

Environmental Impact Assessment Report

## Swarclett Wind Farm

Chapter 5: Landscape and Visual

Swarclett Wind Energy Limited

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Technical Appendix 5-2 Landscape Character Type Description

Technical Appendix 5-3 Special Landscape Area Citations

Technical Appendix 5-4 Inventory Gardens and Designed Landscapes

Technical Appendix 5-5 Assessment of the Proposed Development Against The Criteria Set Out in the Onshore Wind Energy Supplementary Guidance

Technical Appendix 5-6 Residential Visual Amenity Assessment



## Glossary of Terms

Term	Definition
The Applicant	Swarclett Wind Energy Limited
Environmental and Planning Consultant	Atmos Consulting Limited
Environmental Impact Assessment	Environmental Impact Assessment (EIA) is a means of carrying out, in a systematic way, an assessment of the likely significant environmental effects from a development.
Environmental Impact Assessment Regulations	The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 (EIA Regulations)
Environmental Impact Assessment Report	A document reporting the findings of the EIA and produced in accordance with the EIA Regulations
The Proposed Development	The Swarclett Wind Farm
Proposed Development Footprint	The area within which the Proposed Development will be located.
Proposed Development Site	The full application boundary, i.e. the red line boundary (Figure 1-1 Site Location).
Study Area	40km

## List of Abbreviations

Abbreviation	Description		
AOD	Above Ordnance Datum		
CAA	Civil Aviation Authority		
DPEA	Directorate for Planning & Environmental Appeals		
DTM	Digital Terrain Model		
EnvCoW/ECoW	Ecological/Environmental Clerk of Works		
ECU	Energy Consents Unit		
EIA	Environmental Impact Assessment		
EIAR	Environmental Impact Assessment Report		
GLVIA3	Guidelines for Landscape and Visual Impact Assessment (3rd edition)		
HEPLA	Hermitage Environmental Planning and Landscape Architecture Limited		
HwLDP	Highland-wide Local Development Plan		
IGDL	Inventory Gardens and Designed Landscape		
LCT	Landscape Character Type		
LDP	Local Development Plan		
LVIA	Landscape and Visual Impact Assessment		
NCN	National Cycle Network		
NCR1	National Cycle Route 1		
NCR500	North Coast Road 500		
NPF4	National Planning Framework 4		
NS	NatureScot		
NSA	National Scenic Area		
OS	Ordnance Survey		

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Abbreviation	Description	
OWESG	Onshore Wind Energy: Supplementary Guidance	
RSPB	Royal Society for the Protection of Birds	
RVAA	Residential Visual Amenity Assessment	
SLA	Special Landscape Area	
T	Turbine	
TGN	Technical Guidance Note	
THC	The Highland Council	
WLA	Wild Land Area	
ZTV	Zone of Theoretical Visibility	



## 5 Landscape and Visual impact Assessment

## 5.1 Introduction

This chapter of the Environmental Impact Assessment Report (EIA Report) identifies and assesses the potential effects that the proposed Swarclett Wind Farm (hereafter referred to as the 'Proposed Development') will have on the landscape, views and visual amenity of the local environment.

Landscape and visual assessments are separate, though related processes. Effects on the landscape as a resource may be caused by changes to the constituent elements of the landscape, its aesthetic or perceptual qualities and character. Visual effects as experienced by people may be caused by changes in the appearance of the landscape (views) resulting from the Proposed Development.

This chapter sets out the baseline for the Landscape and Visual Impact Assessment (LVIA), but assesses landscape and visual effects separately, followed by an assessment of cumulative effects. The assessments focus on likely significant effects that may arise from the Proposed Development.

## 5.1.1 Supporting Graphics

The LVIA chapter should be read in conjunction with the following figures.

The baseline landscape and visual context is illustrated in Figures 5-1-1 to Figure 5-1-3.

The assessment of landscape and visual effects is supported by the Zone of Theoretical Visibility (ZTV) maps in Figures 5-1-4a to 5-1-7.

Viewpoint photographs and wireframes/photomontages in Figures 5-2-1a-f to 5-2-18 ab; and Figures 5-3-1a-d to 5-3-18 ab.

The cumulative assessment is accompanied by the cumulative site location plans in Figures 5-1-8a-c, cumulative ZTVs in Figures 5-1-9a-d.

The Residential Visual Amenity Assessment is accompanied by the visualisations and property analysis plans in Figures 5-4-1-5-4-7.

## 5.1.2 Appendices

This Chapter is accompanied by Technical Appendices 5-1 to 5-6. These provide greater detail and background information on:

- Technical Appendix 5-1: LVIA Methodology;
- Technical Appendix 5-2: Landscape Character Type Descriptions;
- Technical Appendix 5-3: Special Landscape Area Citations;
- Technical Appendix 5-4: Inventory Gardens and Designed Landscapes;
- Technical Appendix 5-5: Assessment of the Proposed Development Against the Onshore Wind Energy Supplementary Guidance Criteria, The Highland Council, 2016; and
- Technical Appendix 5-6: Residential Visual Amenity Assessment.

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## 5.1.3 Contributors/Author(s)

The LVIA chapter was prepared by Peter Dunmow, a Chartered Landscape Architect with over 20 years of professional experience in undertaking LVIA, at Hermitage Environmental Planning and Landscape Architecture Limited (HEPLA), and was peer reviewed by an experienced Chartered Landscape Architect.

## 5.2 Methodology and Approach

## 5.2.1 Legislation, planning policy and Guidance

The policies and guidance relevant to the LVIA are set out below, and Figure 5-1-2a identifies the location and extent of the landscape policy designations.

The following guidance, legislation and information sources were considered in carrying out this assessment. For planning policy refer to EIAR Volume 2 Chapter 4.

- Guidelines for Landscape and Visual Assessment (Landscape Institute and Institute) of Environmental Assessment, 3rd Edition 2013) (GLVIA 3);
- Landscape Character Assessment: Guidance for England and Scotland, The Countryside Agency and NatureScot, 2002;
- Wildness in Scotland's Countryside, NatureScot, Policy Statement 02/03;
- Landscape Character Assessment Guidance for England and Scotland Topic Paper 6: Techniques and Criteria for Judging Capacity and Sensitivity, The Countryside Agency and NatureScot, 2004;
- National Planning Framework 4 (NPF4), 2023;
- Renewable Energy and the Natural Heritage, NatureScot Policy Document, 2014;
- Spatial Planning for Onshore Wind Turbines Natural Heritage Considerations, NatureScot, June 2015;
- Visualisation Standards for Wind Energy Developments, The Highland Council, July 2016;
- Onshore Wind Energy Supplementary Guidance, The Highland Council, November
- Addendum Supplementary Guidance: "Part 2B", The Highland Council, December 2017Siting and Designing Windfarms in the Landscape, Version 3a, NatureScot, 2017;
- Visual Representation of Windfarms: Guidance, Version 2.2, NatureScot, 2017;
- National Landscape Character Appraisal Introduction & Review Methodology Document, NatureScot, 2018;
- Guidance for Assessing the Effects on Special Landscape Qualities (Working Draft 11, November 2018), NatureScot.
- Advice Note TGN 06/19 Visual Representation of Development Proposals, Landscape Institute, September 2019; and
- Assessing the Cumulative Impact of Onshore Wind Energy Developments, NatureScot, March 2021.



## 5.3 Scope of the Assessment

## 5.3.1 Study Area

The core study area for the LVIA is defined by a 40km radius, as shown in Figure 5-1-1. This extent of study area was determined as appropriate, given the height of the proposed wind turbines.

The cumulative assessment extends to a 60km study area, including all built and consented wind farms and sites that are the subject of valid Planning Application or Section 36 (Electricity Act) Application that have not yet been determined.

## 5.3.2 Temporal Scope

The assessment covers the construction, operational and decommissioning phases of the Proposed Development.

The temporary elements that would be present during the construction period are – due to their nature and short-term duration – much less likely to have significant landscape and visual effects in comparison to the operational elements.

The effects will continue for the permitted life of the Proposed Development. Following this, the turbines will be removed, and the landscape reinstated with the majority of the proposed changes being fully reversible upon decommissioning.

The duration and reversibility of landscape effects will be the same with regard to all landscape receptors. This was taken into account in determining the magnitude of change that would be experienced by each landscape receptor and has therefore not been explicitly re-stated with regard to each individual landscape receptor below, to avoid repetition.

## 5.3.3 Effects Assessed in Full

The following effects have been assessed in full:

- Effects of the construction of the wind turbines and associated infrastructure on the
  existing character of the Proposed Development Site and its surroundings, its
  landscape features and land cover;
- Effects of the construction of the wind turbines and associated infrastructure on the visual amenity experienced in the wider landscape;
- Operational effects of the wind turbines and associated infrastructure upon the existing features and land cover of the Proposed Development Site and upon landscape character;
- Operational effects of the wind turbines and associated infrastructure upon the
  visibility of the Proposed Development in the wider landscape, particularly from
  visually sensitive locations. These locations may include designated landscapes and
  tourist destinations; interpreted viewpoints and well frequented roads and landmark
  hill summits;
- Assessment of cumulative landscape and visual effects sets out the scope of work undertaken for the assessment of the potential landscape and visual effects arising from the Proposed Development in conjunction with other built/consented and application stage wind farm developments; and

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- Decommissioning effects of the wind turbines and associated infrastructure upon the existing features and landcover of the site and upon landscape character; and
- Decommissioning effects of the wind turbines and associated infrastructure on the visual amenity experienced in the wider landscape.

## 5.3.4 Effects Scoped Out

The turbines are proposed at heights lower than 150m to blade tip and will not therefore be subject to Civil Aviation Authority (CAA) regulations requiring visible aviation lighting. In this regard, a Night-Time Lighting Assessment is not be required to support the assessment of the landscape and visual effects.

## 5.3.5 Baseline Determination

#### Sources of Information and Data

Existing map and written data regarding the Proposed Development Site and its environs have been reviewed, including:

- NPF4 2023;
- Renewable Energy and the Natural Heritage, NatureScot Policy Document, 2014;
- Spatial Planning for Onshore Wind Turbines Natural Heritage Considerations, NatureScot, June 2015;
- Assessing Impacts on Wild Land Areas Technical Guidance, NatureScot, 2020;
- Highland-Wide Local Development Plan (LDP) 2012;
- Caithness and Sutherland Local Development Plan, 2018;
- Onshore Wind Energy Supplementary Guidance, The Highland Council, November 2016;
- Addendum Supplementary Guidance: "Part 2B", The Highland Council, December 2017
- Assessment of Highland Special Landscape Areas, June 2011;
- Inventory of Historic Gardens and Designed Landscapes in Scotland, Historic Scotland; and
- Ordnance Survey Maps.

### 5.3.6 Consultation

A brief narrative of consultation submitted for the LVIA is provided in Table 5-1 below. This consultation has led to agreement on the viewpoint locations to be assessed, the cumulative wind farms to be assessed and requirements for the graphic production, which is to follow THC's 'Visualisation Standards for Wind Energy Developments' (July 2016) and NatureScot's 'Visual Representation of Wind Farms', Version 2.2 (February 2017).

Table 5-1: Consultation

Consultee	Summary of Consultee Response	Where addressed within this Report	
The Highland Council, Scoping Opinion,	Visualisations should be prepared to both Highland Council Standards	Section 5.2 Methodology and Approach. Visualisations are	
March 2022	and NatureScot guidance.	presented to meet both NatureScot and THC Standards.	

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Consultee	Summary of Consultee Response	Where addressed within this Report
	This assessment should include the expected impact of on-site borrow pits and access roads.	Borrow pits and tracks are considered in the assessment.
	The study area should be a minimum of 40km from the outer most turbines and the assessment of landscape and visual impact should be completed in full across the entire study area	A 40 km radius study area has been adopted for the LVIA.
	The cumulative study area should extend to 60km.	A 60 km radius study area has been adopted for the cumulative LVIA.
	The finalised list of cumulative sites to be considered in the assessment should be up to date in accordance with the latest planning submissions to THC, ECU and DPEA.	The cumulative sites are up to date as of 23rd August 2023.
	Identifies a selection of additional viewpoints to be assessed. It is considered that additional viewpoints are included to cover visibility from key transport routes and rail network.	Additional viewpoints have been included in the detailed assessment at Viewpoints 15-18 including the A836 (major road), A882 (the main road from Wick to Thurso), A9 and North Highland Line. The North Coast 500/National Cycle Route 1 (NCR1) is covered by Viewpoint 16, B836 east of Castletown. NCR 1 is also included in Viewpoint 11, Inkstack.
	When assessing the impact on recreational routes please ensure that all core paths, the national cycle network, long distance trails are assessed.	All designated recreational routes have been considered in the assessment.
	Identifies the key planning policies guidance applicable.	Relevant policies have been referred to in the LVIA
	Given the cumulative impact of renewable energy in this area it is expected that the applicant should present images for presentation within the Panoramic Digital Viewer deployed by the Council.	Images for the Panoramic Digital Viewer have been prepared.
	An assessment of the proposal against the criterion set out in the Council's OWESG to be included within the LVIA chapter of the EIAR.	A review of the findings of the LVIA against the OSWESG is included in Technical Appendix 5-5.
	It is considered that effects on Residential Visual Amenity and Wild Land Areas should not be scoped out of the EIAR.	Residential Visual Amenity and Wild Land Areas have been considered further in fieldwork, assessment and reporting of the LVIA. The RVAA is included in Technical Appendices 5.6.



Consultee	Summary of Consultee Response	Where addressed within this Report
NatureScot, March	Potential effects on WLA 36:	Wild Land Areas have been
2022	Causeymire - Knockfin Flows, and	considered in fieldwork,
	WLA 39: East Halladale Flows should	assessment and reporting of the
	be considered in the EIA Report.	LVIA.

## 5.3.7 Assessment Methodology

The chapter is supported by Technical Appendix 5-1, which contains a detailed description of the method of assessment.

#### Guidance

The LVIA methodology follows good-practice guidance and advice on the assessment of the impacts of development on landscape and visual resources. A key source of guidance is the 'Guidelines for Landscape and Visual Impact Assessment' (Third Edition, 2013) (GLVIA 3). Other documents specific to photography and visualisation techniques, and cumulative impacts have also been referred to. These are listed in full in Technical Appendix 5-1.

## Overview of Methodology

The general approach to the LVIA includes the following key tasks:

- Desk study: A desk study was undertaken to define the baseline landscape and visual resource within the study area and identify the main users of the area, key viewpoints and key features.
- Field survey: The baseline landscape assessment included field survey work, carried out in July 2023, to verify the landscape character areas identified within the study area and to gain a full appreciation of the relationship between the Proposed Development and the landscape. Field survey work verified the appropriateness of the proposed viewpoints. This involved checking the initial viewpoint selection on the ground, to ensure that there will be views of the Proposed Development from these locations. In some instances, this was remedied by slight adjustments of the location. The fieldwork was supported by analysis of Ordnance Survey maps, and observations made in the field on 27th and 28th July 2023.
- Confirmation of scope, methodology and confirmation of the viewpoints to be included in the assessment was undertaken through pre-application correspondence with THC and NatureScot in February 2022. Further consultation requests were issued in 2023 (27/06/2023 14:11 via email, 18/07/2023 11:44 via email, 08/08/2023 14:48 via email) however, these did not yield a response. Viewpoints are used as a proxy in order to understand effects across the study area, because it is not feasible to make an assessment of every visual receptor across an extensive area. This is standard practice.
- Baseline assessment of landscape and visual resources (consisting of desk study, field survey and reporting) reviews the existing landscape and visual resource of the study area in terms of its character, quality (i.e., the baseline condition) and establishes sensitivity of the resources/receptors. The baseline assessment forms the basis against which to assess the magnitude and significance of the predicted landscape and visual effects arising from the Proposed Development;
- Layout and design optimisation, seeking to develop the design and layout of the
   Proposed Development based upon a combination of landscape and visual factors



alongside, ecology, ornithology, peat and other environmental and technical constraints:

- Assessment of landscape and visual effects (construction, residual operational effects and decommissioning). The assessment describes the changes in the character and quality of the landscape and visual resources that are expected to result from the Proposed Development. In assessing landscape impacts, the potential direct effects on the fabric of the landscape are considered, together with the effects on the perception of landscape character. The baseline landscape character assessment together with an assessment of the effects on each character area is included in the assessment, along with consideration of the extent of potential significant effects. The visual assessment includes a viewpoint analysis which was carried out to identify and evaluate the effects on visual amenity arising from the Proposed Development at specific representative locations in the study area; and
- Assessment of cumulative landscape and visual effects sets out the scope of work undertaken for the assessment of the potential landscape and visual effects arising from the Proposed Development in conjunction with other built/consented and application stage wind farm developments.

#### 5.3.8 Significance Criteria

Once the baseline situation in relation to landscape and visual receptors has been reviewed, this information is combined with an understanding of the proposed change or development that is to be introduced, in order to identify and describe the landscape and visual effects.

As the mitigation is embedded as part of the design, potential effects and residual effects will be the same.

The assessment process determines whether the level of an effect would be significant or not through methodical consideration of, firstly, the sensitivity of landscape and visual receptors relative to changes as a result of the Proposed Development and, secondly, the magnitude of change that the receptor would experience.

A more detailed description of the principles used in establishing the above, as informed by GLVIA 3, is set out in Technical Appendix 5-1.

### Level of Effects and Determination of Significance

The level of any identified landscape or visual effect was assessed as major, moderate, minor or no effect, or intermediate categories (e.g., major/moderate) between these.

These categories have been determined by consideration of the sensitivity of landscape or visual receptor and the predicted magnitude of change that would be experienced as a result of the Proposed Development, as summarised above and described in detail in Technical Appendix 5-1.

The following matrix in Table 5-2 is used as a guide to correlating sensitivity and magnitude to determine the level of predicted effects and their significance.

Table 5-2: Significance of Effects on the Landscape Resource and Visual Receptors

	Magnitude Of Change			
Sensitivity	Substantial	Moderate	Slight	Negligible



Sensitivity	Magnitude Of Change			
High	Major	Major/Moderate	Moderate	Moderate/Minor
Medium	Major/Moderate	Moderate	Moderate/Minor	Minor
Low	Moderate	Moderate/Minor	Minor	Minor/None
Negligible	Moderate/Minor	Minor	Minor/None	Minor/None

Where, for the purpose of this assessment, the landscape or visual effect was classified as major or major/moderate, this is considered to be a significant effect in terms of the EIA Regulations.

It is recognised that in some landscape and visual assessment methodologies a moderate level may be considered to be significant, but this is due to assessors calibrating their scale of effects differently, rather than because the threshold was set high here.

Essentially in an assessment where moderate is considered significant, the level of effect will be broadly similar to that which is described as major/moderate here. GLVIA 3 requires that each assessor develops and explains their methodology but do not set out a prescriptive approach.

Variation between assessors is therefore common. It should be noted that effects are not always adverse and may also be beneficial, however this chapter assumes that the effect is adverse unless otherwise stated.

The matrix is not used as a prescriptive tool, and the methodology and analysis of potential effects at any particular location must make allowance for the exercise of professional judgement. Thus, in some instances, a particular parameter may be considered as having a determining effect on the analysis.

## **Supporting Graphics**

The LVIA is supported by a range of figures including viewpoint photography. These have been prepared in adherence to the principles presented in the GLVIA 3, the Landscape Institute's Advice Note 06/19 'Visual Representation of Development Proposals' (LI, September 2019), the Visual Representation of Windfarms: Guidance, Version 2.2, (NatureScot, 2017) and the Visualisation Standards for Wind Energy Developments (THC, July 2016).

#### **Cumulative Effects Assessment**

The scope of work undertaken for the assessment of the potential landscape and visual effects includes a thorough assessment of the potential effects arising from the operation of the proposed wind turbines in conjunction with built/consented wind farms within the study area, and those at planning application stage.

#### Limitations to the Assessment/Difficulties Encountered

Limitations of the standard approach include the use of agreed viewpoints as a proxy in order to understand effects across a wide area, and the limitations of the ZTV modelling, which can only be as accurate as the underlying data and the resolution at which this is available (OS Terrain 5 Digital Terrain Model (DTM)).

It should also be noted that the DTM does not include vegetation and buildings and accordingly can overstate the visibility of the project.



## 5.4 Baseline Conditions

This section provides a general description of the landscape and visual context of the Proposed Development Site and study area. It briefly describes the historical and cultural context within the study area, identifying both sensitive locations and receptors to be addressed in the subsequent impact assessment.

Much of this information is presented in greater detail in other relevant sections of this EIA Report, but a review of the local area in relation to its amenity use and conservation status is briefly summarised below in order to provide a fuller context for the baseline description of the landscape.

#### 5.4.1 The Proposed Development Site

The Proposed Development Site is located on the Farmed Lowland Plain, a plateau lowland landscape, in the north east of Caithness. The gently undulating landform of this landscape has a wide horizontal emphasis and exposed character.

Occasional smooth hills, such as Spittal Hill and Hill of Olrig, rise above the plain to form local landmarks. The site is approximately 1km to the west of the western edge of the dispersed properties at Bowertower.

The site comprises an open and undulating area of plateau moorland with mosaic of moorland and rough pasture framed by a partially felled forestry shelter belt to the south west.

Landcover across the surrounding landscape includes rough pastures, and moorland on elevated ground with improved pastures and occasional arable fields. Field boundaries are weakly defined with post wire fences though patches of gorse are frequent and lines of gorse and the distinctive Caithness flagstone fences in some parts, creating low, sharp edges to fields.

The Proposed Development Site does not contain any notable landscape features, such as landmark hills or woodlands, which constitute rare or notable 'scenic' elements and there are no residential properties within the Proposed Development Site boundary. The Topographical elevations range within the Proposed Development Site from c.50m to c.60m Above Ordnance Datum (AOD).

Settlement is very dispersed, characterised by widely spaced farmsteads. Detached modern houses are also frequent and regularly spaced set back off short tracks leading from the angular network of minor roads.

The long tradition of occupation of this landscape is evident in the many archaeological features dotted across farmland and on the less cultivated hill fringes. Ruined crofts, drainage channels and field boundaries with neglected grassland are

A relatively regular network of roads connects the dispersed settlement pattern, often following the field and property boundaries, running straight and then swinging around sharp corners.

The closest properties with potential visibility of the Proposed Development, including the BESS, are the property at Lower Bowertower to the north east, 0.9km from the closest proposed turbine of the Proposed Development (Turbine 2) and the nearby detached roadside property at Oakwood south east, also 0.9km from Turbine 2.



The elevated lands of the site are open to long views from the surrounding farmland and the loose pattern of settlement.

The Proposed Development Site falls within the NatureScot Landscape Character Type (LCT) 143: Farmed Lowland Plain, as identified on the NatureScot National Landscape Character Assessment (2019) online mapping database.

The Proposed Development Site is not covered by any form of landscape designation at the national or local level.

## 5.4.2 General Characteristics and Features of the study area

## Extent of the Study Area and Principal Topographic Features

The 40 km study area comprises a range of landscape character types, designations and visual receptors. The site area forms part of the wider settled flat agricultural landscape of Caithness.

It is a land of open, rolling farmland, moorland and scattered settlements. The county is fringed to the north and east by dramatic coastal scenery. The Pentland Firth to the north separates Caithness from the Orkney Islands.

To the south and west the settled and fertile agricultural landscape of Caithness gives way to the open moorland and blanket bog of the Flow Country, extending into Sutherland to the west where the landform becomes progressively more broken and undulating and is framed to the south by the sequence of lone peaks rising to the south at the northern edge of the Highlands, culminating in Morvern at 706m AOD.

Small lochs are frequent within valley floors and shallow basins. Locally to the site Loch Scarmclate and Loch Watten form important water bodies. The River Thurso to the west and the River Wick to the east traverse the landscape following the shallow valleys through this undulating landscape.

### **Natural Heritage Features**

The study area covers a range of lowland and upland areas. The fertile low-lying agricultural land, the coastlines to the north and east and the expansive Flow Country to the south draw together a diverse sequence of habitats and species.

The key natural heritage attributes can be broadly summarised as follows:

- Montane;
- Upland/moorland habitats;
- Rock outcrops;
- Areas of raised bogs;
- Areas of acid grassland;
- Littoral habitats:
- Intertidal habitats:
- Maritime habitats:
- Pockets of native woodland; and
- Large areas of improved pasture and arable land.

The non-porous nature of the bedrock, the clearance of woodland for fuel and agriculture and the cool and damp climate have combined to create large expanses



of peat. The Flow Country of Caithness and Sutherland is the largest expanse of blanket bog in Europe. Much of the interior is covered in a peat blanket, often as much as 3m thick, cloaked in a mantle of heather moorland.

The coastal areas have been the focus of human settlement. Inland Caithness is characterised by an expansive area of settled farmland. The broad open terrain includes rectangular blocks of plantation forestry, the surrounding improved pastures are divided by a mixture of fences, gorse hedges, small shelterbelts and Caithness flagstone fences.

Further details of the ecology/ geology/ hydrogeology of the study area are provided in EIAR Volume 2 Chapter 6 Ecology and Chapter 8 Hydrology and Hydrogeology.

## **Archaeological Features**

The study area has a long cultural history with evidence of man's actions extending over some 8000 years. Neolithic and Bronze Age settlement occurred in more favourable climatic conditions and as a result occupied diverse locations along the coast and inland.

There are numerous historic environment features, including brochs and cairns, castles, Baronial mansions and 'Lairds' houses, usually with broadleaf shelter woods planted around them. They include the Castle of Mey and its associated historic garden and designed landscape, Castle Girnigoe and Castle Sinclair, Ackergill Tower and Noss Head lighthouse. Some of the settlements have intact cores of 19th Century planned streets and buildings.

A full assessment of impact on archaeological and cultural heritage assets is detailed in EIAR Volume 2 Chapter 10 Cultural Heritage, but these features are noted below as visitors will be attracted to them and are potential visual receptors.

## Built and other Heritage Features

Important sites which may attract visitors, and hence be of relevance as potential visual receptors, within the study area include:

- Stone Lud standing stone at Bowertower;
- Castle Sinclair and Castle Girnigoe by Wick;
- Ackergill Tower;
- Noss Head and Dunnet Head lighthouses;
- Wick Pulteney Town Conservation Area; and
- Castle of Mey Inventory Garden and Designed Landscape.

#### Settlements and Route Corridors

This is a well-settled landscape with farms regularly spaced across the plain and occasional loose clusters of croft houses located on more marginal upper slopes and near the coast. Areas of crofts and loosely clustered newer houses tend to be associated with more marginal land on higher slopes or close to the fringes of the Sweeping Moorland and Flows.

The larger settlements of Wick and Thurso are situated on the coast to the north and east respectively. There are also a number of smaller settlements such as Halkirk, Watten and Spittal inland, and Castletown on the north coast.



There are also a few villages large enough to have amenities such as a shop, a cafe, a post office, a hotel, a church or a bank. These include Dunbeath, Dunnet, John o' Groats, Keiss, Lybster, Reay/New Reay, and Scrabster.

A network of often angular roads, the railway line and transmission lines cross this plain. The key routes through the study include the A9 north-south trunk road, A882 connecting between from Thurso and Wick connecting through the agricultural lowlands, and the A836 coast road.

The main trunk roads have been gradually upgraded with sections of road straightening and widening with frequent engineered cuttings and embankments easing the routes through the landscape.

The upgraded roads form locally intrusive corridors through the landscape with modified vegetative cover related to the road's verges cuttings and embankments. Numerous minor and unclassified roads provide access to the agricultural lowlands.

The A836 forms part of the recently promoted tourist route of the North Coast 500, following the c.500 mile coastal route around the north of Scotland through Caithness, Sutherland and Wester Ross.

The study area has been the focus for an emerging pattern of wind farm development over the last two decades. Large scale wind energy development now forms a noticeable component of the baseline landscape character.

There are small groups of large wind turbines located on some of the low ridges and hills. More extensive wind farms are located within areas of forest, moorland and moss within the Sweeping Moorland and Flows lying close to the boundary of this landscape. These often closely-spaced developments are prominent from roads and settlement within the very open Caithness Farmed Lowland Plain.

#### Trains and Ferries

The Far North Train Line links Inverness with Wick and Thurso. Within the study area the route diverts inland from the coast at Helmsdale along Strath Kildonan, continues north along the southern section of Strath Halladale and then diverts east across the open flow country to Halkirk where the line splits with separate lines continuing to both Wick and Thurso.

The Orkney Islands are connected to the mainland through the port at Scrabster to Stromness on Orkney. Ferries also run from Gills Bay to St Margaret's Hope on South Ronaldsay. A summer-only ferry runs from John o' Groats to Burwick on South Ronaldsay. Ferries passing across the Pentland Firth will have views back to Caithness towards the study area.

### Cycle Network

The section of National Cycle Route 1 linking Inverness with John O'Groats follows the route of the A836 through the wider study area from Altnaharra in the south-west of the study area, passing Loch Loyal and the Kyle of Tongue, and then along the north coast through Tongue and Bettyhill to Reay in the north-east, before following a minor road through Caithness to Thurso.

The route passes within 5km of the Proposed Development through Castletown and Inkstack before heading east along the coast to Duncansby Head where it terminates.



