

# **VOLUME 5: CHAPTER 4: LANDSCAPE AND VISUAL - ALTERNATIVE ALIGNMENT**

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# 4. LANDSCAPE AND VISUAL - ALTERNATIVE ALIGNMENT

## 4.1 Executive Summary

- 4.1.1 A Landscape and Visual Impact Assessment (LVIA) has been undertaken for the Proposed Development with the Alternative Alignment (hereafter referred to as 'the Alternative Alignment') within a study area of 5 km from the overhead line (OHL), which is considered appropriate to identify all potential significant effects. The LVIA has been undertaken by a Chartered Landscape Architect and Landscape Assistant at horner + maclennan, a registered practice with the Landscape Institute, in accordance with best practice guidance, the Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3)¹.
- 4.1.2 This Chapter describes the key sensitivities and potential changes to the physical and visual environment arising from the Alternative Alignment. The receptors within this Chapter are categorised in the following sections:
  - · Landscape character, landscape designations and protected landscapes; and
  - Visual Amenity<sup>2</sup> of those present within the landscape, including established views from residential areas and travel routes.
- 4.1.3 The Alternative Alignment would be dependent on or associated with a number of other consented and proposed developments. Therefore, for the purposes of the LVIA, various other developments have been assumed to be present within the baseline landscape, as follows:
  - The Alternative Alignment would be dependent on the presence of the consented Strathy South Wind Farm for which it would provide the connection to the National Grid.
  - The Alternative Alignment would be dependent on the proposed Strathy Wood Wind Farm Grid
    Connection into which it would connect and therefore, the consented Strathy Wood Wind Farm and its
    proposed grid connection have also been included as part of the baseline.
  - The purpose of the Alternative Alignment is to avoid conflict with the proposed Melvich Wind Energy
    Hub, in accordance with the proposals currently submitted, by providing an alignment that goes around
    rather than through this development, as is the case for the Proposed Alignment. The LVIA for the
    Alternative Alignment therefore assumes a baseline with the proposed Melvich Wind Energy Hub being
    present.
- 4.1.4 The inclusion of the Melvich Wind Energy Hub within the baseline is predicted to reduce the sensitivity of some landscape and visual receptors to development. Therefore, this LVIA should not be compared on a like-for-like basis with the LVIA for the Proposed Alignment included in Volume 1: Chapter 6: Landscape and Visual, which considers a baseline scenario without Melvich Wind Energy Hub.
- 4.1.5 The southernmost part of the grid connection for the Strathy South Wind Farm would be provided via an underground cable (UGC) which would be constructed under permitted development rights. This UGC is assumed to be present within the baseline assessment of construction effects. The assessment of operational effects covers the above ground sections of the OHL route only and does not include the UGC.
- 4.1.6 The LVIA also gives consideration to cumulative effects occurring as a result of the addition of the Alternative Alignment to other infrastructure developments which form part of the Connagill Cluster Grid Connections within the study area which are not already considered as part of the baseline. These include:

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<sup>&</sup>lt;sup>1</sup> Landscape Institute and Institute of Environmental Management and Assessment. (2013). Guidelines for Landscape and Visual Impact Assessment, Third Edition

<sup>&</sup>lt;sup>2</sup> Defined in GLVIA 3 as 'The overall pleasantness of the views people enjoy of their surroundings, which provided an attractive visual setting or backdrop for the enjoyment of activities of the people living, working, recreating, visiting or travelling through an area'



- Wind Farms
- Kirkton Energy Park (and on-site substation).
- Grid Infrastructure
- Kirkton Energy Park Grid Connection; and
- Strathy Switching Station.
- 4.1.7 Mitigation measures, including landform and vegetation restoration through best practice construction techniques, and reinforcement and extending of existing woodland in proximity to the proposed cable sealing end (CSE) compound are proposed to help minimise effects of the Alternative Alignment and improve its assimilation into the landscape setting. The residual effects of the Alternative Alignment with proposed mitigation measures have been assessed after ten years, allowing for the landscape and vegetation reinstatement to establish.

Summary of Effects

Landscape Effects

- 4.1.8 The assessment of potential landscape effects has considered the Landscape Character Types (LCTs) identified by NatureScot<sup>3</sup> and designated and protected landscapes, including Special Landscape Areas (SLAs) and Wild Land Areas (WLAs).
- 4.1.9 Moderate adverse (significant) direct and indirect effects are predicted for LCT 134 (Sweeping Moorland and Flows) during construction due to the loss of landcover to temporary working areas and access tracks, and the presence of workforce, materials and construction activity. Moderate adverse (significant) indirect effects during operation are predicted to arise for LCT 134 due to the presence and visibility of activity and towers.
- 4.1.10 Moderate adverse (significant) direct and indirect effects are predicted for LCT 142 (Strath Caithness and Sutherland) during construction due to the loss of landcover to temporary working areas and access tracks and the presence of workforce, materials and construction activity. Moderate adverse (significant) direct and indirect effects during operation are predicted to arise for LCT 142 due to the presence and visibility of activity and towers, most notably at the crossing of the Halladale River.
- 4.1.11 No other LCTs are predicted to accrue significant effects during either the construction or operational phases. This is principally due to the likely landscape effects of Melvich Wind Energy Hub which has been considered as part of the baseline for the Alternative Alignment, as discussed in paragraph 4.1.4 above.
- 4.1.12 The assessment of effects of the Alternative Alignment on the four special qualities of Farr Bay, Strathy and Portskerra SLA are assessed in detail in Volume 4: Appendix V5-4.2: Assessment of Effects on Special Landscape Area 03. Farr Bay, Strathy and Portskerra Alternative Alignment. The assessment concludes that there would be no significant effects on any of the special qualities of the SLA during construction or operation and this conclusion is applicable to the Alternative Alignment which would be seen in the context of turbines at Melvich Wind Energy Hub.
- 4.1.13 Wild Land Area 39 East Halladale Flows lies within the south-eastern portion of the study area but the assessment concluded that the Alternative Alignment is unlikely to have significant effects on the wild land qualities although it would introduce further tall elements to views from the interior in which wind turbines, including those at Melvich Wind Energy Hub, are already present.

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<sup>&</sup>lt;sup>3</sup> NatureScot (2019) Scottish Landscape Character Types – Map and Descriptions [online].



#### Visual Effects

4.1.14 The assessment of potential visual effects has considered views from 50 building based visual receptors (comprising groups of properties and individual properties) in and around buildings, six route receptors (roads and access tracks) and 11 outdoor receptors (including the two rivers within the study area).

**Built Receptors** 

- 4.1.15 Significant Effects are predicted for built receptors as follows:
  - B38 (Tigh na Breac, Strath Halladale): Major adverse significant effects during both construction and operation;
  - B36 (Properties at Strath Halladale north): Moderate Major adverse significant effects during both construction and operation;
  - B37 (Properties at Kirkton): Moderate Major adverse significant effects during construction and moderate adverse and significant effects during operation; and
  - B23 (Properties on A836 west of Portskerra; B25 (Melvich Park Cottage and Coastline Café; B26 (Properties south of Coasdtline Café), B33 (Properties east of Bighouse Lodge) and B49 (Bowside Cottage (Gamekeepers Cottage)): Moderate adverse significant effects during construction and operation;
- 4.1.16 No significant effects are predicted for the remaining 42 built receptors during construction or operation of the Alternative Alignment.

Route Receptors

- 4.1.17 Significant effects are predicted for route receptors as follows:
  - R6a (Core Path SU19.03 northbound): Major adverse significant effects during construction reducing to Moderate Major adverse significant effects during operation;
  - R6b (Core Path SU19.03 southbound): Moderate Major adverse significant effects during construction reducing to Moderate adverse significant effects during operation; and
  - R1a and R1b (A836 / National Cycle Route (NCR) 1 westbound and eastbound respectively), R2a and R2b (A897 both directions of travel), R3b (minor road to Kirkton) and R4a and R4b (Scottish Hill Track 344 southbound and northbound): Moderate adverse significant effects during both construction and operation
- 4.1.18 No significant effects are predicted for the remaining route based receptors during construction or operation of the Alternative Alignment.

**Outdoor Receptors** 

- 4.1.19 Significant effects are predicted for the following outdoor receptor:
  - Rec 8 (Kirkton Cemetery): Moderate adverse significant effects during both construction and operation.
- 4.1.20 No significant adverse effects are predicted for any of the remaining ten outdoor based receptors during construction or operation of the Alternative Alignment.

Cumulative Landscape and Visual Effects

4.1.21 The cumulative landscape and visual assessment carried out for the Alternative Alignment has considered the potential landscape and visual effects of the Alternative Alignment when added to Kirkton Energy Park and associated substation and grid connection and Strathy Switching Station.



- TRANSMISSION
  - 4.1.22 The cumulative landscape and visual effects arising from the addition of the Alternative Alignment would generally be no greater than the levels of effect predicted to arise either from Kirkton Energy Park for some receptors or the Alternative Alignment in isolation for others. Paragraphs 4.11.5 to 4.11.42 clarifies the levels of effect for each receptor and **Table V5-4.7** summarises these findings.
  - 4.1.23 The cumulative visual assessment has identified a very limited number of receptors which would experience an increase in the level of effect identified for either Kirkton Energy Park or the Alternative Alignment in isolation.

