscover of open moorland and forestry in views towards the site and within the surrounding landscape, provides a large scale surrounding landscape context to views of the Proposed Development;
- The Proposed Development turbines would appear beyond the intervening ridgeline of forestry partly screening the lower parts of the towers and creating a sense of visual separation;
- The Proposed Development would not be experienced as entirely uncharacteristic within the surrounding context which includes cumulative influence to the east, albeit as distant.

The magnitude of change for the Proposed Development is considered to be Medium.

Significance of Effect

The effect on road users at this viewpoint is considered to be **Moderate and Significant.** There is no particular sensitivity attached to the view, however, the scale of change experienced combined with the proximity to the Proposed Development is such that a significant visual effect would occur.

Cumulative Assessment



Cumulative Assessment (consented scenario)

Consented sites in the view include Windy Standard III and the Benbrack Variation. The addition of these consented schemes would slightly increase the visibility of turbines within the context of the Windy Standard cluster of operational and under construction wind farms in the distance to the east.

The consented scenario will in itself lead to very minor changes and the scale of change predicted for the Proposed Development against the baseline situation would therefore still broadly apply to this scenario. As a result, the magnitude of change is predicted to be Medium for this scenario resulting in a **Moderate and Significant effect.**

Cumulative Assessment (application scenario)

Application wind farms that would be visible from this location include Sanquhar II and Craiginmoddie. Clauchrie is theoretically visible but with only a small tip which in reality would be obscured by intervening forestry. The Sanquhar II turbines would sit within the same part of the view east as the baseline and consented context of the Windy Standard cluster, adding further larger turbines to this distant wind farm context. Craiginmoddie Windfarm would appear at relatively close proximity to the south-west from this view, with turbines appearing above the treeline of nearby forestry.

Factors that increase the cumulative magnitude of change are:

- the addition of the Craiginmoddie turbines will intensify the potential for cumulative effects for recreational receptors by bringing development close to the route such that it would appear very large in scale at this location and other section of this route;
- the Proposed Development would extend large scale, relatively close range wind farm development across a further part of the view that is already affected by more distant, smaller scale turbines;
- Craiginmoddie would appear in different part of the view than the existing, under construction and consented development, substantially increasing the spread of wind farm development; and
- the Proposed Development and Craiginmoddie would both add wind farm development to the local landscape context whereas the existing, under construction and consented wind farm developments are more distant.

Factors that decrease the cumulative magnitude of change are:

- the Proposed Development would appear in the same part of the view as the existing, under construction and consented wind farm developments, albeit as more distant wind farms. As a result, the Proposed Development would have a visual association with the wind farm influenced landscape to the east.
- the Proposed Development would appear smaller in scale when compared to the closer Craiginmoddie Windfarm; and
- the Proposed Development would not be an entirely uncharacteristic addition to the local upland context in a scenario that includes Craiginmoddie.

On balance the magnitude of change for the application scenario is considered to remain Medium resulting in a **Moderate and Not Significant** effect.

Cumulative Assessment (scoping scenario)



The Carrick Windfarm would extend across the horizon to the south-east across the Black Hill of Garleffan and almost connecting to the eastern edges of the Craiginmoddie Windfarm. The Proposed Development would appear to add to the eastern part of the Carrick Windfarm from this view, further extending turbine development across the panorama. However, in this scenario the Proposed Development would only add slightly to a scenario that includes large scale wind farm development viewed at close proximity and visible within a similar upland landscape context as the Proposed Development.

Taking this into account, the magnitude of change for the scoping scenario is considered to reduce to Medium-Low resulting in a **Moderate-Minor and Not Significant** effect.

Table 6.30 - Detailed Assessment: Viewpoint 6 - Straiton, minor road south of settlement

Baseline Conditions

Baseline Description

This viewpoint is located on the minor road south of Straiton (Newton Stewart Road), at the edges of the settlement. There are no properties in Straiton that share this same view as the trees that form the southern settlement boundary restrict views to the south from the settlement. The view to the north is therefore similarly restricted from this location.

The view south towards the site is orientated along the road and the Water of Girvan valley. The primary school and cemetery are in the mid distance with telegraph poles following the road and cutting across nearby fields. Whilst a minor road it can be busy at times as the road provides a connection to Newton Stewart and Glen Trool to the south and is also used for timber haulage from the expansive areas of plantation forestry to the south. The hills of the upper Water of Girvan valley appear in the distant view which also includes forestry plantations both on the sides of the valley and lower slopes of nearby Bennan Hill. Recent forestry removal on Bennan Hill has occurred during the assessment fieldwork, as can be seen in the photography for this viewpoint. There are no existing wind farms visible from this location.

Receptor Type	Value	Susceptibility	Sensitivity
Straiton settlement	This viewpoint is within the Water of Girvan Valley cLLA and value is considered to be Medium-High.	The viewpoint represents a view from the edge of settlement along the distinctive landscape of the Water of Girvan valley, albeit that residents of properties within Straiton do not share this view. Susceptibility is therefore considered to be Medium-Low.	Medium
Road Users		This viewpoint is located on a minor road with direct views towards the Proposed Development when travelling southbound. The edge of settlement nature of the location and close proximity of the	Medium



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	school means that the attention of road users is	
	likely to remain focussed on the road. Susceptibility	
	for road users at this viewpoint is Medium-Low.	

Assessment (including operational and under construction cumulative sites)

Description of change:

- The proposed turbines would be visible at 4.7 km to the nearest turbine to the south of the viewpoint;
- Only three turbines of the Proposed Development are theoretically visible, two turbines with only blades and one turbine to half of tower. In reality, intervening forestry trees (left in situ following recent felling activity) limits turbine visibility resulting in only two turbines visible above the tree line. One of these as blade visibility and the other as a very small blade tip.
- The proposed turbines theoretically occupy 5 degrees of the view.

Magnitude of Change

Factors that increase the magnitude of change are:

- Change in the view resulting from addition of wind turbines within close proximity from the viewpoint;
- The degree to which the Proposed Development would affect the views from the settlement edge;
- The degree to which the Proposed Development would affect the valley landscape of the Water of Girvan;
 and
- The Proposed Development would introduce wind energy development to a view which currently has none
 visible.

Factors that decrease the magnitude of change are:

- The vast majority of the Proposed Development would be obscured by intervening landform;
- The forestry (and now brash) covered slopes and scale of Bennan Hill signals the upland nature of the
 plateau moorland and forestry that lies beyond, providing an upland context to where the turbines appear
 in the view; and
- The intervening trees and forestry in the view provide a degree of visual separation between the Proposed Development and the edge of settlement characteristics such as the school building and cemetery.

The magnitude of change for the Proposed Development is considered to be Low.

Significance of Effect

The effect at this viewpoint for both settlement and road users is considered to be **Minor and Not Significant.**Despite the relatively close proximity of the Proposed Development, the scale of change is such that a significant visual effect would not occur.

Cumulative Assessment

Cumulative Assessment (consented, application and scoping scenario)



The consented or application schemes will not be visible from this viewpoint and therefore no cumulative interaction occurs between these schemes and the Proposed Development. As a result, there is no cumulative change or cumulative effect in these scenarios.

Cumulative Assessment (scoping scenario)

The Carrick Windfarm would occupy a similar position in the view south to the Proposed Development, however, 2 of the Carrick turbines would be more visible in the view through the intervening trees and would in themselves increase the visual effect experienced at this viewpoint.

The Proposed Development would appear immediately in front of the Carrick wind farm in this scenario adding slightly to the influence of turbines in this view but would not increase its extent. The Proposed Development would therefore have only a minimal effect to a scenario that includes Carrick. On balance, the magnitude of change is considered to remain Low resulting in a **Minor and Not Significant** effect.

Table 6.31 - Detailed Assessment: Viewpoint 8 - Shalloch on Minnoch

Baseline Conditions

Baseline Description

This viewpoint is located at the summit of Shalloch on Minnoch close to the trig point. The route to the summit from the minor road to the north is through forestry and over uneven moorland terrain, this route is also commonly very marshy making the walk to the summit difficult underfoot. Shalloch on Minnoch is a point on several of the routes through the WLA including on circular routes from the north through Carrick Forest, from Turskeen and Macaterick in the east and also as part of a longer walk along the hills of the Awful Hand with Merrick as the focus of the route.

The views from this hill are panoramic and include the dramatic scenery of the Merrick to the south, views across the expansive moorlands and forestry of Glentrool, Wigtonshire and Arecleoch to the west, the Carrick Forest and Ayrshire lowlands to the north and Loch Doon and Glenkens to the east. The viewpoint is located in the northern part of the Merrick WLA and has views across the northern area of the WLA, albeit the domed nature of the summit limits these views from the trig point. Except for the view south which is dominated by the Merrick ridge, views in other directions also include distinctive distant landscape features such as Knockdolian and Ailsa Craig to the west, Cairnsmore of Carsphairn to the east and the high hills on Arran to the north-west.

In the view north towards the site, the foreground of the hill summit and cairn gives way to an elevated view across the upland plateau of plantation forestry of the Carrick Forest. The plateau has a smoother, simple landscape pattern providing an apron of broad upland character before transitioning into the lowland agricultural landscape of Ayrshire further to the north. These successive layers of landscape are clearly defined, and the site is located within the plateau upland part of the landscape in this view. The Water of Girvan Valley can be identified in this view as a notch in the upland landscape of forested foothills due to the angle view along it and the noticeably steep valley sides.



Operational wind farms are a feature of the landscape for much of the panorama and include Dersalloch to the north-east which is the closest at 12.5 km; Mark Hill (15.3 km), Arecleoch (24.7 km) and Kilgallioch (21.4 km) to the south-west; and the Hadyard Hill cluster (Hadyard Hill Penwhapple, Assel Valley and Tralorg) between 13 and 19 km to the north-west. Other more distant operational wind farms in the view include the Windy Standard/Windy Standard Extension/Afton and Hare Hill/Hare Hill Extension/Sanquhar/Whiteside Hill cluster at over 21 km to the east and Airies, Artfield Fell, Balmurrie Fell and Glenchamber cluster to the southwest at over 25 km (to the south of Kilgallioch).

Receptor Type	Value	Susceptibility	Sensitivity
Hill Walkers	The viewpoint is within High Carrick Hills cLLA, the northern part of the Merrick WLA and the Galloway Forest Park/Dark Sky Park Core Area. Value is considered to be Medium-High.	Hill walkers will have an appreciation of the surrounding landscape and will be focussed on views. Susceptibility is partly moderated by existing wind farms in the panorama, including north towards the site. Susceptibility is considered to be Medium.	Medium - High

Assessment (including operational and under construction cumulative sites)

Description of change:

- The proposed turbines would be visible at 8.7 km to the nearest turbine to the south of the viewpoint;
- all 9 of the proposed turbines would be visible from this location with most of the turbine towers visible albeit with some turbine bases obscured by forestry;
- turbine tracks would be visible from this location where they cross the immediate site area but would not be difficult to discern due to distance; and
- The proposed turbines theoretically occupy 8 degrees of the view.