## Walking Routes

There are no national walking routes defined in the core study area however, THC has designated a core path network to provide a reasonable level of public access in THC's Core Paths Plan, intended to provide a basic framework of routes for the purpose of giving the public access throughout a particular area for walking, cycling, horse riding and other non-motorised activities.

Within the core study area, core paths are defined within and around settlements. These may be influenced by the Proposed Development. These routes are identified on Figure 5-1-2a.

#### Tourism and Recreation

Many tourists travel through the wider study area as part of the North Coast 500 Route or the National Cycle Route 1 with the experience of travelling through the landscape in a vehicle or bicycle respectively the main activity. The changing landscape and, dramatic coastline and views to the distant rising lone mountain summits has an appeal for many.

Opportunities for tourism and recreation within the study area focus on outdoor pursuits such as walking, sea kayaking, mountain biking, bird watching, and visiting the numerous archaeological sites. These activities tend to take place in the coast and nearby mountain areas experiencing the dramatic landscape.

Specific informal visitor destinations of Caithness include Sandside Bay, Thurso Bay and Dunnet Bay, Dunnet Head (the northernmost point of Britain) and Duncansby Head (the north-east tip of Britain); along the east coast Freswick Bay, Sinclair's Bay and Wick Bay can be found.

To the south west, the RSPB Forsinard Flows Visitor Centre is an attraction, the new distinctive lookout tower providing a vantage point to observe the birdlife attracted to the blanket bog and lochans. Locally to the site there is a picnic area at Loch Watten.

The River Thurso is a key resource for Salmon fishing and is a focus for many visits to the area during the fishing season. At other times the numerous lochs are an important attraction for trout fishing.

## 5.4.3 Baseline Landscape Resources

The character and value of the study area was reviewed in greater detail against existing landscape character assessments, landscape designations, and other relevant non-designated areas, as set out below.

#### Landscape Character Assessment

#### NatureScot National Landscape Character Assessment (2019) Online

NatureScot has used a system of landscape character assessment to identify, describe, classify and map Scotland. Using accepted, systematic methods of landscape character assessment, the countryside was subdivided into different Landscape Character Types (LCTs) each with a distinctive character based upon local patterns of geology, landform, land use, cultural and ecological features.

These provide information that can be used to guide landscape change and provide a baseline against which to make judgements on the likely effects of the Proposed



Development upon landscape character. The LCTs that fall within the 40km study area are illustrated in Figure 5-1-3 and in Figure 5-1-7, overlaid onto ZTV mapping to blade tip and hub height, projected to 20km.

The Proposed Development Site is situated within the LCT 143 Farmed Lowland Plain as described in NatureScot's digital map-based national Landscape Character Assessment (2019):

"The Farmed Lowland Plain Landscape Character Type is located in the far north-east of Caithness. It forms a broad and relatively low-lying plain bounded by the sea and expansive Sweeping Moorland and Flows."

Key characteristics of the Farmed Lowland Plain LCT are described as follows:

- "A generally open, low-lying plain, gently undulating to form shallow broad valleys, which are often filled with lochs and mosses, and subtle low ridges.
- Occasional smooth hills rise above the more low-lying plain forming local landmarks.
- The broad and shallow valley of the River Wick forming the largest of a series of valleys generally aligned south-east/north-west across the plain.
- Agriculture the predominant land cover.
- More intensively managed farmland near the coast around Thurso and Wick, and close to Loch Watten.
- Distinctive Caithness flagstone fences in some parts, creating low, sharp edges to fields.
- Sparse woodland, mainly comprising small angular coniferous plantations planted for shelter on farms.
- Larger conifer woodlands located at the transition with the Sweeping Moorland and Flows standing out where they are planted on poorer wetter ground on low ridges.
- Farm buildings and houses forming focal points within the landscape. Occasional loose clusters of croft houses located on more marginal upper slopes and near the coast.
- A number of historic environment features, including conspicuous castles, Baronial mansions and tall 'Lairds' houses, usually with broadleaf shelter woods planted around them.
- Roads reinforce the settlement pattern, often following the field and property boundaries, running straight and then swinging around sharp corners.
- A number of large settlements, including the towns of Thurso and Wick, situated on the coast, as well as several smaller settlements.
- Many historic features, including brochs and cairns, dotted across farmland and situated on hills within, or adjacent to, this area.
- Small groups of large wind turbines sited on some of the low ridges and hills and prominent visibility of larger wind farms in adjacent Landscape Character Types.
- Extensive views due to the openness of the landscape, and the clarity of northern air and light.
- Dramatic views from the northern part of this landscape to Dunnet Head and the distant Orkney islands, and views from the A9 on the western edge of this



landscape of the Lone Mountains of Morvern and Scaraben seen across the low-lying Sweeping Moorland and Flows."

In undertaking the preliminary assessment and review of baseline material against the visibility mapping of the Proposed Development, and through subsequent fieldwork, it is considered that beyond a 20km radius, the Proposed Development would be seen as a distant element in the landscape and that there would be only a limited influence on the characteristics, defining features and/or special qualities of the LCTs.

Although there may be some effects on landscape character beyond a 20km radius from the Proposed Development Site, these will not be significant and, in this regard, LCTs (as well as National Scenic Areas, Wild Land Areas and Special Landscape Areas) beyond 20km of the Proposed Development Site have not been assessed further.

LCTs (and other Landscape Designations) falling into the ZTV within a 20km radius of the Proposed Development have been reviewed in detail and provide an appropriate basis to describe the landscape character of the surrounding area. The LCTs that fall within 20km of the Proposed Development are illustrated on Figure 5-1-7, overlaid with ZTV mapping to blade tip and hub height.

There are five LCTs within 20km of the Proposed Development. Of these the following sub units will experience limited or no visibility to the Proposed Development and have, therefore, not been considered further in this assessment:

- 1. LCT 140: sandy Beaches and Dunes Keiss Links/Ackergill Links Sub Unit;
- 2. LCT 141: High Cliffs and Sheltered Bays Duncansby Head Sub Unit & Spear Head Sub Unit: and
- 3. LCT 144 Coastal Crofts & Small Farms North East Coast of Caithness Gills Bay Sub Unit.

Five LCTs have the potential to be significantly affected by the Proposed Development, as listed in Table 5-3, described in detail in Technical Appendix 5-2, and are included in the reporting of the detailed assessment.

Table 5-3: Summary of LCTs within 10km of the Proposed Development and within the Zone of Theoretical Visibility

Landscape Character Type	Source	Value	Susceptibility	Overall Sensitivity to Change Associated with the Proposed Development
134 - Sweeping Moorland and Flows	NatureScot	Medium	High	Medium/High
140 - Sandy Beaches and Dunes	NatureScot	Medium	High	Medium/High
141 - High Cliffs and Sheltered Bays	NatureScot	Medium	High	Medium/High
143 - Farmed Lowland Plain	NatureScot	Low	High	Medium/Low
144 - Coastal Crofts & Small Farms	NatureScot	Medium	Medium	Medium



## Landscape Designations and Other Relevant Areas

Landscape designations are important in the context of the LVIA with regard to the effects of the Proposed Development on the landscape quality and visual amenity of designated areas within the study area.

Landscapes designated at the national scale, within the study area, include: The Castle of Mey Inventory Garden and Designed Landscape. Special Landscape Areas (SLAs) are designated locally by THC. Wild Land Areas, defined by NatureScot, are also considered, however, in accordance with NPF4 Policy 4(g) effects of development outwith Wild Land Areas are not a significant consideration.

The location and extent of these designations and areas within the study area are shown in Figure 5-1-3 and are described below.

#### **Special Landscape Areas**

Special Landscape Areas (SLAs) are regionally valuable landscapes identified to protect and enhance landscape qualities and promote their enjoyment. SLAs are defined in the HwLDP and the SLA citations are contained within the 'Assessment of Highland Special Landscape Areas' (THC, 2011), with amended boundaries as per the Caithness and Sutherland Local Development Plan (THC, 2018).

Three SLAs are identified within the 40km study area. Analysis of the ZTV indicates that there are limited areas of long-distance visibility (in excess of 15km), or no theoretical visibility of the Proposed Development from two of the SLAs that lie within or overlap with the study area, as follows:

- Duncansby Head SLA: No visibility
- The Flow Country and Berriedale Coast SLA: distant visibility at c.17km from the edge of the northern edge of the SLA to the south of the River Thurso.

Owing to the very limited and long-distance nature of visibility, or absence of visibility, these SLAs will not be affected by the Proposed Development to a level that could result in significant effects; therefore, they have not been considered further as part of this assessment. The designation statements for the remaining SLA which is included in the assessment is set out below.

#### Dunnet Head Special Landscape Area

#### Overview:

"This area includes the most northerly point on mainland Britain. The peninsula is characterised by its prominent headland, striking vertical cliffs and expanse of isolated moorland. Dunnet Head juts out into the Pentland Firth, so that experience at its northern tip is one of being more at sea than on land.

To the south, settled farmland and a fine sandy beach and dune system provide a contrasting landscape experience. Clear weather allows impressive and extensive views over land and sea to Orkney, Strathy Point, Cape Wrath, Duncansby Head and the distinctive range of hills within the flow country, including the peaks of Morvern, Maiden Pap and Scaraben to the south."

#### Summary of Special Qualities

- "Panoramic Views from Prominent Headland and Striking Cliffs;
- Isolated Moorland and Lochans;



Contrasting Bay and Cliff Landscapes."

Further description of their special qualities taken from the SLA citations is set out in Technical Appendix 5-3.

#### **Inventory Gardens and Designed Landscapes**

The Inventory of Gardens and Designed Landscapes in Scotland is a list of nationally important Inventory Gardens and Designed Landscapes (IGDLs) that meet the criteria published in Historic Scotland's 2019 publication, Scottish Historic Environment Policy.

As indicated on Figure 5-1-2, there is only one IGDL within the 40km study area, The Castle of Mey.

The Castle of Mey lies c.13km from the Proposed Development and core of the designated landscape is screened from visibility to the Proposed Development. However as indicated on Figure 5-1-2a and ZTVs in Figures 5-1-5a and 5-1-5b, the outer policies of the Castle of Mey IGDL fall within theoretical visibility.

As such, a description of the location and setting of the IGDL is set out in Technical Appendix 5-4 and the designated landscape is included in the detailed assessment is set out below.

Table 5-4 below sets out a summary of the designated landscapes considered in the assessment and their sensitivity to the Proposed Development.

Table 5-4: Summary of Landscape Designations within the Zone of Theoretical Visibility included in the Detailed Assessment

Landscape Designation	Value	Susceptibility	Overall Sensitivity to Change Associated with the Proposed Development
Dunnet Head SLA	High	High	High
Castle of Mey Inventory Garden and Designed Landscape	High	Medium	High/Medium

#### Other Relevant Landscape Areas

In addition to the above nationally and regionally important landscape designations, Wild Land Areas that are not landscape designations but are of potential sensitivity to the Proposed Development have been taken into account.

#### Wild Land Areas

Wild Land is a concept introduced by NatureScot in their 2002 policy statement 'Wildness in Scotland's Countryside (Policy Statement 02/03).

Published in 2023, National Planning Framework 4 (NPF4) sets out the Scottish Government's development priorities.

#### NPF4: Policy 4g) States that:

- "Development proposals in areas identified as wild land in the Nature Scot Wild Land Areas map will only be supported where the proposal:
  - i. will support meeting renewable energy targets; or,
  - is for small scale development directly linked to a rural business or croft or is required to support a fragile community in a rural area.



All such proposals must be accompanied by a wild land impact assessment which sets out how design, siting, or other mitigation measures have been and will be used to minimise significant impacts on the qualities of the wild land, as well as any management and monitoring arrangements where appropriate. Buffer zones around wild land will not be applied, and effects of development outwith wild land areas will not be a significant consideration."

Current Wild Land Areas (WLAs) are identified on the NS map of Wild Land (NS, June 2014).

Two WLAs are identified within the 40km study area. Analysis of the ZTV, illustrated in Figures 5-1-4a-b, indicates that there are very limited areas of long-distance visibility (in excess of 17.5km), as follows:

- WLA 36: Causeymire and Knockfin Flows: 17.5km to closest area of visibility from Beinn Chaitag seen in the distance beyond foreground views to the cluster of wind farm development between the A9 and the River Thurso.
- WLA 39: East Halladale Flows: 18.5km to the closest area of visibility from the southern extent of the Forsinard Flows, similarly, seen in the distance beyond foreground views to the cluster of wind farm development between the A9 and the River Thurso.

Owing to the very limited and long-distance nature of visibility, these WLAs will not be affected by the Proposed Development to a level that could result in significant effects on their attributes or qualities; therefore, they have not been considered further as part of this assessment.

#### 5.4.4 Baseline Visual Resources

A key component of the visual assessment is the effect on views from key locations within the study area. These include settlements, route corridors and specific agreed viewpoints which are representative of typical views to the Proposed Development.

This part of the assessment is undertaken through comprehensive field work, through analysis of visibility mapping and confirmation of the extent of visibility, including the preparation of wireframes and photomontages visualisations. These are used in the field to establish the extent of visibility to the Proposed Development.

#### Settlements

The effects on receptors accessing the local core path network are considered alongside the effects on residential receptors within the settlements.

The Farmed Lowland Plain is well-settled characterised by dispersed regularly spaced farms. This agrarian settlement pattern is increasingly influenced by detached modern houses dispersed across the rural landscape, often focussed on more marginal land.

Distinct clearly aggregated settlement clusters are less obvious however, loose townships can be defined and these are used to define the effects on this rural pattern of settlement.

Larger settlements, including Wick and Thurso, are generally situated along the coast. There are also a number of smaller settlements such as Halkirk, Watten and Spittal inland, and Castletown on the north coast.



In accordance with the criteria outlined in the detailed methodology, residential receptors including those receptors accessing the local core path network within settlements have a high susceptibility to change as views are experienced regularly for prolonged periods. Residential receptors are generally considered to have a high sensitivity overall to the Proposed Development.

The following table lists the principal areas of settlement within the zone of theoretical visibility of the Proposed Development where significant effects may arise, as illustrated in the ZTVs in Figures 5-1-4a-b and 5-1-5a-b. Table 5-5 identifies which settlements require further assessment.

Table 5-5: Review of Visibility from Settlements within the Study Area

Settlement / Property Clusters	Distance and Direction between the Proposed Development and the Settlement	Theoretical Visibility of the Proposal
Within 5km		
Property cluster at Bowertower	Between 850m and 2.5km to the west	There will be local areas of direct visibility from the dispersed settlement. Visibility from the settlement will be similar to that described in the detailed assessment of viewpoint 2 below. Included in the detailed assessment.
Property cluster at Durran	Between 1.5 and 2.5km to the east/south east	There will be local areas of direct visibility from the dispersed settlement. Visibility from the settlement is described in the detailed assessment of viewpoint 5 below. Included in the detailed assessment.
Halcro/ Brabsterdorran	2.3km to the north west	There will be local areas of direct visibility from the dispersed settlement. <b>Included in the detailed</b> assessment.
Bower including core path CA02.01	2.1km to the west	There will be local areas of direct visibility from the dispersed settlement. Visibility from the settlement is described in the detailed assessment of viewpoint 3 below. Included in the detailed assessment.
Bowermadden	2.5km to the south west	There will be local areas of direct visibility from the dispersed settlement. Visibility from the settlement is similar to that described in the detailed assessment of viewpoint 3. <b>Included in the detailed assessment.</b>
Gillock	Between 2.5km and 4km to the north	There will be local areas of direct visibility from the dispersed settlement. <b>Included in the detailed</b> assessment.
Tain	3km to the south	The oblique nature of views to the local terrain and intervening vegetation cover limits the extent of visibility from this dispersed settlement, reducing visibility to turbine blades only. Not considered further in the detailed assessment.
Olrig Hill	3.6km to the south east	The oblique nature of views to the local terrain and intervening vegetation cover will limit the extent of visibility from the dispersed settlement. Not considered further in the detailed assessment.
Castletown including core Paths CA03.01-06	4.2km to the south	Local built form and forestry plantations screen the majority of views. There is the potential for direct views from the southern and eastern edges of the settlement. Visibility from the settlement is described in the detailed



	Distance and	
	Direction between	
Settlement /	the Proposed  Development and	
Property Clusters	the Settlement	Theoretical Visibility of the Proposal
		assessment of viewpoint 16 below. <b>Included in the</b> detailed assessment.
Knockdee	4.5km to the north east	Terrain limits visibility to the north east. Not considered further in the detailed assessment.
Reaster	5km to the south west	The oblique nature of views to the local terrain and intervening vegetation cover limits the extent of visibility from this dispersed settlement. Not considered further in the detailed assessment.
Within 10km		
Clayock	5.2km to the north	There will be local areas of direct visibility from the dispersed settlement. Visibility from the settlement is similar to that described in the detailed assessment of viewpoint 15. Included in the detailed assessment.
Bridge of Dunn	6.1km to the north	There will be local areas of direct visibility from the dispersed settlement. Visibility from the settlement is described in the detailed assessment of viewpoint 17 below. <b>Included in the detailed assessment.</b>
Lyth	6.6km to the west	There will be local areas of direct visibility from the dispersed settlement. Visibility from the settlement is described in the detailed assessment of viewpoint 5 below. <b>Included in the detailed assessment.</b>
Barrock including Core Path CA05.15	8km to the south west	There will be local areas of direct visibility from the dispersed settlement. Visibility from the settlement is described in the detailed assessment of viewpoint 11 below. <b>Included in the detailed assessment.</b>
Halkirk including Core Paths CA.06.01-11	8.1km to the east	Local built form and forestry plantations screen views. Visibility from the settlement is described in the detailed assessment of viewpoint 10 below. Not considered further in the detailed assessment.
Watten including Core Paths CA14.01-05	8.2km to the north west	Local built form and forestry plantations screen views.  Visibility from the settlement is described in the detailed assessment of viewpoint 9 below. Not considered further in the detailed assessment.
Dunnet including Core Paths CA05.01-07	8.3km to the south	There will be local areas of direct visibility from the dispersed settlement. Visibility from the settlement will be similar to that described in the detailed assessments of viewpoints 11 and 16 below. <b>Included in the detailed assessment.</b>
Thurso including Core Paths CA13.01 - CA13.29	9.9km to the south east	Terrain limits visibility to the south east. Not considered further in the detailed assessment.
Beyond 10km		
Spittal including Core Path CA06.08	10.1km to the north	Distant visibility to turbine blades from the eastern sector of the settlement. Not considered further in the detailed assessment.
Scrabster	12.2km to the south east	Distant visibility to turbine blades from the elevated northern edge of the settlement. Not considered further in the detailed assessment.
Wick including	18km to the north	Distant theoretical visibility. Not considered further in



Settlement / Property Clusters	Distance and Direction between the Proposed Development and the Settlement	Theoretical Visibility of the Proposal
Core Paths CA15.02 – CA15.30	west	the detailed assessment.
John O' Groats including Core Paths CA07.06- CA07.11	19km to the south west	No visibility. Not considered further in the detailed assessment.

#### Routes

Vehicular and non-vehicular route corridors within the study area, include roads and designated cycle routes. Effects on core paths are considered alongside the effects on settlements. The following table lists route corridors within 20km of the Proposed Development.

Table 5-6 below identifies which routes or parts of routes require further assessment according to whether they fall within the zone of theoretical visibility, as illustrated in the ZTVs in Figures 5-1-5a and 5-1-5b.

Table 5-6: Review of Visibility from Routes within the Study Area

Route Corridor	Theoretical Visibility of the Proposal
Within 5km	
B876	Direct theoretical visibility to hub height from the route as it passes between Castletown to the north west and Myrelandhorn to the south east of the Proposed Development. With further intermittent, partial visibility to hub height from elevated sections of the route to the east as it winds over the undulating coastal terrain. Viewpoints 3 and 4 are taken from the route and are included in the detailed viewpoint assessment.
B874	Short section of visibility to hub height over c. a 4km section of the route, to the north west and south east of Gillock. <b>Included in the detailed assessment.</b>
B870	Short section of visibility beyond 5km, to hub height over c. a 2km section of the route, between the B876 and the settlement at Cogle. Visibility is indicated to the west of the north south aligned route corridor. Further visibility is indicated from the route between Watten and Houstry of Dunn, similarly away from the direction of travel. <b>Not considered further in the detailed assessment</b> .
A882	Sections of direct visibility as the route passes across the open farmland to the south of Loch Scarmclate and Loch Watten. Views towards the Proposed Development are beyond 5km to the north away from the direction of travel. Viewpoint 15, from close to the route and Viewpoint 17 beside the route are included in the detailed viewpoint assessment. <b>Not considered further in the detailed assessment.</b>
А9	Short section of intermittent theoretical visibility to hub height over a c. 3km length to the south of Georgemas Junction. Visibility is beyond 6km and away from direction of travel. Viewpoint 18 beside the route is included in the detailed viewpoint assessment. Not considered further in the detailed assessment.
A836 (NCR500)	Short sections of visibility to the south of the route corridor between Castleton and Dunnet. Viewpoint 16 beside the route is included in the detailed viewpoint assessment. There is a further distant section of visibility beyond 13km beside Mey away from the direction of travel. Not considered further in the detailed assessment.



B855	Intermittent sections of theoretical visibility between Dunnet and Brough as the route passes around St John's Loch. Distant visibility will be seen over distances greater than 9km. <b>Not considered further in the detailed assessment</b> .
The Far north Railway Line	There are sections of consistent visibility between Georgemas Junction and the northern edge of Loch Watten within 5km of the Proposed Development.  Included in the detailed assessment.
National Cycle Route 1	Direct theoretical visibility to hub height is indicated between the vicinity of Casteltown in the west and Barrock in the east. Viewpoints 11 and 16 beside the route are included in the detailed viewpoint assessment. <b>Included in the detailed assessment.</b>

## Viewpoint Selection

Viewpoints selected for the visual assessment are listed in Table 5-7. The types of receptors considered included the following:

- Different LCTs:
- Designated and other sensitive landscapes;
- Settlements (towns and villages, as well as smaller groups of residential properties);
- Roads (main and minor);
- Footpaths and cycle routes including Core Paths and the National Cycle Network (NCN) Routes;
- Marked popular viewpoints;
- Visited hills;
- Other outdoor recreational resources (including frequently visited historical and archaeological sites); and
- Visitor/tourist facilities such as camp sites, hotels and visitor attractions.

The final list of viewpoints was selected from important receptors through a careful desk-based review of visibility mapping and analysis of wireframes.

In order to confirm the viewpoint selection was appropriate field survey verification was carried out to ensure that the final tranche of selected viewpoints for the assessment were appropriate and the extent to which local features such as vegetation or topography influenced the view.

The viewpoints taken forward for full assessment include 18 viewpoints that cover a range of representative landscape and visual receptors, distances from the Proposed Development, altitudes and directions.

The selection of viewpoints also provides a reasonable distribution at compass points around the application site to assist in understanding how the Proposed Development relates to the wider setting.

Viewpoints were visited as part of the baseline visual assessment, and panoramic photographs of the existing views were taken. The final list of the 18 viewpoints, set out in written correspondence with THC and NS, is shown in Table 5-7, and their locations are illustrated in Figure 5-1-1.

Photographs of the existing views from these viewpoints are shown in Figures 5-2-1 to 5-2-18 in THC Format and in Figures 5-3-1 to 5-3-18 in NatureScot Format. The existing and predicted views of the Proposed Development are described in the assessment of effects below.



Table 5-7: Selected Viewpoints

		Approximate Distance		
No.	Viewpoint location	and Direction to Proposed Development	Receptors	Grid Reference
1	Minor road south west of site	1.45km to the north east	Road Users	319953, 962037
2	Stone Lud standing stone, Bowertower	1.67km to the north west	Visitors / Walkers	322447, 961520
3	B876 west-bound at Bower	1.91km to the south west	Residents / Road Users	323082, 963708
4	B876 east-bound, at Cooper's Hill	2.11km to the south	Road Users	3221438, 965279
5	Easter Durran	2.16km to the south east	Residents / Road Users	319480, 964467
6	B874 west-bound, North Watten	4.84km to the north	Road Users	322706, 958076
7	Hill of Olrig including Core Path CA03.05	4.47km to the south east	Walkers	317506, 965619
8	Lyth	6.65km to the west	Residents / Road Users	327925, 963009
9	Loch Watten picnic spot	8.5km to the north west	Visitors / Walkers	324725, 954937
10	Halkirk	8.43km to the east	Residents / Road Users	313527, 959312
11	Inkstack	8.37km to the south west	Residents / Cyclists /Road Users	325818, 970184
12	Dunnet Head including Core Path CA05.10	13.35km to the south west	Visitors / Walkers	320534, 976503
13	Castle Sinclair Girnigoe, Noss Head including Core Path CA15.29	18.63km to the west	Visitors / Walkers	338163, 954883
14	Ben Dorrery including Core Path CA06.03	16.79km to the north east	Walkers	306294, 955062
15	Level crossing on the North Highland Line at Gelshfield	4.77km to the north east	Residents / Passengers	318265, 958966
16	B836 east of Castletown	4.97km to the south	Cyclists / Road Users	320460, 968079
17	A882 west of Bridge of Dunn	6.51km to the north	Road Users	320909, 956195
18	A9 south of Georgemas Junction	6.73km to the north east	Road Users	315611, 959016



## 5.4.5 Other Baseline Built/Consented Wind Farms

At the time of writing, there were 39 commercial-scale wind farm developments within the 40km radius study area that were operational/under construction, as illustrated on Figure 5-1-8b.

As these wind farms are either already part of the current landscape and visual baseline resource or will become part of the predicted baseline conditions in the near future, they have been considered as an integral part of the baseline within the main assessment of landscape and visual effects.

In the context of the Proposed Development, it was appropriate to confine the assessment to larger commercial schemes in the absence of significant smaller scale developments.

Details of the baseline built/consented wind farms within the 40km radius of the Proposed Development are given in Table 5-8 and their locations relative to the Proposed Development are illustrated in Figure 5-1-8b. Details of the baseline built/consented and planning stage wind farms within a wider 60km radius of the Proposed Development are illustrated in Figure 5-1-8a.

Table 5-8: Built/Consented Commercial-Scale Wind Farms within the 40km Study Area

Wind Farm	Status	Number of Wind Turbines	Turbine Dimensions	
Within the inner 10km study are	Within the inner 10km study area			
Cogle Moss	Consented	12 turbines	100m to blade tip	
Lochend	Operational	4 turbines	100m to blade tip	
Weydale Farm	Operational	1 turbine	67m to blade tip	
Within 10-40km				
Achairn	Operational	3 turbines	100m to blade tip	
Alachan	Operational	5 turbines	115m to blade tip	
Alachan II	Consented	3 turbines	110m to blade tip	
Bad à Cheò	Operational	13 turbines	112m to blade tip	
Baillie	Operational	21 turbines	110m to blade tip	
Beatrice Offshore	Operational	84 turbines	198.4m to blade tip	
Bettyhill	Operational	2 turbines	119m to blade tip	
Berriedale and Dunbeath	Consented	3 turbines	74m to blade tip	
Buolfruich	Operational	15 turbines	75m to blade tip	
Burn of Whilk	Operational	9 turbines	115m to blade tip	
Camster	Operational	25 turbines	100m to blade tip	
Camster II	Consented	11 turbines	126.5m to blade tip	
Causeymire	Operational	21 turbines	100m to blade tip	
Flex Hill	Operational	3 turbines	100m to blade tip	
Forss	Operational	2 turbines	77m to blade tip	
Forss Extension	Operational	4 turbines	77m to blade tip	
Halsary	Operational	15 turbines	120m to blade tip	
Hesta Head	Consented	5 turbines	125m to blade tip	
Hill of Lybster	Consented	2 turbines	98m to blade tip	
Hill of Stroupster	Operational	1 turbine	110m to blade tip	



		Number of Wind	
Wind Farm	Status	Turbines	Turbine Dimensions
Hoy Community	Consented	6 turbines	149.9m to blade tip
Limekiln	Consented	21 turbines	149.9m to blade tip
Limekiln Extension	Consented	5 turbines	149.9m to blade tip
Moray West	Consented	85 turbines	285m to blade tip
Slickly	Consented	11 turbines	150m to blade tip
Strathy North	Operational	33 turbines	110m to blade tip
Strathy South	Operational	39 turbines	200m to blade tip
Strathy Wood	Consented	13 turbines	180m to blade tip
Stroupster	Operational	5 turbines	100m to blade tip
Tacher A, B, C	Operational/ Consented	3 turbines	142.5m to blade tip
Taig na Muir	Operational	1 turbine	79.6m to blade tip
Wathegar	Operational	5 turbines	102m to blade tip
Wathegar Two	Operational	9 turbines	100m to blade tip
West Hill, Flotta	Operational	1 turbine	100m to blade tip

At the time of writing, there were nine proposed wind farm developments that are the subject of planning applications within a 40km radius, as set out in Table 5-9 below. The location of the sites is shown on Figure 5-1-8b.