    These are route based receptors R1a: A836/NCR1 west-bound in the vicinity of Strath Halladale (Major adverse and significant) and R6a: Core Path SU19.03 north-bound (Major adverse and significant); and outdoor based receptor Rec 8: Kirkton Cemetery (Moderate Major adverse and significant).

## 4.2 Introduction

- 4.2.1 This Chapter presents the findings of the LVIA for the Proposed Development with the Alternative Alignment. The Proposed Development with the Proposed Alignment is assessed in Volume 1: Chapter 6: Landscape and Visual.
- 4.2.2 The purpose of the LVIA is to identify and describe potential significant effects which may occur as a result of the Alternative Alignment to views obtained by those living, working and visiting in the area, and to the wider landscape resource, and the residual predicted significance of effects after mitigation. This Chapter considers potential effects, including cumulative effects, of the Alternative Alignment on visual amenity and landscape character during construction and operation. As described in Volume 5: Chapter 3: The Proposed Development Alternative Alignment, it is anticipated that the effects associated with the construction phase could be considered to be representative of worst-case decommissioning effects on visual amenity and landscape character. As such, a separate assessment of potential decommissioning effects of the Alternative Alignment is not included in this Chapter.
- 4.2.3 The LVIA has been undertaken by Chartered Landscape Architects and a Landscape Assistant at horner + maclennan (h+m) a registered practice with the Landscape Institute. The assessment has been undertaken in accordance with best practice guidance, the Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA). A table presenting relevant qualifications and experience of key staff involved in the preparation of this Chapter is included in **Volume 4: Appendix V1-5.1: EIA Team**.
- 4.2.4 Landscape and visual impacts are inter-related but are considered separately. This LVIA considers the potential changes to the character of the landscape which can include both physical changes and changes to perceptual qualities associated with the experience of the landscape and its value. Visual impact assessment relates solely to the effect of the Alternative Alignment on views and visual amenity. All visual receptors are people.
- 4.2.5 The Alternative Alignment would be dependent on or associated with a number of other consented and proposed developments. Therefore, for the purposes of the LVIA, various other developments have been assumed to be present within the baseline landscape, as follows:
  - The Alternative Alignment would be dependent on the presence of the consented Strathy South Wind Farm for which it would provide the connection to the National Grid.
  - The Alternative Alignment is dependent on the proposed Strathy Wood Wind Farm Grid Connection
    into which it would connect and therefore, the consented Strathy Wood Wind Farm and its proposed
    grid connection have also been included as part of the baseline.
  - The purpose of the Alternative Alignment is to avoid conflict with the proposed Melvich Wind Energy Hub by providing an alignment that goes around rather than through this development<sup>4</sup>. The LVIA

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<sup>&</sup>lt;sup>4</sup> The layout of the proposed Melvich Wind Energy Hub is illustrated on Volume 2: Figure V5-1.1 – Overview of the Proposed Development



therefore assumes a baseline with this proposed development being present, as the Proposed Alignment is preferred if Melvich Wind Energy Hub does not go ahead.

4.2.6 The inclusion of the Melvich Wind Energy Hub within the baseline is predicted to reduce the sensitivity of some landscape and visual receptors to development. Therefore, this LVIA should not be compared on a like-for-like basis with the LVIA for the Proposed Alignment included in Volume 1: Chapter 6: Landscape and Visual, which considers a baseline scenario without Melvich Wind Energy Hub.

## 4.3 Scope of Assessment

Study Area

4.3.1 The study area comprises the area where any potentially significant effects resulting from the Alternative Alignment would be likely to occur and has been established through consideration of the Zone of Theoretical Visibility (ZTV), and professional judgement. A ZTV run from each tower position has been produced in order to help establish the study area. Following review of this ZTV (see Volume 2: Figure V5-4.1) alongside site verification, and based on site analysis of the perceptibility of similar existing developments in the landscape, an LVIA study area of 5 km from the Alternative Alignment has been considered appropriate to identify all potential significant effects (see Volume 2: Figure V5-4.1).

Zone of Theoretical Visibility (ZTV)

- 4.3.2 As an aid to establishing the scope for the LVIA, a ZTV has been produced to indicate areas from which the Alternative Alignment would be theoretically visible and is presented in **Volume 2: Figure V5-4.1**<sup>5</sup>. The ZTV has been run using the designed heights for each tower, as identified in the Indicative Tower Schedule Alternative Alignment (see **Volume 4: Appendix V5-3.1**).
- 4.3.3 Paragraphs 6.3.2 to 6.3.5 of **Volume 1: Chapter 6: Landscape and Visual** and **Volume 4: Appendix V1-6.1** sets out how the ZTV was prepared and the associated limitations, which are of relevance for the Alternative Alignment and are taken into account during the landscape and visual impact assessment through professional judgement.

Visualisations

- 4.3.4 Six visualisations have been produced to support the LVIA work. These show the predicted appearance of the Alternative Alignment during operation, once landscape reinstatement of disturbed areas has been assumed to be fully established. The visualisations are from the following locations:
  - Visualisation Location 1: Strathy Cemetery (OS Grid Reference: 283881 965605); (see **Volume 3a:** Figure V5-VL 1a-c and **Volume 3b:** Figure V5-VL1a-e);
  - Visualisation Location 2: A836 near Bighouse (OS Grid Reference: 290196 964007); (see Volume 3a: Figure V5-VL 2.1a-c and Figure V5-VL 2.2 a-c, and Volume 3b: Figure V5-VL 2.1a-e and Figure VL V5-2.2 a-e);
  - Visualisation Location 3: A897 near Golval (OS Grid Reference: 289817 961783); (see Volume 3a: Figure V5-VL 3a-c and Volume 3b: Figure V5-VL3a-e);
  - Visualisation Location 4: A897 at Loch Earacha (OS Grid Reference: 289932, 960830); (see Volume 3a: Figure V5-VL 4a-c and Volume 3b: Figure V5-VL4a-e);
  - Visualisation Location 5<sup>6</sup>: Strathy Point near Totegan (OS Grid Reference 282784, 968406); (see
     Volume 3a: Figure V5-VL5a-b and Volume 3b: Figure V5-VL5a-b); and

<sup>&</sup>lt;sup>5</sup> The ZTV and visualisations (in accordance with NatureScot and THC visualisation standards) have been produced by ASH design+assessment Ltd.

 $<sup>^{6}</sup>$  As agreed during consultation with THC, the viewpoint from Strathy Point near Totegan has been produced as a wireline only.

- Visualisation Location 6: Melvich War Memorial (OS Grid Reference 287642, 965055); (see Volume 3a: Figure V5-VL6a-c and Volume 3b: Figure V5-VL6a-e).
- 4.3.5 The visualisations have been produced from locations agreed with The Highland Council at scoping stage to support the LVIA work. They were selected to show the appearance of the Alternative Alignment within the landscape setting. The visualisation locations have not been assessed as viewpoints. The visual assessment is a receptor-based assessment (giving consideration to all potential visual receptors) rather than a viewpoint-based assessment.
- 4.3.6 Two sets of visualisations have been produced to NatureScot 2017<sup>7</sup> and The Highland Council 2016<sup>8</sup> standards, included within the EIA Report as **Volume 3a** and **Volume 3b**, respectively. Further detail on the preparation of visualisations is included in **Volume 4: Appendix V1-6.1: Technical Methodologies for Visual Representation**.

#### 4.4 Consultation

- 4.4.1 **Section 6.4** of **Volume 1: Chapter 6: Landscape and Visual** summarises the scoping and consultation responses relevant to the LVIA which are common to both the Proposed Alignment and Alternative Alignment of the Proposed Development.
- 4.4.2 **Table V5-4.1** summarises further scoping and consultation responses relevant to the LVIA for the Alternative Alignment only and provides information on where and/or how points raised have been addressed in this assessment.