Magnitude of Change

Factors that increase the magnitude of change are:

- Change in the view resulting from addition of large scale wind turbines in the distant view to the north within Carrick Forest;
- The degree to which the Proposed Development would affect the wildness qualities found at this location within the northern reaches of the WLA;
- The degree to which the Proposed Development would encroach upon the distant view of the valley landscape of the Water of Girvan valley in addition to the view of Dersalloch to the east of the valley; and
- The Proposed Development would introduce wind energy development in the view north increasing the existing influence of development visible at Dersalloch and in the Hadyard Hill cluster.

Factors that decrease the magnitude of change are:

- The Development would have an association with the wind farm influenced landscape to the north of the WLA within the Foothills with Forest and Wind Farm LCT and also with Dersalloch in the Foothills with Forest west of Doon Valley LCT;
- The proposed wind turbines would appear as a relatively evenly spread grouping;



- The large scale of the upland landscape and simple upland landcover of open moorland and forestry in views towards the site and within the surrounding landscape, provides a large scale surrounding landscape context to views of the Proposed Development;
- The localised hills that are part of the immediate context of the site are not readily visible from this elevated location and the undulated forest covered plateau and in this view appears as a simple upland landscape pattern of forestry with pockets of moorland;
- The Proposed Development appears set back from the edges of the Girvan Water Valley, which is clearly visible to the east of the Proposed Development site;
- Dersalloch Wind Farm is to the east of the Proposed Development site and appears to be set back from the valley sides of the Girvan Water Valley by a similar distance, albeit to the opposite side of the valley; and
- The Proposed Development would not be experienced as entirely uncharacteristic within the surrounding operational wind farm context.

The magnitude of change for the Proposed Development is considered to be Medium.

Significance of Effect

The effect on recreational walkers / visitors at this viewpoint is considered to be **Moderate and Significant.**The viewpoint is sensitive to the Proposed Development and the level of change whilst at a medium level is considered sufficiently high enough to trigger a Significant effect.

Cumulative Assessment

Cumulative Assessment (consented sites)

Consented development visible from this location is found within or visually overlapping with operational or under construction developments in the distant views to the west, north and east. The addition of these consented schemes would therefore have a minimal influence on the baseline situation. The scale of change predicted for the Proposed Development against the baseline situation would therefore still broadly apply to this scenario. As a result, the magnitude of change is predicted to remain **Medium** for this scenario resulting in a **Moderate and Significant** effect.

Cumulative Assessment (application scenario)

Similar to the consented scenario, application development would be visible within or visually overlapping with other schemes in the operational or under construction baseline, in distant views to the west, north and east.

The Clauchrie application would appear within the context of the distant schemes to the west but would be closer to the viewpoint at 7.5 km. Craiginmoddie would appear to the north at 11.3 km on the Foothills with Forest and Wind Farm character type, appearing to extend the Hadyard Hill cluster further to the east. Whilst in themselves, the addition of these application schemes would have an additional effect on this viewpoint the cumulative interaction is experienced as a reduced degree of separation between the various clusters of development, but particularly notable to the west and north. The closer proximity of development to this viewpoint also has an influence on the cumulative interaction between these schemes and the Proposed Development, as the Proposed Development would not be introducing development at closer proximity in this situation.

On balance it is considered that the magnitude of change would be moderated slightly by these factors, reducing to **Medium-Low** for this scenario resulting in a **Moderate and Not Significant** effect.



Cumulative Assessment (scoping scenario)

The Carrick Windfarm would extend across the horizon in the view north spanning across the same part of the view as the Proposed Development but occupying a much wider horizontal extent. It would appear to span across the horizon from the eastern edges of Craiginmoddie Windfarm across the site and to the edges of the Water of Girvan Valley. The Proposed Development would appear immediately behind the Carrick Windfarm in this scenario only intensifying the influence of turbines in a part of this view and part of the Carrick Windfarm extent. The Proposed Development would therefore only add slightly to a scenario that includes large scale wind farm development viewed at closer proximity and would appear modest in comparison with the wider extent of the Carrick Windfarm. The magnitude of change is therefore considered to reduce in this scenario to **Low** resulting in a **Moderate-Minor and Not Significant** effect.

Table 6.32 - Detailed Assessment: Viewpoint 9 - Craigengillan GDL, Shear Hill

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Baseline Description

This viewpoint is located on Shear Hill which lies within the Craigengillan GDL. It is accessed via a short walk from the track near Dalcarnie Glen. The view from Shear Hill is panoramic and includes - views across the Doon Valley, Bogton Loch and Dalmellington to the north; the extend settlement of Dalmellington at Bellsbank to the east along with the Bellsbank Plantation and the north-western edges of the Carsphairn Forest in the background view; and views towards the Glenkens and Merrick range of hills across the south-east / south-west part of the panorama. Towards the site to the west the view is across open moorland and forestry and Dersalloch Windfarm which is at close range. The landscape in the view to the west has a simple landscape pattern which is large scale and entirely upland in character.

The operational Dersalloch Windfarm is visible at close proximity to the west of this location (3.7 km). The operational Windy Standard I and II are visible in the distance to the east (11.2 km) along with the under construction Windy Rig (15.1 km). The under construction South Kyle will span across a wider part of the eastern horizon at closer proximity (6.7 km).

Receptor type	Value	Susceptibility	Sensitivity
Hill Walkers	The viewpoint is within the Craigengillan GDL and the Galloway Forest Park/Dark Sky Park Core Area. Value is considered to be High.	Hill walkers will have an appreciation of the surrounding landscape and will be focussed on views. Susceptibility is partly moderated by existing wind farms in the panorama, including west towards Dersalloch wind farm and the site. Susceptibility is considered to be Medium.	Medium - High



Assessment (including operational and under construction cumulative sites)

Description of change:

- The proposed turbines would be visible at 9.6 km to the nearest turbine to the west of the viewpoint;
- All nine of the proposed turbines are theoretically visible from this location as a range of top half of towers and blades;
- In reality, intervening forestry obscures the towers from view for the majority of turbines resulting in five turbines only visible as small blades tips and the other four visible as blade only with hubs close to the intervening treeline; and
- The proposed turbines theoretically occupy 6 degrees of the view.

Magnitude of Change

Factors that increase the magnitude of change are:

- Change in the view resulting from addition of wind turbines in the distant view to the west;
- The degree to which the Proposed Development would affect scenic and panoramic views from this elevated location within the GDL; and
- The Proposed Development would bring additional wind energy development in the view west increasing the existing influence of the more distant operational development in this direction.

Factors that decrease the magnitude of change are:

- Much of the Proposed Development is screened from view from this location due to intervening upland landform and forestry;
- The Proposed Development would appear small in contrast with the larger scale and simple skyline of moorland and forestry in the view west;
- The Proposed Development would not affect the views of the Merrick range further to the south on the skyline or views in other directions including along the Doon valley and to Bogton Loch;
- Whilst located within the GDL the view west towards the site is of an entirely upland context which is expansive and open and the Proposed Development would appear behind this context clearly separated from the GDL by distance and by the forestry that intervenes;
- The Proposed Development that is visible would appear as a relatively evenly spread grouping;
- The Proposed Development would have an association with the wind farm influenced landscape to the west of this location and as such would not be experienced as entirely uncharacteristic within the surrounding operational wind farm context.

The magnitude of change for the Proposed Development is considered to be Low.

Significance of Effect

The effect on hill walkers at this viewpoint is considered to be **Minor and Not Significant**.

Cumulative Assessment

Cumulative Assessment (consented scenario)

Consented development visible from this location tends to be found within or visually overlapping with operational or under construction developments in views to the east including - Enoch Hill (9.7 km) which will



appear behind the northern part of South Kyle; Windy Standard III (10.7 km) which will appear in the same context as Windy Standard I & II; and Benbrack Variation (6.7 km) which will appear to extend South Kyle further along the horizon to the south from this view. Knockshinnoch is theoretically visible as the smallest of tips but would in reality be obscured by forestry on the horizon.

The addition of these consented schemes whilst intensifying the cumulative situation to the east would have only a minimal influence on the baseline cumulative situation in the successive view to the west. The scale of change predicted for the Proposed Development against the baseline situation would therefore still broadly apply to this scenario. As a result, the magnitude of change is predicted to remain **Low** for this scenario resulting in a **Minor and Not Significant** effect.

Cumulative Assessment (application scenario)

North Kyle and Greenburn would appear on the horizon to the north, behind Benbeoch Hill which rises above Dalmellington. Both of these schemes have more cumulative interaction from this viewpoint with the baseline and consented schemes to the east and north-east. Whilst a gap would be maintained to the north-east between North Kyle / Greenburn and South Kyle / Enoch Hill, the spread of development would be increased and would appear to span from the north to the south-west in this scenario. As for the consented scenario however, the addition of these consented schemes whilst intensifying the cumulative situation to the northeast would have only a minimal influence on the baseline cumulative situation in the successive view to the west.

The Clauchrie application is theoretically visible at 19.6 km to the west but only as the smallest of turbine tips, which in reality would be screened by forestry. Craiginmoddie is theoretically visible in the same part of the panorama as the Proposed Development site to the west. In reality much of the Craiginmoddie development would be screened by the same intervening forestry that partly screens the Proposed Development and only four turbine blade tips would be visible. Craiginmoddie and the Proposed Development would be seen together but given the level of screening would have only a minimal influence on the cumulative situation.

The scale of change predicted for the Proposed Development against the baseline situation would therefore still broadly apply to this scenario. As a result, the magnitude of change is predicted to remain **Low** for this scenario resulting in a **Minor and Not Significant** effect.

Cumulative Assessment (scoping scenario)

The Carrick Windfarm would appear to extend across the horizon at 9.5 km to the west stretching across the Proposed Development site and almost connecting to the visible turbine blades of the Craiginmoddie scheme.

The Proposed Development would sit at a similar distance to Carrick in this scenario only intensifying the influence of turbines in a small part of this view that includes a wider extent of Carrick turbines. The Proposed Development would therefore only add slightly to a scenario that includes large scale wind farm development at a similar proximity (and closer in Dersalloch) and would appear modest in comparison with the wider extent of the Carrick Windfarm. The magnitude of change is therefore considered to reduce in this scenario to **Negligible** resulting in a **Minor and Not Significant** effect.

Table 6.33 - Detailed Assessment: Viewpoint 11 - Auchensoul Hill

Baseline Conditions	
Baseline Description	



This viewpoint is located on the summit of Auchensoul Hill, which is located to the west of Barr and overlooks this settlement and the central area of the Stinchar valley. The Hadyard Hill cluster of wind farms are close to this viewpoint to the north, occupying views spanning from the west to the north-east. The summit can be accessed by a short walk from the B734 close to the Stinchar Bridge at the outskirts of Barr.