Table 5-9: Planning Stage Commercial-Scale Wind Farms within the 40km Study Area

Wind Farm	Status	Number of Wind Turbines	Turbine Dimensions
Armadale	In Planning	9 turbines	149.5m to blade tip
Bettyhill	In Planning	10 turbines	149.9m to blade tip
Cairnmore Hill	In Planning	5 turbines	138.5m to blade tip
Forss III	In Planning	2 turbines	140m to blade tip
Golticlay	In Planning	13 turbines	200m to blade tip
Hollandmey	In Planning	10 turbines	149.9m to blade tip
Kirkton	In Planning	11 turbines	149.9m to blade tip
Pentland Offshore	In Planning	9 turbines	300m to blade tip
Tormsdale	In Planning	10 turbines	149.9m to blade tip
Watten	In Planning	7 turbines	220m to blade tip

At the time of writing, there were three wind farms at Scoping Stage within the inner 10km radius of the Proposed Development, as set out in Table 5-10 below. The location of the sites is shown on Figure 5-1-8c.

Table 5-10: Scoping Stage Commercial-Scale Wind Farms within the inner 10km Study Area

Wind Farm	Status	Number of Wind Turbines	Turbine Dimensions
Greenland Wind Energy	Scoping	3 turbines	76m to blade tip
Loch End Extension	Scoping	5 turbines	149.9m to blade tip
Red Moss	Scoping	2 turbines	149.9m to blade tip



The cut-off date for the inclusion of new schemes in the cumulative assessment was the 31st January 2024 ZTV plans showing visibility of the Proposed Development with the planning stage and scoping stage sites are set out in Figures 5-1-9a to 5-1-9d.

## 5.5 Assessment of Effects

This section reports on landscape visual effects and during construction/decommissioning phases and also separately during the operational phase.

#### Assessment of Landscape and Visual Effects at the 5.5.1 Construction Phase

The construction phase of the Proposed Development is expected to last approximately 12 months. During this phase, the following activities and elements have the potential to affect the landscape and visual amenity of the study area:

- Construction of new site access tracks and watercourse crossings;
- Excavations for underground cables and turbine foundations;
- Formation of temporary construction compounds and fencing;
- Machinery and material storage;
- Plant and vehicle movements;
- Short-term use of tall cranes:
- Construction of substation:
- HGV and abnormal load deliveries to site and vehicle movements onsite;
- Construction site lighting in winter months;
- Construction of the turbine foundations and erection of the turbines, access tracks, sub station and the BESS; and
- Reinstatement work, including removal of temporary accommodation.

These relate only to the activity itself. Once the construction activity is complete, the visible infrastructure is considered in the assessment of the operational phase.

All ground disturbance on the Proposed Development Site will be restricted as far as practicable to the construction compounds, access tracks and new watercourse crossings, hardstanding areas, turbine foundations, routes for underground cables, and the substation. The location of these elements is shown in Figure 3-1.

Whilst there may be some substantial local magnitudes of change, physical disturbance will be limited to a relatively small proportion of the overall Proposed Development Site, defined in detail in EIAR Volume 2 Chapter 3 Description of Development, with the excavations for turbine foundations, cable trenches, etc. being reinstated on completion of the works and therefore being temporary in duration.

Restoration of replanted areas, such as re-vegetation of track verges could take several years to establish. Restoration will be pro-active, using proven restoration techniques, to ensure no construction-related erosion features appear along the access tracks.

During re-growth, areas of repaired sward will have a different appearance to surrounding undisturbed areas but, over time, the species balance will change and plants typical of undisturbed areas will become established.



The turbines will be erected over a relatively short period, (approximately 3 months) and the appearance of the construction crane(s) in views of the application site will therefore be of short duration.

Measures that have been or will be taken to mitigate landscape and visual effects during construction include:

- Layout design to minimise land take;
- Layout design to minimise moorland and other vegetation removal;
- Protection of existing landscape features within the Proposed Development boundary;
- Control of after-dark construction lighting to minimise effects on sensitive views;
- Maintenance of tidy and contained construction compounds and laydown area;
- The spreading of overburden and reseeding and planting on areas to be restored as soon as possible after sections of work are complete.

Within 1-2km of the Proposed Development, there will be a range of mainly localised effects arising during the construction phase. These will vary from negligible to minor, through to potentially more substantial magnitudes of change, for example with regard to visibility of tall cranes or construction lighting during winter months.

However, all of these will be temporary effects that will be relatively short-term in duration, and therefore it is not considered that the construction phase of the Proposed Development would not have significant effects.

#### 5.5.2 Assessment of Residual Landscape Effects at the Operational Stage

Identification of residual effects was undertaken following a review of the visibility mapping provided in Figures 5-1-4a to 5-1-7 and a review of the visualisations provided in Figures 5-2-1 to 5-2-18 and Figures 5-3-1 to 5-3-18. This is in addition to field work assessment, and the use of computer-generated visualisations in order to inform the professional judgements made.

## Assessment of Effects on the Landscape Resource

This section comprises the assessment of the residual effects on the landscape resource arising from the Proposed Development during the operational period. The effects are residual because they take into account the layout and design optimisation and mitigation measures embedded in the design.

Landscape character and designated areas can be affected physically by a wind farm development.

This will normally occur where it lies within and causes changes to the fabric of the landscape through the introduction of new features or the removal of existing ones (although off-site physical changes from, for example, widening of access roads at a distance from the site to allow construction traffic, can also less commonly occur).

In general, however, changes to the landscape from wind farm development mainly occur in relation to how the existing character and designated areas are perceived, through people's visual experience of them being affected.



These changes in perception of character, quality or value can affect both the areas and designated landscapes that a wind farm may lie within, as well as those surrounding it, within the study area.

#### Assessment of Effects on Landscape Fabric

The extent of the Proposed Development Site is shown in Figure 1-2. The baseline assessment identified an area of existing rough grassland and moorland, as the context for the Proposed Development.

The turbines have been proposed as a two-turbine development, set upon the western edge of a low ridge to the north of a small block of plantation forestry which has been subject to windthrow. The site area and ridgeline extend to the north west from the shallow ridge at Bowertower and are to the east of the shallow valley of the Burn of Durran. The dispersed property cluster at Bowertower extends to the east of the site and Durran Mains lies to the west.

Within the Proposed Development Site, the turbines, the BESS, and the associated infrastructure will lead to the physical loss of limited areas of rough grassland and moorland through the creation of access tracks, bridges, turbine foundations, crane hardstandings, construction compounds and the erection of the substation and the Battery Energy Storage Site.

The direct works will lead to the loss of a very small proportion of the landscape features within the Proposed Development Site.

The total extent of works will not significantly affect the majority of the existing rough grassland and moorland within the Proposed Development Site. A small area of new structure planting is proposed around the site of the sub station and BESS to soften and filter views to the structures.

Where elements are lost through temporary construction activity such as the formation of construction compounds, these will be subject to restoration and will recover during the operational life span of the Proposed Development. Further reinstatement activity would follow when the wind farm is decommissioned.

There will be a **Moderate** to **Substantial** magnitude of local change to the fabric of the landscape (the rough grassland, moorland vegetation and peatland in the location of the proposed tracks, turbines and other infrastructure) on the Proposed Development Site at the operational stage. The Proposed Development Site is of **Medium to Low** sensitivity to change.

Therefore, there will be a local **Major/Moderate** level of direct effect on the fabric of the landscape, which is considered to be **Significant**. Table 5-14 (LCT 143, Farmed Lowland Plain) provides further information and assessment of the effects on the landscape character of the host landscape, within which the Proposed Development Site is located.

#### Assessment of Effects on Landscape Character and Designations

People's perceptions of the effects of a wind farm on landscape character and designated or other relevant landscape areas are closely related to the potential extent and nature of visibility of the turbines and ancillary infrastructure. An overview of the nature of the visibility of the wind turbines (the components most likely to be visible) within the study area is therefore provided below.



#### General Appraisal of Visibility

The potential visual influence of wind turbines is closely related to a range of parameters, the most important of which is distance. It is considered that within c.5-10km, a blade tip height of 149.9m will be a visible element in the landscape.

Although they may not necessarily be intrusive or prominent, given the established presence of wind farm development within landscape which the turbines are proposed, where visible the turbines have the potential to be an important and/or readily noticeable element in the landscape seen within the context of the existing footprint of development.

Beyond 10km, the relative size of the turbines as a component in the wider landscape will be much reduced, becoming less distinct, and appearing as new elements set in the context of wider views.

Figures 5-1-4a and 5-1-5a indicate the ZTV of the Proposed Development within a 20km radius, based on the visibility to the blade tip and hub height of the turbines respectively.

The turbine layout was carefully sited, in the context of the prevailing hard constraints on the ground, and to set the Proposed Development back from the dispersed pattern of settlement, using the subtleties of the local terrain and the ridgeline to the north of Bowertower to reduce theoretical visibility where possible.

The turbine access tracks and ground level infrastructure will be substantially visually contained within the valley of the Burn of Durran to the west, visible from the local properties and road network. This shallow trough, which contains the tributaries of the Burn of Durran at broadly c.30m AOD, is contained to the east and west by low plateau ridgelines at 64m AOD and c.80m respectively. The proposed sub station and BESS will be located in this naturally low point in the terrain, and it will be sheltered by a small area of structure planting comprising native willows and small trees to soften and filter direct views to the these structures.

The site is set back from the immediate setting of the settlement at Bowertower to the east and Durran Mains to the west. Bowertower extends across the low ridge to the east as a very dispersed settlement between c. 50m AOD and c.80m AOD.

As such, views north west towards the Proposed Development are oblique to the level open terrain, and the turbines will often be visible in direct views from this settled location. The landscape setting is large scale with limited cover and the turbines will appear as prominent new elements in local views set against the expansive open terrain.

The scattered detached properties at Bowertower and the surrounding dispersed settlements at Bower to the north, Durran Mains to the west and Brabsterdorran/Halcro will have an open relationship to the Proposed Development which will be seen in the context of expansive views across the open landscape.

There will be direct views from these locations to the Proposed Development which will be seen over distances beyond c.1km.

Theoretical visibility extends across the farmed lowland plain within the inner 5km of the study area. This is with the exception of areas where visibility falls away to the west of the ridgeline at Stemster and the Hill of Olrig to the north west as rising terrain provides screening to the landscape beyond.



This elevated terrain significantly fragments and reduces visibility to a minimum beyond 5km to the west and north west where the elevated terrain fragments visibility, with theoretical visibility confined to the elevated minor ridges.

This effect combined with the oblique nature of views to the gently rolling terrain, restrict the extent of direct views beyond 5km to the west and north west, curtailing visibility to Thurso in the north west and Halkirk to the west. A more distant swathe of visibility is seen across the locally higher ground Newlands of Geise between 10 – 15km.

Bands of visibility extend across the farmed lowlands between 5-15km with intervening bands of elevated terrain providing local screening. Theoretical visibility extends through to Castletown and Dunnet and Bay and across the southern flank of Dunnet

The following pockets of hilly terrain disrupt visibility to west and south west fragmenting wider visibility across the south western sector of the study area: Spittal Hill to the south west; and Buckies Hill and the Hill of Sour to the west.

Similarly, the elevated forested terrain to the north east focussed on Hollandmey, Hill of Stroupster and the Hill of Slickly screen visibility across Duncansby Head and John O'Groats.

The low-lying landscape around the eastern extent of Loch Watten is also screened from visibility by elevated terrain to the north west. Theoretical visibility is picked up again across the higher less settled forested landscapes to the south west of Wick rising to Tannach Hill, the Hill of Oliclett and Stemster Hill. These features curtail visibility to the south east.

Secondary bands of visibility extend beyond the coastline into Dunnet Bay to the north west, Sinclair's Bay to the south east and across the Pentland Firth in the north east, reaching the cliffs elevated coastal hills across the southern edge of Orkney. there will be distant areas of visibility to the Proposed Development from coastal settlements on South Walls and South Ronaldsay beyond distances greater than 25km.

#### Assessment of Effects upon Landscape Character Types

This section assesses effects upon LCTs within 20km of the Proposed Development, as defined in the NatureScot web-based dataset, the 2019 LCT map and associated descriptions.

The location of the LCTs is presented in Figure 5-1-3. The ZTV of the Proposed Development overlaid with the LCTs is shown in Figure 5-1-7 to a 20km limit, to tip height and hub height.

The visibility indicated within these figures is derived from computer modelling and represents a bare-earth environment, i.e., the modelling does not include built development, vegetation cover, or localised changes in landform, all of which may screen the Proposed Development, either in full or in part.

Beyond 20km, due to the effect of distance, the Proposed Development will be a less visible element in the landscape.

Given the established footprint of wind farm development within Caithness, it is not considered that the resulting changes to perception of landscape character could give rise to significant effects on landscape character beyond 20km. Therefore, no further assessment of LCTs beyond 20km was made.



As set out in the baseline There are five LCTs within 20km of the Proposed Development. Of these the following sub units will experience limited or no visibility to the Proposed Development and have, therefore, not been considered further in this assessment:

- LCT 140: sandy Beaches and Dunes Keiss Links/Ackergill Links Sub Unit;
- LCT 141: High Cliffs and Sheltered Bays Duncansby Head Sub Unit & Spear Head Sub Unit: and
- LCT 144 Coastal Crofts & Small Farms North East Coast of Caithness Gills Bay Sub

This section describes the operational and cumulative effects on landscape character resulting from the Proposed Development, where potentially significant effects may occur, as set out in Tables 5-11 - 5-15.

#### Table 5-11: Operational Effects on Landscape Character Type 134: Sweeping Moorland and Flows

#### Landscape Character Type 134: Sweeping Moorland and Flows

The Sweeping Moorlands and Flows LCT is found in four areas within the inner 20km study area:

- The extensive Flow Country to the south and south western edges of the study area beyond the core settled agricultural landscape of central Caithness; and
- The pocket of elevated moorland terrain to the north west of Wick centred on the Moss of ii) Killimster and the Moss of Kirk; iii) the extensive area of moorland with forestry in the north east of the study area centred on the Hill of Slickly; and, iv) Dunnet Head.

This LCT has been the main focus for large scale wind farm development within the inner study area. The following wind farm development, which is located within the LCT, currently influences the existing baseline landscape character:

- Sub Unit i) The following large wind farm cluster to the south: Achalan; Halsary; Causeymire; Bad a' Cheo.
- Sub Unit i) The following large wind farm cluster to the south east: Achairn; Camster; Flex Hill; Wathegar I & II.
- Sub Unit iii) The large schemes at Stroupster and Lochend.

The following large areas of consented development are also proposed within the LCT, and will influence the LCT if constructed:

- Sub Unit i) additional wind farms within the southern cluster at: Achalan II; and Tacher A,B,C.
- Sub Unit i) additional wind farms within the south eastern cluster at Camster II; and Wathegar II.
- Sub Unit ii) The large wind farm at Cogle Moss.
- Sub Unit iii) additional wind farm at Slickly.

The following planning stage developments are proposed within the LCT, and will strongly influence the LCT if consented:

- Sub Unit i) The large schemes at Tormsdale and Watten.
- Sub Unit iii) The large scheme at Hollandmey.

In addition, the following scoping stage developments are being considered as suitable sites within the LCT, and will strongly influence the LCT if consented:

Sub Unit iii) Lochend Extension, and the three turbine scheme to the south east at Greenland.

#### **Determination of Landscape Sensitivity**

The sensitivity is considered to be Medium. The factors which have contributed to this judgement are as follows:

#### Value - Medium

This flat, gently undulating and generally smooth, landscape forms the important setting to many valued and designated landscapes, is not in itself is not valued through designation within the core 15km study area. However, beyond 15km to the south east of the study area extensive parts of this remote landscape are defined as Wild Land Areas including the East Halladale



#### Landscape Character Type 134: Sweeping Moorland and Flows

Flows WLA, the Causeymire and Knockfin Flows WLA, and the area also includes the Flow Country and Berriedale Coast Special Landscape Area. These designations focussed on the Flow Country to the south west reflect the area's remoteness and relative absence of manmade features. The restricted palette of landscape components and subtlety of landform enhance the sense of remoteness.

Susceptibility to Change – Medium

- Large-scale landscape, with simple land cover, expansive views, with few reference points or features against which to judge scale and perspective;
- Low moorland vegetation;
- Perceptual qualities: sense of remoteness due to the lack road access and settlement, contrasting with the presence and influence of existing wind turbines and other noticeable manmade features within the LCT.

#### Magnitude of Change

The magnitude of change to the Sweeping Moorland and Flows LCT caused by the introduction of the Proposed Development is considered to be **Moderate** within c. 5 -km of the Proposed Development, within Zone iii) where the turbines will be visible in direct views over a relatively short distances beyond the LCT, seen as prominent new elements within the large scale extensively modified farmed lowlands. Distance, angle of view and the presence of existing manmade features in the landscape and the oblique nature of views against the gentle terrain will reduce the magnitude of change to **Slight** between a c.5-15km radius. Within Zone iv) effects are moderated by distance and presence of other wind farm development however, there will be a locally **Moderate** magnitude of change from the open moorland at Dunnet Head. Within Zone i) effects are reduced by distance and where visible the Proposed Development is seen as a distant element beyond the extensive cluster of established wind farms which are seen in the foreground, within the LCT, with a no greater than a **Negligible** magnitude of change.

The factors which have contributed to this judgement are as follows:

#### Size or Scale

Within the open moorland landscape, the Proposed Development, where visible, will be seen as a large-scale man-made feature in the landscape, with the turbines, contrasting with the existing colour, texture of the existing moorland. The lower lying infrastructure elements of the wind farm will be often contained from view by local terrain. The prominence of the turbines will vary with light conditions, often receding against pale skies or haze but more prominent on clear sunny days where the pale grey structures will be seen within the settled agricultural landscape beyond the LCT. The Proposed Development will be seen within the gently undulating terrain of the host landscape and will be viewed as a prominent addition to the landscape.

Beyond c. 5km the Proposed Development will be seen as a large-scale new element, within the context of expansive views across the sweeping moorland, closely associated with the large scale extensively modified, settled agricultural landscape. From the south and from the south east of the study Area in Zone i) the Proposed Development will be seen as minor element beyond the existing dominant foreground presence of existing wind farms within the LCT which reduce the contrasting presence of new development in the landscape.

Viewpoint 14, Figures 5-3-14a-e at 16.79km from the Proposed Development taken from the Ben Dorrery, is representative of the typical nature of distant views from elevated vantage points within the Sweeping Moorland and Flows LCT.

#### **Geographical Extent**

The ZTV indicates that there will be extensive but distant influence within the sub units of the LCT where there will be potential for visibility of the proposed turbines across parts of the sweeping moorland. Visibility will reduce with distance and where the topography will assist in screening of views.

Limited effects on the perceived qualities and characteristics of the LCT, will occur as a result of the Proposed Development. The extended undulating moorland is already influenced by existing wind farm development and the Proposed Development will not have an important influence on this component of the prevailing landscape character. The Proposed Development will not alter the openness and expansiveness of the undulating moorland or substantially affect the majority of views from the interior out to the surrounding landscape and moorland, or the visual relationships to the



#### Landscape Character Type 134: Sweeping Moorland and Flows

distant Lone Mountains LCT. However, some very local views between the sub units of the LCT and to the distant Lone Mountains LCT will be interrupted by the large new vertical structures.

#### **Potential for Future Cumulative Effects**

The built and consented cumulative schemes would be visible over varying distances in combined views with the Proposed Development, slightly increasing the influence of wind turbines across the

The addition of the Proposed Development to the consented baseline will result in locally Slight and Not Significant cumulative combined effects within Zone iii).

The addition of the Proposed Development will result in locally Slight and Not Significant cumulative combined effects within Zone iv) when seen in combination with the scoping stage sites at Red Moss and Greenland.

The total cumulative effect of built, consented and planning stage schemes would result in Moderate and Not Significant cumulative effects within the Zones i-iii) of this LCT due to the established footprint of development alongside the planning stage sites at Hollandmey, Tormsdale and Watten and the scoping stage site at Lochend.

#### Significance of Effect

The combination of the individual judgements of Medium sensitivity and a locally Moderate magnitude of change within c. 5km of the Proposed Development in Zone iii), are considered to result in a Moderate local effect on the perception of the landscape, which in the context of this assessment is considered to be **Not Significant**.

Effects on Sub Units i - iii) of the LCT within 5-10km will give rise to a Slight magnitude of change, with Moderate/Minor and Not Significant effects on the perception the landscape.

There will be Moderate and Not Significant effects at the south facing elevated flank edge of Dunnet Head within Zone iv).

Beyond 15km the influence on the perception of landscape character will reduce to no greater than a Negligible magnitude of change, resulting in Minor effects on the perception of the landscape, which in the context of this assessment is considered to be Not Significant.



## Table 5-12: Operational Effects on Landscape Character Type 140: Sandy Beaches and Dunes

#### Landscape Character Type 140: Sandy Beaches and Dunes

#### Location

The Sandy Beaches and Dunes landscape character type falls into areas of theoretical visibility twice in the core 20km study area: Sub Unit i): along the southern edge of Dunnet Bay to the north east of Castletown just beyond 5km; and Sub Unit ii) at Keiss Links beyond 13km to the east. The following wind farm development, which is located beyond the LCT, currently influences the existing baseline landscape character:

- Sub Unit i): Limited distant visibility to Lochend Wind Farm;
- Sub Unit ii): Visibility to Stroupster over 5.5km to the north.

The following consented development, which is proposed beyond the LCT, and will influence the LCT if constructed:

• Sub Unit i) Slickly.

The following planning stage developments are proposed beyond the LCT, and will influence the LCT if consented:

• Sub Units i) and ii) The large scheme at Hollandmey.

In addition, the following scoping stage developments are being considered as suitable sites beyond the LCT, and will influence the LCT if consented:

• Sub Units i) and ii) Lochend Extension, Greenland and Red Moss.

#### **Determination of Landscape Sensitivity**

The sensitivity is considered to be **Medium/High**. The factors which have contributed to this judgement are as follows:

Value - Medium

- The coastline to the north with sub unit i) is within the Dunnet Head Special Landscape Area.
- The beaches and dunes are a valued local recreational resource.

Susceptibility to Change – Medium/High

- The landscape character is complex and diverse with coastal and coastal influences contributing to an intense experience;
- Views are focussed on the foreground elements but the setting is exposed to long views beyond the LCT; and
- Perceptual qualities: sense of remoteness due to the lack of man-made influence, contrasting
  with the presence and influence of existing wind turbines and coastal settlement beyond the
  LCT.

#### Magnitude of Change

The magnitude of change to the Sandy Beaches and Dunes LCT caused by the introduction of the Proposed Development is considered to be **Slight** from the transitional landscape at the rear of the beach at Dunnet Bay and **Negligible** from the rear of Keiss Links. The factors which have contributed to this judgement are as follows:

#### Size or Scale

The Proposed Development, where visible, will be seen as a new man-made feature in the settled agricultural landscape, inland and away from the dynamic coastal views. The turbines will be seen above the flat agricultural landscape of the interior, 5km from Dunnet Bay and 12.8km from Keiss Links. The prominence of the turbines will vary with light conditions, often receding against pale skies or haze but more prominent on clear sunny days. Where visible, these will be seen as a local increase in man-made features in the landscape with the effect reduced by the presence of existing development. The lower lying infrastructure elements of the wind farm will be contained from view by local terrain.

Viewpoint 16, Figures 5-2-16a-e at c.5km from the Proposed Development taken on the B836 to the east of Castletown, is representative of the typical nature of oblique views across the undulating landscape.

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#### Landscape Character Type 140: Sandy Beaches and Dunes

#### **Geographical Extent**

The ZTV indicates that the core influence within the LCT is away from the focus of local views which are across Dunnet Bay to the north west within Sub unit i) and to the east across Sinclair's Bay within Sub unit ii).

Effects on the perceived qualities and characteristics of the LCT, will occur as a result of the Proposed Development. The existing wind farms at Stroupster, already has an influence on the character of the LCT in Sub Unit II. The Proposed Development will not alter or substantially affect the majority of views to the surrounding landscape, or the visual relationships to the headlands enclosing views across Dunnet Bay and Sinclair's Bay.

#### **Potential for Future Cumulative Effects**

The built and consented cumulative schemes would be visible over varying distances in successive views with the Proposed Development, increasing the influence of wind turbines across the landscape inland from the LCT.

The addition of the Proposed Development will result in locally Slight magnitude of change with Moderate/Minor and Not Significant cumulative effects. These effects will not influence the key characteristics of the LCT.

The *total* cumulative effect of built, consented and planning stage schemes would result in Moderate/Minor and Not Significant cumulative effects from this LCT due to the planning stage Hollandmey site in both sub units of the LCT.

The *total* cumulative effect of built, consented and planning stage schemes would result in Moderate and Not Significant cumulative effects from this LCT when seen in combined and successive views with the Red Moss and Greenland in Sub Unit i) of the LCT.

#### Significance of Effect

The combination of the individual judgements of **Medium - High** sensitivity and a locally **Slight** magnitude of change to the south of Sub Unit i): Dunnet Bay is considered to result in a no greater than **Moderate** local effect on the perception of the landscape, which in the context of this assessment is considered to be **Not Significant**. Effects on Sub Unit ii): Keiss Links are no greater than a **Negligible** magnitude of change with a **Moderate/Minor** and **Not Significant** effects on landscape character.

# Table 5-13: Operational Effects on Landscape Character Type 141 - High Cliffs and Sheltered Bays

#### Landscape Character Type 141 - High Cliffs and Sheltered Bays

#### Location

The High Cliffs and Sheltered Bays character type falls into areas of theoretical visibility twice in the core 20km study area: Sub Unit i): Dunnet Head 9km at the closest point to the north; and Sub Unit ii) at Holburn Head 13.5km to the north west. The elevated vantage points of the LCT sub units reveal visibility to the following wind farm development, which is located beyond the LCT, and which currently influences the existing baseline landscape character:

- Sub Unit i) and ii): Lochend and Stroupster over 8.5km and 14.5km respectively.
- Sub Unit i) and ii): Long distance visibility to the large southern clusters of development at Achalan; Halsary; Causeymire; Bad a' Cheo; Achairn; Camster; Flex Hill; Wathegar I & II.

The following consented development, which is proposed beyond the LCT, and will influence the LCT if constructed:

- Sub Unit i) and ii): Slickly; Cogle Moss to the north east of the study area.
- Sub Unit i) and ii) additional wind farms within the south of the study area at: Achalan II; and Tacher A,B,C; Camster II; and Wathegar II.

The following planning stage developments are proposed beyond the LCT, and will influence the LCT if consented:

- Sub Units i) and ii) The large scheme at Hollandmey to the north east of the study area.
- Sub Unit i) and ii) The large scheme at Tormsdale to the south of the study area.

In addition, the following scoping stage developments are being considered as suitable sites



#### Landscape Character Type 141 - High Cliffs and Sheltered Bays

beyond the LCT, and will influence the LCT if consented:

• Sub Units i) and ii) Lochend Extension, Greenland and Red Moss.

#### **Determination of Landscape Sensitivity**

The sensitivity is considered to be **Medium/High**. The factors which have contributed to this judgement are as follows:

Value – Medium/High

- The coastline to the north with sub uniti) is within the Dunnet Head Special Landscape Area.
- The beaches and dunes are a valued local recreational resource.

Susceptibility to Change - Medium/High

- The landscape character is complex and diverse with coastal influences contributing to an intense experience;
- Views are focussed on the foreground elements but the setting is exposed to long views beyond the LCT; and
- Perceptual qualities: sense of remoteness due to the lack of man-made influence, contrasting
  with the presence and influence of coastal settlement and existing wind turbines beyond the
  LCT.

#### Magnitude of Change

The magnitude of change to the High Cliffs and Sheltered Bays LCT caused by the introduction of the Proposed Development is considered to be **Slight** from the elevated southern flanks of Dunnet Head in Sub Unit i) and **Negligible** from Holburn Head Sub Unit ii). The factors which have contributed to this judgement are as follows:

#### Size or Scale

The Proposed Development, where visible, will be seen from Sub Unit i) as a distant new man-made feature in the settled agricultural landscape beyond the LCT, inland to south, away from the dramatic coastal scenery in the foreground. The Proposed Development will be seen as a noticeable minor addition to the landscape, seen in the context of the settled agricultural landscape of the interior, 9km from Dunnet Head and 13.5km from Holburn Head. The prominence of the turbines will vary with light conditions, often receding against pale skies or haze but more prominent on clear sunny days. Where visible, these will be seen as a local increase in man-made features in the landscape with the effect reduced by the presence of existing development. The lower lying infrastructure elements of the wind farm will be contained from view by local terrain. The influence on the Sub Unit of the LCT at Holburn Head is limited to the distant presence of turbine blades above the intervening undulating terrain, locally increasing the presence of man-made

Viewpoint 12, Figures 5-2-12a-e at c13.5km from the Proposed Development at Dunnet Head, is representative of the typical nature of distant views from the elevated LCT.

structures within the settled agricultural landscape beyond the LCT.

#### **Geographical Extent**

The ZTV indicates that the core influence within the LCT is away from the focus of local views which are across Dunnet Bay/Pentland Firth to the north west within Sub unit i) and to the north across Pentland Firth within Sub unit ii).