Table V5-4.1: Consultation Responses

Organisation & Date	Summary of Consultation Response	EIA/Design Response to Consultee
The Highland Council (THC) 21st May 2024	The Scoping Report includes five viewpoints (VPs) for the Alternative Alignment; these are generally considered appropriate. Further consideration should be given to providing a VP from the path to the lighthouse at Strathy Point. THC would be happy to review wireframes in the first instance to confirm whether this would be beneficial for inclusion in the EIA Report.	The Applicant has conducted further consultation with THC regarding the inclusion of a viewpoint from Totegan near Strathy Point. It has been agreed that the inclusion of wireline for the Alternative Alignment is sufficient from this viewpoint.
	The purpose of the selected and agreed viewpoints should be clearly identified and stated in the supporting information.	This Chapter identifies and describes the viewpoints used for production of the photomontages to support and inform the LVIA.

https://www.highland.gov.uk/downloads/file/12880/visualisation\_standards\_for\_wind\_energy\_developments [Accessed January 2025]

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<sup>&</sup>lt;sup>7</sup> Scottish Natural Heritage (2017) Visual Representation of Wind Farms (Version 2.2). Available at: https://www.nature.scot/sites/default/files/2019-09/Guidance%20-%20Visual%20representation%20of%20wind%20farms%20-%20Feb%202017.pdf [Accessed January 2025]

<sup>&</sup>lt;sup>8</sup> The Highland Council (2016) Visualisation Standards for Wind Energy Developments. Available at:



Organisation & Date	Summary of Consultation Response	EIA/Design Response to Consultee
NatureScot (NS) 26 <sup>th</sup> April 2024	NS welcome exploration of the Alternative Alignment. At this stage, NS consider the Alternative Alignment may result in adverse landscape and visual effects on the north coast between Melvich and Strathy, in particular where the OHL is situated in close proximity to the A836, Melvich and Far Bay, Strathy and Portskerra SLA, however NS do not consider the effects would be of a magnitude to significant erode the distinctive character of the north coast. Careful siting and design is required due to the sensitivity of this landscape. NS would like to be notified of further changes / options should Melvich Wind Energy Hub not be granted consent.	Volume 5: Chapter 2: Routeing Process and Alternatives – Alternative Alignment sets out the alternative options considered and discusses the reasons for identifying the Alternative Alignment and design solution.  This Chapter considers potential effects, including cumulative effects, of the Alternative Alignment on landscape receptors and visual amenity during construction and operation.
	The Alternative Alignment is expected to be visible from the A836 due to the open landscape, impacting on views along the coast and the experience of the popular North Coast 500. NS consider the Alternative Alignment would intensify the influence of energy infrastructure where it is sited within proximity to the A836; Melvich and the Farr Bay, Strathy and Portskerra SLA. Furthermore, the routing of the Alternative Alignment would likely result in more visual complexity where it 'turns' at Alltan Domhaich and may appear to overlap (from the A836), eroding the simplicity of the moorland backdrop. NS therefore consider that the Alternative Alignment would likely result in significant landscape and visual effects though these would not be of a degree to erode the distinctive character of the north coast.	This Chapter considers potential effects, including cumulative effects, of the Alternative Alignment on landscape receptors and visual amenity during construction and operation.

# 4.5 Methodology

- 4.5.1 The detailed methodology for the LVIA is included in **Section 6.5** of **Volume 1: Chapter 6.** The methodology has been developed using GLVIA3<sup>1</sup> and other best practice guidance.
- 4.5.2 GLVIA3 advises that landscape and visual effects should be assessed from a clear understanding of the development proposed and any mitigation measures which are being adopted.
- 4.5.3 The GLVIA3 methodology for landscape assessment involves an appreciation of the existing landscape resource, the susceptibility of its key components to accept the change proposed, and an understanding of the potential effects which could occur and how these could affect these key components.
- 4.5.4 Familiarity with the site and the extent, nature and expectation of existing views by visual receptors is a key factor in establishing the visual sensitivity in terms of the development proposed. The guidelines require evaluation of magnitude of change to views experienced by sensitive receptors, comprising individuals living,



working, travelling and carrying out other activities within the landscape, and the subsequent evaluation of the significance of effects.

- 4.5.5 The potential to mitigate adverse effects should also be considered for both landscape and visual assessment.
- 4.5.6 There are five key stages to the assessment:
  - Establishment of the baseline;
  - Appreciation of the development proposed;
  - Identification of key landscape and visual receptors;
  - · Identification of potential effects; and
  - Assessment of significance of effect.
- 4.5.7 GLVIA3 places a strong emphasis on the importance of professional judgement in identifying and defining the significance of landscape and visual effects. As part of this assessment, professional judgement has been used in combination with structured methods and criteria to evaluate landscape value, landscape and visual sensitivity, magnitude of change, and significance of effect, which are all defined in Section 6.5 of Volume 1: Chapter 6: Landscape and Visual. The assessment has been undertaken and verified by two Landscape Professionals (Chartered Landscape Architects) to provide a robust and consistent approach.
- 4.5.8 Criteria used for the assessment of effects are presented in **Table V1-6.5** of **Volume 1: Chapter 6: Landscape** and **Visual**. For the purposes of the LVIA, effects with a rating of Moderate or greater are considered to be significant in terms of the EIA Regulations.

## 4.6 Limitations and Assumptions

- 4.6.1 A list of limitations and assumptions of relevance to the Proposed Development are detailed in Section 6.6 of Volume 1: Chapter 6: Landscape and Visual and are of relevance to the Alternative Alignment. In addition this assessment has assumed:
  - Assessment of landscape and visual effects assumes a situation where the turbines of Strathy South
    and Strathy Wood wind farms and Strathy Wood Wind Farm Grid Connection would be in-situ and
    operational, because the Alternative Alignment would be dependent on these other developments.
  - Assessment of landscape and visual effects also assumes a baseline situation where the turbines at Melvich Wind Energy Hub would be in-situ as the Alternative Alignment would only be required if this development were consented.

# 4.7 Landscape Baseline Conditions

Overview

- 4.7.1 The study area for the Alternative Alignment is located on the north coast of Sutherland, to the south of the coastal settlements of Strathy and Melvich which lie to the west of Thurso and it comprises a 10 km wide corridor (5 km either side of the OHL centreline). The Alternative Alignment proceeds northwards from Strathy Forest approximately parallel to the River Strathy, before heading approximately east and then northwards across open moorland to a point just north of Cnoc na Caiileach where it passes north of Cnoc Eadar Dha. It then proceeds approximately south east and then south west crossing the Achridigill Burn and proceeds south eastwards, crossing Strath Halladale to terminate at Connagill 275/132 kV substation.
- 4.7.2 The study area encompasses all, or parts, of the settlements of Armadale, Strathy, Baligill, Portskerra and Melvich, which lie along the coast, and also scattered settlement inland in Strath Halladale as well as isolated properties near the River Strathy.



- 4.7.3 To the west of the River Strathy, the landform is undulating and rises to a maximum height of around 229 m above Ordnance datum (AOD). The deeply incised Armadale Burn is a notable feature with isolated lochs and lochans also present. Landcover is a mixture coniferous plantation immediately west of the river and open moorland further west. Wind turbines and an electricity substation (Strathy North substation) are present in Strathy Wood and the turbines are prominent features in the landscape. There are hill tracks, mainly to the west of the Armadale Burn.
- 4.7.4 Between the River Strathy and the Strath Halladale the landform is also undulating, rising to a maximum height of 254 m AOD at Beinn Ruadh. There are numerous lochs and lochans and small blocks of coniferous plantation. There are hill tracks in the northern and eastern parts of the interior of this area and Scottish Hill Track 344 which runs approximately north southeast of the River Strathy. This area includes gravel workings and a wind turbine south of Melvich, as well as an existing wood pole mounted OHL (Strathy North 132 kV trident 'H' wood pole OHL) which the Alternative Alignment would replace in part.
- 4.7.5 Strath Halladale is an agricultural landscape of improved, semi-improved and rough grassland with areas of scrub woodland along the river and on side slopes, with scattered dwellings. It is visually contained by rising ground to the west and east with views channelled along the strath. There are, however, views of the steel lattice tower OHL (Beauly to Dounreay 275 kV OHL) which runs over higher ground from Connagill 275/132 kV substation to the east of the strath.
- 4.7.6 East of Strath Halladale, the landform is also undulating and rises to a maximum height of approximately 250 m AOD at Cean Mòr. Landcover is predominantly open moorland with some small blocks of coniferous forest and several lochs and numerous lochans. This area is largely uninhabited but is crossed by a steel lattice tower OHL (Beauly to Dounreay 275 kV OHL), which runs south-west from Dounreay to Connagill 275/132 kV substation and then southwards along Strath Halladale.
- 4.7.7 For the purpose of the assessment, proposed and consented developments are considered to form part of the baseline and include:
  - Strathy South Wind Farm (for which the Alternative Alignment is dependent) would be located to the south of the study area but visible from much of the study area with the exceptions of areas of lower lying land south-west of Strathy Point; areas of lower lying ground northeast of Strathy Wood Forest, Strath Halladale and areas of lower lying land west of Broubster Forest.
  - Strathy Wood Wind Farm (for which the Alternative Alignment is dependent) would be located partly
    within the southern portion of the study area and visible from much of the study area with the
    exceptions of areas of lower lying land south-west of Strathy Point; areas of lower lying ground
    northeast of Strathy Wood Forest, Strath Halladale and areas of lower lying land west of Broubster
    Forest.
  - Melvich Wind Energy Hub which (for which the Alternative Alignment is required to avoid conflict)
    would be located in the central, northern part of the study area and visible from most of the study area
    with the exception of lower lying land either side of the River Strathy, parts of Strath Halladale and
    areas of lower lying land west of Broubster Forest.
  - Strathy Wood Wind Farm Grid Connection (for which the Alternative Alignment is dependent) would be
    located in the south-western part of the study area and visible from land either side of the River Strathy
    and isolated areas of high ground to the west and south of this river.