The view towards the site is north-east along the Stinchar valley which is framed by the surrounding hills that are largely rounded summits. The small to medium scaled pastoral farmland of the Stinchar valley can be seen stretching along the valley floor, distinctive for its wooded and hedgerow field boundaries in contrast to the large scale upland moorland and plantation forestry that surrounds and contains the valley. The view south east is across the Stinchar Valley to the high ridgeline of hills on the opposite side of the Stinchar Valley. This view is dominated by plantation forestry but has occasional rocky moorland hill tops sitting up above the extensive forestry.

Operational wind farms include the Hadyard cluster to the north (Hadyard Hill, Penwhapple, Assel Valley and Tralorg), Mark Hill to the south, with Arecleoch and Kilgallioch behind Mark Hill forming a wide array of turbines extending into the distance. Windy Standard, Afton and Hare Hill along with the under construction South Kyle form a distant cluster of development visible to the east behind the Proposed Development site.

Receptor Type	Value	Susceptibility	Sensitivity
Hill Walkers	The viewpoint is located at the northern edges of the Stinchar valley cLLA and has views across it and towards the High Carrick Hills cLLA. It is popular with walkers and described as a 'Landmark Hill' in SALWCS. Value is considered to be Medium-High.	Hill walkers will have an appreciation of the surrounding landscape and will be focussed on views. However, susceptibility is moderated by existing wind farms in the immediate context to the north but also by the extensive development to the south. Susceptibility is considered to be medium-low.	Medium

Assessment (including operational and under construction cumulative sites)

Description of change:

- The proposed turbines would be visible at 11.5 km to the nearest turbine to the south of the viewpoint;
- Parts of all nine of the proposed turbines would be visible from this location. One with top of tower visible, one with hub visible on the horizon and the other six with only blades visible (four of these with only the top of blade visible); and
- The proposed turbines theoretically occupy 5 degrees of the view.

Magnitude of Change

Factors that increase the magnitude of change are:

- Change in the view resulting from addition of wind turbines in the distant view to the east within Carrick Forest:
- The degree to which the Proposed Development would encroach upon the scenic view along the valley landscape of the Stinchar valley; and



• The Proposed Development would bring additional closer wind energy development in the view east increasing the existing influence of the more distant operational development in this direction.

Factors that decrease the magnitude of change are:

- Much of the Proposed Development is screened from view from this location due to intervening upland landform and would appear small in contrast with the larger scale of the surrounding upland;
- The Proposed Development that is visible would appear as a relatively evenly spread grouping;
- The Proposed Development appears set back from the edges of the Stinchar Valley and would also be set back and behind the valley of the Dalguhairn Burn; and
- The Proposed Development would have an association with the close proximity wind farm influenced landscape to the north of this location, which spans across a wide part of the view and as such would not be experienced as entirely uncharacteristic within the surrounding operational wind farm context.

The magnitude of change for the Proposed Development is considered to be Low.

Significance of Effect

The effect on hill walkers at this viewpoint is considered to be Minor and Not Significant.

Cumulative Assessment

Cumulative Assessment (consented scenario)

Consented development visible from this location is found within or visually overlapping with operational or under construction developments in the distant views to the east and south-west. The addition of these consented schemes would therefore have a minimal influence on the baseline situation. The scale of change predicted for the Proposed Development against the baseline situation would therefore still broadly apply to this scenario. As a result, the magnitude of change is predicted to remain **Low** for this scenario resulting in a **Minor and Not Significant** effect.

Cumulative Assessment (application scenario)

Similar to the consented scenario, application development would be visible within or visually overlapping with other schemes in the operational or under construction baseline, in distant views to the east and southwest. The addition of these application schemes would also have a minimal influence on the baseline situation.

The Clauchrie application would appear 5.5 km due south from this viewpoint spanning across a wide part of the ridgeline of hills on the opposite side of the Stinchar valley and Craiginmoddie would appear to the east also at 5.5 km on a separate but adjoining upland within the Foothills with Forest and Wind Farm character type, appearing to extend the Hadyard Hill cluster further to the east.

The Proposed Development would only slightly intensify this situation by introducing further development further to the east. On balance it is considered that the scale of change predicted for the Proposed Development against the baseline situation would still broadly apply to this scenario. As a result, the magnitude of change is predicted to remain **Low** for this scenario resulting in a **Minor and Not Significant** effect.

Cumulative Assessment (scoping scenario)



The Carrick Windfarm would appear to extend across the horizon at 8.7 km to the east across the distant upper Stinchar Valley, the valley of the Dalquhairn Burn and almost connecting to the eastern edges of the Craiginmoddie Windfarm. The Proposed Development would sit behind Carrick Windfarm and would appear diminutive in comparison. Taking this into account, the magnitude of change is predicted to be **Negligible** for this scenario resulting in a **Minor and Not Significant** effect.

Table 6.34 – Detailed Assessment: Viewpoint 12 - Maybole

Baseline Conditions

Baseline Description

Maybole is a key settlement in the area and the A77 passes through the centre of town. The elevation of the settlement on east facing slopes, in comparison with the lowland landscape to the east creates a particular vantage point for this settlement in views east. The viewpoint is located to the east of the settlement and sits above an area of open space on Welltrees Street in a primarily residential area.

The Maybole football club, large industrial warehousing and other residential parts of eastern Maybole occupy the foreground view. The wider view towards the site to the south-east is across successive undulations of the agricultural landscape that surround the Maybole settlement and that extend across the lower Water of Girvan. The landscape character is typical of characteristics seen across the Ayrshire lowlands.

The view towards the site also has distant views of the hills and ridge that follows the Foothills with Forest and Windfarm LCT. The summit of Glenalla Fell can be seen on the distant upland ridgeline from this location appearing as a low conical feature within a slightly more elevated part of the overall distant ridgeline.

Dersalloch operational wind farm is visible to the east with the southern edges of the under construction South Kyle wind farm visible to the north of Dersalloch in the same part of the view.

	in any designated nic quality, view towards the Proposed experienced by residents of share this elevated view eas farm development at Dersal	Development Maybole that st. Existing wind lloch potentially s but on balance is e susceptibility. Medium
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Assessment (including operational and under construction cumulative sites)

Description of change:

- The proposed turbines would be visible at 11.8 km to the nearest turbine to the east of the viewpoint;
- Eight of the proposed turbines would be visible from this location with 8 towers and 6 hubs obscured by the upland ridgeline that intervenes in the distant view, resulting in two hubs visible close to the upland horizon; and
- The proposed turbines theoretically occupy 6 degrees of the view.



Magnitude of Change

Factors that increase the magnitude of change are:

- Change in the view resulting from the addition of large scale wind turbines to the distant view east;
- The proximity to and extent to which the Proposed Development would appear to encroach upon the 'Landmark Hill' of Glenalla Fell; and
- Potential for cumulative effects with the existing Dersalloch Windfarm which also appears in the distant view east.

Factors that decrease the magnitude of change are:

- The towers and most of the hubs of the Proposed Development are screened from view from this location due to intervening upland landform;
- The visible blades would appear diminutive in contrast with the larger scale of the upland ridgeline in the distant view;
- The Proposed Development that is visible would appear as a relatively evenly spread grouping;
- The Proposed Development is separated from the Glenalla Fell summit and in combination with the blade only visibility, would not dimmish the scale or setting of this hill on the upland ridgeline;
- The Proposed Development would not be experienced as entirely uncharacteristic due to the position of Dersalloch within the centre of the view east.

The magnitude of change for the Proposed Development is considered to be Low.

Significance of Effect

The effect on this viewpoint is considered to be **Minor and Not Significant.**

Cumulative Assessment

Cumulative Assessment (consented scenario)

The consented schemes that are theoretically visible from this location are in reality obscured from view and therefore no cumulative interaction occurs between these schemes and the Proposed Development. As a result, there is no cumulative change or cumulative effect in this scenario.

Cumulative Assessment (application scenario)

The majority of the application schemes would be obscured from this viewpoint except for the eastern end of the Craiginmoddie Windfarm which would appear at 10.1 km to the south-east. The Proposed Development would only slightly intensify this situation by introducing further development further to the east. On balance it is considered that the scale of change predicted for the Proposed Development against the baseline situation would still broadly apply to this scenario. As a result, the magnitude of change is predicted to remain **Low** for this scenario resulting in a **Minor and Not Significant** effect.

Cumulative Assessment (scoping scenario)

The Carrick Windfarm would appear across the horizon at 11.5 km to the south-east, appear to almost connect to Craiginmoddie Windfarm, extending the spread of development to the east as far as the Proposed



Development site. The Carrick turbines would only be seen as blade tips within the area of the Proposed Development site to the east of Glenalla Fell.

The Proposed Development would add further turbine blades to this part of the view intensifying and increasing the perception of turbines spreading across the south-eastern horizon when seen in combination with the other schemes in this scenario. Taking this into account, the magnitude of change is predicted to be **Medium-Low** for this scenario resulting in a **Moderate- Minor and Not Significant** effect.

Table 6.35 - Detailed Assessment: Viewpoint 13 - A713 Eriff

Baseline Conditions

Baseline Description

This viewpoint is located on the A713 to the south of Dalmellington at a high point on the road near Eriff and Loch Muck. The viewpoint is located close to a layby which shares a similar view albeit not as elevated as the road itself.

Overhead line towers follow the road and can be seen in views to the east and south. The landscape context is of an open and exposed location which is dominated by the simple moorland and forestry typically found all along this road. Small trees and areas of scrub are found at the road edges along with the occasional small tree grouping such as at the nearby layby. Views to the south includes views of the Glenkens and Merrick range beyond in the far distance. Views west towards the site are dominated by the elevated view across Loch Doon which provides a strong focus to the views from this location. The horizon is gently undulating in this direction although the low conical form of Big Hill of Glenmount can be distinguished.

The operational Dersalloch wind farm is visible as a single blade tip to the north-west at 9.6 km. The under construction North Kyle is visible as a single blade to the north at 3.4 km, with Torrs Hill barely visible to the south at 10.9 km.

Receptor Type	Value	Susceptibility	Sensitivity
Road Users	This viewpoint is located within the Galloway Hills RSA and the value is considered to be Medium-High.	The A713 is a busy road and motorists are likely to be travelling at speeds of around 60 mph. Road users only have oblique views towards the site and the elevated view west is only available for a very short section of straight road at fast speeds. Susceptibility is however increased for motorists stopped in the layby who could appreciate the views for longer. Taking all of this into account susceptibility is considered to be Medium-Low.	Medium

Assessment (including operational and under construction cumulative sites)

Description of change:

- The proposed turbines would be visible at 13.5 km to the nearest turbine to the west of the viewpoint;
- All nine of the proposed turbines are theoretically visible from this location as blades with differing amount of visibility, including one turbine hub close to the horizon. The distant forestry on the horizon further limits the size of blades visible above the horizon; and



The proposed turbines theoretically occupy 3 degrees of the view.

Magnitude of Change

Factors that increase the magnitude of change are:

- Change in the view resulting from addition of wind turbines in the distant view to the west;
- The degree to which the Proposed Development would affect the view across Loch Doon;
- The proximity of the Proposed Development to the Big Hill of Glenmount, visible on the horizon to the west;
- The Proposed Development would bring additional wind energy development in the view west.