The Proposed Development will not alter or substantially affect the majority of views to the surrounding landscape, or the visual relationships between the headlands in views across Dunnet Bay and the Pentland Firth.

#### **Potential for Future Cumulative Effects**

The built and consented cumulative schemes would be visible over varying distances in successive views with the Proposed Development, increasing the influence of wind turbines across the landscape inland from the LCT.

The addition of the Proposed Development will result in locally Slight and Not Significant cumulative effects. These effects will not influence the key characteristics of the LCT.

The total cumulative effect of built, consented and planning stage schemes would result in



#### Landscape Character Type 141 - High Cliffs and Sheltered Bays

Moderate/Minor and Not Significant cumulative effects from this LCT due to the planning stage Hollandmey site in both sub units of the LCT.

The total cumulative effect of built, consented and planning stage schemes would result in Moderate and Not Significant cumulative effects from this LCT when seen in combined and successive views with the Lochend Extension, Red Moss and Greenland scoping stage sites in both sub units of the LCT.

#### Significance of Effect

The combination of the individual judgements of Medium - High sensitivity and a locally Slight magnitude of change to the south of Sub Unit i): Dunnet Bay is considered to result in a no greater than Moderate local effect on the perception of the landscape, which in the context of this assessment is considered to be Not Significant. Effects on Sub Unit ii): Holburn Head are no greater than a Negligible magnitude of change with a Moderate/Minor and Not Significant effect on landscape character.

#### Table 5-14: Operational Effects on Landscape Character Type 143 - Farmed Lowland Plain (the host landscape of the Proposed Development)

#### Landscape Character Type 143 - Farmed Lowland Plain

#### Location

The Farmed Lowland Plain LCT encompasses the generally open, low-lying agricultural plain within the north east of Caithness. The landscape is gently undulating to form shallow broad valleys, which are often filled with lochs and mosses, and subtle low ridges. The Proposed Development, including the turbine area, is located within the LCT.

The LCT has been the focus for an emerging pattern of wind farm development. The following wind farm development, which is located within the LCT, currently influences the existing baseline landscape character:

The following single or paired large turbines: Taig na Muir; and Weydale Farm.

The following wind farm development, which is located beyond the LCT, currently influences the existing baseline landscape character:

- Long distance partial visibility to the large southern clusters of development at Achalan; Halsary; Causeymire; Bad a' Cheo; Achairn; Camster; Flex Hill; Wathegar I & II.
- The large schemes at Stroupster and Lochend to the east.

The following consented development, which is proposed beyond the LCT, and will influence the LCT if constructed:

- Slickly; and Cogle Moss to the east of the study area.
- Additional wind farms within the south of the study area at: Achalan II; and Tacher A,B,C; Camster II; and Wathegar II.

The following planning stage developments are proposed beyond the LCT, and will influence the LCT if consented:

- The large scheme at Hollandmey to the north east of the study area.
- The large schemes at Tormsdale and Watten to the south of the study area.

In addition, the following scoping stage developments are being considered as suitable sites within the LCT, and will influence the LCT if consented:

Lochend Extension, Greenland and Red Moss.

#### **Determination of Landscape Sensitivity**

The sensitivity is considered to be Medium/Low. The factors which have contributed to this judgement are as follows:

Value - Low

The landscape is not valued through designation.

Susceptibility to Change – Medium/Low

- The agricultural landscapes are relatively open with occasional coniferous shelterbelts;
- Visibility is fragmented by the gently rolling terrain with a contrast between relatively sheltered



#### Landscape Character Type 143 - Farmed Lowland Plain

local views and long views beyond the LCT from higher ground; and

Perceptual qualities: presence and influence of intensive agriculture, settlement and existing wind turbines, masts and pylons within and beyond the LCT.

#### Magnitude of Change

The magnitude of change to the Farmed Lowland Plain LCT caused by the introduction of the Proposed Development is considered to be **Substantial** within the immediate vicinity of the Proposed Development, up to c.1.5 - 2km where terrain and vegetation cover are limited and allow direct views. Effects reduce to Moderate within c.2 -5km of the Proposed Development where the simple large-scale pattern of agricultural fields moderate the magnitude of change. Distance, angle of view and the presence of further wind farm development, settlement and other infrastructure in the wider landscape will reduce the magnitude of change to Slight within a c.5-15km radius, and to **Negligible** at distances over 15km beyond the Proposed Development.

The factors which have contributed to this judgement are as follows:

#### Size or Scale

The Proposed Development will be seen as a large-scale man-made feature in the expansive intensively farmed arable landscape, with the turbines and, to a lesser degree, the associated tracks and other infrastructure, contrasting with the existing colour, texture of the landscape. The lower lying infrastructure elements of the wind farm and the associated sub station and BESS will mostly be contained from view by local terrain. The prominence of the turbines will vary with light conditions, often receding against pale skies or haze but more prominent on clear sunny days where the pale grey structures will be seen against the local horizon. Within 5km the Proposed Development will be seen as a prominent addition to the landscape, seen in the context of the dispersed settlement pattern across the intensively farmed landscape in wider views.

Beyond c. 5km the Proposed Development will be seen as a large-scale new element, in partial oblique views across the terrain, positioned upon the local plateau at Bowertower within local views across the agricultural lowlands. It will be clearly seen within the context of the existing masts and other wind turbines which will reduce the contrasting presence of new development in the landscape.

Viewpoints 1-7, Figures 5-2-1a-e - 5-2-7a-e, illustrate the typical nature of views within a 5km radius of the Proposed Development within the LCT. Viewpoints 8-11, Figures 5-2-8a-e - 5-2-11a-e illustrate the reduction in direct views within 5-10km of the Proposed Development.

#### Geographical Extent

The ZTV indicates that the influence within the LCT will be relatively open direct, with visibility from the open rural landscapes where the Proposed Development will be seen within the context of existing views to the nearby turbine clusters. Visibility is fragmented by terrain to the west and north west and south west, whilst the lower lying landscape encompassing the eastern sector of Loch Watten is also in visual shadow.

Effects on the perceived qualities and characteristics of the LCT, will occur as a result of the Proposed Development. The open plateau farmland landscape will flow through and experience a relatively open relationship with the Proposed Development within the immediate site area. Existing wind farm development already have an influence on the character of the LCT and the Proposed Development will reinforce this as a component of the prevailing landscape character. However, some views immediately adjacent to the Proposed Development will be interrupted by the large new vertical structures and the turbines will become a locally dominant presence. The Proposed Development will increase locally the influence and prominence of wind energy development within the LCT. The Proposed Development will not substantially affect the visual relationships within the wider farmed lowlands.

#### **Potential for Future Cumulative Effects**

The built and consented cumulative schemes would be visible over varying distances in successive views with the Proposed Development, increasing the influence of wind turbines across the landscape of the LCT.

The addition of the Proposed Development will result in locally Moderate and Not Significant cumulative effects. These effects will not influence the key characteristics of the LCT.

The total cumulative effect of built, consented and planning stage schemes would result in



#### Landscape Character Type 143 - Farmed Lowland Plain

Moderate/Minor and Not Significant cumulative effects from this LCT due to the planning stage site at Hollandmey.

The total cumulative effect of built, consented and planning stage schemes would result in Moderate and Not Significant cumulative effects from this LCT when seen in combined and successive views with the Lochend Extension, Red Moss and Greenland scoping stage sites.

#### Significance of Effect

The combination of the individual judgements of **Medium-Low** sensitivity and a locally **Substantial** magnitude of change within the immediate vicinity of the site are considered to result in a local **Major/Moderate** and **Significant** effect. Within c.2-5km of the Proposed Development effects reduce to a **Moderate** magnitude of change, with a **Moderate** effect on the perception of the landscape, which in the context of this assessment is considered to be **Not Significant**. No further significant effects are predicted across the wider LCT.

## Table 5-15: Operational Effects on Landscape Character Type 144 - Coastal Crofts & Small Farms

#### Landscape Character Type 144 - Coastal Crofts & Small Farms

#### Location

The Coastal Crofts and Small Farms LCT includes four discrete areas along the northern and eastern coastline of Caithness within the core 20km study area: Sub Unit i) Brough on the north coast; Sub Unit ii) Warse and Seater on the north east coast which experiences very limited areas of visibility to the Proposed Development; Sub Unit iii) Keiss/Nybyster/Freswick; and Sub Unit iv) Thrumster to the south east of the study area.

The following wind farm developments, located beyond the subunits of the LCT, currently have a minor influence on parts of the existing baseline landscape character:

- The following single or paired large turbines: Taig na Muir; and Weydale Farm.
- Long distance partial visibility to the large southern clusters of development at Achalan; Halsary; Causeymire; Bad a' Cheo; Achairn; Camster; Flex Hill; Wathegar I & II.
- The large schemes at Stroupster and Lochend to the east.

The following consented development, which is proposed beyond the LCT, and will influence the LCT if constructed:

- Slickly; and Cogle Moss to the east of the study area.
- Additional wind farms within the south of the study area at: Achalan II; and Tacher A,B,C; Camster II; and Wathegar II.

The following planning stage developments are proposed beyond the LCT, and will influence the sub units of the LCT if consented:

- The large scheme at Hollandmey to the north east of the study area will have a close relationship to the Warse and Seater sub unit.
- The large scheme at Tormsdale and Watten to the south of the study area.

In addition, the following scoping stage developments are being considered as suitable sites beyond the LCT, and will influence Sub Unit i) of the LCT if consented:

Lochend Extension, Greenland, and Red Moss.

#### **Determination of Landscape Sensitivity**

The sensitivity is considered to be **Medium**. The factors which have contributed to this judgement are as follows:

Value - Medium

- The southern extent of Sub Unit i) falls within the Dunnet Head Special Landscape Area.
- The eastern extent of Sub Unit ii) falls within the Duncansby Head Special Landscape Area.
- The coastal LCT is of interest for recreational visitors.

Susceptibility to Change – Medium/Low

The agricultural landscapes have a close relationship with the coastline and orientated away
from views inland towards the agricultural lowlands, with limited contribution to landscape
character from the adjacent inland landscapes;



#### Landscape Character Type 144 - Coastal Crofts & Small Farms

- Visibility is fragmented by the gently rolling terrain; and
- Perceptual qualities: presence and influence of intensive agriculture, settlement, transport infrastructure, and existing wind turbines, masts and pylons beyond the LCT.

#### **Magnitude of Change**

The magnitude of change to the Coastal Crofts and Small Farms LCT caused by the introduction of the Proposed Development is considered to be **Slight** within a c.10km radius within Sub Unit i), reducing to **Negligible** at distances over 10km beyond the Proposed Development within Sub Units ii) – iii).

The factors which have contributed to this judgement are as follows:

#### Size or Scale

Where visible, the Proposed Development would be seen inland away from the coastal landscapes. The Proposed Development will be a locally noticeable addition to the landscape, seen in the context of the intensively farmed inland agricultural landscapes.

Beyond c. 10km the Proposed Development will be seen as a new element, in partial oblique views across the terrain, within expansive views across the agricultural lowlands. It will be seen as a minor element within the context of the existing masts and other wind turbines which will reduce the contrasting presence of new development in the landscape.

#### Geographical Extent

The ZTV indicates that the Proposed Development will influence very limited areas of elevated landscape within the LCT which face inland. The existing wind farm development already have a minor influence on the character of the LCT. The Proposed Development will not alter the character of these settled coastal landscapes.

#### **Potential for Future Cumulative Effects**

The built and consented cumulative schemes would be visible over varying distances in successive views with the Proposed Development, increasing the influence of wind turbines across the landscape of the LCT sub units.

The addition of the Proposed Development will increase the influence of wind farm development within Sub Unit i) of the LCT, with locally Moderate/Minor, Not Significant cumulative effects. These effects will not influence the key characteristics of the LCT.

The *total* cumulative effect of built, consented and planning stage schemes would result in Moderate and Not Significant cumulative effects within Sub Unit ii) LCT due to the planning stage site at Hollandmey.

The *total* cumulative effect of built, consented and planning stage schemes would result in Moderate and Not Significant cumulative effects from Sub Unit i) of the LCT when seen in combined and successive views with the Lochend Extension, Red Moss and Greenland scoping stage sites.

#### Significance of Effect

The combination of the individual judgements of **Medium** sensitivity and a locally **Slight** magnitude of change within Sub Unit i) are considered to result in a local **Moderate/Minor** and **Not Significant** effect. Beyond 10km of the Proposed Development effects reduce to a no greater than **Negligible** magnitude of change, with a **Minor** effect on the perception of the landscape, which in the context of this assessment is considered to be **Not Significant**.

#### Summary of Effects on Landscape Character Types

Table 5-16 lists and summarises effects on the Landscape Character Types assessed above. It sets out their sensitivity to change, the magnitude of change that would arise as a result of the Proposed Development, and the level of resultant effects and their significance.

Table 5-16: Summary of Effects on Landscape Character Types

Landscape Character Type	Sensitivity		Level of Effect	Significance
134 - Sweeping	Medium	Moderate within c. 5km of Sub Unit	Moderate	Not Significant



Landscape Character Type	Sensitivity	Magnitude of Change	Level of Effect	Significance
Moorland and Flows		iii), and within Sub Unit iv). Slight within 5 – 10km Negligible beyond 15km	Moderate/ Minor	
140 - Sandy Beaches and Dunes	Medium - High	Locally Slight within Sub Unit i) No greater than Negligible within Sub Unit ii)	Moderate Moderate/ Minor	Not Significant
141 - High Cliffs and Sheltered Bays	Medium - High	Locally Slight within Sub Unit i) No greater than Negligible within Sub Unit ii)	Moderate Moderate/ Minor	Not Significant
143 - Farmed Lowland Plain	Medium - Low	Locally Substantial within 2km of the Proposed Development Moderate between 2 - 5km radius, reducing to slight between c.5-15km radius and Negligible beyond 15km.	Locally Major/ Moderate within 2km No greater than Moderate elsewhere	<b>Significant</b> Not Significant
144 - Coastal Crofts & Small Farms	Medium	Locally Slight within Sub Unit i) Elsewhere no greater than Negligible	Locally Moderate/ Minor No greater than Minor elsewhere	Not Significant

### Assessment of Effects on Designated Landscapes

This section considers the implication of the Proposed Development on designated landscapes within the study area. The designated landscapes listed below have been considered in more detail, following the preliminary analysis of visibility of the Proposed Development:

- Dunnet Head SLA; and
- Castle of Mey Inventory Garden and Designed Landscape.

The analysis cross references to the assessment of landscape character, the assessment of visual effects and the cumulative assessment, and has given regard to the special qualities and features for which each receptor was designated. Designated landscapes are shown on Figure 5-1-2a and are shown overlaid with the Blade Tip and Hub Height ZTV to 20km in Figure 5-1-6.

## Special Landscape Areas

Designation statements for Special Landscape Areas (SLAs) are set out in THC Report, 'Assessment of Highland Special Landscape' (THC, 2011).

#### **Dunnet Head SLA**

Dunnet Head SLA lies to the north of the Proposed Development. The SLA:

"includes the most northerly point on mainland Britain. The peninsula is characterised by its prominent headland, striking vertical cliffs and expanse of isolated moorland. Dunnet Head juts out into the Pentland Firth, so that experience at its northern tip is one of being more at sea than on land.



To the south, settled farmland and a fine sandy beach and dune system provide a contrasting landscape experience."

Figure 5-1-6 illustrate the extent of theoretical visibility of the Proposed Development at blade tip and hub height, indicating direct visibility from the south facing elevated flanks of the SLA.

Visibility is reduced to the south of the SLA from the beach at Dunnet Bay by the undulating dunes to the south from which there will be partial visibility to the Proposed Development within oblique views to the south. Viewpoint 16, from the B836 east of Castletown, Figures 5-2-16a-e, and Viewpoint 12, Dunnet Head Figures 5-2-12a-e, are illustrative of views which may be experienced from the SLA.

The SLA is covered by parts of the landscape character types: 134 - Sweeping Moorland and Flows; 140 - Sandy Beaches and Dunes; 141 - High Cliffs and Sheltered Bays; and 144 - Coastal Crofts & Small Farms which experience a range of direct views to the Proposed Development over distances between 5-15km.

The assessment of effects on LCTs found a no greater than Moderate and Not Significant effects on the sub units of these LCTs. This is due to the Proposed Development being set back from the coastline and inland within the extensively modified agricultural landscape of Farmed Lowland Plain LCT.

The Proposed Development will introduce further local change to the character of the SLA, extending the footprint of wind farm development to the south.

The large scale, open character of the coastal landscapes can accommodate the level development proposed. The open character of panoramic views will be retained. The following juxtaposition is listed as one of the special qualities of the SLA, as set out in Technical Appendix 5-3:

"Elevated views from the peninsula reveal a pattern of pasture and arable fields to the south; these form a distinctive transition between the exposed headland and the settled agricultural lowlands to the south."

The Proposed Development will be seen within the backdrop of the coastal views to the south, with a limited influence on the perception of scale. This is not judged to affect the key characteristics and integrity of the Dunnet Head SLA.

The key characteristics of the SLA will not be altered by the Proposed Development due to the long separation distance. The overall baseline condition of the SLA will be maintained.

#### Inventory Gardens and Designed Landscapes

As indicated on Figure 5-1-2a there is only one IGDL within the 40km study area, The Castle of Mey.

The Castle of Mey lies beyond c.13km from the Proposed Development. The Castle and grounds are situated to the north of a low ridgeline with the principal orientation of the castle to the north across Wester Haven and the Pentland Firth beyond.

The core of the designated designed landscape is screened from the Proposed Development by the gently rising ground of the ridge to the south, the high boundary stone walls and the mature policy woodland to the east and south comprising a shelter belt of sycamore trees.



The Castle is orientated on a north to south axis, aligned with a break in policy woodland to the south. This reveals views to the south towards the village of Mey and to the extensive forestry plantations of Hollandmey Moss.

The turbines at Lochend will be visible as noticeable elements in the wider landscape to the south. The Proposed Development lies at c.216 degrees to the south west and will not be directly visible through the break in the policy woodland. However, the Proposed Development will be visible as minor new element from the outer edges of the woodland policies associated with the Castle, seen within expansive views across the settled agricultural plain.

As indicated in the baseline description of the Castle of Mey the IGDL is of **High** sensitivity to change. The effect of the Proposed Development on the limited partial views, from the outer edge of the designated landscape, will give rise to a no greater than a **Negligible** magnitude of change with a **Minor** and **Not Significant** effect on the designation.

# 5.5.3 Assessment of Residual Effects on the Visual Resource at the Operational Stage

The following sections provide an assessment of the residual visual effects that would be likely to arise from the Proposed Development during the operational period. The effects are residual because they take into account the layout and design optimisation and mitigation measures embedded in the site design (See EIAR Volume 2 Chapter 3: Description of Development).

The following assessment addresses effects on the visual amenity of people, through assessing:

- Effects on settlements;
- Effects on key transport routes; and
- Effects on viewpoints.

#### Assessment of Effects on Settlements

The following section provides an assessment of the predicted effects on the visual amenity that would be experienced by residents of principal settlements within the study area. The assessment was undertaken through field survey and the analysis of ZTV mapping and wireframe views, in order to confirm the likely nature of visibility.

In accordance with the criteria outlined in the detailed methodology in Technical Appendix 5-1 residential receptors within settlements in the study area have a high susceptibility to change as views are experienced regularly for prolonged periods and are generally considered to have a high sensitivity overall to the Proposed Development.

An indication of the predicted extents of visibility (both blade tip and hub height) across the settlements is provided within the visibility mapping in Figures 5-1-4a and 5-1-5a.

All ZTV drawings are based on bare-ground conditions, in accordance with current good practice as indicated in GLVIA 3. For those settlements where the ZTV indicates theoretical visibility, buildings and, to a small degree, vegetation are likely to provide a degree of containment between receptors and the Proposed Development.



Buildings, localised topography and vegetation do not register on the ZTV and, therefore, views to the Proposed Development will tend to be more restricted and more intermittent than the ZTV indicates.

The following clusters of rural housing and settlements in the study area with potential views of the Proposed Development, as identified in Table 5-5, are assessed below:

- Bowertower;
- Durran;
- Halcro/Brabsterdorran
- Bower, including core path CA02.01
- Bowermadden
- Gillock
- Castletown including core Paths CA03.01-06;
- Clayock;
- Bridge of Dunn;
- Lyth;
- Barrock including Core Path CA05.15; and
- Dunnet including Core Paths CA05.01-07.

Given the open character of the settled agricultural landscape of the core 5km study area and the very dispersed pattern of settlement, effects on the principal clusters of rural housing and defined settlements are aggregated in the following table. The relationships to the cumulative baseline are similar. The subtle differences in effect on each settlement are drawn out in the table below.

Table 5-17: Operational Effects on clusters of rural housing and settlements within the core 5km study area

## Operational Effects on clusters of rural housing and settlements within the core 5km study area Location

The following dispersed open settlements are located within the core study area:

**Bowertower** spans the shallow ridgeline to the east of the site. is arranged to the north and south of the valley. There will be local areas of direct visibility from the dispersed settlement over distances between 850m and 2.5km.

**Durran** extends to cover the dispersed rural settlement between Durran Mains to the south and Borgie Mains to the north, connected by the local network of angular minor roads. The settlement extends across sloping ground to the east of the Hill of Olrig above the course of the Burn of Durran. Views are typically orientated to the east towards the Proposed Development. There will be local areas of direct visibility from the dispersed settlement over distances between 1.3km and 2.3km.

**Halcro/Brabsterdoran** extends to the east and west of the road junction beside the Bower War Memorial. The settlement is in lee of the low plateau ridgeline to the north, set back 2.5km from the Proposed Development. The core of the settlement clustered around the War Memorial is sheltered from direct views to the north by a block of plantation forestry. There will be local areas of direct visibility to the east and west of the forestry plantation beyond 2.5km.

**Bower and Bowermadden**. The settlement extends across the gently rising terrain from the slightly more clustered settlement at Bower beside the B876 at c.30m AOD to the low ridge to the north c.50m AOD and the loose pattern of dispersed rural properties at Bowermadden. There will be local areas of direct visibility from the dispersed settlement over distances between 2km and 3.2km.

**Gillock** extends along the A834 road corridor within the shallow valley between Loch Scarmclate and Loch Watten. There are oblique views from the settlement across gently rising ground to the north towards the Proposed Development over distances beyond 2.5km.

Castletown including core Paths CA03.01-06 The settlement is located to the west of Dunnet Bay.



#### Operational Effects on clusters of rural housing and settlements within the core 5km study area

Visibility from the compact town is substantially screened by the existing built form, the well-defined mature trees bounding the edges of the settlement and terrain. There will be more open views towards the Proposed Development at Millhill Bridge/Waitside over distances beyond 4km.

The following wind farm development currently influences the existing baseline:

- The following single or paired large turbines: Taig na Muir; and Weydale Farm.
- Long distance partial visibility to the large southern clusters of development at Achalan; Halsary; Causeymire; Bad a' Cheo; Achairn; Camster; Flex Hill; Wathegar I & II.
- The large schemes at Stroupster and Lochend to the east.

The following consented development will influence the settlement if constructed:

- Slickly; and Cogle Moss to the east of the study area.
- Additional wind farms within the south of the study area at: Achalan II; and Tacher A,B,C; Camster II; and Wathegar II.

The following planning stage developments will influence the settlement if consented:

- The large scheme at Hollandmey to the north east of the study area.
- The large scheme at Tormsdale and Watten to the south of the study area.

In addition, the following scoping stage developments are being considered as suitable sites locally and will influence the settlement if consented:

Lochend Extension, Greenland, and Red Moss.

#### **Determination of Visual Sensitivity**

The sensitivity is considered to be High. The factors which have contributed to this judgement are as follows:

Value - High

- Residents are highly likely to be aware of any changes to their existing visual amenity. Susceptibility to Change – Medium
- Diverse views across the settlement and to the surrounding modified agricultural landscape beyond; and
- Influence of existing wind farm development in the wider landscape.

#### Magnitude of Change at each settlement cluster

Bowertower: locally Substantial within a c.1.5km radius, reducing to Moderate across the remainder of the settlement. The factors which have contributed to this judgement are as follows:

#### Size or Scale

The Proposed Development will be seen in direct views as a prominent new element upon the ridgeline to the west, seen in the context of the large scale open, modified farming landscape.

The Proposed Development will be viewed away from the core of settlement, seen in the foreground of views toward the low profile of the Hill of Olrig.

#### Geographical Extent

Analysis of wireframes indicate that from the outer western edge of settled area there will be visibility to the turbines over a 33° angle of view, to the west, over distances of c.850m at the closest point. The lower lying infrastructure elements of the wind farm, including the access tracks and hardstanding, will mostly be contained from view by intervening ridge.

The prominence of the turbines diminishes within the main eastern sector of the dispersed settlement, with a corresponding reduction in the angle of view over which the Proposed Development would be seen, reducing to c.20 degrees at 1.5km and c.14 degrees at 2km.

Viewpoint 2, Figures 5-2-2a-, at c1.67km from the Proposed Development at Stone Lud, is representative of the typical nature of views from the dispersed rural settlement.

**Durran: Moderate.** The factors which have contributed to this judgement are as follows:

#### Size or Scale

The Proposed Development will be seen in direct views as a prominent new element upon the low ridgeline to the east, seen in the context of expansive views across the large scale open, modified farming landscape.

The Proposed Development will be viewed beyond the settlement, and beyond the shallow valley of



#### Operational Effects on clusters of rural housing and settlements within the core 5km study area

the Burn of Durran provides separation between the settlement and the Proposed Development.

#### Geographical Extent

Analysis of wireframes indicate that from the Durran Main's in the south of the settlement area there will be visibility to the turbines over a c.25° angle of view, to the east, over distances of c.1.3km at the closest point. The low-lying infrastructure elements of the wind farm, including the access tracks and hardstanding, will be faintly seen in oblique views beneath the turbines.

Viewpoint 5, Figures 5-2-5a-e, at c2.16km from the Proposed Development at Easter Durran, is representative of the typical nature of views from the dispersed rural settlement.

**Halcro/Brabsterdorran:** Moderate to the outer northern and southern edges of the settlement. Elsewhere effects are moderated by the intervening forestry plantation with a Slight magnitude of change. The factors which have contributed to this judgement are as follows:

Size or Scale

The Proposed Development will be seen in direct views from the outer edges of the dispersed settlement as a prominent new element beyond the plateau ridgeline to the west, seen in the context of expansive views across the large scale open, modified farming landscape.

The Proposed Development will be viewed beyond the setting of the settlement.

From the core of the settlement at the War Memorial the large forestry plantation to the north will provide local screening and it will reduce visibility to partial views of the turbine blades

#### Geographical Extent

Analysis of wireframes indicate that from the Halcro/Brabsterdorran from the outer edges of the settlement to the north and south there will be reduced visibility as a component of views, with the turbines seen over a c.8° angle of view, to the west, over distances of c.2.7km at the closest point. The low-lying infrastructure elements of the wind farm, including the access tracks and hardstanding, will be screened from view by the terrain.

**Bower/Bowermadden: Moderate** to the south reducing to **Slight** to the north. The factors which have contributed to this judgement are as follows:

#### Size or Scale

The Proposed Development will be seen in direct views as prominent new elements upon the low plateau ridgeline to the south east, seen in the context of expansive views across the large scale open, modified farming landscape.

The Proposed Development will be viewed beyond the settlement, and beyond the immediate shallow valley within which Bower is located. Bowermadden is spread across the rising ground to the north and is set back further from the Proposed Development.

#### **Geographical Extent**

Analysis of wireframes indicate that from the Bower in the south of the settlement area there will be visibility to the turbines over a c.16° angle of view, to the south west, over distances greater than c.2km at the closest point. Visibility from Bowermadden is reduced with the Proposed Development occupying a c.11° angle of view to the south west, over distances of c.3.2km. The low-lying infrastructure elements of the wind farm, including the access tracks and hardstanding, will be screened from view by terrain.

Viewpoint 3, Figures 5-2-3a-e, at c1.91km from the Proposed Development at Bower, is representative of the typical nature of views from the dispersed rural settlement.

**Gillock: Slight** to the north. The factors which have contributed to this judgement are as follows: Size or Scale

The Proposed Development will be seen to the upper towers, hubs and blades in partial views as new elements low upon the rising ridgeline to the north, seen in the context of expansive views across the large scale open, modified farming landscape.

The Proposed Development will be viewed beyond the settlement, and beyond the immediate shallow valley within which Gillock is located.

#### **Geographical Extent**

Analysis of wireframes indicate that visibility from Gillock is limited to less than a 2° angle of view, to the north, over distances greater than c.2.5km at the closest point. The low-lying infrastructure elements of the wind farm, including the access tracks and hardstanding, will be screened from

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#### Operational Effects on clusters of rural housing and settlements within the core 5km study area

view by terrain.

Viewpoint 6, Figures 5-2-6a-e, at c4.84km from the Proposed Development taken from the B874 to the east of Gillock, is representative of the typical nature of views from the dispersed rural settlement.

**Castletown: Slight** from the southern edge of the settlement at Millhill Bridge/Waitside. Elsewhere **Negligible** or **None**.