#### Landscape Designations

4.7.8 Landscapes can be ascribed an international, national, regional or local designation that recognises the importance of the landscape for its scenic interest or attractiveness. Areas of landscape may also be protected by planning policy at either a national or regional level.



- 4.7.9 The following areas designated for landscape quality or identified as wild land areas lie within, or partly within, the study area, as displayed on **Volume 2: Figure V5-4.2.** 
  - Farr Bay, Strathy and Portskerra Special Landscape Area (SLA); and
  - WLA 39: East Halladale Flows.
- 4.7.10 The SLA lies along the northern coast partly within the study area. There are four Special Qualities (SQ) listed in the citation for this SLA<sup>9</sup>
  - SQ1 Dramatically Intricate Coastline and Forceful Sea
  - SQ2 Moorland and Crofting Mosaic;
  - SQ3 Big Skies and Extensive Views; and
  - SQ4 Historical Dimension
- 4.7.11 The full citation for this SLA is included in Volume 4: Appendix V1-6.2 Assessment of Effects on Special Landscape Area 03. Farr Bay, Strathy and Portskerra.
- 4.7.12 WLA 39 falls partially within the south-western extent of the study area and, given the context where existing infrastructure is already present, it is unlikely that significant effects would occur. However, a review of the Alternative Alignment in relation to the Wild Land Qualities<sup>10</sup> is provided in Section 4.9 of this Chapter.
- 4.7.13 The identified Wild Land Qualities of the WLA11 are:
  - Q1 An awe-inspiring simplicity of landscape at the broad scale, with a strong horizontal emphasis, 'wide skies' and few foci.
  - Q2 A remote, discrete interior, with limited access and a strong sense of solitude.
  - Q3 A rugged and complex pattern of hidden burns, lochans and pools at the local level, despite the landscape's simple composition at the broad scale.
  - Q4 A remarkably open landscape with extensive visibility, meaning tall or high features in the distance are clearly visible.

Landscape Character

- 4.7.14 NatureScot has undertaken detailed review and classification of various landscape areas and types of Scotland (SNH, 2019 [online]<sup>3</sup>). Six individual Landscape Character Types (LCTs) are identified within the 5 km study area for the Alternative Alignment, as follows (see **Volume 2: Figure V5-4.3**):
  - LCT 134 Sweeping Moorland and Flows;
  - LCT 136 Rocky Hills and Moorland;
  - LCT 140 Sandy Beaches and Dunes;
  - LCT 141 High Cliffs and Sheltered Bays;
  - LCT 142 Strath Caithness and Sutherland; and
  - LCT 144 Coastal Crofts and Small Farms.
- 4.7.15 These are described in further detail in Tables V1-6.6 to V1-6.11 in Volume 1: Chapter 6: Landscape and Visual, along with the key characteristics which have been identified by NatureScot. Characteristics of specific note and relevance within the study area are also identified.

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<sup>&</sup>lt;sup>9</sup> The Highland Council (2011). Assessment of Highland Special Landscape Areas. Available at: https://www.highland.gov.uk/downloads/file/2937/assessment\_of\_highland\_special\_landscape\_areas

<sup>&</sup>lt;sup>10</sup> Wild land qualities are seen as a combination of physical attributes and perceptual responses to them; the former being relatively easy to define and the latter being concerned with the way people react to them.

<sup>&</sup>lt;sup>11</sup> East Halladale Flows Wild Land Area (2017). Available at: https://www.nature.scot/sites/default/files/2021-06/Wild%20land%20Description%20East-Halladale-Flows-July-2016-39.pdf



#### 4.8 Visual Baseline Conditions

Interpretation of ZTV

- 4.8.1 The ZTV (see **Volume 2: Figure V5-4.1**) indicates that there is extensive theoretical visibility of the Alternative Alignment over approximately 75% of the 5 km study area.
- 4.8.2 There is slightly fragmented theoretical visibility from much of the settled coastline north of the A836 with almost continuous visibility from the road itself. Inland, visibility is widespread and largely continuous either side of the Alternative Alignment, becoming more fragmented with distance. Inevitably, the greatest number of towers would be seen from areas in close proximity to the Alternative Alignment.
- 4.8.3 The ZTV takes no account of the screening effects of vegetation and, as much of the area to the west of the River Strathy is under forest cover, the actual level of visibility in the western part of the study area would be considerably less. Other blocks of coniferous plantation would also reduce the extent of visibility but to a lesser degree.

Visual Receptors

4.8.4 Visual receptors within the study area comprise residents (permanent or temporary) or others present in and around buildings and those using access tracks and recreational routes or features. The locations of visual receptors are shown on Volume 2: Figure V5-4.4: Building Based Visual Receptors and Volume 2: Figure V5-4.5: Visual Receptors (Routes and Outdoor Based Visual Receptors) and described below.

**Building-based Receptors** 

4.8.5 Building Based Visual Receptors within the study area are mainly concentrated along the coast and within Strath Halladale, and include:

Strathy and Baligill (Refer to Volume 2: Figure V5-4.4a)

- Three groups of buildings and two individual buildings at Strathy;
- Two groups of buildings west of the River Strathy;
- Two groups of buildings, and one individual property at Strathy, east of the River Strathy; and
- One group of buildings at Ballagill.

Melvich and Portskerra (Refer to Volume 2: Figure V5-4.4b)

- 14 groups of properties and three individual properties at Portskerra;
- A group of properties north of the A836;
- · Four groups of properties and two individual properties at Melvich; and
- Three groups of properties at Bighouse.

Kirkton, Golval and Loch Earcha (Refer to Volume 2: Figure V5-4.4c)

- Two individual properties at Melvich and Kirkton gravel pits;
- · A group of two buildings near Goval;
- A group of properties at Kirkton; and
- An individual property at Loch Earacha;

Strath Halladale near Achiemore and Upper Bighouse (Refer to Volume 2: Figure V5-4.4d)

- A group of nine houses along the A897 at northern Strath Halladale; and
- A group of three properties at Upper Bighouse;



Strath Halladale near Dalhalvaig (Refer to Volume 2: Figure V5-4.4e)

Three groups of buildings and three individual properties in Strath Halladale north of Dalhalvaig

River Strathy (Refer to Volume 2: Figure V5-4.4f)

• Four individual properties along the River Strathy.

## Route Based Visual Receptors

- 4.8.6 Route based visual receptors include those using public roads and recreational users of paths, tracks and other established recreation routes. Views from the following routes experienced by people travelling in both directions have been identified within the study area (as displayed on Volume 2: Figure V5-4.5) for inclusion within the visual assessment:
  - A836 (NC500 and NCR1);
  - A897;
  - Minor Road to Kirkton;
  - Scottish Hill Track 344 Strath Halladale (Trantlebeg) to Strathy;
  - · Forest/wind farm access tracks around Dallangwell; and
  - Core Paths.
- 4.8.7 The following core paths that fall within the study area have been scoped out of the assessment:
  - SU 19.01 Portskerra Coast Walk very limited theoretical visibility of a low number of towers at more
    than 3 km distant from a route where attention is focussed on the coast and effects are unlikely to be
    significant.
  - SU 19.05 Melvich Beach theoretical visibility of a low number of towers at more than 2 km distant from a route where attention is focussed on the river, dunes and Bighouse and effects are unlikely to be significant
  - SU 19.07 Strathy Bay very limited theoretical visibility of a low number of towers at more than 2.5 km distant from a route where attention is focussed on the river and the bay effects are unlikely to be significant.
  - SU 19.08 Bayview Terrance-Low Road very limited theoretical visibility of a low number of towers at more than 3 km distant from a route where neighbouring buildings are likely to screen the view.
  - SU 19.11 Windy Knowe very limited theoretical visibility of a low number of towers at more than 3 km distant from a route where neighbouring buildings are likely to screen the view; and
  - SU 19.10 Rubha Bra very limited theoretical visibility of a low number of towers at more than 3 km distant from a route where attention is focussed on the coast and effects are unlikely to be significant.

#### Outdoor Based Visual Receptors

4.8.8 Potential outdoor viewing receptors include those using public viewpoints, local recreational stops and locations of interest. Views from the following outdoor based receptors identified within the study area (as displayed on Volume 2: Figure V5-4.5) are included within the visual assessment. It should be noted that the outdoor receptor Scottish Hill Track 344 is assessed under route-based receptors. Recreation receptors on the NC500 / NCR1 are assessed under route-based receptor the A836.