Factors that decrease the magnitude of change are:

- Much of the Proposed Development is screened from view from this location due to intervening upland landform and forestry;
- The Proposed Development would appear small in contrast with the larger scale and simple skyline of moorland and forestry in the view west;
- The Proposed Development would not affect the views of the Glenken Hills or Merrick range further to the south;
- Whilst the Proposed Development would appear in the background of the northern edges of Loch Doon, it would be clearly separated from it by the upland of Herds Hill which intervenes in the same part of the view and it does not appear within the immediate context of the Loch;
- The Proposed Development does not encroach upon the low conical hill form of the Big Hill of Glenmount;
 and
- The Proposed Development that is visible would appear as a relatively evenly spread grouping.

The magnitude of change for the Proposed Development is considered to be Low.

Significance of Effect

The effect on road users at this viewpoint is considered to be Minor and Not Significant.

Cumulative Assessment

Cumulative Assessment (consented scenario)

The only consented development visible from this location is the Benbrack Variation which will appear to the east / north-east at close proximity (1.7 km). The addition of this consented scheme brings turbine development much closer to the viewer and more apparent than experienced in the baseline situation. When considering the Proposed Development in this scenario it is clear that the introduction of the Benbrack Variation would increase the wind farm influencing characteristics at the viewpoint. In doing so, Benbrack Variation could potentially moderate the effect resulting from the Proposed Development, however, the Proposed Development is in a different part of the view to the west and would not be overly susceptible to this influence.

The scale of change predicted for the Proposed Development against the baseline situation would therefore still broadly apply to this scenario. As a result, the magnitude of change is predicted to remain **Low** for this scenario resulting in a **Minor and Not Significant** effect.



Cumulative Assessment (application scenario)

Craiginmoddie would be visible in the same part of the panorama as the Proposed Development site to the west as a series of blade tips appearing close to the horizon. At 18.8 km, it would be more distant from the viewpoint than the Proposed Development, however, it would occupy a wider part of the horizon.

The Proposed Development turbine blades would appear slightly larger than the Craiginmoddie turbine blades due to differences in proximity. The Proposed Development would be introduced into the same part of the panorama as Craiginmoddie and would only slightly intensify the effect experienced at this viewpoint, appearing central to the spread of Craiginmoddie visible turbines.

On balance, the scale of change predicted for the Proposed Development against the baseline situation would only reduce by a small amount, however, the magnitude of change is predicted to remain **Low** for this scenario resulting in a **Minor and Not Significant** effect.

Cumulative Assessment (scoping scenario)

The Carrick Windfarm would appear to extend across the horizon at 13.1 km to the west appearing to spread the Craiginmoddie visible blades further to the south. Carrick Windfarm would sit higher up against the horizon than Craiginmoddie and would be more visible from this location as a result.

The Proposed Development would sit at a similar distance to Carrick in this scenario only intensifying the influence of turbines in a small part of this view that includes a wider extent of Carrick and Craiginmoddie turbines. The Proposed Development would therefore only add slightly to a scenario that includes large scale wind farm development at a similar proximity (and closer in the Benbrack Variation) and would appear modest in comparison with the wider extent of the horizontal spread of the Carrick and Craiginmoddie Windfarms. The magnitude of change is therefore considered to reduce in this scenario to **Negligible** resulting in a **Minor and Not Significant** effect.

Table 6.36 – Detailed Assessment: Viewpoint 14 - B741 near Clawfin

Baseline Conditions	

Baseline Description

This viewpoint is located on the section of B741 between Dalmellington and New Cumnock. The road is elevated and crosses a large area of upland with this particular location having elevated views to the west across the Doon valley.

The area has large areas of plantation forestry which is also visible in the view particularly to the south which includes the northern edges of the Carsphairn Forest. Mine workings have had a defining influence on the local character of this area and a large series of connected open cast sites are immediately to the north of this viewpoint. The workings themselves are not readily visible from the viewpoint although the location is at the junction with an access track that leads into an old open cast area no longer in use. The nearby property at Clawfin does not share the same view as it nestled amongst trees which restrict the view towards the site.

Operational wind farms visible from this location include Dersalloch at 7.9 km to the west and the under construction South Kyle Windfarm to the south (although this would partly obscured by intervening forestry).

Receptor Type	Value	Susceptibility	Sensitivity
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KNOCKCRONAL WIND FARM 6-104 LANDSCAPE AND VISUAL



Road Users	This viewpoint is at the edges of the East Ayrshire Sensitive Landscape Area with elevated views across the designated landscape and value is considered to be Medium-High.	The B741 is a busy road at this location with motorists likely to be travelling at speeds of around 60 mph. The view towards the site is in line with the direction of travel for westbound road users. Whilst theoretical visibility stretches along the road to the east from this location, actual visibility is restricted by forestry and this location is therefore isolated in both its elevated aspect and its open outlook. The distant view west is therefore only available for a very short section of road viewed at fast speeds. Taking all of this into account susceptibility is considered to be Low.	Medium-Low
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Assessment (including operational and under construction cumulative sites)

Description of Change:

- The proposed turbines would be visible at 14.2 km to the nearest turbine to the west of the viewpoint;
- All nine of the proposed turbines would be visible from this location with top of towers and hubs visible to a varying degree due to locally intervening landform; and
- The proposed turbines theoretically occupy 5 degrees of the view.

Magnitude of Change

Factors that increase the magnitude of change are:

- Change in the view resulting from the addition of large scale wind turbines to the distant view;
- The extent to which the Proposed Development would be visible within the context of the East Ayrshire Sensitive Landscape Area; and
- Potential for cumulative effects with the existing Dersalloch Windfarm which appears in the same part of the view west, extending wind farm development along the distant ridgeline to the west.

Factors that decrease the magnitude of change are:

- The lower towers and bases of the Proposed Development are screened from view from this location due
 to intervening upland landform and would appear small in contrast with the larger scale of the surrounding
 upland and extensive plantation forestry;
- The Proposed Development that is visible would appear as a relatively evenly spread grouping;
- The Proposed Development appears set back from the edges of the Doon Valley East Ayrshire Sensitive Landscape Area of which only the upper slopes are visible; and
- The Proposed Development would have a visual association with the Dersalloch Windfarm and as such would not be experienced as entirely uncharacteristic within the surrounding operational wind farm context.

The magnitude of change for the Proposed Development is considered to be Low.

Significance of Effect



The effect on road users at this viewpoint is considered to be **Minor and Not Significant.** There is no particular sensitivity attached to the view and the Proposed Development would only be seen as a glimpsed view at speed and distance, isolated to a short section of road.

Cumulative Assessment

Cumulative Assessment (consented scenario)

Enoch Hill will appear in the view to the east adding to the view of the Under Construction South Kyle. The addition of this consented scheme would therefore have a minimal influence on the baseline situation. The scale of change predicted for the Proposed Development against the baseline situation would therefore still broadly apply to this scenario. As a result, the magnitude of change is predicted to remain **Low** for this scenario resulting in a **Minor and Not Significant** effect.

Cumulative Assessment (consented and application scenario)

North Kyle wind farm would be visible at 1.8 km to the north of this location and whilst in close proximity would be viewed successively to the view west towards the Proposed Development and away from the direction of road travel. Craiginmoddie and Clauchrie would be visible to the west, in the same part of the view as the Proposed Development. Clauchrie would be 25.1 km from this viewpoint with only very small blade tips visible. Craiginmoddie would be 19.4 km from this viewpoint, again with only small blade tips visible. Taking this into account, it is considered that the cumulative interaction with these application schemes is relatively small and that the cumulative influence on the baseline situation is minimal as a result. The scale of change predicted for the Proposed Development against the baseline situation would therefore still broadly apply to this scenario. As a result, the magnitude of change is predicted to remain **Low** for this scenario resulting in a **Minor and Not Significant** effect.

Cumulative Assessment (scoping scenario)

The Carrick Windfarm would appear to extend across the horizon at 14.9 km (the same distance as the Proposed Development) to the west, spanning the horizon between the blade tips of the Craiginmoddie and Clauchrie schemes. The Proposed Development would appear within the centre of the Carrick spread of turbines occupying less than 50% of the horizontal spread. The Proposed Development would add slightly to the view of turbines in the distant view, however, the view of large scale development to the west in this scenario would already be established by Carrick and the Proposed Development would have a negligible further influence at this distance. The magnitude of change is therefore considered to be **Negligible** resulting in a **Negligible and Not Significant** effect.

Table 6.37 - Detailed Assessment: Viewpoint 16 - A713 and B742 Road Junction

Baseline Conditions

Baseline Description

This viewpoint is located on the busy A713 at the junction with the B742 road to Dalrymple. This section of the road is elevated to the agricultural landscape to the south, providing open views across the undulating farmland towards the foothills in the distance to the south. The predominantly pastoral farmland is enclosed by post and wire fencing in the foreground or scrubby, intermittent hedgerows. Forestry becomes more



prevalent with distance as the hills rise to a low, undulating skyline. The foreground view includes the junction of two busy roads with associated laybys, bins, bollards and barriers.

The operational wind farms of Dersalloch (12.4 km), Hadyard Hill (19.9 km), Assel Valley (26 km) and Tralorg (25.1 km) are visible on the distant horizon to the south. The operational Whitelee Windfarm and under construction Sneddons Law to the north along with turbines at North Threave and Leffinwyne to the west are theoretically visible in the distance but in reality are obscured by intervening vegetation.

Receptor Type	Value	Susceptibility	Sensitivity
Road Users	This viewpoint is not located within or close to any national, regional or local scenic designations or recognised scenic views and the value is considered to be Low.	The A713 is a busy road and motorists are likely to be travelling at speeds of around 60 mph. Road users have oblique views towards the site, however, would be turning south-west when turning onto the B742, which is more in line with the site. Visibility is limited to a short section of this road as can be seen on the ZTV. The distant view south is therefore only available for a very short section of road viewed at fast speeds. Taking all of this into account susceptibility is considered to be Low.	Low

Assessment (including operational and under construction cumulative sites)

Description of change:

- The proposed turbines would be visible at 16.6 km to the nearest turbine to the south of the viewpoint;
- All nine of the proposed turbines are theoretically visible from this viewpoint including tops of towers. In reality a block of intervening woodland obscures five of these turbines such that they would only be visible as turbine blades;
- The proposed turbines theoretically occupy 5 degrees of the view.

Magnitude of Change

Factors that increase the magnitude of change are:

- Change in the view resulting from the addition of large scale wind turbines to the distant view south;
- The proximity to extent to which the Proposed Development would detract from the pastoral landscape evident in the intervening landscape of this view; and
- Potential for cumulative effects with the existing Dersalloch Windfarm which also appears in the distant view south.

Factors that decrease the magnitude of change are:

- The towers and hubs of the Proposed Development are screened from view from this location due to intervening successive undulating landform and woodlands found on an intervening ridgeline;
- The visible turbines would appear small in comparison to the intervening landscape and so would not diminish it in terms of scale or detract from the pastoral character;
- The Proposed Development that is visible would appear as a relatively evenly spread grouping;



• The Proposed Development would not be experienced as entirely uncharacteristic due to the position of Dersalloch within a similar position on the distant horizon.