#### Size or Scale

The Proposed Development will be seen as noticeable new elements in framed views to the south along the valley of the Burn of Durran.

The Proposed Development will be viewed beyond the settlement, within the wider extensively modified agricultural landscape.

#### Geographical Extent

Analysis of wireframes indicate that visibility from the edge of Castletown is limited to less than a 3.5° angle of view, to the south, over distances greater than c.4km at the closest point. The low-lying infrastructure elements of the wind farm, including the access tracks and hardstanding, will be screened from view by terrain.

Viewpoint 16, Figures 5-2-16a-e, at c4.97km from the Proposed Development taken from the A836 to the east of Castletown, is illustrative of similar views that will be experienced from the southern edges of the settlement.

#### **Potential for Future Cumulative Effects**

The built and consented cumulative schemes would be visible over varying distances in successive views with the Proposed Development, increasing the influence of wind turbines across the landscape of the LCT.

The addition of the Proposed Development will result in locally Major/Moderate and Significant cumulative effects and generally Moderate and Not Significant cumulative effects.

The *total* cumulative effect of built, consented and planning stage schemes would result in a **Major/Moderate** and **Significant** cumulative effect on the settlement at **Bowertower** when seen in successive views with the Red Moss scoping stage site.

The total cumulative effect of built, consented and planning stage schemes would result in a Moderate and Not Significant cumulative effect on the settlement at **Halcro/Brabsterdorran** when seen in combined views with the Hollandmey planning stage site and the Red Moss and Lochend Extension scoping stage sites.

The *total* cumulative effect of built, consented and planning stage schemes would result in a Major and Significant cumulative effect on the settlement at **Bower/Bowermadden** when seen in successive views with the Hollandmey planning stage site and the Red Moss and Lochend Extension scoping stage sites.

The total cumulative effect of built, consented and planning stage schemes would result in a Minor and Not Significant cumulative effect on the settlement at **Gillock** when seen in combined views with the Red Moss scoping stage site.

The total cumulative effect of built, consented and planning stage schemes would result in a Moderate and Not Significant cumulative effect on very southern outskirts of the settlement at **Castletown** when seen in combined views with the Red Moss scoping stage site.

	Casilelowii when seen in combined views with the ked woss scoping stage site.		
Summary of Effects on rural settlement within 5km			
	Bowertower	Locally <b>Substantial</b> magnitude of change from the western edge of the settlement is considered to result in a <b>Major</b> local effect, which in the context of this assessment is considered to be <b>Significant</b> .	
		Elsewhere effects on central and eastern sector of Bowertower which are set back from the Proposed Development will experience a <b>Moderate</b> magnitude of change, which is considered to result in a <b>Major/Moderate</b> effect, which in the context of this assessment is considered to be <b>Significant</b> .	
	Durran	Moderate magnitude of change from the settlement is considered to result in a Major/Moderate local effect, which in the context of this assessment is considered to be Significant.	
	Halcro/	Moderate magnitude of change on the outer edges of the settlement to the	



Operational Effec	ts on clusters of rural housing and settlements within the core 5km study area
Brabsterdorran	north and south are considered to result in a <b>Major/Moderate</b> local effect, which in the context of this assessment is considered to be <b>Significant</b> . The core of the settlement is sheltered by the forestry plantation to the north with a reduction in the magnitude of change to <b>Slight</b> , with a <b>Moderate</b> and <b>Not Significant</b> effect.
Bower (including core path CA02.01)/ Bowermadden	<b>Moderate</b> magnitude of change on the settlement at Bower are considered to result in a <b>Major/Moderate</b> local effect, which in the context of this assessment is considered to be <b>Significant</b> . Bowermadden is set back with a reduction in the magnitude of change to <b>Slight</b> , with a <b>Moderate</b> and <b>Not Significant</b> effect.
Gillock	Gillock is lower lying and partly sheltered by the low intervening ridgeline with a reduction in the magnitude of change to <b>Slight</b> , with a <b>Moderate</b> and <b>Not Significant</b> effect.
Castletown	The southern outskirts of the settlement at Millhill Bridge will experience a <b>Slight</b> , magnitude of change with a <b>Moderate</b> and <b>Not Significant</b> effect. Elsewhere with the settlement effects are no greater than <b>Negligible</b> , with a <b>Minor</b> , Not Significant effect.

Effects on the dispersed settlement beyond 5km of the Proposed Development to the south of Loch Scarmclate and Loch Watten are assessed in the table below.

Table 5-18: Operational Effects on the dispersed rural settlement along the A882 between Clayock and Bridge of Dunn

Operational Effects on the dispersed rural settlement along the A882 between Clayock and Bridge of Dunn

#### Location

The dispersed rural settlement beside the A882 extends between Clayock in the north west, through the settlement at Dunn and Scarmclate Holdings to Bridge of Dunn. The landscape shelves gently towards the broad valley bottom and Loch Scarmclate and Loch Watten. The landscape is open, characterised by rectilinear field pattern of arable and improved pastures accessed visa short spur roads leading from the A882. There will be direct visibility from the dispersed settlement towards the Proposed Development over distances between c.5-8km.

The following wind farm development currently influences the existing baseline:

- The following single or paired large turbines: Taig na Muir; and Weydale Farm.
- Long distance partial visibility to the large southern clusters of development at Camster; Flex Hill;
   Wathegar I & II.

The following consented development will influence the settlement if constructed:

- Cogle Moss to the east of the study area.
- Additional wind farms within the south of the study area at: Camster II; and Wathegar II.

The following planning stage developments will influence the settlement if consented:

- The large scheme at Hollandmey to the north east of the study area; and
- The large Watten scheme to the south of the study area.

In addition, the following scoping stage developments are being considered as suitable sites locally and will influence the settlement if consented:

• Lochend Extension, and Red Moss.

#### **Determination of Visual Sensitivity**

The sensitivity is considered to be **High**. The factors which have contributed to this judgement are as follows:

Value – High

- Residents are highly likely to be aware of any changes to their existing visual amenity. Susceptibility to Change Medium
- Diverse views across the settlement and to the surrounding modified agricultural landscape beyond; and
- Influence of existing wind farm development in the wider landscape.



## Operational Effects on the dispersed rural settlement along the A882 between Clayock and Bridge of Dunn

#### **Magnitude of Change**

The magnitude of change to the settlement at Clayock- Bridge of Dunn caused by the introduction of the Proposed Development is considered to be **Slight**. The factors which have contributed to this judgement are as follows:

#### Size or Scale

The Proposed Development will be seen in direct views as new element upon the low ridgeline to the north east, seen in the context of expansive views across the large scale open, modified farming landscape.

The Proposed Development will be viewed beyond the settlement, and beyond the shallow valley of Loch Scarmclate – Loch Watten which provides separation between the settlement and the Proposed Development.

#### Geographical Extent

Analysis of wireframes indicate that visibility to the turbines varies between a c.4.5° angle of view to the west and a 2° angle of view in the east, where the turbines are seen in close overlap. The low-lying infrastructure elements of the wind farm, including the access tracks and hardstanding, will be faintly seen in oblique views beneath the turbines.

Viewpoint 15, (Figure 5-2-15), and Viewpoint 17, (Figure 5-2-17), from Clayock at c4.7km and the Bridge of Dunn at c.6.2km are illustrative of the typical nature of views from the dispersed rural settlement.

#### **Potential for Future Cumulative Effects**

The built and consented cumulative schemes would be visible over varying distances in successive views with the Proposed Development, increasing the influence of wind turbines across the landscape of the LCT.

The addition of the Proposed Development will result in locally Moderate and Not Significant cumulative effects.

The *total* cumulative effect of built, consented and planning stage schemes would result in a Moderate and Not Significant cumulative effect on the dispersed settlement when seen in combined views with the Hollandmey planning stage site and the Red Moss and Lochend Extension scoping stage sites.

#### Significance of Effect

The combination of the individual judgements of **High** sensitivity and **Slight** magnitude of change from the settlement is considered to result in a **Moderate** effect, which in the context of this assessment is considered to be **Not Significant**.

Effects on the dispersed rural settlement at Lyth and Barrock beyond 5km to the north of the Proposed Development, which are located on comparatively elevated terrain, and the larger coastal settlement at Dunnet to the north are assessed in the table below.

#### Table 5-19: Operational Effects on settlement at Lyth, Barrock and Dunnet

#### Operational Effects on settlement at Lyth, Barrock and Dunnet

#### Location

The dispersed rural settlement at Lyth and Barrock is located on slightly elevated terrain at 6.6km to the north east and 8km to the north respectively. Settlement at Lyth is focussed around higher ground at c. 50m AOD and Barrock extends across elevated ground at c.60m AOD. The surrounding landscape is open, with rectilinear field pattern of arable and improved pastures extending across the gently undulating terrain. There will be direct visibility from the dispersed settlement towards the Proposed Development over distances between c.6.6 - 8km.

Dunnet lies to the north of Dunnet and will have a similar distant relationship to the Proposed Development. Dunnet Forest to the south of the settlement limits the extent of direct intervisibility with the agricultural lowlands to the south.

The following wind farm development currently influences the existing baseline:



#### Operational Effects on settlement at Lyth, Barrock and Dunnet

- The following single or paired large turbines: Taig na Muir; and Weydale Farm.
- Long distance partial visibility to the large southern clusters of development at Achalan; Halsary; Causeymire; Bad a' Cheo; Achairn; Camster; Flex Hill; Wathegar I & II.
- The large schemes at Stroupster and Lochend to the east.

The following consented development will influence the settlement if constructed:

- Slickly; and Cogle Moss to the east of the study area.
- Additional wind farms within the south of the study area at: Achalan II; and Tacher A,B,C;
   Camster II; and Wathegar II.

The following planning stage developments will influence the settlement if consented:

- The large scheme at Hollandmey to the north east of the study area.
- The large schemes at Tormsdale and Watten to the south of the study area.

In addition, the following scoping stage developments are being considered as suitable sites locally and will influence the settlement if consented:

Lochend Extension, Greenland, and Red Moss.

#### **Determination of Visual Sensitivity**

The sensitivity is considered to be **High**. The factors which have contributed to this judgement are as follows:

Value - High

- Residents are highly likely to be aware of any changes to their existing visual amenity.
- Susceptibility to Change Medium
- Diverse views across the settlement and to the surrounding modified agricultural landscape beyond; and
- Influence of existing wind farm development in the wider landscape.

#### Magnitude of Change

The magnitude of change to the settlement at **Lyth** caused by the introduction of the Proposed Development is considered to be **Slight** reducing to **Negligible** to the north of the local ridgeline. The factors which have contributed to this judgement are as follows:

#### Size or Scale

The Proposed Development will be seen from the southern edge of the settlement in direct views as noticeable new elements upon the low plateau ridgeline to the west, seen in the context of expansive views across the large scale open, modified farming landscape.

To the north of the ridgeline the Proposed Development will be visible to the turbine blades only with the intervening local vegetation structure providing local containment.

The Proposed Development will be viewed beyond the settlement, within expansive views across the extensively modified agricultural landscape.

#### Geographical Extent

Analysis of wireframes indicate that from the southern edge of the settlement area there will be visibility to the turbines over a c.5.5° angle of view, to the west, over distances greater than c.6.6km at the closest point. The low-lying infrastructure elements of the wind farm, including the access tracks and hardstanding, will be screened from view by terrain.

Viewpoint 8, Figures 5-2-8a-e, at c6.65km from the Proposed Development at Lyth, is representative of the typical nature of views from the dispersed rural settlement.

The magnitude of change to the settlement at **Barrock** caused by the introduction of the Proposed Development is considered to be no greater than **Slight**. The factors which have contributed to this judgement are as follows:

#### Size or Scale

The Proposed Development will be seen from the southern edge of the settlement in direct but distant views as new elements upon the low agricultural plain to the south west, seen in the context of expansive views across the large scale open, modified farming landscape.

#### Geographical Extent



#### Operational Effects on settlement at Lyth, Barrock and Dunnet

Analysis of wireframes indicate that from the southern edge of the settlement area there will be visibility to the turbines over a c.2.5° angle of view, to the south west, over distances greater than c.8km at the closest point. The low-lying infrastructure elements of the wind farm, including the access tracks and hardstanding, will be screened from view by terrain.

Viewpoint 11, Figures 5-2-11a-e, at c8.37km from the Proposed Development at Inkstack, is representative of the typical nature of views from the dispersed rural settlement.

The magnitude of change to the settlement at **Dunnet** caused by the introduction of the Proposed Development is considered to be **Negligible**. The factors which have contributed to this judgement are as follows:

#### Size or Scale

The Proposed Development will be seen from the southern edge of the settlement in direct but distant views as minor elements, seen in the context of foreground views across the dynamic setting of Dunnet Bay, within the distant agricultural plain beyond.

#### **Geographical Extent**

Analysis of wireframes indicate that from the southern edge of the settlement area there will be distant visibility to the turbines over less than a c.1° angle of view, to the south, over distances greater than c.8km at the closest point. The low-lying infrastructure elements of the wind farm, including the access tracks and hardstanding, will be screened from view by terrain.

#### **Potential for Future Cumulative Effects**

The built and consented cumulative schemes would be visible over varying distances in successive views with the Proposed Development, increasing the influence of wind turbines across the landscape of the LCT.

The addition of the Proposed Development will result in locally Moderate and Not Significant cumulative effects.

The *total* cumulative effect of built, consented and planning stage schemes would result in a Moderate and Not Significant cumulative effect on **Lyth** when seen in combined views with the Hollandmey planning stage site and the Red Moss and Lochend Extension scoping stage sites.

The *total* cumulative effect of built, consented and planning stage schemes would result in a Major/Moderate and Significant cumulative effect on **Barrock** when seen in combined views with the Hollandmey planning stage site and the Greenland, Red Moss and Lochend Extension scoping stage sites.

The *total* cumulative effect of built, consented and planning stage schemes would result in a Moderate and Not Significant cumulative effect on **Dunnet** when seen in combined views with the Hollandmey planning stage site and the Greenland, Red Moss and Lochend Extension scoping stage sites.

Summary of Effects on settlement beyond 5km to the north		
Lyth	Slight, with a Moderate and Not Significant effect, reducing to Negligible magnitude of change on the properties in the lee of the low ridgeline with a Minor and Not Significant effect.	
Barrock	No greater than a <b>Slight</b> magnitude of change, with a <b>Moderate/Minor</b> and <b>Not Significant</b> effect.	
Dunnet	Negligible magnitude of change, with a <b>Minor</b> and <b>Not Significant</b> effect.	

#### Assessment of Effects on Routes

The following section provides an assessment of the predicted effects of the Proposed Development on visual amenity that would be experienced by travellers using vehicular and non-vehicular route corridors within the study area, including roads, designated cycle routes and core paths.

The assessment was undertaken through field survey and the analysis of mapping ZTV and wireframe views, in order to confirm the likely nature of visibility.



In accordance with the criteria outlined in the detailed methodology in Technical Appendix 5-1, the sensitivity of receptors from cycle routes and core paths is generally considered to be high.

Receptors using road routes (i.e., motorised vehicle users of cars/motorbikes/buses) are considered to range from low or low to medium (e.g., for trunk and main roads) through to medium sensitivity (for B-roads, minor roads etc.), although vehicle users of routes promoted or noted for scenic value may be of medium to high sensitivity.

There may also be value attached to specific views along the routes or particular stretches where they pass through or overlook designated landscapes.

An indication of the predicted extents of visibility (both blade tip and hub height) route corridors is provided within the visibility mapping in Figures 5-1-4a and 5-1-5a.

The principal effects on the following routes with potential views of the Proposed Development, as identified in the baseline, are assessed below:

- B876;
- B874;
- NCR 1; and
- Far North Railway Line.

#### Table 5-20: Operational Effects on the B876

#### Operational Effects on the B876

#### Location

The B876 links through the study area broadly following the north coast. The route will experience intermittent visibility towards the Proposed Development between Castletown to the north and Myrelandhorn to the east, passing within 1.7km to the west of Bower.

The following wind farm development currently influences the existing baseline:

- The following single or paired large turbines: Taig na Muir; and Weydale Farm.
- Long distance partial visibility to the large southern clusters of development at Achalan; Halsary; Causeymire; Bad a' Cheo; Achairn; Camster; Flex Hill; Wathegar I & II.
- The large schemes at Stroupster and Lochend to the east.

The following consented development will influence the route if constructed:

- Slickly; and Cogle Moss to the east of the study area.
- Additional wind farms within the south of the study area at: Achalan II; and Tacher A,B,C;
   Camster II; and Wathegar II.

The following planning stage developments will influence the route if consented:

- The large scheme at Hollandmey to the north east of the study area.
- The large schemes at Tormsdale and Watten to the south of the study area.

In addition, the following scoping stage developments are being considered as suitable sites locally and will influence the route if consented:

Lochend Extension, Greenland, and Red Moss.

#### **Determination of Visual Sensitivity**

People in motorised vehicles using the route are considered to be of Medium sensitivity to change resulting from the Proposed Development. The factors which have contributed to this judgement are as follows:

Value – Medium

• The route does not pass through any designated landscapes.

Susceptibility to Change – Medium

Motorists travelling through or past the landscape on roads will focus on the route corridor.



#### Operational Effects on the B876

#### **Magnitude of Change**

The zone of theoretical visibility plans on Figures 5-1-6 indicates the potential for theoretical visibility within c.5km of the Proposed Development with no greater than a **Moderate** magnitude of change. The factors which have contributed to this judgement are as follows:

#### Size or Scale

The Proposed Development will be seen in direct views to the south of the road corridor. Along the northern sector of the route, the Proposed Development will be noticeably more prominent in views with visibility to the towers, hub and rotors. To the east of Bower, the views are increasingly oblique to the terrain and views become increasingly filtered by the intervening forestry shelter belts across the flat landscape.

#### Geographical Extent

Theoretical visibility is indicated from the route within the inner 5km study area. Visibility begins to fragment to the east of Myrelandhorn. The following viewpoints demonstrate the nature of views along the route:

The photomontage in Viewpoint 3, Figure 5-2-3a-d near Bower, is representative of the typical nature of views towards the Proposed Development as the route passes through the farming landscape to the north of the site. There will be direct visibility to the turbines on the low ridge to the south, over a 16° angle of view, to the south west over a distance of 1.8km.

The photomontage in Viewpoint 4, Figure 5-2-4a-d on the southern flank of Cooper's Hill is representative of the typical nature of views towards the Proposed Development as the route rises above the Burn of Durran, revealing expansive views across the open farmland to the south. There will be direct visibility to the turbines which are seen overlap to the south, over a 4.5° angle of view, over a distance of 2km.

#### **Potential for Future Cumulative Effects**

The addition of the Proposed Development in the context of potential future built/consented cumulative schemes will give rise to a Moderate, Not Significant cumulative effect on the route corridor.

The *total* cumulative effect of built consented, planning stage sites will contribute to a Major/Moderate, Significant cumulative effect on the route when seen in combination with the Red Moss scoping stage site.

#### Significance of Effect

The combination of the individual judgements of **Medium** sensitivity and a locally **Moderate** magnitude of change from the sections of the route that experience open views to the south are considered to result in a **Moderate** effect, which in the context of this assessment is considered to be **Not Significant**.

#### Table 5-21: Operational Effects on the B874

#### Operational Effects on the B874

#### Location

The B874 links through the study area passing within 5km of the Proposed Development as the route passes to the north of Loch Watten and Loch Scarmclate. The route will experience a short section of direct visibility towards the Proposed Development to the north and south of Gillock, passing within 2.7km to the west of Gillock.

The following wind farm development currently influences the existing baseline:

Long distance partial visibility to the large southern clusters of development at Achalan; Halsary;
 Causeymire; Bad a' Cheo; Achairn; Camster; Flex Hill; Wathegar I & II.

The following consented development will influence the route if constructed:

- Cogle Moss to the east of the study area.
- Additional wind farms within the south of the study area at: Achalan II; and Tacher A,B,C; Camster II; and Wathegar II.

The following planning stage developments will influence the route if consented:

• The large scheme at Hollandmey to the north east of the study area.



#### Operational Effects on the B874

• The large schemes at Tormsdale and Watten to the south of the study area.

In addition, the following scoping stage developments are being considered as suitable sites locally and will influence the route if consented:

Lochend Extension, and Red Moss.

#### **Determination of Visual Sensitivity**

People in motorised vehicles using the route are considered to be of Medium sensitivity to change resulting from the Proposed Development. The factors which have contributed to this judgement are as follows:

Value - Medium

• The route does not pass through any designated landscapes.

Susceptibility to Change - Medium

Motorists travelling through or past the landscape on roads will focus on the route corridor.

#### Magnitude of Change

The zone of theoretical visibility plans on Figures 5-1-6 indicates the potential for theoretical visibility within c.5km of the Proposed Development with no greater than a **Moderate** magnitude of change. The factors which have contributed to this judgement are as follows:

#### Size or Scale

The Proposed Development will be seen in direct views to the north of the road corridor with visibility to the towers, hub and rotors. To the south east of Gillock visibility reduces as the views are increasingly oblique to the terrain. To the north east the route passes into visual shadow behind the ridgelines at Corsback Hill and Stemster.

#### Geographical Extent

Theoretical visibility is indicated from the route within the inner 5km study area. The following viewpoints demonstrate the nature of views along the route:

The photomontage in Viewpoint 6, Figure 5-2-6a-d, south of Gillock, is representative of the typical nature of views towards the Proposed Development as the route passes through the farming landscape to the south of the site. There will be direct visibility to the turbines on the low ridge to the north, over a 2.5° angle of view, over a distance of 4.7km.

#### **Potential for Future Cumulative Effects**

The addition of the Proposed Development in the context of potential future built/consented cumulative schemes will give rise to a Moderate, Not Significant cumulative effect on the route corridor.

The total cumulative effect of built consented, planning stage sites will contribute to a Moderate, Not Significant cumulative effect on the route when seen in combination with the Red Moss scoping stage site.

#### Significance of Effect

The combination of the individual judgements of **Medium** sensitivity and a locally **Moderate** magnitude of change from the sections route that experience open views to the north are considered to result in a **Moderate** effect, which in the context of this assessment is considered to be **Not Significant**.

#### Table 5-22: Operational Effects on the National Cycle Route 1

#### Operational Effects on the National Cycle Route 1

#### Location

The NCR1 links through the study area broadly following the north coast. The route will experience intermittent visibility towards the Proposed Development between Castletown to the north and Barrock to the north east, passing within 4.2km to the east of Castletown.

The following wind farm development currently influences the existing baseline within the core 5km study area:

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#### Operational Effects on the National Cycle Route 1

- The following single or paired large turbines: Taig na Muir; and Weydale Farm.
- Long distance partial visibility to the large southern clusters of development at Achalan; Halsary; Causeymire; Bad a' Cheo; Achairn; Camster; Flex Hill; Wathegar I & II.
- The large schemes at Stroupster and Lochend to the east and Baillie to the west.

The following consented development will influence the route if constructed:

- Slickly; and Cogle Moss to the east of the study area.
- Additional wind farms within the south of the study area at: Achalan II; and Tacher A,B,C;
   Camster II; and Wathegar II.

The following planning stage developments will influence the route if consented:

- The large scheme at Hollandmey to the north east of the study area.
- The large scheme at Tormsdale to the south of the study area.

In addition, the following scoping stage developments are being considered as suitable sites locally and will influence the route if consented:

Lochend Extension, Greenland and Red Moss.

#### **Determination of Visual Sensitivity**

Cyclists are considered to have a **High** sensitivity to change. The factors which have contributed to this judgement are as follows:

Value - Medium

- The route passes through the southern edge of the Dunnet Head Special Landscape Area. Susceptibility to Change – High
- Cyclists on NCR1 are considered to be using the route for recreation and are considered as being of High susceptibility to changes resulting from the Proposed Development.

#### Magnitude of Change

The zone of theoretical visibility plans on Figures 5-1-6 indicates the potential for theoretical visibility within c.5km of the Proposed Development with a **Slight** magnitude of change.

The factors which have contributed to this judgement are as follows:

#### Size or Scale

The Proposed Development will be seen in direct views across the open farmland to the south of the road corridor, noticeable as a new element in views with visibility to the towers, hub and rotors. To the east of Barrock the views are increasingly oblique to the terrain and views become increasingly screened at intervals by blocks of plantation forestry.

#### Geographical Extent

Theoretical visibility is indicated from the route within the inner 5km study area. Visibility begins to fragment to the east of Barrock. The following viewpoints demonstrate the nature of views along the route:

The photomontage in Viewpoint 11, Figure 5-2-11a-d, on the southern edge of the settlement at Barrock is representative of the typical nature of views towards the Proposed Development as the route rises to the high ground at Barrock, revealing expansive views across the open farmland to the south. There will be direct visibility to the turbines which are seen overlap to the south, over a 2.7° angle of view, over a distance of c.8km.

The wireframe in Viewpoint 16, Figure 5-2-16a-d, to the east of Castletown, is representative of the typical nature of views towards the Proposed Development from the coastal edge to the south of Dunnet Bay. There will be direct visibility to the turbines to the south, over a 2.5° angle of view, to the south over a distance of c.5km.

#### **Potential for Future Cumulative Effects**

The addition of the Proposed Development in the context of potential future built/consented cumulative schemes will give rise to a Moderate/Minor, Not Significant cumulative effect on the route corridor.

The total cumulative effect of built consented, planning stage sites will contribute to a Major/Moderate, Significant cumulative effect on the route when seen in combination with the Hollandmey planning stage site, and the Lochend Extension, Greenland and Red Moss scoping



#### Operational Effects on the National Cycle Route 1

stage sites.

#### Significance of Effect

The combination of the individual judgements of **High** sensitivity and a locally **Slight** magnitude of change from the sections of the route that experience open views to the south are considered to result in a **Moderate** effect, which in the context of this assessment is considered to be **Not Significant**.

#### Table 5-23: Operational Effects on the Far North Railway Line (A882)

#### Operational Effects on the Far North Railway Line (A882)

#### Location

The Far North Railway passes from east to west through the study area, passing within c.4.5km to the south of the Proposed Development. The following wind farm development currently influences the existing baseline within the core 5km study area:

The following consented development will influence the route if constructed:

Cogle Moss to the east of the study area.

The following planning stage developments will influence the route if consented:

• The large scheme at Hollandmey to the north east of the study area.

In addition, the following scoping stage developments are being considered as suitable sites locally and will influence the route if consented:

Lochend Extension, Greenland and Red Moss.

#### **Determination of Visual Sensitivity**

Passengers on the Far North line are considered to have a **High** sensitivity to change. The factors which have contributed to this judgement are as follows:

Value - Medium

- The route does not pass through any designated landscapes within the core study area. Susceptibility to Change High
- Rail passengers will be engaged in the experience of the landscape and will have a High susceptibility to change.
- Motorists travelling through or past the landscape on the nearby A882 will focus on the route corridor.

#### **Magnitude of Change**

The zone of theoretical visibility plans on Figures 5-1-6 indicates the potential for theoretical visibility within c.5km of the Proposed Development with a **Slight** magnitude of change.

The factors which have contributed to this judgement are as follows:

#### Size or Scale

The Proposed Development will be seen in direct views across the open farmland and Loch Scarmclate to the north of the route, noticeable as a new element in views with visibility to the towers, hub and rotors.

#### Geographical Extent

Theoretical visibility is indicated from the route within the inner 5km study area. To the south of Bower Stone Quarry, the railway enters a cutting and views are screened. Further to the east the route passes into visual shadow as it passes beside Loch Watten and follows the course of the River Wick.

The wireframe in Viewpoint 15, Figure 5-2-15a-d, beside the railway line and to the north of the A882 corridor is representative of the typical nature of views towards the Proposed Development as the route passes to the south of Loch Scarmclate, with expansive views across the open farmland to the north. There will be direct visibility to the turbines to the north, within a 4.5° angle of view, over a distance of c.4.5km.

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#### Operational Effects on the Far North Railway Line (A882)

#### **Potential for Future Cumulative Effects**

The addition of the Proposed Development in the context of potential future built/consented cumulative schemes will give rise to a Moderate/Minor, Not Significant cumulative effect on the route corridor.

The *total* cumulative effect of built consented, planning stage sites will contribute to a Moderate, Not Significant cumulative effect on the route when seen in combination with the Hollandmey planning stage site, and the Lochend Extension, Greenland and Red Moss scoping stage sites.

#### Significance of Effect

The combination of the individual judgements of **High** sensitivity and a locally **Slight** magnitude of change from the sections of the route that experience open views to the north are considered to result in a **Moderate** effect, which in the context of this assessment is considered to be **Not Significant**. Effects on motorists with **Medium** sensitivity, on the parallel route of the A882 will be similar with a **Slight** magnitude of change, with a **Moderate/Minor** and **Not Significant** effect.

#### Assessment of Residual Effects at Viewpoints at the Operational Stage

The viewpoint assessment was carried out to identify and evaluate the effects on visual amenity arising from the Proposed Development at specific representative locations in the study area.