- Strathy Cemetery / Strathy Bay car park;
- Strathy War Memorial;
- Melvich and Porskerra War Memorial;
- Portskerra car park;
- Portskerra Drownings Memorial and car park;
- Melvich Bay car park;
- · Melvich Campsite North Coast Touring Park;
- Kirkton Cemetery<sup>12</sup>;
- Strath Halladale War Memorial;
- · River Strathy; and
- Halladale River.
- 4.8.9 The baseline conditions for each of the visual built, route and outdoor receptors noted above, are described in **Tables 1 3** of **Volume 4: Appendix V5-4.3.**
- 4.9 Assessment of Likely Significant Landscape Effects
- 4.9.1 This section of the Chapter provides an assessment of the effects that the Alternative Alignment would have on the landscape character and designated and protected landscapes within the study area during construction and operation, where operational effects are assessed 10 years after completion, in accordance with the effects criteria set out in Section 6.5 of Volume 1: Chapter 6: Landscape and Visual.
  - Landscape Designations and Wild Land Areas
- 4.9.2 The assessment of effects of the Alternative Alignment on the Farr Bay, Strathy and Portskerra SLA is set out in Volume 4: Appendix V5-4.2 and summarised in Table V5-4.2. The assessment concludes that there would be No Effect during construction or operation on two of the Special Qualities (SQ1 Dramatically intricate Coastline and Forceful Sea and SQ4 Historical Dimension), a Minor adverse and not significant construction and operational effect on one (SQ2 Moorland and Crofting Mosaic), and a Negligible and not significant construction and operational effect on the fourth (SQ 3 Big Skies and Extensive Views).
- 4.9.3 In terms of qualities of the WLA 39: East Halladale Flows, the Alternative Alignment would not be located within the WLA itself and would have **No effect** on Q2 (a remote, discrete interior, with limited access and a strong sense of solitude) during construction or operation. Similarly, it would have **No effect** on Q3 (a rugged and complex pattern of hidden burns, lochans and pools at the local level, despite the landscape's simple composition at the broad scale) during construction or operation.

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<sup>&</sup>lt;sup>12</sup> **Volume 5: Chapter 8: Cultural Heritage** is of relevance to this receptor because it identifies and assesses potential effects on Kirkton Cemetery as a cultural heritage asset.

4.9.4 The Alternative Alignment is not anticipated to have a significant effect when assessed against the baseline situation including Melvich Wind Energy Hub on Q1 (awe-inspiring simplicity of landscape at the broad scale, with a strong horizontal emphasis, 'wide skies' and few foci) as this Quality would be diminished in strength by the presence of turbines at Melvich Wind Energy Hub. The Alternative Alignment is not anticipated to have a significant effect when assessed against the baseline situation including Melvich Wind Energy Hub to Q4 (a remarkably open landscape with extensive visibility, meaning tall or high features in the distance are clearly visible) other than by increasing the number of tall structures visible from the WLA (i.e. features additional to activity including wind turbines at: Strathy South, Strathy North, Strathy Wood and Melvich Wind Energy Hub, which would also be present, and visible from the interior, and OHL towers including the Beauly to Dounreay 275 kV OHL which defines the north-western boundary of the WLA). Effects on these two qualities would be likely to be no greater than Minor adverse and not significant during construction or operation. Cumulative effects on these wild land qualities arising from the addition of the Alternative Alignment would be no greater than those arising from Melvich Wind Energy Hub in isolation or in combination with Kirkton Energy Hub (see paragraph 4.11.8).

Table V5-4.2: Summary of Landscape Designations and Protected Areas Effects

Period	Construction		Operation	
Receptor	Level of Effect	Significance	Level of Effect	Significance
Farr Bay, Strathy and Portskerra SLA SQ1	No Effect	Not significant	No Effect	Not significant
Farr Bay, Strathy and Portskerra SLA SQ2	Minor	Not significant	Minor	Not significant
Farr Bay, Strathy and Portskerra SLA SQ3	Negligible	Not significant	Negligible	Not significant
Farr Bay, Strathy and Portskerra SLA SQ4	No Effect	Not significant	No Effect	Not significant
WLA 39: East Halladale Flows Q1	Minor	Not significant	Minor	Not significant
WLA 39: East Halladale Flows Q2	No Effect	Not significant	No Effect	Not significant
WLA 39: East Halladale Flows Q3	No Effect	Not significant	No Effect	Not significant
WLA 39: East Halladale Flows Q4	Minor	Not significant	Minor	Not significant



## Landscape Character Types

4.9.5 Assessment of potential effects on the six LCTs within the study area (see Volume 2: Figure V5-4.3) are presented in Tables 1 to 6 in Volume 4: Appendix V5-4.1. A summary of the effects on the LCTs during construction and operation is provided in Table V5-4.3 below. Effects which are significant are shaded in grey.

Table V5-4.3: Summary of LCT Effects

Period	Construction		Op	peration
Receptor	Level of Effect	Significance	Level of Effect	Significance
LCT 134: Sweeping	Moderate direct	Significant	Moderate – Minor direct	Not significant
Moorland and Flows	Moderate indirect	Significant	Moderate indirect	Significant
LCT 136: Rocky Hills and Moorland	Minor indirect	Not significant	Minor indirect	Not significant
LCT 140 Sandy Beaches and Dunes	Minor indirect	Not significant	Minor indirect	Not significant
LCT 141 High Cliffs and Sheltered Bays	Minor indirect	Not significant	Minor indirect	Not significant
LCT 142 Strath -	Moderate direct	Significant	Moderate direct	Significant
Caithness and Sutherland	Moderate indirect	Significant	Moderate indirect	Significant
LCT 144 Coastal Crofts and Small Farms	Minor indirect	Not significant	Minor indirect	Not significant

- 4.9.6 Of the six LCTs, one (LCT 142 Strath Caithness and Sutherland) has been assessed as accruing moderate (significant) direct and indirect effects during construction due to the temporary presence of activity and loss of landcover associated with the installation of the Alternative Alignment, UGCs and the construction of new permanent and temporary access tracks, and the upgrading of existing access tracks. This LCT would also accrue moderate direct and indirect effects during operation due to the presence and visibility of the Alternative Alignment.
- 4.9.7 One other LCT (LCT 134: Sweeping Moorland and Flows) has been predicted to accrue moderate (significant) direct and indirect effects during construction due to the temporary presence of activity and loss of landcover associated with the installation of the Alternative Alignment, the temporary wood pole diversion, the dismantling of the existing OHL the construction of new permanent and temporary access tracks, and the upgrading of existing access tracks. Significant effects during operation would be limited to indirect effects associated with the presence of the Alternative Alignment and its visibility.
- 4.9.8 Othe LCTs have been predicted to accrue not significant indirect effects due to the very limited nature of the visibility of the Alternative Alignment.



## 4.10 Assessment of Likely Significant Visual Effects

- 4.10.1 This section of the Chapter provides an assessment of the effects that the Alternative Alignment would have on the visual amenity of identified receptors within the study area during both construction and operation (with operational effects being assessed 10 years after completion), in accordance with the effects criteria set out in Table V1-6.5 of Volume 1: Chapter 6: Landscape and Visual. It takes into account the dismantling works associated with the existing trident 'H' wood pole OHL.
- 4.10.2 Detailed assessment of potential effects on the building based, route based and outdoor based receptors are presented in Tables 1 to 3 of **Volume 4: Appendix V5-4.3**.
  - Summary of Visual Effects on Building Based Receptors
- 4.10.3 The building-based receptors are generally grouped geographically and it should be noted that the changes to the views would not necessarily be experienced by all of the properties in the group. The changes described relate to people at those properties where principal views are in the direction of the Alternative Alignment: some properties main focus of view would be away from the Alternative Alignment.
- 4.10.4 A summary of the effects on the building-based visual receptors during construction and operation is provided in **Table V5-4.4**. Effects which are significant are shaded in grey.

Table V5-4.4: Summary of Visual Effects on building based visual receptors

Period	Construction		Oper	ation
Receptor	Level of Effect	Significance	Level of Effect	Significance
B1 Properties on Minor Road to Strathy Point (North Section)	Minor - Moderate	Not significant	Minor - Moderate	Not significant
B2 Properties on Minor Road to Strathy Point (South Section)	Minor - Moderate	Not significant	Minor - Moderate	Not significant
B3 Strathy Bay Pods	Minor	Not significant	Minor	Not significant
B4 Properties at Strathy along the A836 West of the River Strathy	Minor - Moderate	Not significant	Minor	Not significant
B5 The Old Post Office, Portskerra	None	None	None	None
B6 Strathy Village Hall	Minor	Not significant	Minor	Not significant
B7 Properties at Strathy east of the River Strathy and north of the A836	Minor	Not significant	Minor	Not significant
B8 New House at Strathy	Minor - Moderate	Not significant	Minor - Moderate	Not significant
B9 Properties at Strathy east of the River Strathy and south of the A836	Minor	Not significant	Minor	Not significant
B10 Properties at Baligill	Minor - Moderate	Not significant	Minor - Moderate	Not significant