The magnitude of change for the Proposed Development is considered to be Low.

Significance of Effect

The effect on this viewpoint is considered to be **Minor and Not Significant.**

Cumulative Assessment

Cumulative Assessment (consented scenario)

Kirk Hill will appear to the south-west at 16.6 km on the same part of the horizon as Tralorg and Assel Valley but at closer proximity. The consented Chapleton Farm is obscured in the view south-west. A group of distant consented wind farms to the east will also be obscured (Kennoxhead, Penbreck and Lethans Resub). 2 turbines of the consented Knockshinnoch will appear at 6.2 km to the east above the horizon.

On balance it is considered that the scale of change predicted for the Proposed Development against the baseline situation would still broadly apply to this scenario. As a result, the magnitude of change is predicted to remain **Low** for this scenario resulting in a **Minor and Not Significant** effect.

Cumulative Assessment (application scenario)

The visible blade tips of the North Kyle wind farm would appear in the same context as the consented Knockshinnoch. Clauchrie and Craiginmoddie would appear to the west of the Proposed Development site, whilst only the blades of Clauchrie would be visible above the horizon, the Craiginmoddie turbines would be visible to turbine base appearing to sit on top of the ridgeline of hills that creates the distant horizon to the south.

The Proposed Development would intensify this situation by introducing further development further to the east. The spread of turbines visible in this view including at Dersalloch and Craiginmoddie would also be added to by the Proposed Development from this location increasing the cumulative effect. As a result, the magnitude of change is predicted to be **Medium-Low** for this scenario resulting in a **Moderate-Minor and Not Significant** effect.

Cumulative Assessment (scoping scenario)

The Carrick Windfarm would appear to extend development further across the southern horizon of foothills and would almost appear to connect to the eastern edges of the Craiginmoddie Windfarm. From this viewpoint, the Proposed Development would sit immediately in front of Carrick Windfarm but would occupy far less extent with Carrick Windfarm. Whilst the Proposed Development would slightly intensify the view of wind farm development, it would do so within the context of a scenario that already includes the large scale Carrick Windfarm within its immediate context, moderating the magnitude of change experienced.

Taking this into account, the magnitude of change is predicted to be **Negligible** for this scenario resulting in a **Minor and Not Significant** effect.

Table 6.38 - Detailed Assessment: Viewpoint 20 - Cornish Hill

Baseline Conditions



Baseline Description

This viewpoint is located on Cornish Hill, the summit has multiple rocky outcrops and the viewpoint is located on one of the northern high points to allow clearer views to the north towards the site. The route to the Cornish Hill is along well used paths along the popular circular route around Cornish Hill and Cornish Loch which starts at the Stinchar Bridge Car Park. The viewpoint is located just outside the Merrick WLA but offers an accessible route and vantage point from which to view the more remote areas of the WLA to the north.

Whilst only a small hill and of a relatively modest elevation, the views from the top are panoramic and include views towards Loch Doon and Glenkens to the east, the ridge of Shalloch on Minnoch to the south with the distant summits of Mullwharchar and Craignaw visible to the south-east. Views to the west are across the expansive moorland of Carrick Forest with the extensive plantation forestry becoming more evident in views to the north with the Ayrshire lowlands in the distance to the north.

The view north towards the site is elevated across the upland plateau of plantation forestry of the Carrick Forest. The plateau has a smooth, simple landscape pattern providing an apron of broad upland character before transitioning into the lowland agricultural landscape of Ayrshire further to the north.

The Water of Girvan Valley can be identified in this view as the landscape between the steep slopes of Bennan Hill and Craigingower. The site is located within the plateau upland part of the landscape in this view to the west of the Water of Girvan valley.

Operational wind farms are a feature of the landscape for much of the panorama and include Dersalloch to the north-east which is the closest at 8.9 km and the Hadyard Hill cluster (Hadyard Hill Penwhapple, Assel Valley and Tralorg) between 11 and 19 km to the north-east. To the east, more distant operational wind farms of Windy Standard II, Afton and Hare Hill are theoretically visible but largely obscured by intervening topography. The Under Construction South Kyle is more apparent in this view east at 15.6 km.

Receptor Type	Value	Susceptibility	Sensitivity
Hill Walkers	The viewpoint is within High Carrick Hills cLLA, within the Galloway Forest Park/Dark Sky Park Core Area and at the northern edges of the Merrick WLA. Value is considered to be Medium-High.	Hill walkers will have an appreciation of the surrounding landscape and will be focussed on views. Susceptibility is partly moderated by existing wind farms in the panorama, including north towards the site. Susceptibility is considered to be Medium.	Medium - High

Assessment (including operational and under construction cumulative sites)

Description of change:

- The proposed turbines would be visible at 5.1 km to the nearest turbine to the north of the viewpoint;
- All nine of the proposed turbines would be visible from this location with most of the turbine towers visible albeit with some turbine bases obscured by forestry;
- Turbine tracks would be visible from this location where they cross the immediate site area but would be difficult to discern due to distance; and
- The proposed turbines theoretically occupy 12 degrees of the view.

Magnitude of Change



Factors that increase the magnitude of change are:

- Change in the view resulting from addition of large scale wind turbines in the elevated view to the north within Carrick Forest;
- The degree to which the Proposed Development would affect the qualities of relative remoteness found at the northern edges of the WLA;
- The degree to which the Proposed Development would encroach upon the distant view of the valley landscape of the upper Water of Girvan valley; and
- The Proposed Development would introduce wind energy development in the view north increasing the existing influence of development visible at Dersalloch and in the Hadyard Hill cluster.

Factors that decrease the magnitude of change are:

- The Proposed Development would have an association with the wind farm influenced landscape to the north of the WLA within the Foothills with Forest and Wind Farm LCT and also with Dersalloch in the Foothills with Forest west of Doon Valley LCT;
- The proposed wind turbines would appear as a relatively evenly spread grouping;
- The large scale of the upland landscape and simple upland landscover of open moorland and forestry in views towards the site and within the surrounding landscape, provides a large scale surrounding landscape context to views of the Proposed Development;
- The localised hills that are part of the immediate context of the site are not readily visible from this elevated location and the undulated forest covered plateau and in this view appears as a simple upland landscape pattern of forestry with pockets of moorland;
- The Proposed Development appears set back from the edges of the upper Water of Girvan valley, which is clearly visible to the east of the Proposed Development site;
- Dersalloch Wind Farm is to the east of the Proposed Development site and appears to be set back from the valley sides of the upper Water of Girvan Valley by a similar distance, albeit to the opposite side of the valley; and
- The Proposed Development would not be experienced as entirely uncharacteristic within the surrounding operational wind farm context.

The magnitude of change for the Proposed Development is considered to be Medium.

Significance of Effect

The effect on recreational walkers / visitors at this viewpoint is considered to be **Moderate and Significant.**The viewpoint has sensitivity to the Proposed Development and whilst the effect is of a moderate level it is considered that the large scale of turbine combined with the relative proximity when viewed from this elevated location is sufficient to trigger a significant effect in this instance.

Cumulative Assessment

Cumulative Assessment (consented sites)

Consented development visible from this location is found within or visually overlapping with operational or under construction developments in the distant views to the west, north and east. The addition of these consented schemes would therefore have a minimal influence on the baseline situation. The scale of change predicted for the Proposed Development against the baseline situation would therefore still broadly apply to



this scenario. As a result, the magnitude of change is predicted to remain **Medium** for this scenario resulting in a **Moderate and Significant** effect.

Cumulative Assessment (application scenario)

Similar to the consented scenario, application development would largely be visible within or visually overlapping with other schemes in the operational or under construction baseline, in distant views to the west, north and east. South Kyle, however, at 17 km would appear closer and more apparent than the consented Overhill at 20.4 km which is barely visible due to intervening landform.

Craiginmoddie would appear to the north at 8.8 km on the Foothills with Forest and Wind Farm character type, appearing to extend the Hadyard Hill cluster further to the east. The addition of this application scheme would have an intensifying effect on this viewpoint. The Proposed Development would introduce further development between Craiginmoddie and Dersalloch and whilst would appear to retain a sense of separation would result in further intensification.

On balance, the scale of change predicted for the Proposed Development against the baseline and consented situation would only increase by a small amount and so the magnitude of change is predicted to remain **Medium** for this scenario resulting in a **Moderate and Significant** effect.

Cumulative Assessment (scoping scenario)

The Carrick Windfarm would extend across the horizon in the view north at 3.7 km spanning across the same part of the view as the Proposed Development but occupying a much wider horizontal extent. It would appear to span across the horizon from the eastern edges of Craiginmoddie Windfarm across the site and to the edges of the Water of Girvan Valley. The Proposed Development would appear immediately behind the Carrick Windfarm in this scenario only intensifying the influence of turbines in a part of this view and part of the Carrick Windfarm extent. The Proposed Development would therefore only add slightly to a scenario that includes large scale wind farm development viewed at closer proximity and would appear modest in comparison with the wider extent of the Carrick Windfarm. The magnitude of change is therefore considered to reduce in this scenario to **Low** resulting in a **Moderate-Minor and Not Significant** effect.

Table 6.39 – Detailed Assessment: Viewpoint 21 - B741 near Largs Farm

Baseline Conditions

Baseline Description

This viewpoint is located on the B741 near Largs Farm 0.5 km to the east of the Straiton settlement. The view towards the site to the south is a framed view between the slopes of Highgate Hill and Bennan Hill. Views in other directions are restricted by roadside trees and field boundary vegetation.

The view south towards the site is across a foreground of farmland including farmsteads, irregular shaped pastural fields with a mix of hedgerow, post and wire fence or small trees as field boundaries. Larger trees can be seen along the roads or access tracks and associated with the burns that run off Highgate and Largs Hill. Road users would only have this view to the south for a short section of the road due to the level of roadside screening found along this section of the road.



The intervening band of forestry that follows the lower slopes of Highgate Hill, creates the horizon to the south, with the rocky moorland tops of Highgate Hill and Largs Hill notable above this treeline, which also includes the steep slopes of Craigengower with the Craigengower Monument visible on the summit.

There are no operational or under construction wind farms visible from this viewpoint. Dersalloch is theoretically visible at 2 km to the east but is obscured by roadside trees.

Receptor Type	Value	Susceptibility	Sensitivity
Road Users	This viewpoint is within the Water of Girvan Valley cLLA and value is considered to be Medium-High.	This section of the B741 is narrow and winding with roadside hedgerows and trees, motorists attention would therefore be focussed on the road rather than the surrounding landscape. The view towards the site is only available for a short section of the road and would be experienced as a glimpsed view. Taking all of this into account susceptibility is considered to be Medium-Low.	Medium

Assessment (including operational and under construction cumulative sites)

Description of change:

- The proposed turbines would be visible at 4.8 km to the nearest turbine to the east of the viewpoint;
- Eight of the proposed turbines would be visible from this location. Five turbines would be visible with top
 of towers above the treeline and the other three with only blades visible above the treeline or landform;
 and
- The proposed turbines theoretically occupy 12 degrees of the view.