Confirmation of the viewpoints to be included in the assessment was undertaken through pre-application correspondence with THC and NatureScot in February 2022. Further consultation requests were issued in 2023 (27/06/2023 14:11 via email, 18/07/2023 11:44 via email, 08/08/2023 14:48 via email) however, these did not yield a response.

The predicted views from each of the 18 viewpoint locations are illustrated using the wireframes or photomontages in Figures 5-2-1 – 5-2-18, which are accurate graphic representations in terms of the positioning, spatial distribution and size of the turbines.

Visualisations have been prepared in accordance with the requirements of NatureScot 'Visual Representation of Windfarms' Guidance, Version 2.2 (NatureScot, February 2017), and the Visualisation Standards for Wind Energy Developments (THC, July 2016), as described in Technical Appendix 5-1.

The visualisation figures each include the following productions:

- Firstly, the visualisation figures for NS:
  - Viewpoint location;
  - 90° existing view and a wireframe of the Proposed Development (including any other built/consented/planning stage windfarms (and the Scoping Stage sites within 5km) within the view);
  - A 53.5° panoramic wireframe of the Proposed Development; and
  - A 53.5° panoramic photomontage of the Proposed Development; and
- Secondly, the visualisation figures for THC: Images for the Landscape Assessment:
  - Viewpoint location plan;
  - A 65.5° photomontage view;
  - A 65.5° baseline photograph; Images for the Visual Impact Assessment
  - Single frame colour photomontage (50mm lens);
  - Single frame colour photomontage (75mm lens); and



If required, a single frame monochrome cumulative photomontage image (75mm lens).

For the purposes of assessing the effects on visual amenity, the sensitivity of the receptors is as defined in Technical Appendix 5-1.

The following detailed analysis of the 18 viewpoints includes a description of the existing and predicted view, an assignment of receptor sensitivity (including confirmation of receptor susceptibility and the value applied to the viewpoint), an analysis of the magnitude of change, and an assessment of the level of predicted effects on visual amenity, and a determination of their significance.

Table 5-24: Operational Effects on Viewpoint 1, Minor Road West Site

Viewpoint 1, Minor Road West of the Site, Figures 5-2-1a-d		
Distance and Direction to the Proposed Development	1.45km	
LCT and Designations	143: Farmed Lowland Plain	
Receptors and Sensitivity to Change	Road Users - Medium	
Theoretical visibility	Two turbines to tower, hubs and blades	
Location and Rationale for Selection		

The viewpoint is located on the minor road which connects between the B874 to the south and the B876 to the north. It represents the potential effects on road users travelling along the minor road.

The following wind farm development currently influences the existing baseline:

- Long distance partial visibility to the large southern clusters of development at Achalan; Halsary; Causeymire; Bad a' Cheo; Achairn; Camster; Flex Hill; Wathegar I & II.
- The large schemes at Stroupster and Lochend to the east.

The following consented development will influence the route if constructed:

- Cogle Moss to the east of the study area.
- Additional wind farms within the south of the study area at: Achalan II; and Tacher A,B,C; Camster II; and Wathegar II.

The following planning stage developments will influence the route if consented:

- The large scheme at Hollandmey to the north east of the study area.
- The large schemes at Tormsdale and Watten to the south of the study area.

In addition, the following scoping stage developments are being considered as suitable sites and will influence the viewpoint if consented:

Lochend Extension, Greenland, and Red Moss.

#### **Description of the Existing View**

The existing view taken from the road corridor on the side of Cooper's Hill looks north east across the open rectilinear fields with an oblique view towards the plateau moorland at the crest of the low ridge to the west of Bowertower. Halsary Wind Farm is seen as a minor element on the horizon

Occasional small blocks of forestry break up the otherwise expansive view. The large farm and surrounding barns at Wester Olrig are seen below in the foreground. It represents the potential effects of the Proposed Development upon road users accessing the rural settlement.

#### **Determination of Visual Sensitivity**

The sensitivity to change associated with the Proposed Development at this location is considered to be **Medium** for road users:

Value - Medium

The landscape is not designated.

Susceptibility to Change – High

Awareness of views will be medium for road users.



#### Viewpoint 1, Minor Road West of the Site, Figures 5-2-1a-d

#### **Magnitude of Change**

The overall magnitude of change on receptors at this viewpoint will be Substantial.

The factors which have contributed to this judgement are as follows:

#### Size or Scale

The wireframe indicates the turbines which are seen in overlap the turbines will be directly visible from this viewpoint. The wind farm occupies c.5° of the available 360° panoramic view.

The turbines will be seen as prominent new elements rising above the relatively scaleless and expansive farmland. The towers, hubs and blades will be visible against the skyline. Ancillary components will be oblique to the viewpoint and will not be directly visible. The turbines will add large scale man-made vertical elements into the landscape.

#### Geographical Extent

The Proposed Development will lie to the north east at 186° to the viewpoint.

It will be seen over a short separation distance of 2.11km to the nearest turbine.

The change in view will occur within the southern aspect of the view.

#### **Potential for Future Cumulative Effects**

The addition of the Proposed Development will result in limited combined cumulative effects with the baseline of distant built sites to the south and south east. The turbines of the Proposed Development will be prominent in views, resulting in a **Moderate**, **Not Significant** cumulative effect.

The total cumulative effect of built consented, planning stage sites will contribute to a **Major/Moderate**, **Significant** cumulative effect when seen in combination with the Red Moss scoping stage site and in successive views with the Watten planning site.

#### Significance of Effect

The combination of the individual judgements of **Medium** sensitivity and **Substantial** magnitude of change are considered to result in a **Major/Moderate** effect on road users which in the context of this assessment is considered to be **Significant**.

#### Table 5-25: Operational Effects on Viewpoint 2, Lud Stone

Viewpoint 2, Lud Stone, Figures 5-2-2 a-d	
Distance and Direction to the Proposed Development	1.67km
LCT and Designations	143: Farmed Lowland Plain
Receptors and Sensitivity to Change	Walkers and Visitors - High
Theoretical visibility	Two turbines to tower, hubs and blades
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#### Location and Rationale for Selection

The viewpoint is located on the open moorland to the south of the Stone Lud standing stone. It represents the potential effects on walkers accessing the moorland and visitors to the scheduled monument site. The following wind farm development currently influences the existing baseline:

- Long distance partial visibility to the large southern clusters of development at Achalan; Halsary;
   Causeymire; Bad a' Cheo; Achairn; Camster; Flex Hill; Wathegar I & II.
- The large schemes at Stroupster and Lochend to the east.

The following consented development will influence the settlement if constructed:

- Slickly; and Cogle Moss to the east of the study area.
- Additional wind farms within the south of the study area at: Achalan II; and Tacher A,B,C;
   Camster II; and Wathegar II.

The following planning stage developments will influence the settlement if consented:

- The large scheme at Hollandmey to the north east of the study area.
- The large schemes at Tormsdale and Watten to the south of the study area.

In addition, the following scoping stage developments are being considered as suitable sites and will influence the view if consented:

Lochend Extension, Greenland, and Red Moss.



#### Viewpoint 2, Lud Stone, Figures 5-2-2 a-d

#### **Description of the Existing View**

The existing view looks towards the location of the Proposed Development and shows the view across the open moorland which extends across crest of the local ridge, broken up with frequent low clumps of gorse. The view is oblique across plateau moorland. The distant ridge of the Hill of Olrig is seen beyond marked by the two communications masts

The edge of the dispersed settlement at Bowertower is seen to the right of the view, with the edge of Ludstone Cottage seen through the conifers to the right of the view. It represents the potential effects of the Proposed Development upon walkers and visitors.

#### **Determination of Visual Sensitivity**

The sensitivity to change associated with the Proposed Development at this location is considered to be **High** for visitors and walkers accessing the moorland:

Value - High

• The viewpoint is close to the Stone Lud scheduled monument site.

Susceptibility to Change – High

- Visitors accessing the moorland to visit the Stone Lud site will be focussed on the relationship of the scheduled monument to the immediate setting.
- Walkers will be engaged in the experience of the landscape and panoramic views, with a strong awareness of their surroundings.

#### Magnitude of Change

The overall magnitude of change on receptors at this viewpoint will be **Substantial**.

The factors which have contributed to this judgement are as follows:

#### Size or Scale

The wireframe indicates the turbines will be directly visible from this viewpoint. The wind farm occupies c.13° of the available 360° panoramic view.

The turbines will be seen as prominent new elements rising beyond the moorland. The towers, hubs and blades will be visible against the skyline. Ancillary components will be oblique to the viewpoint and will not be directly visible. The turbines will add additional large scale man-made vertical elements into the landscape.

#### **Geographical Extent**

The turbines will be seen in the foreground of distant views to the communication masts on the Hill of Olrig.

The Proposed Development will lie to the north east at 317° to the viewpoint.

It will be seen over a short separation distance of 1.67km to the nearest turbine.

The change in view will occur within the north western aspect of the view.

#### **Potential for Future Cumulative Effects**

The addition of the Proposed Development will result in combined cumulative effects in successive views with the baseline of the built sites at Lochend and Stroupster. The turbines of the Proposed Development will be prominent in views, resulting in a **Moderate**, **Not Significant** cumulative effect.

The *total* cumulative effect of built consented, planning stage sites will contribute to a **Major/Moderate**, **Significant** cumulative effect when seen in successive views with the Hollandmey and Watten planning stage sites, and the Lochend Extension, Greenland, and Red Moss scoping stage sites.

#### Significance of Effect

The combination of the individual judgements of **High** sensitivity and **Substantial** magnitude of change are considered to result in a **Major** effect on visitors and walkers which in the context of this assessment is considered to be **Significant**.

#### Table 5-26: Operational Effects on Viewpoint 3, B876 West-bound at Bower

#### Viewpoint 3, B876 West-bound at Bower, Figures 5-2-3a-d

**Distance and Direction to the Proposed Development** 1.91km

ince and bijection to the Proposed Development



Viewpoint 3, B876 West-bound at Bower, Figures 5-2-3a-d		
LCT and Designations	143: Farmed Lowland Plain	
Receptors and Sensitivity to Change	Road Users - Medium	
Theoretical visibility	Two turbines to tower, hubs and blades	
·		

#### Location and Rationale for Selection

The viewpoint is located on the B876 to the north of the settlement at Bower. It represents the potential effects on road users travelling along the local road network.

The following consented development will influence successive views from the viewpoint if constructed:

Cogle Moss to the east of the study area.

The following planning stage developments will influence the viewpoint if consented:

- The large scheme at Hollandmey to the north east of the study area.
- The large scheme at Watten to the south.

In addition, the following scoping stage developments are being considered as suitable sites locally and will influence the route if consented:

Lochend Extension, and Red Moss.

#### **Description of the Existing View**

The existing view looks towards the location of the Proposed Development to the south west and shows the view across the open rectilinear fields of pasture and to the open moorland across the low plateau ridgeline to the west of Bowertower.

Occasional small blocks forestry of forestry blocks break-up the otherwise expansive view. It represents the potential effects of the Proposed Development upon road users accessing the rural settlement.

#### **Determination of Visual Sensitivity**

The sensitivity to change associated with the Proposed Development at this location is considered to be **Medium** for road users:

Value - Medium

• The landscape is not designated.

Susceptibility to Change – High

Awareness of views will be medium for road users.

#### **Magnitude of Change**

The overall magnitude of change on receptors at this viewpoint will be **Substantial**.

The factors which have contributed to this judgement are as follows:

#### Size or Scale

The wireframe indicates the turbines will be directly visible from this viewpoint. The wind farm occupies c.15° of the available 360° panoramic view.

The turbines will be seen as prominent new elements rising above the relatively scaleless and expansive, open farmland. The towers, hubs and blades will be visible against the skyline. Ancillary components will be oblique to the viewpoint and will not be directly visible. The turbines will add prominent man-made vertical elements into the landscape.

#### Geographical Extent

The Proposed Development will lie to the north east at 245° to the viewpoint.

It will be seen over a short separation distance of 1.91km to the nearest turbine.

The change in view will occur within the south western aspect of the view.

#### **Potential for Future Cumulative Effects**

The addition of the Proposed Development will not result in cumulative effects.

The *total* cumulative effect of built consented, planning stage sites will contribute to a **Major/Moderate**, **Significant** cumulative effect when seen in successive views with the Hollandmey and Watten planning stage sites, and the Lochend Extension, and Red Moss scoping stage sites.

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#### Viewpoint 3, B876 West-bound at Bower, Figures 5-2-3a-d

#### Significance of Effect

The combination of the individual judgements of  ${\it Medium}$  sensitivity and  ${\it Substantial}$  magnitude of change are considered to result in a Major/Moderate effect on road users which in the context of this assessment is considered to be Significant.



Table 5-27: Operational Effects on Viewpoint 4, B876 East-bound

Viewpoint 4, B876 East-bound at Bower, Figures 5-2-4a-d		
Distance and Direction to the Proposed Development	2.11km	
LCT and Designations	143: Farmed Lowland Plain	
Receptors and Sensitivity to Change	Road Users - Medium	
Theoretical visibility	Two turbines to tower, hubs and blades	
Land Paramata Bar Paramata francis de Para		

#### Location and Rationale for Selection

The viewpoint is located on the B876 to the north of the Proposed Development, mid-way between Castletown and Bower. It represents the potential effects on road users travelling along the local road network.

The following wind farm development currently influences the existing baseline:

Long distance partial visibility to the large southern clusters of development at Achalan; Halsary;
 Causeymire; Bad a' Cheo; Achairn; Camster; Flex Hill; Wathegar I & II.

The following consented development will influence the viewpoint if constructed:

- Cogle Moss to the east of the study area.
- Additional wind farms within the south of the study area at: Achalan II; and Tacher A,B,C;
   Camster II; and Wathegar II.

The following planning stage developments will influence the route if consented:

The large schemes at Watten and Tormsdale to the south of the study area.

In addition, the following scoping stage development is being considered as a suitable site locally within 10km and will influence the viewpoint if consented:

Red Moss.

#### **Description of the Existing View**

The existing view looks towards the location of the Proposed Development to the south west and shows the view across the open rectilinear fields of pasture and to the open moorland across the low plateau ridgeline to the west of Bowertower.

Occasional small blocks forestry of forestry blocks break-up the otherwise expansive view. It represents the potential effects of the Proposed Development upon road users accessing the rural settlement.

#### **Determination of Visual Sensitivity**

The sensitivity to change associated with the Proposed Development at this location is considered to be **Medium** for road users:

Value - Medium

• The landscape is not designated.

Susceptibility to Change – High

• Awareness of views will be medium for road users.

#### **Magnitude of Change**

The overall magnitude of change on receptors at this viewpoint will be **Substantial**.

The factors which have contributed to this judgement are as follows:

#### Size or Scale

The wireframe indicates the turbines will be directly visible from this viewpoint. The wind farm occupies c.15° of the available 360° panoramic view.

The turbines will be seen as prominent new elements rising above the relatively scaleless and expansive, open farmland. The towers, hubs and blades will be visible against the skyline. Ancillary components will be oblique to the viewpoint and will not be directly visible. The turbines will add prominent man-made vertical elements into the landscape.

#### Geographical Extent

The Proposed Development will lie to the north east at 245° to the viewpoint.

It will be seen over a short separation distance of 1.91km to the nearest turbine.



## Viewpoint 4, B876 East-bound at Bower, Figures 5-2-4a-d

The change in view will occur within the south western aspect of the view.

## **Potential for Future Cumulative Effects**

The addition of the Proposed Development will not result in cumulative effects.

The total cumulative effect of built consented, planning stage sites will contribute to a **Major/Moderate**, **Significant** cumulative effect when seen in successive views to the Hollandmey planning stage site and in combined views with the Watten planning stage site, and the Lochend Extension and Red Moss scoping stage sites.

#### Significance of Effect

The combination of the individual judgements of **Medium** sensitivity and **Substantial** magnitude of change are considered to result in a **Major/Moderate** effect on road users which in the context of this assessment is considered to be **Significant**.

## Table 5-28: Operational Effects on Viewpoint 5, Easter Durran

Viewpoint 5, Easter Durran, Figures 5-2-5a-d	
Distance and Direction to the Proposed Development	2.16km
LCT and Designations	143: Farmed Lowland Plain
Receptors and Sensitivity to Change	Road Users – Medium
	Residents - High
Theoretical visibility	Two turbines to tower, hubs and blades

## Location and Rationale for Selection

The viewpoint is located on the minor road connecting the dispersed rural settlement at Durran, adjacent to the farm at Easter Durran to the north west of the Proposed Development. It represents the potential effects on local residents and road users travelling along the local road network.

The following wind farm development currently influences the existing baseline:

Long distance partial visibility to the large southern clusters of development at Achalan; Halsary;
 Causeymire; Bad a' Cheo; Achairn; Camster; Flex Hill; Wathegar I & II.

The following consented development will influence the viewpoint if constructed:

- Cogle Moss to the east of the study area.
- Additional wind farms within the south of the study area at: Achalan II; and Tacher A, B,C;
   Camster II; and Wathegar II.

The following planning stage developments will influence the route if consented:

- The large scheme at Hollandmey to the east of the study area.
- The large schemes at Tormsdale and Watten to the south of the study area.

In addition, the following scoping stage development is being considered as suitable sites locally and will influence the viewpoint if consented:

Lochend, and Red Moss.

#### **Description of the Existing View**

The existing view looks towards the location of the Proposed Development to the south east and shows the view across the open rectilinear fields of pasture and to the open moorland across the low plateau ridgeline to the west of Bowertower.

Occasional small blocks forestry of forestry blocks break-up the otherwise expansive view. The farm and outbuildings at Lochquoy are seen in the foreground below the viewpoint. It represents the potential effects of the Proposed Development upon road users accessing the rural settlement.

## **Determination of Visual Sensitivity**

The sensitivity to change associated with the Proposed Development at this location is considered to be **High** for residents and **Medium** for road users:

Value - Medium

• The landscape is not designated.



#### Viewpoint 5, Easter Durran, Figures 5-2-5a-d

Susceptibility to Change – High

- Residents are highly likely to be aware of any changes to their existing visual amenity;
- Awareness of views will be medium for road users.

## Magnitude of Change

The overall magnitude of change on receptors at this viewpoint will be **Substantial**.

The factors which have contributed to this judgement are as follows:

#### Size or Scale

The wireframe indicates the turbines will be directly visible from this viewpoint. The wind farm occupies c.12° of the available 360° panoramic view.

The turbines will be seen as prominent new elements rising above the relatively scaleless and expansive farmland. The towers, hubs and blades will be visible against the skyline. Ancillary components will be oblique to the viewpoint and will not be directly visible. The turbines will add prominent man-made vertical elements into the landscape.

### Geographical Extent

The Proposed Development will lie to the north east at 132.5° to the viewpoint.

It will be seen over a short separation distance of 2.16km to the nearest turbine.

The change in view will occur within the south eastern aspect of the view.

## **Potential for Future Cumulative Effects**

The addition of the Proposed Development will not result in important cumulative effects.

The total cumulative effect of built consented, planning stage sites will contribute to a Major/Moderate, Significant cumulative effect when seen in successive views to the Hollandmey and Watten planning stage sites, and the Lochend Extension scoping site and in combined views with the Red Moss scoping stage site.

## Significance of Effect

The combination of the individual judgements of High and Medium sensitivity and Substantial magnitude of change are considered to result in a Major effect on residents and Major/Moderate effect on road users which in the context of this assessment are considered to be Significant.

Table 5-29: Operational Effects on Viewpoint 6, B874 West-bound

Viewpoint 6, B874 West-bound, Figures 5-2-6a-d	
Distance and Direction to the Proposed Development	4.84km
LCT and Designations	143: Farmed Lowland Plain
Receptors and Sensitivity to Change	Road Users - Medium
Theoretical visibility	Two turbines to tower, hubs and blades
Location and Pationals for Salaction	

## Location and Rationale for Selection

The viewpoint is located on the B874 to the south east of the Proposed Development, as the route passes to the north of Loch Watten across gentle ridgeline. It represents the potential effects on road users travelling along the local road network.

The following wind farm development currently influences the existing baseline:

Long distance partial visibility to the large southern clusters of development at Achalan; Halsary; Causeymire; Bad a' Cheo; Achairn; Camster; Flex Hill; Wathegar I & II.

The following consented development will influence the viewpoint if constructed:

- Cogle Moss to the east of the study area.
- Additional wind farms within the south of the study area at: Achalan II; and Tacher A,B,C; Camster II; and Wathegar II.

The following planning stage developments will influence the route if consented:

The large schemes at Watten and Tormsdale to the south of the study area.

In addition, the following scoping stage development is being considered as suitable sites locally



## Viewpoint 6, B874 West-bound, Figures 5-2-6a-d

within 10km and will influence the viewpoint if consented:

Red Moss.

## **Description of the Existing View**

The existing view looks towards the location of the Proposed Development to the northwest along the road corridor defined by closely maintained beech hedges. The views to the surrounding rectilinear fields of pasture and arable land are broken up by intervening coniferous shelter belts around the dispersed farms. The view is focussed on the low plateau ridgeline to the west of Bowertower, the higher ground at the Hill of Olrig is seen to the left of the view. It represents the potential effects of the Proposed Development upon road users accessing the rural settlement.

### **Determination of Visual Sensitivity**

The sensitivity to change associated with the Proposed Development at this location is considered to be **Medium** for road users:

Value - Medium

The landscape is not designated.

Susceptibility to Change – High

Awareness of views will be medium for road users.

## Magnitude of Change

The overall magnitude of change on receptors at this viewpoint will be **Moderate**.

The factors which have contributed to this judgement are as follows:

#### Size or Scale

The wireframe indicates the turbines will be directly visible from this viewpoint. The wind farm occupies c.3° of the available 360° panoramic view.

The turbines will be seen as prominent new elements rising above the expansive landscape, seen in a rational position on the ridgeline above the surrounding farmland. The towers, hubs and blades will be visible against the skyline. Ancillary components will be oblique to the viewpoint and will not be directly visible. The turbines will add prominent man-made vertical elements into the landscape.

### Geographical Extent

The Proposed Development will lie to the north east at 341° to the viewpoint.

It will be seen over a short separation distance of 4.84km to the nearest turbine.

The change in view will occur within the northern aspect of the view.

#### **Potential for Future Cumulative Effects**

The addition of the Proposed Development will not result in cumulative effects.

The total cumulative effect of built consented, planning stage sites will contribute to a Moderate, Not Significant cumulative effect when seen in successive views to the Watten and Hollandmey planning stage sites, and the Lochend Extension scoping stage site and in combined views with the Red Moss scoping stage site.

## Significance of Effect

The combination of the individual judgements of **Medium** sensitivity and **Moderate** magnitude of change are considered to result in a Moderate effect on road users which in the context of this assessment is considered to be Not Significant.



Table 5-30: Operational Effects on Viewpoint 7, Hill of Olrig

Viewpoint 2, Lud Stone, Figures 5-2-2 a-d	
Distance and Direction to the Proposed Development	4.47km
LCT and Designations	143: Farmed Lowland Plain
Receptors and Sensitivity to Change	Walkers - High
Theoretical visibility	Two turbines to tower, hubs and blades

The viewpoint is located on the open pastures at the summit of the Hill of Olrig. It represents the potential effects on walkers accessing the hill top vantage point. The following wind farm development currently influences the existing baseline:

- Long distance partial visibility to the large southern clusters of development at Achalan; Halsary; Causeymire; Bad a' Cheo; Achairn; Camster; Flex Hill; Wathegar I & II.
- The large schemes at Stroupster and Lochend to the east.

The following consented development will influence the settlement if constructed:

- Slickly; and Cogle Moss to the east of the study area.
- Additional wind farms within the south of the study area at: Achalan II; and Tacher A,B,C;
   Camster II; and Wathegar II.

The following planning stage developments will influence the settlement if consented:

- The large scheme at Hollandmey to the north east of the study area.
- The large schemes at Watten and Tormsdale to the south of the study area.

In addition, the following scoping stage developments are being considered as suitable sites and will influence the view if consented:

Lochend Extension, Greenland, and Red Moss.

## **Description of the Existing View**

The existing elevated view looks to the east across the lowland farmland plain towards the location of the Proposed Development. The gently rolling landscape is view is covered by a patchwork of large arable fields with moorland/pasture across plateau ridges. The landscape is broken up by occasional forestry plantation blocks and shelter belts with a dispersed pattern of farming settlement. The edge of the loose settlement at Bowertower is seen to the centre of the view. The viewpoint represents the potential effects of the Proposed Development upon walkers accessing the Hill of Olrig.

## **Determination of Visual Sensitivity**

The sensitivity to change associated with the Proposed Development at this location is considered to be **High** for walkers:

Value – Medium

The landscape is not designated.

Susceptibility to Change – High

• Walkers will be engaged in the experience of the landscape and panoramic views, with a strong awareness of their surroundings.

## **Magnitude of Change**

The overall magnitude of change on receptors at this viewpoint will be Moderate.

The factors which have contributed to this judgement are as follows:

## Size or Scale

The wireframe indicates the turbines will be directly visible from this viewpoint. The wind farm occupies c.7° of the available 360° panoramic view.

The turbines will be seen as prominent new elements within the settled managed agricultural lowland landscape. The upper towers, hubs and blades will be visible against the skyline, with the lower towers back clothed against the surrounding fields. Ancillary components will be oblique to the viewpoint and will not be directly visible. The turbines will add additional large scale man-made vertical elements into the landscape.

### Geographical Extent



## Viewpoint 2, Lud Stone, Figures 5-2-2 a-d

The turbines will be seen within expansive panoramic views from the hill top.

The Proposed Development will lie to the north east at 124° to the viewpoint.

It will be seen over a short separation distance of 4.47km to the nearest turbine.

The change in view will occur within the south eastern aspect of the view.

#### **Potential for Future Cumulative Effects**

The addition of the Proposed Development will result in combined cumulative effects in successive views with the baseline of the built sites at Lochend and Stroupster. The turbines of the Proposed Development will be prominent in views, resulting in a Moderate, Not Significant cumulative effect.

The total cumulative effect of built consented, planning stage sites will contribute to a Moderate, Not Significant cumulative effect when seen in combined views with the Watten and Hollandmey planning stage sites, and the Lochend Extension, Greenland, and Red Moss scoping stage sites.

## Significance of Effect

The combination of the individual judgements of High sensitivity and Moderate magnitude of change are considered to result in a Major/Major effect on walkers which in the context of this assessment is considered to be Significant.

Table 5-31: Operational Effects on Viewpoint 8, Lyth

6.65km
143: Farmed Lowland Plain
Road Users – Medium
Residents - High
Two turbines to tower, hubs and blades

#### Location and Rationale for Selection

The viewpoint within the southern side of the dispersed settlement at Lyth to the north east of the Proposed Development. It represents the potential effects on local residents and road users travelling along the local road network.

The following wind farm development currently influences the existing baseline:

- Long distance partial visibility to the large southern clusters of development at Achalan; Halsary; Causeymire; Bad a' Cheo; Achairn; Camster; Flex Hill; Wathegar I & II.
- The large schemes at Stroupster and Lochend to the east.

The following consented development will influence the viewpoint if constructed:

- Slickly and Cogle Moss to the east of the study area.
- Additional wind farms within the south of the study area at: Achalan II; and Tacher A,B,C; Camster II; and Wathegar II.

The following planning stage developments will influence the route if consented:

- The large scheme at Hollandmey to the east of the study area.
- The large schemes at Watten and Tormsdale to the south of the study area.

In addition, the following scoping stage development is being considered as suitable sites locally within 10km of the Proposed Development and will influence the viewpoint if consented:

Lochend, Greenland, and Red Moss.

## **Description of the Existing View**

The existing view looks towards the location of the Proposed Development to the west and shows the view across the open rectilinear fields of arable farmland and to the lower lying land at Bower. The land rises beyond to the plateau ridgeline at Bowertower.

Occasional small blocks forestry of forestry blocks break-up the otherwise expansive view. The farm and outbuildings at West Lyth are seen in the foreground below the viewpoint. It represents the potential effects of the Proposed Development upon local residents and road users accessing the rural settlement.



## Viewpoint 8, Lyth, Figures 5-2-8a-d

## **Determination of Visual Sensitivity**

The sensitivity to change associated with the Proposed Development at this location is considered to be **High** for residents and **Medium** for road users:

Value - Medium

• The landscape is not designated.

Susceptibility to Change – High

- Residents are highly likely to be aware of any changes to their existing visual amenity;
- Awareness of views will be medium for road users.

### Magnitude of Change

The overall magnitude of change on receptors at this viewpoint will be Slight.

The factors which have contributed to this judgement are as follows:

#### Size or Scale

The wireframe indicates the turbines will be directly visible from this viewpoint. The wind farm occupies c.12° of the available 360° panoramic view.

The Proposed Development will be seen from the southern edge of the settlement in direct views as distant new elements upon the low plateau ridgeline to the west beyond the settlement, seen in the context of expansive views across the large scale open, modified farming landscape.

## **Geographical Extent**

The Proposed Development will lie to the north east at 269° to the viewpoint.

It will be seen over a short separation distance of 6.65km to the nearest turbine.

The change in view will occur within the western aspect of the view.

#### **Potential for Future Cumulative Effects**

The addition of the Proposed Development will result in locally Moderate and Not Significant cumulative effects.