Period	Cons	truction	Ор	eration
B11 Properties in north east Portskerra	Negligible	Not significant	Negligible	Not significant
B12 Berrigoe, Portskerra	None	None	None	None
B13 Properties in north west Portskerra	Negligible	Not significant	Negligible	Not significant
B14 Properties to the rear of Mill House, Portskerra	None	None	None	None
B15 Properties in north central Portskerra	Negligible	Not significant	Negligible	Not significant
B16 Properties in north west central Portskera	Negligible	Not significant	Negligible	Not significant
B17 Properties near Melvich Primary School	Negligible	Not significant	Negligible	Not significant
B18 Properties at east Portskerra	Negligible	Not significant	Negligible	Not significant
B19 Properties at central Portskerra	Negligible	Not significant	Negligible	Not significant
B20 Sunny Ridge	Negligible	Not significant	Negligible	Not significant
B21 Properties at south central Portskerra	Minor	Not significant	Minor	Not significant
B22 Properties on Minor Road to Strathy Point	Minor	Not significant	Minor	Not significant
B23 Properties on A836 west of Portskera	Moderate	Significant	Moderate	Significant
B24 Properties at south Portskerra	Minor	Not significant	Minor	Not significant
B25 Melvich Park Cottage and Coastline Cafe	Moderate	Significant	Moderate	Significant
B26 Properties south of the Coastline Cafe	Moderate	Significant	Moderate	Significant
B27 Properties east of Melvich Terrace	Minor	Not significant	Minor	Not significant
B28 Properties at central Melvich	Minor	Not significant	Minor	Not significant
B29 Properties at south Melvich	Negligible	Not significant	Negligible	Not significant

Period	Constr	ruction	Oper	ation
B30 Halladale Inn	Minor	Not significant	Minor	Not significant
B31 Bighoue Lodge, Strathview and the Barracks	Minor	Not significant	Minor	Not significant
B32 The Netstore and Fishery Cottage	None	None	None	None
B33 Properties east of Bighouse Lodge	Moderate	Significant	Moderate	Significant
B34 Lochend, Melvich	Minor	Not significant	Minor	Not significant
B35 Bridge House, Melvich	Negligible	Not significant	Negligible	Not significant
B36 Properties at Strath Halladale north	Moderate - Major	Significant	Moderate - Major	Significant
B37 Properties at Kirkton	Moderate - Major	Significant	Moderate	Significant
B38 Tigh na Breac, Strath Halladale	Major	Significant	Major	Significant
B39 Properties at Strath Halladale central	Negligible	Not significant	Negligible	Not significant
B40 Properties at Upper Bighouse	Negligible	Not significant	Negligible	Not significant
B41 Mission House	None	None	None	None
B42 Properties at Trantlemore	Negligible	Not significant	Negligible	Not significant
B43 33 Chisley	None	None	None	None
B44 51 Dalhalvaig	None	None	None	None
B45 Strath Halladale South  – west of the A897	Negligible	Not significant	Negligible	Not significant
B46 Strath Halladale South - east of the A897	Negligible	Not significant	Negligible	Not significant
B47 Bowside Lodge	Minor	Not significant	Minor	Not significant
B48 The Bothy	Minor	Not significant	Minor	Not significant
B49 Bowside Cottage (Gamekeepers Cottage)	Moderate	Significant	Moderate	Significant
B50 Dallangwell	Minor	Not significant	Minor	Not significant



Summary of Significant Effects on Building Based Receptors

- 4.10.5 Significant effects are predicted for eight of the 50 building-based receptors within the study area.
- 4.10.6 Effects would be **Major adverse** during both construction and operation for built receptor B38: Tigh na Breac, Strath Halladale due to the fact that construction works associated with a high number of towers and the CSE compound and UGC's would be visible at approximately 1 km distant and these towers and the CSE compound would be visible at close range during operation.
- 4.10.7 Moderate Major adverse effects would occur during both construction and operation for built receptor B36: Properties at Strath Halladale North due to construction and operation of a medium to high number of towers being visible at distances of 1.5 km and greater.
- 4.10.8 **Moderate Major adverse** effects during construction and **Moderate adverse** effects during operation for B37: Properties at Kirkton during construction due to construction traffic and high-level works, and due to the addition of further tall features to views which would include turbines at Melvich Wind Energy Hub.
- 4.10.9 Effects would be **Moderate adverse** during construction and operation for five built receptors: B23: Properties on A836 west of Portskerra due to construction activity and the presence of towers in close proximity (>500m); B25: Melvich Park Cottage and Coastline Café due to the Alternative Alignment being visible in conjunction with Melvich Wind Energy Hub at close and medium range; B26: Properties south of the Coastline Café due to a further deterioration in the view by the addition of the Alternative Alignment to Melvich Wind Energy Hub; B33: Properties East of Bighouse Lodge due to construction and operation of a medium to high number of towers being visible on the hillside with some towers breaching the skyline, and for B49: Bowside Cottage (Gamekeepers Cottage) due to construction works associated with three towers being visible at very close range and these towers being visible during operation.
- 4.10.10 For the other building based receptors effects are either none where there are no views of the Alternative Alignment or not significant due to a range of factors including very limited theoretical visibility, distance and focus of view. The full assessment on building based receptors is set out in **Table 1** of **Volume 4: Appendix V5-4.3: Visual Assessment Tables Alternative Alignment**.

Summary of Visual Effects on Route Based Receptors

4.10.11 The roads and other route-based receptors are linear routes which may be travelled in either direction and have therefore been assessed separately for each direction of travel. A summary of the effects on route based visual receptors, which includes the effects on people on recreational or tourist routes, during construction and operation of the Alternative Alignment is provided in **Table V5-4.5.** Effects which are significant are shaded in grey.

Table V5-4.5: Summary of Visual Effects on route based visual receptors

Period	Construction		Operation	
Receptor	Level of Effect	Significance	Level of Effect	Significance
R1a A836 / NCR1 west- bound	Moderate	Significant	Moderate	Significant
R1b A836 / NCR 1 east- bound	Moderate	Significant	Moderate	Significant
R2a A897 north-bound	Moderate	Significant	Moderate	Significant



Period	Construction		Operation	
R2b A897 south-bound	Moderate	Significant	Moderate	Significant
R3a Minor Road to Kirkton north-bound	Minor	Not significant	Minor	Not significant
R3b Minor Road to Kirkton south-bound	Moderate	Significant	Moderate	Significant
R4a Scottish Hill Track 344  - Strath Halladale (Trantlebeg) to Strathy south-bound	Moderate	Significant	Moderate	Significant
R4b Scottish Hill Track 344  - Strath Halladale (Trantlebeg) to Strathy north-bound	Moderate	Significant	Moderate	Significant
R5 Forest / Estate Access Tracks at Dallangwell	Minor	Not significant	Minor	Not significant
R6a Core Path SU19.03 north-bound	Major	Significant	Moderate - Major	Significant
R6b Core Path SU19.03 south-bound	Moderate - Major	Significant	Moderate	Significant

Summary of Significant Effects on Route Based Receptors

- 4.10.12 Eleven route based receptors within the study area were assessed (four roads (both directions of travel), one core path (both directions of travel) and one track (both directions of travel)). Six other core paths were identified within the study area but were scoped out of the assessment on the basis of limited or no visibility / distance / focus of the views.
- 4.10.13 Nine of the eleven route based receptors assessed were considered to accrue significant effects during construction and operation of the Alternative Alignment.
- 4.10.14 Major adverse construction effects and Moderate Major adverse operational effects were identified for route receptor R6a: Core Path SU19.03 northbound, due to construction operations associated with a low number of towers initially seen at distance. On passing through Am Bealach, construction works would be seen at increasingly closer range as users of the path approach the location of the OHL Halladale River crossing where ground level and high level works would be very close to the route. Over the southern section of the route only very low numbers of towers would be visible, with some skylining across the strath, until users of the route pass through Am Bealach when medium<sup>13</sup> to high numbers of towers would be visible for a short distance. Some of these would be seen at very close range as the core path approaches and passes below the OHL.

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<sup>&</sup>lt;sup>13</sup> For the purposes of this assessment, the terms Low, Medium and High have been used to categorise the number of towers theoretically visible. Low refers to less than approximately 18, Medium refers to between approximately 18 and 36, and High refers to over approximately 36.

- 4.10.15 Moderate Major adverse construction effects and Moderate adverse operational effects were identified for route receptor R6b: Core Path SU19.03 southbound, due to construction works being seen to the west of the route and in views ahead with construction traffic using parts of this route. Both ground level and high level works would be visible with the latter skylining. On the approach to the location of the OHL crossing the Halladale River, construction works would become more prominent and at close range and construction traffic would be seen using parts of this route. During operation there would be views of towers to the right and ahead. These would be seen at relatively close range and would be seen skylining. Towers at the river crossing would
- 4.10.16 **Moderate adverse** construction and operation effects were identified for a number of route receptors, as follows:

be backclothed for part of the route, then skylining as path users approach and pass below the OHL.