Magnitude of Change

Factors that increase the magnitude of change are:

- Change in the view resulting from the introduction of large scale wind turbines within relatively close proximity from the viewpoint;
- The extent to which the Proposed Development would be visible within the context of the Water of Girvan valley; and
- The extent to which the Proposed Development would contrast with the landscape characteristics and elements of the intervening farmland in the foreground view.

Factors that decrease the magnitude of change are:

- The intervening band of forestry that follows the lower slopes of the Highgate hill and that creates the horizon to the south screens the Water of Girvan valley from view;
- The same band of forestry creates an intervening upland characteristic that provides visual separation from the farmland and smaller scale landscape elements of the foreground;
- The Proposed Development would only be seen as a glimpsed view and the effect would be isolated to a very short section of this road; and
- The Proposed Development would be partly screened by the intervening landforms and forestry in the view, as a result, reducing the magnitude of change.

The magnitude of change for the Proposed Development is considered to be Medium.



Significance of Effect

The effect on road users at this viewpoint is considered to be **Moderate and Not Significant**. There is no particular sensitivity attached to the view, the Proposed Development would only be seen as a glimpsed view and the effect would be isolated to a very short section of this road. As such the scale of change is such that a significant visual effect would not occur.

Cumulative Assessment

Cumulative Assessment (consented and application scenario)

Kirk Hill is theoretically visible but in reality is screened behind roadside trees. There are no application schemes visible from this viewpoint. As a result, no cumulative interaction occurs between these schemes and the Proposed Development. As a result, there is no cumulative change or cumulative effect in these scenarios.

Cumulative Assessment (scoping scenario)

The Carrick Windfarm would appear to extend across the horizon at 6.5 km to the south across the forested horizon and continuing behind Bennan Hill.

The Proposed Development would appear immediately in front of the Carrick wind farm in this scenario intensifying the influence of turbines in this view but would not increase its extent. The Proposed Development would therefore only add slightly to a scenario that includes large scale wind farm development viewed at similar proximity and visible within a similar landscape context as the Proposed Development. The magnitude of change is therefore considered to be **Medium-Low** resulting in a **Moderate-Minor and Not Significant** cumulative effect.

Table 6.40 - Detailed Assessment: Viewpoint 23 - Loch Girvan Eye

Baseline Conditions

Baseline Description

This viewpoint is located on Craignasheenie to the east of Loch Girvan Eye. The viewpoint is accessed from the Stinchar Bridge car park by walking to Cornish Hill on the path and then crossing rough terrain and thick heather and boggy moorland in the direction of Loch Girvan Eye to the south-east of Cornish Hill.

Loch Girvan Eye is an elevated and isolated loch surrounded by rough moorland and hills with rocky outcrops. Craignasheenie, where the viewpoint is located is one of these rocky outcrops to the east of the loch. As can be seen from the viewpoint photography the terrain in this area is very uneven and accessing this viewpoint is difficult as a result. The apparently short distance from Cornish Hill of around 2 km is surprisingly deceptive, and the combination of uneven terrain and boggy moorland makes for a long walk to reach Loch Girvan Eye and the viewpoint on Craignasheenie.

The views from this location include towards Merrick and the core area of WLA to the south, towards the imposing rounded summit and ridge of Shalloch on Minnoch to the west / south-west and towards Cornish Hill and the Carrick Forest to the north. The foreground view to the west includes the view overlooking Loch Girvan Eye, which is below the viewpoint and so not apparent in the viewpoint photography. Views north



towards the site also include Cornish Hill in the mid distance, the undulations of the foothills beyond Carrick Forest and the Ayrshire lowlands further into the distance.

The only operational wind farm in the view is Dersalloch which is located at 10.5 km to the north.

Receptor Type	Value	Susceptibility	Sensitivity
Hill Walkers	The viewpoint is within High Carrick Hills cLLA, the Merrick WLA and within the Galloway Forest Park/Dark Sky Park Core Area. Value is considered to be Medium-High.	Hill walkers will have an appreciation of the surrounding landscape and will be focussed on views. Susceptibility is partly moderated by the existing Dersalloch wind farm in the panorama to the north towards the site, however, views from this location are relatively contained which increases susceptibility. On balance, susceptibility is considered to be Medium-High.	Medium - High

Assessment (including operational and under construction cumulative sites)

Description of change:

- The proposed turbines would be visible at 7 km to the nearest turbine to the north of the viewpoint;
- All nine of the proposed turbines would be visible from this location with the lower parts of towers obscured by the intervening landform of Cornish Hill in the mid distance; and
- The proposed turbines theoretically occupy 12 degrees of the view.

Magnitude of Change

Factors that increase the magnitude of change are:

- Change in the view resulting from addition of large scale wind turbines to the landscape of Carrick Forest in the view to the north;
- The degree to which the Proposed Development would affect the qualities of relative remoteness experienced in views from this location;
- The Proposed Development would introduce wind farm development in the centre of the view north creating an additional visual focus within the context of Dersalloch Wind farm, outside of the WLA;
- The degree to which the Proposed Development would encroach upon the view of Cornish Hill from this location; and
- The Proposed Development would introduce closer proximity wind energy development in the view north increasing the existing influence of development visible at Dersalloch.

Factors that decrease the magnitude of change are:

- The Proposed Development would have an association with the wind farm influenced landscape to the north of the WLA with Dersalloch in the Foothills with Forest west of Doon Valley LCT;
- The proposed wind turbines would appear as a relatively evenly spread grouping;
- The Proposed Development would not affect views to the south towards the Merrick and the core areas of rugged uplands of the WLA;
- The immediate context of the site is not readily visible from this location, however, the surrounding context of the site which is at a similar distance appears as a distant forested plateau where visible;

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- The large scale of the upland landscape and simple upland landcover of open moorland and forestry in views towards the site and within the surrounding landscape, provides a large scale surrounding landscape context to views of the Proposed Development; and
- Whilst at a closer proximity, the Proposed Development would not be experienced as entirely uncharacteristic due to the presence of Dersalloch wind farm to the north.

The magnitude of change for the Proposed Development is considered to be Medium.

Significance of Effect

The effect on recreational walkers at this viewpoint is considered to be **Moderate and Significant.** The viewpoint has sensitivity to the Proposed Development and whilst the effect is of a moderate level it is considered that the large scale of turbine seen above the leading ridgeline of Cornish Hill when viewed from this location would trigger a significant effect. It should be noted however that the location on Craignasheenie itself is elevated to the localised context of Loch Girvan Eye and in that respect is a worst case situation within a wide area that does not necessarily share similar levels of effect. Visual effects from other areas surrounding the Loch Girvan Eye, including at the edges of the Loch or on the remote path to the west of the Loch would be lesser due to more limited visibility and would be Not Significant as a result.

Cumulative Assessment

Cumulative Assessment (consented sites)

The consented Kirk Hill is theoretically visible but not readily apparent from this location and therefore no cumulative interaction occurs between this scheme and the Proposed Development. As a result, there is no cumulative change or cumulative effect in this scenario.

Cumulative Assessment (application scenario)

Craiginmoddie is the only application scheme visible at this location, it would appear to the north at 10.5 km on the Foothills with Forest and Wind Farm character type, beyond the northern shoulder of the Shalloch on Minnoch ridge. The addition of this application scheme would have an intensifying effect on this viewpoint adding wind farm development to the west of the view and so framing the view north with wind farm development west at Craiginmoddie and east at Dersalloch. The Proposed Development would introduce further development between Craiginmoddie and Dersalloch and whilst would appear to retain a sense of separation would result in further intensification.

On balance, the scale of change predicted for the Proposed Development against the baseline and consented situation would only increase by a small amount and so the magnitude of change is predicted to remain **Medium** for this scenario resulting in a **Moderate and Significant** effect.

Cumulative Assessment (scoping scenario)

The Carrick Windfarm would extend across the horizon in the view north at 5.6 km spanning across the same part of the view as the Proposed Development but occupying a much wider horizontal extent. It would appear to span across the horizon from the eastern edges of Craiginmoddie Windfarm to east of the Cornish Hill landform in the intervening view. The Proposed Development would appear immediately behind the Carrick wind farm in this scenario intensifying the influence of turbines in a part of this view, with some of the Proposed Development turbines appearing to fill the gaps of the Carrick Windfarm. The Proposed

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Development would, however, only be adding slightly to a scenario that already includes large scale wind farm development viewed at closer proximity and would fit within the wider extent of the Carrick Windfarm.

On balance, the scale of change predicted for the Proposed Development against the baseline and consented situation would only reduce by a small amount and so the magnitude of change is predicted to remain **Medium** for this scenario. However, the reduction in magnitude alters the resulting assessment of significance which in this scenario is considered to result in a **Moderate and Not Significant** effect.

Table 6.41 – Detailed Assessment: Core path SA47 (Straiton to Dalwhyne and Bennan Walk SAC local path network)

Baseline Conditions

Baseline Description

Core path SA47 connects Straiton through the upper Water of Girvan valley along its western banks through Bennan Wood to Dalmorton, through the Palmullan Glen to Knockskae and across the Balloch forestry plantation to the Dalquhairn Bridge near North Balloch in the Stinchar valley. The SAC Straiton to Dalwhynie local path follows an identical route to Core path SA47. The Bennan Walk is a circular walk that includes the minor road between Straiton and Craigfad where it connects to SA47. The views and character of the landscape experienced by walkers on this route can be summarised in the changes experienced across the following sections:

- The upper Water of Girvan valley between Straiton and Dalmorton;
- The upper Water of Girvan valley between Straiton and Craigfad (Bennan Walk link on minor road);
- The Palmullan Glen between Dalmorton and Knockskae
- The upland glen between Knockskae and the forestry plantation; and
- The forestry plantation to Dalwhyne.

From the Straiton area walkers would experience views towards the upper Water of Girvan valley including the steep slopes of Bennan Hill and Craigengower which frames the direction of travel southwards. From the further south in the Water of Girvan valley, views are more enclosed by the surrounding hills, views north towards Straiton tend to be limited by the trees that surround the settlement and along the river banks. Views to the south open up along the upper stretches of the valley at the bridge near Craigfad. The route then gradually rises in elevation past Dalmorton and Linfairn farms and becoming more upland in character along the Palmullan Glen. Views to the east along the upper Water of Girvan valley from this section are notable and include elevated views across the valley floor and contrasting upland valley sides. Beyond Knockskae, the views of the surrounding landscape are dominated by the upland characteristics of moorland, forestry and rough pasture. Whilst views are still available across the Water of Girvan valley to the north, they tend to be across wide expanses of foreground moorland with only the opposite side of the valley visible (Craigs Hill and Doonans Hill).

Wireframes are provided for views along this route at intervals between Straiton and the forestry plantation to provide an indication of the changes in view that may be experienced when walking along this route. These are provided on Figures 6.46a to 649d. Cumulative wind farms are included in these wireframe visualisations illustrating that the operational Dersalloch wind farm is visible from elevated parts of the view between Dalmorton and the forestry plantation.