The *total* cumulative effect of built, consented and planning stage schemes would result in a Moderate and Not Significant cumulative effect when seen in combined views with the Watten and Hollandmey planning stage sites and the Red Moss, and Lochend Extension scoping stage sites.

## Significance of Effect

The combination of the individual judgements of **High** and **Medium** sensitivity and **Slight** magnitude of change are considered to result in a **Moderate** effect on residents and **Moderate/Minor** effect on road users which in the context of this assessment are considered to be **Not Significant**.

Table 5-32: Operational Effects on Viewpoint 9, Loch Watten Picnic Spot

Viewpoint 8, Lyth, Figures 5-2-8a-d	
Distance and Direction to the Proposed Development	8.5km
LCT and Designations	143: Farmed Lowland Plain
Receptors and Sensitivity to Change	Road Users – Medium
	Visitors - High
Theoretical visibility	One turbine to blades only, one turbine to hub and blades.

#### Location and Rationale for Selection

The viewpoint is located at the eastern extent of Loch Watten. It represents the potential effects on visitors to the picnic spot and road users travelling along the local road network.

The following wind farm development currently influences the existing baseline:

- Long distance partial visibility to the large southern clusters of development at Achalan; Halsary; Causeymire; Bad a' Cheo; Achairn; Camster; Flex Hill; Wathegar I & II.
- The large scheme at Stroupster to the east.

The following consented development will influence the viewpoint if constructed:



## Viewpoint 8, Lyth, Figures 5-2-8a-d

- Slickly and Cogle Moss to the east of the study area.
- Additional wind farms within the south of the study area at: Achalan II; and Tacher A,B,C;
   Camster II; and Wathegar II.

The following planning stage developments will influence the route if consented:

The large schemes at Watten and Tormsdale to the south of the study area.

•

#### **Description of the Existing View**

The existing view looks across the foreground of the road corridor and beyond across the flat expanse of Loch Watten to the rising low ridge of arable farmland to the north west.

The properties at Lynegar on the northern side of the loch are seen towards the centre of the view. The viewpoint represents the potential effects of the Proposed Development upon visitors and road users.

## **Determination of Visual Sensitivity**

The sensitivity to change associated with the Proposed Development at this location is considered to be **High** for visitors and **Medium** for road users:

Value - Medium

- The landscape is not designated however, the picnic spot provides an important local amenity. Susceptibility to Change High
- Visitors will be focussed on the setting and they will be aware of any changes to their existing visual amenity;
- Awareness of views will be medium for road users.

### **Magnitude of Change**

The overall magnitude of change on receptors at this viewpoint will be Slight.

The factors which have contributed to this judgement are as follows:

## Size or Scale

The wireframe indicates the turbine blades will be visible from this viewpoint, with the hub of one turbine also visible. The wind farm occupies c.2.5° of the available 360° panoramic view.

The Proposed Development will be seen across the loch as distant new elements upon the low plateau ridgeline beyond, seen in the context of expansive views across the surrounding large scale open, modified farming landscape.

## **Geographical Extent**

The Proposed Development will lie to the north east at 341° to the viewpoint.

It will be seen over a short separation distance of 8.5km to the nearest turbine.

The change in view will occur within the north western aspect of the view.

## **Potential for Future Cumulative Effects**

The addition of the Proposed Development will result in locally Moderate and Not Significant cumulative effects.

The *total* cumulative effect of built, consented and planning stage schemes would result in a Major/Moderate and Significant cumulative effect when seen in combined views with the Watten planning stage site.

## Significance of Effect

The combination of the individual judgements of **High** and **Medium** sensitivity and **Slight** magnitude of change are considered to result in a **Moderate** effect on visitors and **Moderate/Minor** effect on road users which in the context of this assessment are considered to be **Not Significant**.

# Table 5-33: Operational Effects on Viewpoint 10, Halkirk

Viewpoint 8, Lyth, Figures 5-2-8a-d	
Distance and Direction to the Proposed Development	8.43km
LCT and Designations	143: Farmed Lowland Plain



Viewpoint 8, Lyth, Figures 5-2-8a-d	
Receptors and Sensitivity to Change	Residents – High Road Users – Medium
Theoretical visibility	Two turbines to blades only

The viewpoint is located at the eastern edge of Halkirk to the south east of the Proposed Development. It represents the potential effects on local residents and road users travelling at the settlement.

The following wind farm development currently influences the existing baseline:

• Long distance partial visibility to the large southern clusters of development at Achalan; Halsary; Causeymire; Bad a' Cheo; Achairn; Camster; Flex Hill; Wathegar I & II.

The following consented development will influence the viewpoint if constructed:

• Additional wind farms within the south of the study area at: Achalan II; and Tacher A,B,C; Camster II; and Wathegar II.

The following planning stage developments will influence the route if consented:

• The large scheme at Tormsdale to the south of the study area.

## **Description of the Existing View**

The existing view looks towards the location of the Proposed Development to the north east and shows an expansive view across the open very gently flowing arable farmland at the edge of the settlement. The rises slightly to the ridgeline at Swordale Hill to the left of the view. The overhead power lines passing through the middle ground follow the course of the River Thurso which is hidden from view by the local terrain. The dispersed farms around the settlement at Roadside extend across the ridge.

Occasional small blocks forestry of forestry blocks break-up the otherwise expansive view. The farm and outbuildings at West Lyth are seen in the foreground below the viewpoint. It represents the potential effects of the Proposed Development upon local residents and road users.

### **Determination of Visual Sensitivity**

The sensitivity to change associated with the Proposed Development at this location is considered to be **High** for residents and **Medium** for road users:

Value – Medium

• The landscape is not designated.

Susceptibility to Change – High

- Residents are highly likely to be aware of any changes to their existing visual amenity;
- Awareness of views will be medium for road users.

# Magnitude of Change

The overall magnitude of change on receptors at this viewpoint will be Negligible.

The factors which have contributed to this judgement are as follows:

## Size or Scale

The wireframe indicates the only the turbine blades will be visible from this viewpoint. The wind farm occupies c.4° of the available 360° panoramic view.

The Proposed Development will be seen partially as distant elements upon the low plateau ridgeline from the eastern edge of the settlement, seen in the context of expansive views across the large scale open, modified farming landscape.

## **Geographical Extent**

The Proposed Development will lie to the north east at 62° to the viewpoint.

It will be seen over a short separation distance of 8.43km to the nearest turbine.

The change in view will occur within the north eastern aspect of the view.

## **Potential for Future Cumulative Effects**

The addition of the Proposed Development will result in locally Minor and Not Significant cumulative effects.



## Viewpoint 8, Lyth, Figures 5-2-8a-d

The total cumulative effect of built, consented and planning stage schemes would result in a Minor and Not Significant cumulative effect when seen in combined views with the Tormsdale planning stage site.

## Significance of Effect

The combination of the individual judgements of High and Medium sensitivity and Negligible magnitude of change are considered to result in a Moderate/Minor effect on residents and Minor effect on road users which in the context of this assessment are considered to be Not Significant.



Table 5-34: Operational Effects on Viewpoint 11, Inkstack

Viewpoint 11, Inkstack, Figures 5-2-11a-d	
Distance and Direction to the Proposed Development	8.37km
LCT and Designations	143: Farmed Lowland Plain
Receptors and Sensitivity to Change	Road Users – Medium
	Residents/Cyclists - High
Theoretical visibility	Two turbines to tower, hubs and blades

The viewpoint is located close to the property at Inkstack to the south of settlement of Barrock which is clustered across the plateau summit of locally elevated ground to the north east of the Proposed Development. It represents the potential effects on local residents, cyclists on the NCR1 and road users travelling along the local road network.

The following wind farm development currently influences the existing baseline:

- Long distance partial visibility to the large southern clusters of development at Achalan; Halsary; Causeymire; Bad a' Cheo; Achairn; Camster; Flex Hill; Wathegar I & II.
- The large scheme at Lochend to the east.

The following consented development will influence the viewpoint if constructed:

Additional wind farms within the south of the study area at: Achalan II; and Tacher A,B,C;
 Camster II; and Wathegar II.

The following planning stage developments will influence the viewpoint if consented:

- The large scheme at Hollandmey to the east of the study area.
- The large schemes at Watten and Tormsdale to the south of the study area.

In addition, the following scoping stage development is being considered as suitable sites locally within 10km of the Proposed Development and will influence the viewpoint if consented:

Lochend, Greenland, and Red Moss.

### **Description of the Existing View**

The existing view looks south east towards the location of the Proposed Development and shows the view along the minor road corridor flanked by the open rectilinear arable fields. The view is slightly elevated and reveals an expansive view across the farmed lowland plain of Caithness, seen against the backdrop of the distant peak of Ben Alisky and the adjoining hills. Loch Heilen is seen in the middle ground, beneath the local ridge at Greenland.

Occasional small blocks forestry and shelter belts beside farms break-up the otherwise expansive view. It represents the potential effects of the Proposed Development upon local residents and road users accessing the rural settlement.

## **Determination of Visual Sensitivity**

The sensitivity to change associated with the Proposed Development at this location is considered to be **High** for residents and cyclists accessing the NCR 1 and **Medium** for road users:

Value – Medium

• The road is defined as the route of National Cycle Route 1.

Susceptibility to Change – High

- Residents are highly likely to be aware of any changes to their existing visual amenity;
- Cyclists on NCR1 are considered to be using the route for recreation and are considered as being of High susceptibility to changes resulting from the Proposed Development;
- Awareness of views will be medium for road users.

### **Magnitude of Change**

The overall magnitude of change on receptors at this viewpoint will be **Slight**.

The factors which have contributed to this judgement are as follows:

## Size or Scale

The wireframe indicates the turbines will be directly visible from this viewpoint. The wind farm



## Viewpoint 11, Inkstack, Figures 5-2-11a-d

occupies c.2.5° of the available 360° panoramic view.

The Proposed Development will be seen from the southern edge of the settlement in distant views as new elements within the farmed lowlands to the south west, seen in the context of expansive views across the large scale open, modified farming landscape.

### Geographical Extent

The Proposed Development will lie to the north east at 206° to the viewpoint.

It will be seen over a short separation distance of 8.37km to the nearest turbine.

The change in view will occur within the south western aspect of the view.

## **Potential for Future Cumulative Effects**

The addition of the Proposed Development will result in locally Minor and Not Significant cumulative effects.

The total cumulative effect of built, consented and planning stage schemes would result in a Major/Moderate and Significant cumulative effect when seen in combined views with the Hollandmey and Watten planning stage sites and the Greenland, Red Moss, and Lochend Extension scoping stage sites.

## Significance of Effect

The combination of the individual judgements of High and Medium sensitivity and Slight magnitude of change are considered to result in a Moderate effect on residents and cyclists and a Moderate/Minor effect on road users which in the context of this assessment are considered to be Not Significant.



Table 5-35: Operational Effects on Viewpoint 12, Dunnet Head

Viewpoint 12, Dunnet Head, Figures 5-2-12 a-d	
Distance and Direction to the Proposed Development	13.35km
LCT and Designations	141: High Cliffs and Sheltered Bays
Receptors and Sensitivity to Change	Walkers and Visitors - High
Theoretical visibility	Two turbines to tower, hubs and blades

The viewpoint is located beside the trigonometry point on the open coastal moorland at Dunnet Head to the south of the Dunnet Head Lighthouse. It represents the potential effects on walkers and visitors to the northern point on the British Mainland. The following wind farm development currently influences the existing baseline:

- Long distance partial visibility to the large southern clusters of development at Achalan; Halsary;
   Causeymire; Bad a' Cheo; Achairn; Camster; Flex Hill; Wathegar I & II.
- The large schemes at Stroupster and Lochend to the east.

The following consented development will influence the settlement if constructed:

- Slickly; and Cogle Moss to the east of the study area.
- Additional wind farms within the south of the study area at: Achalan II; and Tacher A,B,C;
   Camster II; and Wathegar II.

The following planning stage developments will influence the settlement if consented:

- The large scheme at Hollandmey to the north east of the study area.
- The large schemes at Watten and Tormsdale to the south of the study area.

In addition, the following scoping stage developments are being considered as suitable sites and will influence the view if consented:

Lochend Extension, Greenland, and Red Moss.

## **Description of the Existing View**

The existing view looks to the south towards the location of the Proposed Development and shows the view across the open moorland which extends across Dunnet Head. The Loch of Easter Head and Loch Long are seen in the foreground. The farmed lowlands of Caithness are seen in the distance flanked to the rear by the prominent peaks of Scaraben and Morven and the adjoining lower hills. The view represents the potential effects of the Proposed Development upon walkers and visitors.

#### **Determination of Visual Sensitivity**

The sensitivity to change associated with the Proposed Development at this location is considered to be **High** for visitors and walkers accessing the moorland:

Value – High

- The viewpoint is close to the listed buildings at Dunnet Head Lighthouse.
- The viewpoint is located within the Dunnet Head Special Landscape Area.

Susceptibility to Change – High

- Visitors accessing the vantage point will be focussed on the dramatic setting.
- Walkers will be engaged in the experience of the landscape and panoramic views, with a strong awareness of their surroundings.

### Magnitude of Change

The overall magnitude of change on receptors at this viewpoint will be **Negligible**.

The factors which have contributed to this judgement are as follows:

### Size or Scale

The wireframe indicates the turbines will be directly visible from this viewpoint. The wind farm occupies c.0.5° of the available 360° panoramic view.

The turbines will be seen as very distant new elements within the settled agricultural plain to the south. The towers, hubs and blades will be back clothed by the farmed lowlands. The turbines will add distant man-made vertical elements into the landscape.



## Viewpoint 12, Dunnet Head, Figures 5-2-12 a-d

### Geographical Extent

The Proposed Development will lie to the north east at 178° to the viewpoint.

It will be seen over a short separation distance of 13.35km to the nearest turbine.

The change in view will occur within the southern aspect of the view.

#### **Potential for Future Cumulative Effects**

The addition of the Proposed Development will result in Minor combined cumulative effects.

The total cumulative effect of built consented, planning stage sites will contribute to a Major/Moderate, Significant cumulative effect when seen in successive views with the Watten and Hollandmey planning stage sites, and the Lochend Extension, Greenland, and Red Moss scoping stage sites.

#### Significance of Effect

The combination of the individual judgements of High sensitivity and Negligible magnitude of change are considered to result in a Minor effect on visitors and walkers which in the context of this assessment is considered to be Not Significant.

Table 5-36: Operational Effects on Viewpoint 13, Castle Sinclair Girnigoe, Noss Head

Viewpoint 13, Castle Sinclair Girnigoe, Noss Head, Figures 5-2-13 a-b	
18.63km	
143: Farmed Lowland Plain	
Walkers and Visitors - High	
Two turbines to tower, hubs and blades	

## Location and Rationale for Selection

The viewpoint is located on the footpath leading to Castle Sinclair Girnigoe at Noss Head. It represents the potential effects on walkers and visitors to site of the ruined castle. The following wind farm development currently influences the existing baseline:

The large schemes at Stroupster and Lochend to the north.

The following consented development will influence the settlement if constructed:

Slickly; and Cogle Moss to the east of the study area.

The following planning stage developments will influence the settlement if consented:

The large schemes at Watten and Hollandmey to the north east of the study area.

In addition, the following scoping stage developments are being considered as suitable sites and will influence the view if consented:

Lochend Extension, Greenland, and Red Moss.

### **Description of the Existing View**

The existing view looks to the east towards the location of the Proposed Development and shows the ruined castle above the sweeping view over Sinclair's Bay view across the open moorland which extends across Dunnet Head. The beach and dunes at Akeraill Links are seen at the back of the bay in the foreground of the flat farmed lowland plain beyond. The view represents the potential effects of the Proposed Development upon walkers and visitors.

## **Determination of Visual Sensitivity**

The sensitivity to change associated with the Proposed Development at this location is considered to be **High** for visitors and walkers accessing the moorland:

Value - High

- The viewpoint is close to the listed buildings at Castle Sinclair Girnigoe, Noss Head. Susceptibility to Change – High
- Visitors to the castle will be focussed on the dramatic setting.
- Walkers will be engaged in the experience of the landscape and panoramic views, with a



## Viewpoint 13, Castle Sinclair Girnigoe, Noss Head, Figures 5-2-13 a-b

strong awareness of their surroundings.

### **Magnitude of Change**

The overall magnitude of change on receptors at this viewpoint will be **Negligible**.

The factors which have contributed to this judgement are as follows:

#### Size or Scale

The wireframe indicates the turbines will be directly visible from this viewpoint. The wind farm occupies c.2° of the available 360° panoramic view.

The turbines will be seen as very distant new elements within the settled agricultural plain to the east. The towers, hubs and blades will be seen to rise slightly above the farmed lowlands. The turbines will add distant man-made vertical elements into the landscape.

#### Geographical Extent

The Proposed Development will lie to the north east at 292° to the viewpoint.

It will be seen over a short separation distance of 18.63km to the nearest turbine.

The change in view will occur within the eastern aspect of the view.

#### Potential for Future Cumulative Effects

The addition of the Proposed Development will result in Minor combined cumulative effects.

The total cumulative effect of built consented, planning stage sites will contribute to a

**Major/Moderate**, **Significant** cumulative effect when seen in successive views with the Watten and Hollandmey planning stage sites, and the Lochend Extension, Greenland, and Red Moss scoping stage sites.

#### Significance of Effect

The combination of the individual judgements of **High** sensitivity and **Negligible** magnitude of change are considered to result in a **Minor** effect on visitors and walkers which in the context of this assessment is considered to be **Not Significant**.

Table 5-37: Operational Effects on Viewpoint 14, Ben Dorrery

Viewpoint 14, Ben Dorrery, Figures 5-2-14 a-d	
Distance and Direction to the Proposed Development	16.79km
LCT and Designations	134: Sweeping Moorland and Flows
Receptors and Sensitivity to Change	Walkers - High
Theoretical visibility	Two turbines to tower, hubs and blades

## Location and Rationale for Selection

The viewpoint is located on the moorland at the summit of Ben Dorrery. It represents the potential effects on walkers accessing the hill top vantage point. The following wind farm development currently influences the existing baseline:

- Long distance partial visibility to the large southern clusters of development at Achalan; Halsary; Causeymire; Bad a' Cheo; Achairn; Camster; Flex Hill; Wathegar I & II.
- The large schemes at Stroupster and Lochend to the east.

The following consented development will influence the settlement if constructed:

- Slickly; and Cogle Moss to the east of the study area.
- Additional wind farms within the south of the study area at: Achalan II; and Tacher A,B,C;
   Camster II; and Wathegar II.

The following planning stage developments will influence the settlement if consented:

- The large scheme at Hollandmey to the north east of the study area.
- The large schemes at Watten and Tormsdale to the south of the study area.

In addition, the following scoping stage developments are being considered as suitable sites and will influence the view if consented:

Lochend Extension, Greenland, and Red Moss.



## Viewpoint 14, Ben Dorrery, Figures 5-2-14 a-d

## **Description of the Existing View**

The existing elevated view looks to the east across the lowland farmland plain towards the location of the Proposed Development. The gently rolling landscape is view is covered by a patchwork of large arable fields with moorland/pasture across plateau ridges. The landscape is broken up by occasional forestry plantation blocks and shelter belts with a dispersed pattern of farming settlement. The viewpoint represents the potential effects of the Proposed Development upon walkers accessing this vantage point which lies between the settled agricultural landscape to the east and the remote sparsely settled flow country to the south and south west.

#### **Determination of Visual Sensitivity**

The sensitivity to change associated with the Proposed Development at this location is considered to be **High** for walkers:

Value - Medium

The landscape is not designated although the path to the summit is defined as part of the local core path network.

Susceptibility to Change – High

Walkers will be engaged in the experience of the landscape and panoramic views, with a strong awareness of their surroundings.

## Magnitude of Change

The overall magnitude of change on receptors at this viewpoint will be Slight.

The factors which have contributed to this judgement are as follows:

#### Size or Scale

The wireframe indicates the turbines will be directly visible from this viewpoint. The wind farm occupies c.2° of the available 360° panoramic view.

The turbines will be seen as distant but noticeable new elements within the settled managed agricultural lowland landscape. The upper towers, hubs and blades will be visible against the skyline, with the lower towers back clothed against the surrounding fields. The turbines will add additional large scale man-made vertical elements into the landscape.

## Geographical Extent

The turbines will be seen within expansive panoramic views from the hill top.

The Proposed Development will lie to the north east at 68° to the viewpoint.

It will be seen over a short separation distance of 16.79km to the nearest turbine.

The change in view will occur within the eastern aspect of the view.

## **Potential for Future Cumulative Effects**

The addition of the Proposed Development will result in combined cumulative effects with the baseline of the built sites at Lochend and Stroupster. The turbines of the Proposed Development will be prominent in views, resulting in a Moderate, Not Significant cumulative effect.

The total cumulative effect of built consented, planning stage sites will contribute to a Major/Moderate, Not Significant cumulative effect when seen in combined views with the Watten and Hollandmey planning stage sites, and the Lochend Extension, Greenland, and Red Moss scoping stage sites.

## Significance of Effect

The combination of the individual judgements of High sensitivity and Slight magnitude of change are considered to result in a Moderate effect on walkers which in the context of this assessment is considered to be Not Significant.



Table 5-38: Operational Effects on Viewpoint 15, Level crossing by Gelshfield

Viewpoint 15, Level crossing by Gelshfield, Figures 5-2-15a-d	
Distance and Direction to the Proposed Development	4.77km
LCT and Designations	143: Farmed Lowland Plain
Receptors and Sensitivity to Change	Rail passengers and Residents - High
Theoretical visibility	Two turbines to the upper towers, hubs and blades

The viewpoint is located on the minor spur road from the A882 leading to Loch Scarmclate to the south west of the Proposed Development. It represents the potential effects on local residents at Gelshfield and rail passengers travelling along the adjacent Far North Line.

The following wind farm development currently influences the existing baseline:

Long distance partial visibility to the large southern clusters of development at Camster; Flex Hill;
 Wathegar I & II.

The following consented development will influence the viewpoint if constructed:

- Cogle Moss to the east of the study area.
- Additional wind farms within the south of the study area at: Camster II; and Wathegar II.

The following planning stage developments will influence the route if consented:

- The large scheme at Hollandmey to the east of the study area.
- The large scheme at Watten to the south of the study area.

In addition, the following scoping stage development is being considered as suitable sites locally and will influence the viewpoint if consented:

Lochend, and Red Moss.

## **Description of the Existing View**

The existing view looks towards the location of the Proposed Development to the north east and shows the view across the open rectilinear fields of pasture and to the low ridgeline at Corsback Hill. Woodlands at the western edge of Loch Scarmclate are seen to the left of the view. Loch Scarmclate extends to the right.

## **Determination of Visual Sensitivity**

The sensitivity to change associated with the Proposed Development at this location is considered to be **High** for residents and rail passengers

Value - Medium

• The landscape is not designated.

Susceptibility to Change – High

- Residents are highly likely to be aware of any changes to their existing visual amenity;
- Rail passengers will be engaged in the experience of the landscape and will have a High susceptibility to change.

## Magnitude of Change

The overall magnitude of change on receptors at this viewpoint will be Slight.

The factors which have contributed to this judgement are as follows:

### Size or Scale

The wireframe indicates the turbines will be directly visible from this viewpoint. The wind farm occupies c.4.5° of the available 360° panoramic view.

The Proposed Development will be seen in direct views across the open farmland and Loch Scarmclate to the north of the route, noticeable as a new element in views with visibility to the towers, hub and rotors.

#### **Geographical Extent**

The Proposed Development will lie to the north east at 30° to the viewpoint.



## Viewpoint 15, Level crossing by Gelshfield, Figures 5-2-15a-d

It will be seen over a short separation distance of 4.77km to the nearest turbine.

The change in view will occur within the north eastern aspect of the view.

#### **Potential for Future Cumulative Effects**

The addition of the Proposed Development will not result in important cumulative effects.

The total cumulative effect of built consented, planning stage sites will contribute to a Moderate, Not Significant cumulative effect when seen in combined views to the Hollandmey planning stage site, and the Lochend Extension and Red Moss scoping stage sites, as well as successive views to the Watten planning stage site.

## Significance of Effect

The combination of the individual judgements of **High** sensitivity and **Slight** magnitude of change are considered to result in a **Moderate** effect on resident and rail passengers which in the context of this assessment are considered to be **Not Significant**.

Table 5-39: Operational Effects on Viewpoint 16, Dunes beside Castletown, A836

Viewpoint 16, Dunes beside Castletown, A836, Figures 5-2-16a-d		
Distance and Direction to the Proposed Development 4.97km		
LCT and Designations 140: Sandy Beaches and Dunes		
Receptors and Sensitivity to Change Road Users – Medium		
	Residents/Cyclists - High	
<b>Theoretical visibility</b> Two turbines to tower, hubs and blades		

#### Location and Rationale for Selection

The viewpoint is located beside the A836 (route of the north coast 500) on the edge of dunes to the east of Castletown, to the north of the Proposed Development. It represents the potential effects on local residents, cyclists on the NCR1 and road users travelling along the A836.

The following wind farm development currently influences the existing baseline:

• Lochend to the east.

The following consented development will influence the viewpoint if constructed:

Slickly to the east.

The following planning stage developments will influence the viewpoint if consented:

The large scheme at Hollandmey to the east of the study area.

In addition, the following scoping stage development is being considered as suitable sites locally within 10km of the Proposed Development and will influence the viewpoint if consented:

• Lochend, Greenland, and Red Moss.

#### **Description of the Existing View**

The existing view looks south towards the location of the Proposed Development and shows the view across the flat open rectilinear fields of pasture. The view is narrow with ground rising slightly to the Ridge at Cooper's Hill. The farm at Thurdistoft is seen to the left of the view, the farm scale turbine on the disused airfield is seen as vertical element beyond. The blocks of woodland to the east of Castletown break up views to the eastern edge of the settlement.

## **Determination of Visual Sensitivity**

The sensitivity to change associated with the Proposed Development at this location is considered to be **High** for cyclists accessing the NCR 1 and **Medium** for road users:

Value - Medium

- The viewpoint is within the Dunnet Bay Special Landscape Area.
- The road is defined as the route of National Cycle Route 1 and is also the route followed by the North Coast 500 tourist route.

Susceptibility to Change – High

• Cyclists on NCR1 are considered to be using the route for recreation and are considered as



## Viewpoint 16, Dunes beside Castletown, A836, Figures 5-2-16a-d

being of High susceptibility to changes resulting from the Proposed Development;

Awareness of views will be medium for road users.

#### **Magnitude of Change**

The overall magnitude of change on receptors at this viewpoint will be Slight.

The factors which have contributed to this judgement are as follows:

#### Size or Scale

The wireframe indicates the turbines will be directly visible from this viewpoint. The wind farm occupies c.2.5° of the available 360° panoramic view.

The Proposed Development will be seen as distant new vertical elements within the farmed lowlands to the south, seen in the context of expansive views across the large scale open, modified farming landscape. Locally views are focussed to the north across the expansive dramatic setting of Dunnet Bay.

#### **Geographical Extent**

The Proposed Development will lie to the north east at 168° to the viewpoint.

It will be seen over a short separation distance of 4.97km to the nearest turbine.

The change in view will occur within the southern aspect of the view.

#### Potential for Future Cumulative Effects

The addition of the Proposed Development will result in locally Moderate/Minor and Not Significant cumulative effects.

The *total* cumulative effect of built, consented and planning stage schemes would result in a Moderate and Not Significant cumulative effect when seen in combined views with the Hollandmey planning stage site and the Greenland, Red Moss, and Lochend Extension scoping stage sites.

#### Significance of Effect

The combination of the individual judgements of **High** and **Medium** sensitivity and **Slight** magnitude of change are considered to result in a **Moderate** effect on cyclists and a **Moderate/Minor** effect on road users which in the context of this assessment are considered to be **Not Significant**.

Table 5-40: Operational Effects on Viewpoint 17, Bridge of Dunn beside A882

Viewpoint 16, Dunes beside Castletown, A836, Figures 5-2-16a-d			
Distance and Direction to the Proposed Development 6.51km			
LCT and Designations 143: Farmed Lowland Plain			
Receptors and Sensitivity to Change Road Users – Medium			
Theoretical visibility Two turbines to tower, hubs and blades			

#### **Location and Rationale for Selection**

The viewpoint is located beside the A882 to the east of the settlement at Bridge of Dunn, to the south of the Proposed Development. It represents the potential effects on road users travelling along the A882.

The following wind farm development currently influences the existing baseline:

- The large schemes at Stroupster and Lochend to the east.
- Long distance partial visibility to the large southern clusters of development at Camster; Flex Hill;
   Wathegar I & II.

The following consented development will influence the viewpoint if constructed:

- Slickly; and Cogle Moss to the east of the study area.
- Additional wind farms within the south of the study area at: Camster II; and Wathegar II.

The following planning stage developments will influence the route if consented:

- The large scheme at Hollandmey to the east of the study area.
- The large scheme at Watten to the south of the study area.

In addition, the following scoping stage development is being considered as suitable sites locally



## Viewpoint 16, Dunes beside Castletown, A836, Figures 5-2-16a-d

within a 10km radius and will influence the viewpoint if consented:

Lochend, and Red Moss.