- R1a: A836 / NCR1 west-bound, due to intermittent visibility from approximately three quarters of the route with increasing visibility on the approach and descent to Halladale Bridge;
- R1b: A836 / NCR 1 east-bound, due to almost continuous visibility from east of Armadale Bay to Melvich and intermittent visibility thereafter;
- R2a: A897 north-bound, due to tower construction and operation being theoretically visible from around two thirds of the route. Including towers being prominent on the skyline to the west, with close range views on the approach to Connagill 275/132 kV substation;
- R2b: A897 south-bound, due to theoretical visibility from around one third of the route, including towers being prominent on the skyline to the west, added with close range views on the approach to Connagill 275/132 kV substation;
- R3b: Minor road to Kirkton south-bound, due to continuous theoretical visibility of the Alternative
   Alignment with construction works and operational towers being seen on the skyline west of the road and crossing the strath:
- R4a: Scottish Hill Track 344 Strath Halladale (Trantlebeg) to Strathy south-bound, due to
  construction works being in relatively close proximity to the track and the Alternative Alignment being
  seen in views southwards with some towers skylining; and
- R4b: Scottish Hill Track 344 Strath Halladale (Trantlebeg) to Strathy north-bound, due to the Alternative Alignment becoming more prominent as track users head north with high level works and towers seen above the skyline.
- 4.10.17 For the other route-based receptors effects are not significant due to a range of factors including very limited theoretical visibility, distance and focus of view/direction of travel. The full assessment on building-based receptors is set out in Table 2 of Volume 4: Appendix V5-4.3: Visual Assessment Tables Alternative Alignment.

Summary of Visual Effects on Outdoor Based Receptors

4.10.18 A summary of the effects on the outdoor based visual receptors during construction and operation of the Alternative Alignment is provided in **Table V5-4.6**. Effects which are significant are shaded in grey.

Table V5-4.6: Summary of Visual Effects on outdoor based visual receptors

Period	Construction		Operation	
Receptor	Level of Effect	Significance	Level of Effect	Significance
Rec 1 Strathy Cemetery / Strathy Bay Car Park	Minor	Not significant	Minor	Not significant
Rec 2 Strathy War Memorial	Minor	Not significant	Minor	Not significant



Period	Construction		Operation	
Rec 3 Melvich and Portskerra War Memorial	Minor	Not significant	Moderate	Significant
Rec 4 Portskerra Car Park	None	None	None	None
Rec 5 Portskerra Drownings Memorial and Car Park	None	None	None	None
Rec 6 Melvich Bay Car Park	Negligible	Not significant	Negligible	Not significant
Rec 7 Melvich Campsite - North Coast Touring Park	Minor	Not significant	Minor	Not significant
Rec 8 Kirkton Cemetery	Moderate	Significant	Moderate	Significant
Rec 9 Strath Halladale War Memorial	Negligible	Not Significant	Negligible	Not Significant
Rec 10 River Strathy	Minor	Not significant	Minor	Not significant
Rec 11 Halladale River	Minor	Not significant	Minor	Not significant

Summary of Significant Effects on Outdoor Based Receptors

4.10.19 Of the eleven outdoor based receptors within the study area that were assessed, only one was assessed as accruing significant effects. This is Rec 8: Kirkton Cemetery which was identified as having Moderate adverse effects during both construction and operation due to a medium number of towers (approximately 13 towers) being visible at distances ranging from approximately 600 m to just over 2 km. Other outdoor based receptors were not found to be likely to experience significant effects due to either no visibility or very limited visibility of small numbers of towers or parts of towers, as set out in Table 3 of Volume 4: Appendix V5-4.3: Visual Assessment Tables – Alternative Alignment.

#### 4.11 Cumulative Effects

- 4.11.1 The cumulative assessment is presented for the following scenario comprising other known developments as of 24<sup>th</sup> October 2024, as displayed on **Volume 2: Figure V5-4.6**:
  - Wind farm developments and their associated grid infrastructure (associated with the Connagill Cluster Grid Connections), namely:
    - Kirkton Energy Park (including on-site substation) (proposed);
    - Kirkton Energy Park Grid Connection (pre-scoping); and
    - Strathy Switching Station (pre-scoping).
- 4.11.2 The assessment is limited to permanent effects as it is unlikely that construction operations for the Alternative Alignment and other cumulative developments would occur concurrently.

- 4.11.3 The assessment does not give consideration to cumulative effects occurring as a result of the addition of the Alternative Alignment to other infrastructure developments which form part of the Connagill Cluster Grid Connection within the study area, which have already been considered as part of the baseline. This includes the consented Strathy South Wind Farm, Strathy Wood Wind Farm, and the proposed Strathy Wood Wind Farm Grid Connection and Melvich Wind Energy Hub. However, consideration of the contribution the Alternative Alignment would have in the context of the whole development cluster is also addressed in paragraph 4.11.45.
- 4.11.4 The assessment is restricted to those receptors predicted to accrue effects from the Alternative Alignment in isolation greater than negligible. It is considered that receptors which would experience negligible effects from the Alternative Alignment in isolation would be unlikely to experience greater levels of effect from the addition of the Alternative Alignment to other developments than those arising from the other developments in isolation or in combination.
- 4.11.5 The cumulative assessment is therefore limited to the addition of the Alternative Alignment to other developments for the following receptors (the effects stated are those arising from the Alternative Alignment during the operational phase):
  - Landscape Receptors
    - Farr Bay, Strathy and Portskerra SLA SQ2 Moorland and Crofting Mosaic (Minor indirect).
    - WLA 39: East Halladale Flows Q1 (an awe-inspiring simplicity of landscape at the broad scale, with a strong horizontal emphasis, 'wide skies' and few foci) (Minor indirect) and Q4 (a remarkably open landscape with extensive visibility, meaning tall or high features in the distance are clearly visible) (Minor indirect);
    - LCT 134 Sweeping Moorland and Flows (Moderate-Minor direct and Moderate indirect);
    - LCT 136 Rocky Hills and Moorland (Minor indirect);
    - LCT 140 Sandy Beaches and Dunes (Minor indirect);
    - LCT 141 High Cliffs and Sheltered Bays (Minor indirect);
    - LCT 142 Strath Caithness and Sutherland (Moderate direct and Moderate indirect); and
    - LCT 144 Coastal Crofts and Small Farms (Minor indirect).
  - Visual Built Receptors
    - B1 Properties on Minor Road to Strathy Point (North Section) (Minor Moderate);
    - B2 Properties on Minor Road to Strathy Point (South Section) (Minor Moderate);
    - B3 Strathy Pods (Minor);
    - B4 Properties at Strathy along the A836 West of the River Strathy (Minor);
    - B6 Strathy Village Hall (Minor);
    - B7 Properties at Strathy east of the River Strathy and north of the A836 (Minor);
    - B8 New House at Strath (Minor Moderate)
    - B9 Properties at Strathy east of the River Strathy and south of the A836 (Minor);
    - B10 Properties at Baligill (Minor Moderate);
    - B21 Properties at south central Portskerra (Minor);
    - B22 Properties on Minor Road to Strathy Point (Minor);
    - B23 Properties on A836 west of Portskerra (Moderate);
    - B24 Properties at south Portskerra (Minor);
    - B25 Melvich Park Cottage and Coastline Café (Moderate);
    - B26 Properties south of the Coastline café (Moderate);
    - B27 Properties east of Melvich Terrace (Minor);

- TRANSMISSION
- B28 Properties at central Melvich central (Minor);
- B30 Halladale Inn (Minor);
- B31 Bighouse Lodge, Strathview and The Barracks (Minor);
- B33 Properties east of Bighouse Lodge (Moderate);
- B34 Lochend, Melvich (Minor);
- B36 Properties at Strath Halladale north (Moderate Major);
- B37 Properties at Kirkton (Moderate);
- B38 Tigh na Breac, Strath Halladale (Major);
- B47 Bowside Lodge (Minor);
- B48 The Bothy (Minor)
- B49 Bowside Cottage (Gamekeeper's Cottage) (Moderate); and
- B50 Dallangwell (Minor).
- Visual Route Receptors
  - R1a A836 / NCR1 west-bound (Moderate);
  - R1b A836 / NCR1 east-bound (Moderate);
  - R2a A897 north-bound (Moderate);
  - R2b A897 south-bound (Moderate);
  - R3a Minor Road to Kirkton north-bound (Minor)
  - R3b Minor Road to Kirkton south-bound (Moderate);
  - R4a Scottish Hill Track 344 Strath Halladale (Trantlebeg) to Strathy south-bound (Moderate);
  - R4b Scottish Hill Track 344 Strath Halladale (Trantlebeg) to Strathy north-bound (Moderate);
  - R5 Forest / Estate Access Track at Dallangwell (Minor)
  - R6a Core Path SU19.03 north-bound (Moderate Major); and
  - R6b Core Path SU19.03 south-bound (Moderate).
- Visual Outdoor Receptors
  - Rec 1 Strathy Cemetery/Strathy Bay carpark (Minor);
  - Rec 2 Strathy War Memorial (Minor);
  - Rec 3 Melvich and Portskerra War Memorial (Moderate);
  - Rec 7 Melvich Campsite North Coast Touring Park (Minor);
  - Rec 8 Kirkton Cemetery (Moderate);
  - Rec 10: River Strathy (Minor); and
  - Rec 11: Halladale River (Minor).

#### **Cumulative Landscape Assessment**

4.11.6 The Kirkton Energy Park Grid Connection would comprise a very short section of wood pole mounted 132 kV OHL running approximately south-west from the Kirkton Energy Park substation to join the retained section of the existing 132 kV trident 'H' wood pole OHL. The substation would be located adjacent to existing trees and scrub. Given that effects of these two elements would be likely to be of a very localised nature, it is considered the effects of the addition of the Alternative Alignment to these would not give rise to any significant cumulative effect. The cumulative assessment therefore focusses on the effects of the addition of the Alternative Alignment to the Kirkton Energy Park wind turbines and the Strathy Switching Station development.