Receptor Type	Value	Susceptibility	Sensitivity
Recreational Walkers	This route crosses between the Water of Girvan Valley cLLA and the Stinchar Valley cLLA value is considered to be Medium-High.	Recreational walkers on this route will have an appreciation of the surrounding landscape and will be focussed on views. Views vary along the route from rural valley landscapes, open and elevated uplands, enclosed forestry and intimate upland valleys. Taking this into account susceptibility is considered to be Medium-High.	Medium-High

Assessment (including operational and under construction cumulative sites)

Magnitude of Change

The magnitude of change for each of the sections described in the baseline is assessed as follows:

- The upper Water of Girvan valley between Straiton and Dalmorton No visibility or effect between Straiton and Curroch Wood, with turbines becoming increasingly visible between Craigfad and Dalmorton. The magnitude of change is predicted to be Low for this section.
- The upper Water of Girvan valley between Straiton and Craigfad (Bennan Walk link on minor road) Limited visibility on the minor road south of Straiton (see viewpoint 6 and wireframe C). Proposed Development becoming more visible to varying degree from the minor road south of Longcroft to Craig (see viewpoint 2 and wireframe D). The magnitude of change is predicted to range from Low to High for this section and is considered overall to be Medium-High.
- The Palmullan Glen between Dalmorton and Knockskae From this area all nine of the Proposed Development turbines would be visible at close range (1.5-2 km) to a varying degree of hubs / top half of towers (see wireframe E). Parts of this section include trees against the road/track or surrounding properties but on the whole views towards the site are open in nature. When visible, the turbines would appear beyond the upland ridgeline horizon to the south and as such none of the turbine bases would be visible. A section of track would be visible on the intervening moorland slopes but as a distant element which is higher in elevation and likely not readily visible due to line of sight. The Proposed Development would appear set back from upper edges of the Water of Girvan valley to the south-east and would not encroach upon the view along the valley floor to the east. The magnitude of change is predicted to be High for this section.
- The upland glen between Knockskae and the forestry plantation From this area the Proposed Development turbine visibility varies due to the close proximity of intervening landform close to the route resulting in only 5-6 Proposed Development turbines visible. The farthest away turbines would only be visible as top of towers and hubs and the closest turbines would have more tower visibility appearing taller on the horizon (see wireframe F). The view from this section of the route is contained by the nearby hills and landforms to the east and the forestry to the west. The magnitude of change is predicted to be High for this section.
- The forestry plantation to Dalwhyne theoretical visibility on this section of the route drops of sharply to the west. In reality the Proposed Development would not be visible due to the screening effect of the Forestry Plantation that the route passes through, other than at the edges of the plantation when approaching from the site from the west resulting in no change.

The High magnitude of change is limited to the section of route between Craig at the bridge over the Water of Girvan valley and the edges of the forestry plantation and the site itself. Other sections of the route would experience less severe change and the Proposed Development would not be visible for western sections. Taking all of this into account and considering the close range of the central section of the route to the Proposed Development the overall magnitude of change is considered to be **Medium-High**.



Significance of Effect

The effect on recreational walkers on this route is considered to be **Moderate - Major and Significant.** The significant effect is limited to the section of route between Craig at the bridge over the Water of Girvan valley and the edges of the forestry plantation.

Cumulative Assessment

Cumulative Assessment (consented scenario)

There are no consented stage wind farms visible on this route and therefore no cumulative interaction occurs between the consented schemes and the Proposed Development. As a result, there is no cumulative change or cumulative effect in this scenario.

Cumulative Assessment (application scenario)

There are no application stage wind farms visible on the sections of route that have visibility of the Proposed Development although the CZTV for Craiginmoddie and Clauchrie wind farms (Figures 6.20g and 6.20h) illustrate that these application wind farms would be visible in west facing views from the section of route approaching Dalwhyne.

The application schemes would extend the influence of wind farms sequentially to the west but on the whole would have very little cumulative interaction with the Proposed Development on this route. On balance, the scale of change predicted for the Proposed Development against the baseline situation would only increase by a small amount and so the magnitude of change is predicted to remain **Medium-High** for this scenario resulting in a **Moderate-Major and Significant** effect.

Cumulative Assessment (scoping scenario)

Carrick Windfarm would be visible for the majority of the route, even for the areas to the west where the Proposed Development has no visibility, see Figure 6.20j. For the northern sections of this route the Carrick Windfarm, would extend across the horizon in the view south-west spanning across the same part of the view as the Proposed Development but occupying a greater horizontal extent. It would appear to span across the horizon from close to the summit of Glenalla Fell, to the east of the Proposed Development turbines occupying a wide part of the upland ridgeline. The Proposed Development would appear immediately in front of the Carrick Windfarm in these views intensifying the influence of turbines but within or much less than the horizontal extent already occupied by Carrick Windfarm. For southern and western sections of the route walkers would pass through Carrick Windfarm which would be visible at close range within the forested area, continuing the influence of wind farm development at close proximity along this route.

The Proposed Development would increase the experience of close proximity wind turbines seen from sections of this route but for the most part would be seen as an intensification of the Carrick Windfarm in views. On balance, the magnitude of change is considered to be reduce overall for this route to **Medium** resulting in a **Moderate and Significant** cumulative effect. Whilst only of a Moderate level the effect is still considered to be significant due to the close proximity of proposed turbines to the route which for some sections are the Proposed Development.



6.13 Summary

Landscape Effects

- 6.13.1 The LVIA has assessed the potential for significant landscape and visual effects over a 45 km Study Area. The Proposed Development is located on an upland landscape (Foothills with Forest and Windfarm) which has an overall large scale and upland characteristics considered to be suitable for wind farm development.
- 6.13.2 The areas of moorland required to be removed in the construction and operation of the Proposed Development would be very limited in relation to the total area on the site, elsewhere within the Foothills with Forest and Windfarm LCT 17c and also when considered alongside the large areas of moorland in the wider landscape. The physical landscape effects of the Proposed Development on these landscape elements are considered to be Minor and not significant.
- 6.13.3 The LVIA has identified significant effects for localised parts of the landscape character areas that cover the site and its immediate surroundings. Significant effects within the Foothills and Forest with Windfarm LCT (17c), would be contained largely within the site itself due to surrounding plantation forestry, with other areas assessed as not significant. Significant landscape character effects are also experienced in the Intimate Pastoral Valley LCT 13 (Girvan Valley) extending to around 4 km to the east and north from the nearest Proposed Development turbine.
- 6.13.4 Such significant effects would arise largely due to the close proximity and clear visibility of the Proposed Development but also take account of the interaction with the visibility and potential cumulative effects with other existing wind farms within this area, in particular Dersalloch and Hadyard Hill wind farms.
- 6.13.5 At greater distances, the effect on landscape character would not be significant due to the level of screening from intervening landform such as upland ridgelines and interconnecting hills that contain views of the site from the surrounding landscape and screening by other landscape elements such as shelterbelt and woodland planting within surrounding valleys and large blocks of commercial forestry within the upland itself but also on the valley sides.
- 6.13.6 Significant effects are found for the Water of Girvan Valley cLLA in the upper Water of Girvan valley, which corresponds with the same area of Intimate Pastoral Valley LCT 13 (Girvan Valley) that experiences significant effects. Whilst the other neighbouring cLLAs would be indirectly affected by the introduction of the Proposed Development, these effects are not considered significant. All other landscape designations in the Study Area were also found to be not significant, including areas of RSA, SLA, NSA and GDL. There would also be no significant effects on the Merrick Wild Land Area, see appendix 6.2.

Visual Effects

- 6.13.7 The assessment of effects on views is informed by a series of 23 viewpoints that were selected, in agreement with NatureScot and SAC, to represent visibility from a range of receptors throughout the Study Area. The visual assessment has found significant effects at eight locations, as follows:
 - For the operational/under construction scenario, there was found to be a significant effect for eight viewpoints. These comprise: Viewpoint 2 Minor Road near Craig; Viewpoint 3 Minor Road near Stinchar Bridge; Viewpoint 4 Craigengower Monument; Viewpoint 5 NCN7, near Palmullan Bridge; Viewpoint 8 Shalloch on Minnoch; Viewpoint 20 Cornish Hill; Viewpoint 21 B741 nr Largs Farm; and Viewpoint 23 Loch Girvan Eye.
 - For the consented cumulative scenario, none of the viewpoints were assessed as having significant effects as a result of further cumulative interaction between the Proposed Development and consented schemes, however, a significant effect remains for four of the viewpoints assessed as significant in the operational/under construction scenario Viewpoint 4 Craigengower Monument; Viewpoint 5 NCN7, near Palmullan Bridge; Viewpoint 8 Shalloch on Minnoch; and Viewpoint 20 Cornish Hill.



- For the application cumulative scenario, there was found to be a significant effect for four viewpoints. These comprise: Viewpoint 3 Minor Road near Stinchar Bridge; Viewpoint 4 Craigengower Monument; Viewpoint 20 Cornish Hill; and Viewpoint 23 Loch Girvan Eye.
- 6.13.8 Significant effects are also found for Core path SA47 between Craig at the bridge over the Water of Girvan valley and the edges of the forestry plantation (Straiton to Dalwhyne and Bennan Walk SAC local path network) in the operational / under construction and application scenarios along with the scenario that includes the scoping stage Carrick Windfarm.
- 6.13.9 Whilst the RVAA has assessed 8 of the 14 properties within the Study Area to have Significant visual effects, the Proposed Development will not lead to the 'Residential Visual Amenity Threshold' being reached. Therefore, none of the effects assessed have the potential to be overbearing in respect of the visual amenity of residents at the property. See also Appendix 6.3.
- 6.13.10 Significant effects are predicted for representative night time Viewpoint 2 Minor Road near Craig and Viewpoint 20 Cornish Hill as a result of turbine lighting. The overall effect of the Proposed Development turbine lights on the Dark Sky Park is considered to be Not Significant. See also Appendix 6.4.