## **Description of the Existing View**

The existing view looks to north across the open farmland surrounding the western extent of Loch Watten. The blocks of woodland to the east of Bridge of Dunn break up views to the left of the image. The Hill of Olrig is seen on the horizon beyond, marked by the two communication towers. To the centre of the view the distant profile of Dunnet Head is seen on the horizon.

## **Determination of Visual Sensitivity**

The sensitivity to change associated with the Proposed Development at this location is considered to be **Medium** for road users:

Value - Medium

The landscape is designated.

Susceptibility to Change – Medium

Awareness of views will be medium for road users.

#### Magnitude of Change

The overall magnitude of change on receptors at this viewpoint will be Slight.

The factors which have contributed to this judgement are as follows:

#### Size or Scale

The wireframe indicates the turbines will be visible as distant new vertical elements on the low ridge at Bowertower from this viewpoint. The wind farm occupies c.1.5° of the available 360° panoramic view.

The Proposed Development will be seen as distant new vertical elements within the farmed lowlands to the north, seen in the context of expansive views across the large scale open, modified farming landscape and Loch Watten.

## Geographical Extent

The Proposed Development will lie to the north east at 3.5° to the viewpoint.

It will be seen over a short separation distance of 6.51km to the nearest turbine.

The change in view will occur within the northern aspect of the view.

### **Potential for Future Cumulative Effects**

The addition of the Proposed Development will result in locally Moderate/Minor and Not Significant cumulative effects.

The total cumulative effect of built, consented and planning stage schemes would result in a Moderate and Not Significant cumulative effect when seen in combined views with the Hollandmey and Watten planning stage sites and the Greenland, Red Moss, and Lochend Extension scoping stage sites.

## Significance of Effect

The combination of the individual judgements of Medium sensitivity and Slight magnitude of change are considered to result in a Moderate/Minor effect on road users which in the context of this assessment are considered to be Not Significant.



Table 5-41: Operational Effects on Viewpoint 18, Roadside View near Georgemas

Junction

Viewpoint 18, Roadside View near Georgemas Junction, Figures 5-2-18a-d		
Distance and Direction to the Proposed Development	6.73km	
LCT and Designations	143: Farmed Lowland Plain	
Receptors and Sensitivity to Change	Road Users – Medium	
Theoretical visibility	Two turbines to upper tower, hub and blades	

The viewpoint is located just to the south of the railway station beside the A9 at Georgemas Junction. It represents the potential effects on road users travelling along the A9 trunk road.

The following wind farm development currently influences the existing baseline:

- Long distance partial visibility to the large southern clusters of development at Achalan; Halsary;
   Causeymire; Bad a' Cheo; Achairn; Camster; Flex Hill; Wathegar I & II.
- The large schemes at Stroupster and Lochend to the east.

The following consented development will influence the viewpoint if constructed:

- Additional wind farms within the south of the study area at: Achalan II; and Tacher A,B,C;
   Camster
- Slickly; and Cogle Moss to the east of the study area.
- Additional wind farms within the south of the study area at: Camster II; and Wathegar II.

The following planning stage developments will influence the route if consented:

The large scheme at Hollandmey to the east of the study area.

In addition, the following scoping stage development is being considered as suitable sites locally within a 10km radius and will influence the viewpoint if consented:

Lochend, Greenland, Red Moss and Watten.

## **Description of the Existing View**

The existing view looks towards the location of the Proposed Development to the north east and shows an expansive view across the Moss Woodland of Sibister Moss in the foreground with belts of Plantation forestry seen beyond to the right and centre of the view. The low, ridgeline of arable farmland at Corsback Hill is seen on the horizon to the left of the view.

### **Determination of Visual Sensitivity**

The sensitivity to change associated with the Proposed Development at this location is considered to be **Medium** for road users:

Value - Medium

• The landscape is not designated.

Susceptibility to Change – High

• Awareness of views will be medium for road users.

## Magnitude of Change

The overall magnitude of change on receptors at this viewpoint will be no greater than **Slight**. The factors which have contributed to this judgement are as follows:

## Size or Scale

The wireframe indicates the only the turbine blades will be visible from this viewpoint. The wind farm occupies c.1.7° of the available 360° panoramic view.

The Proposed Development will be seen partially as distant elements upon the low plateau ridgeline to the north east of the road corridor, away from the direction of travel, seen locally in the context of foreground views to Moss Woodland and areas of forestry. Where visible to the Proposed Development will be seen within the settled agricultural lowland plain beyond.

#### **Geographical Extent**

The Proposed Development will lie to the north east at 61° to the viewpoint.

It will be seen over a short separation distance of 6.73km to the nearest turbine.



## Viewpoint 18, Roadside View near Georgemas Junction, Figures 5-2-18a-d

The change in view will occur within the north eastern aspect of the view.

## **Potential for Future Cumulative Effects**

The addition of the Proposed Development will result in locally Minor and Not Significant cumulative

The total cumulative effect of built, consented and planning stage schemes would result in a Moderate and Not Significant cumulative effect when seen in combined views with the Watten and Red Moss scoping stage sites.

#### Significance of Effect

The combination of the individual judgements of Medium sensitivity and Slight magnitude of change are considered to result in a Moderate/Minor effect on road users which in the context of this assessment are considered to be Not Significant.

# Summary of Effects on Viewpoints

Table 5-42 lists and summarises effects on the viewpoints assessed above. It sets out their sensitivity to change, the magnitude of change that would arise as a result of the Proposed Development, and the level of resultant effects and their significance.

Table 5-42: Summary of Effects on Viewpoints

Viewpoint	Sensitivity	Magnitude of Change	Significance of Effect for Proposed Development	Significance of Cumulative Effect (additional and total)
Viewpoint 1, Minor road south west of site	Road Users - Medium	Substantial	Road Users – Major/Moderate, Significant	The addition of the Proposed Development will result in Moderate and Not Significant cumulative effects. The total cumulative effect of built consented, planning stage sites will contribute to a Major/Moderate, Significant cumulative effect.
Viewpoint 2, Stone Lud standing stone, Bowertower	Walkers and Visitors - High	Substantial	Visitors – <b>Major</b> , <b>Significant</b>	The addition of the Proposed Development will result in Moderate and Not Significant cumulative effects. The total cumulative effect of built consented, planning stage sites will contribute to a Major/Moderate, Significant cumulative effect.
Viewpoint 3, B876 west- bound at Bower	Road Users - Medium	Substantial	Road Users – Major/Moderate, Significant	The addition of the Proposed Development will not result in cumulative effects. The total cumulative effect of built consented, planning stage sites will contribute to a Major/Moderate, Significant cumulative effect.
Viewpoint 4, B876 east- bound, at Cooper's Hill	Road Users - Medium	Substantial	Road Users – Major/Moderate, Significant	The addition of the Proposed Development will not result in cumulative effects. The total cumulative effect of built consented, planning stage sites will contribute to a Major/Moderate, Significant cumulative effect.

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			Significance of	
Viewpoint	Sensitivity	Magnitude of Change	Effect for Proposed Development	Significance of Cumulative Effect (additional and total)
Viewpoint 5, Easter Durran	Road Users  – Medium  Residents -  High	Substantial	Residents- Major, Significant. Road Users – Major/Moderate, Significant	The addition of the Proposed Development will not result in cumulative effects. The total cumulative effect of built consented, planning stage sites will contribute to a Major/Moderate, Significant cumulative effect.
Viewpoint 6, B874 west- bound, North Watten	Road Users - Medium	Substantial	Road Users – Moderate, Not Significant	The addition of the Proposed Development will not result in cumulative effects. The total cumulative effect of built consented, planning stage sites will contribute to a Moderate, Not Significant cumulative effect
Viewpoint 7, Hill of Olrig including Core Path CA03.05	Walkers – High	Moderate	Walkers – Major/Moderate, Significant	The addition of the Proposed Development will result in Moderate and Not Significant cumulative effects. The total cumulative effect of built consented, planning stage sites will contribute to a Moderate, Not Significant cumulative effect
Viewpoint 8, Lyth	Road Users – Medium Residents - High	Slight	Residents- Moderate, Not Significant. Road Users – Moderate/Minor, Not Significant	The addition of the Proposed Development will result in locally Moderate and Not Significant cumulative effects. The total cumulative effect of built, consented and planning stage schemes would result in a Moderate and Not Significant cumulative effect.
Viewpoint 9, Loch Watten picnic spot	Visitors – High Road Users – Medium	Slight	Visitors – Moderate, Not Significant. Road Users – Moderate/Minor, Not Significant	The addition of the Proposed Development will result in locally Moderate and Not Significant cumulative effects. The total cumulative effect of built, consented and planning stage schemes would result in a Major/Moderate and Significant cumulative effect.
Viewpoint 10, Halkirk	Road Users – Medium Residents - High	Negligible	Residents- Moderate/Minor, Not Significant. Road Users – Minor, Not Significant	The addition of the Proposed Development will result in Minor and Not Significant cumulative effects. The total cumulative effect of built, consented and planning stage schemes would result in a Minor and Not Significant cumulative effect.
Viewpoint 11, Inkstack	Residents/ Cyclists – High Road Users	Slight	Residents/Cyclists – Moderate, Not Significant Road Users –	The addition of the Proposed Development will result in Minor and Not Significant cumulative effects. The total cumulative effect of built,



		Magnitude	Significance of Effect for Proposed	Significance of Cumulative Effect
Viewpoint	Sensitivity  - Medium	of Change	Moderate/Minor, Not Significant	(additional and total)  consented and planning stage schemes would result in a  Major/Moderate and Significant cumulative effect.
Viewpoint 12, Dunnet Head including Core Path CA05.10	Walkers/ Visitors – High	Negligible	Walkers/Visitors – Minor – Not Significant	The addition of the Proposed Development will result in Minor and Not Significant cumulative effects. The total cumulative effect of built, consented and planning stage schemes would result in a Major/Moderate and Significant cumulative effect.
Viewpoint 13, Castle Sinclair Girnigoe, Noss Head including Core Path CA15.29	Walkers/ Visitors – High	Negligible	Walkers/Visitors – Minor – Not Significant	The addition of the Proposed Development will result in Minor and Not Significant cumulative effects. The total cumulative effect of built, consented and planning stage schemes would result in a Major/Moderate and Significant cumulative effect.
Viewpoint 14, Ben Dorrery including Core Path CA06.03	Walkers – High	Slight	Walkers – Moderate, Not Significant	The addition of the Proposed Development will result in Moderate and Not Significant cumulative effects. The total cumulative effect of built consented, planning stage sites will contribute to a Major/Moderate, Not Significant cumulative effect
Viewpoint 15, Level crossing on the North Highland Line at Gelshfield	Rail passenger s and Residents - High	Slight	Rail passengers and Residents – Moderate, Not Significant	The addition of the Proposed Development will not result in important cumulative effects. The total cumulative effect of built consented, planning stage sites will contribute to a Moderate, Not Significant cumulative effect.
Viewpoint 16, B836 east of Castletown	Residents/ Cyclists - High	Slight	Residents/Cyclists - Moderate, Not Significant	The addition of the Proposed Development will result in locally Moderate/Minor and Not Significant cumulative effects. The total cumulative effect of built, consented and planning stage schemes would result in a Moderate and Not Significant cumulative effect.
Viewpoint 17, A882 west of Bridge of Dunn	Road Users – Medium	Slight	Road Users – Moderate/Minor, Not Significant	The addition of the Proposed Development will result in locally Moderate/Minor and Not Significant cumulative effects. The total cumulative effect of built, consented and planning stage schemes would result in a Moderate



Viewpoint	Sensitivity	Magnitude of Change	Significance of Effect for Proposed Development	Significance of Cumulative Effect (additional and total)
				and Not Significant cumulative effect.
Viewpoint 18, A9 south of Georgemas Junction	Road Users – Medium	Slight	Road Users – Moderate/Minor, Not Significant	The addition of the Proposed Development will result in locally Minor and Not Significant cumulative effects. The total cumulative effect of built, consented and planning stage schemes would result in a Moderate and Not Significant cumulative effect.

# Residential Visual Amenity Assessment

The following section provides a summary of the detailed Residential Visual Amenity Assessment (RVAA) which is set out in Technical Appendix 5-6.

Residential receptors are considered to be of high sensitivity to changes in terms of their visual amenity. It is recognised that changes in their views resulting from the presence of wind turbines at close proximities will inevitably give rise to significant visual impacts in the context of the EIA Regulations. Effects of significance are not unexpected.

The purpose of this study was to explore the nature of these effects in more detail and examine whether the RVAA Threshold had been breached.

The assessment concludes that, at none of the properties assessed will residents experience impacts on the visual component of residential amenity or living conditions from the Proposed Development which will affect "the outlook of these residents to such an extent, i.e., be so unpleasant, overwhelming and oppressive that, the property would become an unattractive place to live."

It is concluded that the relationship between residential properties in close proximity to the Proposed Development is not of the order of magnitude to create a situation where the effect on the outlook / visual amenity of a residential property is so great that it would affect the living conditions. The Proposed Development will not breach the Residential Visual Amenity Assessment Threshold.

## **Cumulative Assessment**

The cumulative assessment is incorporated into the main LVIA, with separate judgements for the cumulative effects being presented throughout within each of the assessment tables, for each landscape and visual receptor.

It should be noted that the key cumulative wind farms of relevance to this assessment are the built baseline sites at Lochend to the north east, Stroupster to the east, and the two large clusters to the south and south east which encompass the following sites.

Firstly, to the south: Achlachan; Causeymire; Halsary; and Bad a Cheo. Secondly, to the south east: Flex Hill; Wathegar I & II; and Camster. These key sites have been considered as part of the baseline for the assessment (i.e., they are included within the primary assessment).



The consented schemes at Cogle Moss and Slickly will also have an important influence on local cumulative effects within the core study area and have been considered as part of the less certain, future baseline.

The cumulative effects with the application stage sites at Hollandmey to the east and Watten and Tormsdale to the south are a focus for the assessment of potential future cumulative effects. The scoping stage sites at Red Moss, Greenland, and Lochend Extension have also been considered as part of the cumulative assessment given their close proximity within the inner 10km radius of the Proposed Development.

This section therefore summarises the key issues, informed by the analysis and assessment which has already been presented.

The cumulative assessment is supported by cumulative ZTVs and 360-degree cumulative wireframes. The cumulative ZTVs are presented as pairs or trios, focussed on comparison of visibility between the Proposed Development and projects at the Planning Stage.

One strategic viewpoint, East Craigs Hill, was selected to illustrate 360° wireframe views to illustrate the cumulative effect of the Proposed Development and to assist in understanding how this affects the existing and proposed pattern of development.

Each viewpoint assessed in the viewpoint assessment also present cumulative sites visible within a 90-degree angle of view. The existing and proposed wind farms are shown on the following Figures:

- Site Location Plans:
  - Figure 5-1-8a: Cumulative Wind Farm Site Location Plan (60km)
  - Figure 5-1-8b: Cumulative Wind Farm Site Location Plan (40km)
  - Figure 5-1-8c: Cumulative Wind Farm Site Location Plan (150km)
  - Figure 5-1-9a: Cumulative Blade Tip ZTV: The Proposed Development with all built and consented sites (40km)
  - Figure 5-1-9b: Cumulative Blade Tip ZTV: The Proposed Development with Hollandmey and Tormsdale (40km)
  - Figure 5-1-9c: Cumulative Blade Tip ZTV: The Proposed Development with Greenland and Red Moss (40km)
  - Figure 5-1-9d: Cumulative Blade Tip ZTV: The Proposed Development with Lochend Extension and Watten (40km)

The following Viewpoint Figures include 360° wire frame views:

- Figure 5-3-2, Viewpoint 2 Lud Stone, Standing Stone
- Figure 5-3-7, Viewpoint 7 Hill of Olrig
- Figure 5-3-14, Viewpoint 14 Ben Dorrery

The main footprint of the existing built/consented wind farm development within the baseline and within the core study area lies to the north east encompassing the existing four turbine Lochend Wind Farm.

Beyond this footprint of wind farm development, there are frequent small scale wind turbines in the landscape associated with the dispersed farming settlement, alongside two larger operational single turbines at Weydale Farm, 7.5km to the north west, and Taig na Muir, 10.5km to the north east.



The addition of the Proposed Development to this established footprint of development was assessed for cumulative effects within the main LVIA above. No significant cumulative effects due to the addition of the Proposed Development were reported on landscape character, settlements, route corridors and the selected viewpoints.

The total cumulative effect of built/consented and planning stage schemes alongside the Proposed Development has also been considered throughout the LVIA reporting.

This part of the assessment considered the effects on landscape and visual receptors and the effects resulting from the Proposed Development in combination with sites at application stage, noting that there is a lower degree of certainty that these sites may obtain consent and be operational.

The assessment of landscape effects found no significant cumulative effects on landscape character.

The assessment of visual effects found locally significant total cumulative effects on receptors who are of high sensitivity at settlements within the inner 2.5km study area at Bowertower, Durran, Halcro/Brabsterdoran and Bower.

This total effect arises when the Proposed Development is seen in successive views with the Hollandmey planning stage site and the Red Moss, Greenland and Lochend Extension scoping stage sites. The addition of the Proposed Development in this scenario does not give rise to a significant cumulative effect.

The assessment of visual effects found locally significant total cumulative effects on road users in views from the local road network close to the site. Significant total cumulative effects were also found on walkers/visitors to the Lud Stone, Viewpoint 2.

Similar effects are predicted on the travellers on the local road network and from the local settlements within a c.2.5km radius as assessed at Viewpoint 3, B876 west-bound at Bower; Viewpoint 4, B876 east-bound, at Cooper's Hill; and Viewpoint 5, Easter Durran.

This effect is due to the combined effects of the built and consented baseline footprint of development in combined and successive views with the Watten and Hollandmey planning stage sites, and the Lochend Extension, and Red Moss scoping stage sites.

A significant total cumulative effect was assessed on Viewpoint 9, Loch Watten picnic spot, when the Proposed Development is seen in successive views to the Watten planning stage site.

Further total cumulative effects were assessed on receptors of high sensitivity including cyclists, and walkers from more distant viewpoints: Viewpoint 11, Inkstack; Viewpoint 12, Dunnet Head; Viewpoint 13, Castle Sinclair Girnigoe, Noss Head; and Viewpoint 14, Ben Dorrery.

These effects also arise due to the combined effects of the built and consented baseline footprint of development in combined and successive views with the Hollandmey and Watten planning stage sites, and the Lochend Extension, Greenland, and Red Moss scoping stage sites.

In conclusion, the key consideration in terms of cumulative effects is between the Proposed Development and the Watten and Hollandmey planning stage sites, and the Lochend Extension, Greenland, and Red Moss scoping stage sites.



# Post-Operational Stage Effects (Decommissioning)

## **Residual Operational Effects**

The decommissioning of the Proposed Development and the extent of restoration works will be agreed with THC in consultation with appropriate statutory bodies.

At the end of the operational lifetime of the wind farm, the turbines and other structures will be removed, and the landscape and application site would be returned to their present condition.

Decommissioning, with the dismantling of all above-ground structures, is expected to be shorter than the construction phase however, the reinstatement of disturbed ground will take around 12 months.

The below-ground structures are likely to be left in place to avoid further disturbance (with the exception of the top metre of the foundation base of each turbine). There will therefore be a temporary effect from the activities on the application site to remove structures, but this will be of relatively short duration.

Some evidence of the past presence of the Proposed Development will remain visible in short-range views during the post-decommissioning restoration period. Over the short-to-medium term the Proposed Development Site will be returned to rough grazing uses or forestry, with the only structures remaining onsite being underground ones.

Accordingly, the decommissioning and post-operational phases are considered to have a short-term effect on the landscape and visual amenity of the locality, similar but less substantial than those effects described for the construction phase. This will be Not Significant.

# 5.6 Residual Effects and Conclusions

A LVIA was undertaken for the Proposed Development and considers landscape and visual effects.

It sets out effects on the landscape fabric and landscape character. The landscape assessment includes consideration of effects upon nationally designated Inventory Gardens and Designed Landscape and regionally designated landscapes such as Special Landscape Areas.

From a visual perspective, the assessment considers effects upon residents at settlements, users of roads and recreational routes, which include tourists. This was informed by an assessment of visual effects at a series of representative viewpoints, which were set out in correspondence with i.e., NS and THC. A residential visual amenity assessment is also included as at Technical Appendix 5-6.

The assessment of cumulative effects is incorporated into the main assessment of landscape and visual effects.

Cumulative interactions will occur, between the Proposed Development and the less certain possible future interactions with the Watten and Hollandmey planning stage sites, and the Lochend Extension, Greenland, and Red Moss scoping stage sites, locally increasing the influence of wind farm development on landscape and visual receptors.

Whilst it is always necessary to take account and to balance the wide range of technical and environmental requirements, it is also a requirement to seek to optimise



the layout design and choice of turbine from a landscape and visual perspective, in order to achieve mitigation which is embedded into the project design.

Landscape and visual input into the wind farm design was provided through the design development stages of the project, through a series of design workshops.

The positioning of the turbines has used the subtleties of the local terrain to reduce theoretical visibility to the ground level infrastructure, including the sub station and BESS and the access tracks where possible. Details of the evolution of the design to take account of potential visibility and other factors ins presented in EIAR Volume 2 Chapter 3 Description of Development.

The Proposed Development sits on the western extent of the low ridge at Bowertower, set back from the dispersed settlement pattern.

The extensively modified Farmed Lowland Plain LCT is characterised by a level of local farm scale wind farm development as well as two large single turbines at Weydale Farm and Taig na Muir and is influenced by extensive areas of wind farm development in the adjacent landscape character types to the south and north east.

A number of significant residual effects are predicted, as summarised in Table 5-43, including significant landscape effects on the landscape character of the site and its surroundings, and significant visual effects on local viewpoints.

The large-scale Farmed Lowland Plain and the low open plateau ridgeline upon which the Proposed Development is proposed is considered to have attributes which are suited to the scale of wind farm development proposed. The Proposed Development is focussed away from the main body of the settlement at Bowertower upon the moorland to the west.

Whilst the effects will be significant locally to the Proposed Development Site, and for some visual local receptors, it is considered that these can be accommodated within the wider landscape.

Any new wind turbine development may result in potentially significant effects upon landscape and visual amenity. In the case of the Proposed Development, the significant effects on landscape and visual receptors are seen in the context of an extensively modified farming landscape.

Policy 11 of NPF4 states that:

"...significant landscape and visual impacts ,recognising that such impacts are to be expected for some forms of renewable energy. Where impacts are localised and/ or appropriate design mitigation has been applied, they will generally be considered to be acceptable."

On that basis it is not considered that the Proposed Development will give rise to unacceptable effects.

Table 5-43: Summary of Predicted Significant Effects of the Proposed Development

Receptor	Nature of Effect
Significant Construction Effe	ects on the Landscape Fabric
Direct effects on the landscape fabric	There will be a Moderate to Substantial magnitude of local change to the fabric of a small area of the landscape (the forestry/moorland vegetation and peatland in the location of the proposed tracks, turbines and other infrastructure) on the Proposed Development Site at the operational stage. The Proposed Development Site is of Medium



Receptor	Nature of Effect			
	sensitivity to change. Therefore, there will be a local <b>Major/Moderate</b> level of direct effect on a small area of the existing fabric of the landscape, which is considered to be <b>Significant</b> .			
Significant Construction Visual Effects				
Views within 1-2km	The Proposed Development will give rise to a <b>Major</b> and <b>Significant</b> visual effect locally (within approximately 1km) during construction albeit this will be of limited duration.			
Significant Operational Land	scape Effects			
Landscape Fabric	The Proposed Development will give rise to local <b>Major/Moderate</b> and <b>Significant</b> effects on the landscape fabric of the Proposed Development Site.			
Landscape Character Type 143 - Farmed Lowland Plain	The Proposed Development will give rise to locally <b>Major/Moderate</b> and <b>Significant</b> effects on those parts of the LCT that lie within c.2km of the site.			
Significant Operational Visua	al Effects			
Settlement - Bowertower	The Proposed Development will give rise to <b>Major</b> and <b>Significant</b> local effects on the western edge of the dispersed settlement at Bowertower. Elsewhere within the settlement effects will be <b>Major/Moderate</b> and <b>Significant</b> .			
Settlement - Durran	The Proposed Development will give rise to <b>Major/Moderate</b> and <b>Significant</b> local effects on the dispersed settlement at Durran.			
Settlement - Halcro/ Brabsterdorran	The Proposed Development will give rise to <b>Major/Moderate</b> and <b>Significant</b> local effects on the dispersed outer edges of the settlement to the north and south of Halcro/ Brabsterdorran.			
Settlement - Bower	The Proposed Development will give rise to <b>Major/Moderate</b> and <b>Significant</b> local effects on the dispersed settlement at Bower.			
Viewpoint 1, Minor road south west of site	The Proposed Development will give rise to <b>Major/Moderate</b> and <b>Significant</b> effects on road users who are of Medium sensitivity.			
Viewpoint 2, Stone Lud standing stone, Bowertower	The Proposed Development will give rise to <b>Major</b> and <b>Significant</b> effects on visitors/walkers who are of High sensitivity from this viewpoint.			
Viewpoint 3, B876 west- bound at Bower	The Proposed Development will give rise to <b>Major/Moderate</b> and <b>Significant</b> effects on road users who are of Medium sensitivity.			
Viewpoint 4, B876 east- bound, at Cooper's Hill	The Proposed Development will give rise to <b>Major/Moderate</b> and <b>Significant</b> local effects on Residents who are of High sensitivity.			
Viewpoint 5, Easter Durran	The Proposed Development will give rise to <b>Major</b> and <b>Significant</b> local effects on Residents who are of High sensitivity and <b>Major/Moderate</b> and <b>Significant</b> effects on road users who are of Medium sensitivity.			
Viewpoint 7, Hill of Olrig including Core Path CA03.05	The Proposed Development will give rise to <b>Major/Moderate</b> and <b>Significant</b> effects on walkers who are of High sensitivity.			
Significant Operational Cumulative Visual Effects				
Settlement - Bowertower	Major/Moderate and Significant total cumulative effect on the settlement at Bowertower when seen in successive views with the Red Moss scoping stage site.			
Settlement - Bower/Bowermadden	Major/Moderate and Significant total cumulative effect on the settlement at Bower/Bowermadden when seen in successive views with the Hollandmey planning stage site and the Red Moss and Lochend Extension scoping stage sites.			
Settlement - Barrock	Major/Moderate and Significant total cumulative effect on the settlement at Barrock when seen in successive views with the			



Receptor	Nature of Effect
	Hollandmey planning stage site and the Red Moss, Greenland and Lochend Extension scoping stage sites.
National Cycle Route 1	Major/Moderate and Significant total cumulative effect on the route when seen in successive views with the Hollandmey planning stage site and the Red Moss, Greenland and Lochend Extension scoping stage sites.
Viewpoint 1, Minor road south west of site	Major/Moderate, Significant total cumulative effect when seen in combination with the Red Moss scoping stage site and in successive views with the Watten planning site.
Viewpoint 2, Stone Lud standing stone, Bowertower	Major/Moderate, Significant total cumulative effect when seen in combination with the Watten and Hollandmey planning stage site, and the Lochend Extension, Greenland, and Red Moss scoping stage sites.
Viewpoint 3, B876 west- bound at Bower	Major/Moderate, Significant total cumulative effect when seen in combination with the Watten and Hollandmey planning stage site, and the Lochend Extension, Greenland, and Red Moss scoping stage sites.
Viewpoint 4, B876 east- bound, at Cooper's Hill	Major/Moderate, Significant total cumulative effect when seen in combination with the Watten and Hollandmey planning stage sites, and the Lochend Extension, and Red Moss scoping stage sites.
Viewpoint 5, Easter Durran	Major/Moderate, Significant total cumulative effect when seen in combination with the Watten and Hollandmey planning stage sites, and the Lochend Extension, and Red Moss scoping stage sites.
Viewpoint 9, Loch Watten picnic spot	Major/Moderate, Significant total cumulative effect when seen in combination with the Watten planning stage site.
Viewpoint 11, Inkstack	Major/Moderate, Significant total cumulative effect when seen in combination with the Hollandmey and Watten planning stage site, and the Lochend Extension, Greenland, and Red Moss scoping stage sites.
Viewpoint 12, Dunnet Head including Core Path CA05.10	Major/Moderate, Significant total cumulative effect when seen in combination with the Hollandmey and Watten planning stage site, and the Lochend Extension, Greenland, and Red Moss scoping stage sites.
Viewpoint 13, Castle Sinclair Girnigoe, Noss Head including Core Path CA15,29	Major/Moderate, Significant total cumulative effect when seen in combination with the Hollandmey and Watten planning stage sites, and the Lochend Extension, Greenland, and Red Moss scoping stage sites.
Viewpoint 14, Ben Dorrery including Core Path CA06.03	Major/Moderate, Significant total cumulative effect when seen in combination with the Hollandmey and Watten planning stage sites, and the Lochend Extension, Greenland, and Red Moss scoping stage sites.