Cumulative Effects

- 6.13.11 The closest applications to the Proposed Development are Clauchrie and Craiginmoddie. There are instances in the application scenario where the Proposed Development would extend the wind farm development further along developed horizons and so increasing visual effects. For the majority of receptors, the Proposed Development only contributes to a small part of the overall spread of development, often with the Proposed Development turbines in the same context as the baseline or application scenario turbines. Therefore, this outcome results in only a slight intensification of effect in the application scenario across receptors.
- 6.13.12 This is similar for landscape character effects, where the gradual spread of wind farm development across an area has an influence on the underlying characteristics of LCTs (particularly host LCTs or immediately neighbouring ones), and so alters the degree of change that would be experienced as a result. In the case of the Proposed Development, the introduction of Craiginmoddie would spread development into central parts of the Foothills with Forest and Wind Farm LCT, extending the Hadyard cluster further east. The Proposed Development would then spread development further to the east and in doing so the cumulative effect would be increased.
- 6.13.13 When considering the influence of the Carrick Windfarm in the scoping scenario it is important to note the uncertainty of the scoping scenario. Carrick Windfarm in its current design would be located immediately to the south and west of the Proposed Development which for the majority of landscape and visual receptors results in the Proposed Development having a far lesser degree of change than in other scenarios assessed. This is due to the following factors:
 - the Proposed Development almost always fitting within the horizontal extent of the much larger footprint Carrick Windfarm in views from the surrounding landscape;
 - the similar scale of turbines between the two developments;
 - the more compact and cohesive layout of the Proposed Development in comparison to the more spread out layout of Carrick;
 - and the slightly lower elevations of the Proposed Development turbines.
- 6.13.14 These factors have generally combined in the LVIA to result in a reduced effect in the scoping scenario, noting a slight intensification would occur.
- 6.13.15 As described in Appendix 6.1 the cumulative assessment set out in the LVIA assesses only the additional landscape and visual effects of the Proposed Development in the context of different baseline scenarios that make assumptions about existing and proposed wind farms. It does not present an assessment of the combined effects of all of the relevant wind farms on the landscape and/ or visual receptors. Notwithstanding this, it is the authors' professional opinion that the Proposed Development in itself would not alter the current perception of a 'landscape with wind



farms' characteristic within the immediate landscape and visual context of the site. There are no consented wind farm developments within close enough proximity to alter this perception and whilst the cumulative application scenario would further intensify this characteristic (as a result of the introduction of Craiginmoddie within the host LCT to the west and Clauchrie to the south of the Stinchar valley), that the perception of a 'landscape with wind farms' would be maintained. The Proposed Development would add further development to this scenario, however, the LVIA has shown that the separation between these developments is sufficiently distant to allow each of these to occupy slightly separate parts of the same upland (along with Dersalloch in a closely neighbouring LCT).

6.13.16 However, should these applications be consented and built, in addition to the scoping site of Carrick Windfarm then the resulting level of change would have a greater influence on this perception of a 'landscape with wind farms' characteristic and result in the redefining of the LCT as a 'wind farm landscape character type'. The Proposed Development would contribute to this change in that eventuality in that it would extend the influence of development east and north of the other developments in the application and scoping scenarios from parts of the surrounding landscape (albeit that Carrick extends furthest east in this situation). It should also be noted that it is the combination of Craiginmoddie and Carrick together which would occupy the vast majority of the undeveloped parts of the LCT and in doing so would appear to bridge the gap from many views from the north and south between the existing influence of wind turbine development in the west of this LCT with the eastern parts that are currently undeveloped.

Conclusion

- 6.13.17 The assessment has identified that the significant landscape and visual effects of the Proposed Development would be contained within a relatively limited area around the site when compared with other wind farm developments of this scale. Significant landscape character effects are assessed to occur within a maximum of 4 km from the nearest turbine of the Proposed Development. Significant visual effects have been identified as occurring out to 9 km although the vast majority of significant visual effects are found to lie within 5km. In landscape and visual terms, it is considered that there is scope for wind farm development within the large scale upland landscape of the Foothills with Forest and Wind Farm LCT 17c in South Ayrshire.
- 6.13.18 Whilst there are views of the Proposed Development at close range from the upper Water of Girvan valley to the north of Straiton. The Proposed Development turbine layout has been designed to minimise effects on the valley landscape by reducing the heights of the three turbines closest to the valley, and setting turbines back from the valley sides and away from conspicuous edge of valley hills. In doing so, the Proposed Development has made the best use of the site topography and surrounding hill forms to help to settle the Proposed Development into the landscape. The Proposed Development has a compact layout which for most views appears as a cohesive and consistently spaced grouping of turbines. The reduced height of the easternmost turbines also helps the turbines closest to the valley appear more similar in height to the more distant turbines in the group, due to natural perspective which prevents these turbines from appearing overly prominent in close valley views. The compact nature of the layout also results in a relatively small horizontal field of view when viewing the Proposed Development from the wider landscape context. Therefore, the Proposed Development is consistently viewed as occupying a small part of a larger upland either as a backdrop to the Ayrshire lowlands to the north or viewed together with the large scale upland hills and plateau that the site is a part of.
- 6.13.19 On this basis, it is considered that the landscape is capable of accommodating the Proposed Development, that wider landscape and visual effects are relatively limited in extent and severity due to the localised topographical containment and that Significant effects on the existing landscape character or visual amenity are localised in nature.



Table 6.42 – Effects Summary

Receptor	Receptor	Operational / U Construction Sc		Consented Scer	nario	Application Scenario		Scoping Scenario		
	Sensitivity	Magnitude of Change	Significance of Effect	Cumulative Magnitude of Change	Significance of Cumulative Effect	Cumulative Magnitude of Change	Significance of Cumulative Effect	Cumulative Magnitude of Change	Significance of Cumulative Effect	
Physical Landscape Effects										
Moorland	Medium - Low	Low	Minor / Not Significant	N/A	N/A	N/A	N/A	N/A	N/A	
Landscape Character Effects										
Foothills with Forest &	Medium	High: site area	Moderate- Major / Significant	High: site area	Moderate- Major / Significant	High: site area	Moderate- Major / Significant	Medium: other areas	Moderate / Not Significant	
Wind Farm – LCT 17c	Medium	Medium-Low: other areas	Moderate- Minor / Not Significant	Medium-Low: other areas	Moderate- Minor / Not Significant	Medium: other areas	Moderate / Not Significant	Low: other areas	Minor / Not Significant	
Intimate Pastoral Valley – LCT 13 (Girvan Valley)	Medium-High	Medium-High	Moderate- Major / Significant	N/A	N/A	Medium-High	Moderate- Major / Significant	Medium	Moderate / Not Significant	
Intimate Pastoral Valley LCT 13 (Stinchar Valley)	Medium	Low	Minor / Not Significant	Low	Minor / Not Significant	Negligible	Minor / Not Significant	Negligible	Minor / Not Significant	



Middle Dale – LCT 12	Medium	Low	Minor / Not Significant	Low	Minor / Not Significant	Low	Minor / Not Significant	Negligible	Minor / Not Significant
Foothills with Forest west of Doon Valley – LCT 17b	Medium	Medium-Low	Moderate- Minor / Not Significant	Medium-Low	Moderate- Minor / Not Significant	Medium	Moderate / Not Significant	Medium-Low	Moderate- Minor / Not Significant
Rugged Uplands with Loch & Forest – LCT 21	Medium-High	Low	Moderate- Minor / Not Significant	Low	Moderate- Minor / Not Significant	Low	Moderate- Minor / Not Significant	Negligible	Minor / Not Significant
Landscape Designations									
Water of Girvan Valley cLLA	Madium High	Upper Valley: Medium-High	Moderate- Major / Significant	Upper Valley: Medium-High	Moderate- Major / Significant	Upper Valley: Medium-High	Moderate- Major / Significant	Medium	Moderate / Not Significant
	Medium-High	Wedidin-riigii	Lower Valley: Low	Moderate- Minor / Not Significant	Lower Valley: Low	Moderate- Minor / Not Significant	Lower Valley: Low	Moderate- Minor / Not Significant	Negligible
High Carrick Hills cLLA	Medium	Low	Moderate- Minor / Not Significant	Low	Moderate- Minor / Not Significant	Low	Moderate- Minor / Not Significant	Negligible	Minor / Not Significant
Stinchar Valley cLLA	Medium	Low	Minor / Not Significant	Low	Minor / Not Significant	Negligible	Minor / Not Significant	Negligible	Minor / Not Significant
Blairquhan GDL	Medium-High	Low	Moderate- Minor / Not Significant	Low	Moderate- Minor / Not Significant	Medium-Low	Moderate / Not Significant	Negligible	Minor / Not Significant
Visual Effects									



Viewpoint 1: Minor Road near Tairlaw	Medium-Low	Low	Minor / Not Significant	N/A	N/A	N/A	N/A	N/A	N/A
Viewpoint 2 Minor Road near Craig	Medium-High	High	Major / Significant	N/A	N/A	N/A	N/A	Medium	Moderate / Significant
Viewpoint 3 Minor Road near Stinchar Bridge	Medium	Medium	Moderate / Significant	N/A	N/A	Medium	Moderate / Significant	Medium-Low	Moderate- Minor / Not Significant
Viewpoint 4 Craigengower Monument	Medium-High	Medium	Moderate / Significant	Medium	Moderate / Significant	Medium-High	Moderate- Major / Significant	Medium-Low	Moderate / Not Significant
Viewpoint 5 NCN7, near Palmullan Bridge	Medium	Medium	Moderate / Significant	Medium	Moderate / Significant	Medium-Low	Moderate / Not Significant	Medium-Low	Moderate- Minor / Not Significant
Viewpoint 6 Straiton, minor road south of settlement	Medium	Low	Minor / Not Significant	N/A	N/A	N/A	N/A	Low	Minor / Not Significant
Viewpoint 8 Shalloch on Minnoch	Medium-High	Medium	Moderate / Significant	Medium	Moderate / Significant	Medium-Low	Moderate / Not Significant	Low	Moderate- Minor / Not Significant
Viewpoint 9 Craigengillan GDL, Shear Hill	Medium-High	Low	Minor / Not Significant	Low	Minor / Not Significant	Low	Minor / Not Significant	Negligible	Minor / Not Significant
Viewpoint 11 Auchensoul Hill	Medium	Low	Minor / Not Significant	Low	Minor / Not Significant	Low	Minor / Not Significant	Negligible	Minor / Not Significant



Viewpoint 12 Maybole	Medium	Low	Minor / Not Significant	N/A	N/A	Low	Minor / Not Significant	Medium-Low	Moderate- Minor / Not Significant
Viewpoint 13 A713 Eriff	Medium	Low	Minor / Not Significant	Low	Minor / Not Significant	Low	Minor / Not Significant	Negligible	Minor / Not Significant
Viewpoint 14 B741 near Clawfin	Medium-Low	Low	Minor / Not Significant	Low	Minor / Not Significant	Low	Minor / Not Significant	Negligible	Minor / Not Significant
Viewpoint 16 A713 and B742 Road Junction	Low	Low	Minor / Not Significant	Low	Minor / Not Significant	Medium-Low	Moderate- Minor / Not Significant	Negligible	Minor / Not Significant
Viewpoint 20 Cornish Hill	Medium-High	Medium	Moderate / Significant	Medium	Moderate / Significant	Medium	Moderate / Significant	Low	Moderate- Minor / Not Significant
Viewpoint 21 B741 nr Largs Farm	Medium	Medium	Moderate / Significant	N/A	N/A	N/A	N/A	Medium-Low	Moderate- Minor / Not Significant
Viewpoint 23 Loch Girvan Eye	Medium-High	Medium	Moderate / Significant	N/A	N/A	Medium	Moderate / Significant	Medium	Moderate / Significant
Core path SA47 (Straiton to Dalwhyne and Bennan Walk SAC local path network)	Medium-High	Medium-High	Moderate- Major / Significant	N/A	N/A	Medium-High	Moderate- Major / Significant	Medium	Moderate / Significant



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