- 4.11.7 The Kirkton Energy Park EIA predicts moderate adverse and significant effects on the Farr Bay Strathy and Portskerra SLA without assessing the effects on the individual special qualities. The Strathy Switching Station development has yet to be the subject of a landscape and visual impact assessment, but it would likely have a relatively limited effect on the SLA with theoretical visibility likely from areas of elevated ground at Strathy Point. It is considered that the cumulative effects on the Farr Bay, Strathy and Portskerra SLA SQ2 Moorland and Crofting Mosaic resulting from the addition of the Alternative Alignment to Kirkton Energy Park and Strathy Switching Station while also taking into account the presence of turbines at Melvich Wind Energy Hub (the EIAR for which identifies no greater cumulative effects than for Kirkton and other baseline wind farm developments) would be no greater than the level of effect arising from Kirkton Energy Park (Moderate adverse and significant).
- 4.11.8 In relation to the East Halladale Flows WLA, the Kirkton Energy Park EIA states that: 'whilst it would result in significant effects on parts of the WLA, these would relate to areas up to between 8 km and 10 km. It is also notable that views to the south would be unaffected by the proposed development, with these being the directions in which a sense of wildness is most strongly expressed. Overall, Kirkton Energy Park would not fundamentally alter the key attributes and qualities and the East Halladale Flows WLA, when considered in relation to the overall WLA and its baseline context'. The Strathy Switching Station development has yet to be the subject of a landscape and visual impact assessment, but it would likely have a relatively limited effect on the WLA due to the scale of the Switching Station and the >7 km distance from the WLA. It is considered that the cumulative effects on the East Halladale Flows WLA resulting from the addition of the Alternative Alignment to Kirkton Energy Park and Strathy Switching Station, and taking into account the presence of turbines at Melvich Wind Energy Hub, would not result in any increase in the level of effect arising from Kirkton Energy Park in isolation i.e. Major to Major - Moderate adverse and significant effect on Q1 (An awe-inspiring simplicity of landscape at the broad scale, with a strong horizontal emphasis, 'wide skies' and few foci) at distances of up to approximately 8 – 10 km; and Major to Major - Moderate adverse and significant effect on Q4 (a remarkably open landscape with extensive visibility, meaning tall or high features in the distance are clearly visible) at distances of up to approximately 8 - 10 km.
- 4.11.9 The Kirkton Energy Park EIA predicts moderate adverse and significant effects arising for LCT 134 Sweeping Moorland and Flows without differentiating between direct and indirect effects. The turbines would be located within this LCT, and it is therefore assumed that this level of effect applies to both direct and indirect effects. Strathy Switching Station would also be located within this LCT and there would likely be fragmented theoretical visibility from areas of high ground within the western part of this LCT. While the Alternative Alignment would add further energy infrastructure to this LCT and would extend the influence of man-made elements west of Kirkton Energy Park and north east and south of Strathy Switching Station (although not markedly increasing the geographical extent of the area significantly affected), it is not considered that the level of effects would increase above those arising from Kirkton Energy Park in isolation (Moderate direct adverse and indirect adverse and significant). This takes into account the presence of Melvich Energy Hub which itself would extend the influence of man-made elements to the north-east of Strathy Switching station.
- 4.11.10 The Kirkton Energy Park EIA predicts moderate to minor adverse and not significant effects arising for LCT 136 Rocky Hills and Moorland. Strathy Switching Station would likely be visible from limited areas of high ground within this LCT at more than 3 km distant. It is considered that the addition of the Alternative Alignment to Kirkton Energy Park and Strathy Switching Station, taking into account the presence of Melvich Wind Energy Hub, would not result in any increase in the level of effect from that arising from the proposed turbines at Kirkton Energy Park in isolation (Moderate to Minor indirect adverse and not significant).



- 4.11.11 The Kirkton Energy Park EIA predicts moderate adverse effects arising for LCT 140 Sandy Beaches and Dunes. These are considered in the EIAR to be not significant as 'the primary focus and association with the coastline and sea to the north, is away from the development. There is likely to be very limited and fragmented visibility of Strathy Switching Station from this LCT. Cumulative effects resulting from the addition of the Alternative Alignment to these two other developments, taking into account the presence of Melvich Wind Energy Hub, would be no greater than for Kirkton Energy Park in isolation (Moderate indirect adverse but considered in the EIA for Kirkton Energy Park to be not significant).
- 4.11.12 The Kirkton Energy Park EIA predicts moderate to minor adverse and not significant effects on LCT 141 High Cliffs and Sheltered Bays. There is likely to be very limited and fragmented visibility of Strathy Switching Station from this LCT. It is not considered that the addition of the Alternative Alignment, taking into account the presence of Melvich Wind Energy Hub, would result in any higher level of effect than that arising from the wind turbines at Kirkton Energy Park in isolation (Moderate to Minor indirect adverse and not significant).
- 4.11.13 The Kirkton Energy Park EIA predicts major adverse and significant effects arising for LCT 142 Strath Caithness and Sutherland. It is assumed that this is an indirect effect as the turbines would not be located within this LCT. It is unlikely there would be visibility of Strathy Switching Station from this LCT. Taking into account the presence of Melvich Wind Energy Hub, the addition of the Alternative Alignment is not considered to give rise to any direct effects greater than those arising from the Alternative Alignment in isolation (Moderate direct and indirect adverse and significant). The addition of the Alternative Alignment is not considered to give rise to any indirect effects greater than those arising from the wind turbines at Kirkton Energy Park in isolation (Major indirect adverse and significant), taking into account the presence of Melvich Wind Energy Hub.
- 4.11.14 The Kirkton Energy Park EIA predicts moderate to moderate-minor adverse effects arising for LCT 144 Coastal Crofts and Small Farms. These are considered to be not significant due to the primary focus and association with the coastline and sea to the north, away from the turbines. Strathy Switching Station is likely to be theoretically visible from parts of this LCT west of Strathy Bay and at Baligill at distances of around 2 km. It is not considered that the addition of the Alternative Alignment to these two other developments, taking into account the presence of Melvich Wind Energy Hub, would result in any higher level of effect than that arising from Kirkton Energy Park in isolation (Moderate to Moderate Minor indirect adverse but considered in the EIA for Kirkton Energy Park to be not significant).

Cumulative Visual Assessment - Building Based Receptors

- 4.11.15 The Kirkton Energy Park EIA identifies major moderate adverse and significant effects for properties on the road to Strathy Point. This would include receptors B1: Properties on Minor Road to Strathy Point (North Section), B2: Properties on Minor Road to Strathy Point (South Section), and B3: Strathy Pods. There is also likely to be theoretical visibility of Strathy Switching Station from these properties. It is considered that the addition of the Alternative Alignment, taking into account the presence of Melvich Wind Energy Hub, would not give rise to any cumulative effects greater than the effects predicted for Kirkton Energy Park in isolation Major to Moderate adverse and significant).
- 4.11.16 The Kirkton Energy Park EIA identifies moderate adverse significant effects for a viewpoint west of Strathy which is an appropriate proxy for receptor B4: Properties at Strathy along the A836 West of the River Strathy. Strathy Switching Station is likely to be theoretically visible from only the northernmost of these properties. It is considered that the addition of the Alternative Alignment would not give rise to any cumulative effects greater than the effects predicted for Kirkton Energy Park in isolation (Moderate adverse and significant). This takes into account the presence of Melvich Wind Energy Hub.



- 4.11.17 There would be no visibility of Kirkton Energy Park from built receptors B6: Strathy Village Hall, B7: Properties at Strathy East of the River Strathy and north of the A836, B8: New House at Strath, and B9: Properties at Strathy East of the River Strathy and south of the A836. There is likely to be theoretical visibility from some of the individual properties within these receptor groups of Strathy Switching Station at distances in excess of 2 km. It is considered that the cumulative effects would be no greater than for the Alternative Alignment in isolation (i.e. B6: Strathy Village Hall (Minor adverse and not significant); B7: Properties at Strathy east of the River Strathy and north of the A836 (Minor adverse and not significant); B8: New House at Strath (Minor Moderate adverse and not significant) and B9: Properties at Strathy East of the River Strathy and south of the A836 (Minor adverse and not significant)) and that cumulative effects would be not significant. This takes into account the presence of Melvich Wind Energy Hub.
- 4.11.18 There would be visibility (mainly blade tips) of Kirkton Energy Park from built receptor B10: Properties at Baligill.

  The wind turbines would be more than 5 km distant. There is likely to be theoretical visibility of Strathy

  Switching Station from two of the houses in this receptor group. Cumulative effects would be no greater than those arising from the Alternative Alignment in isolation (Minor Moderate adverse and not significant). This takes into account the presence of Melvich Wind Energy Hub.
- 4.11.19 There would be visibility of blade tips of Kirkton Energy Park turbines from built receptors B21: Properties in south central Portskerra, B22: Properties on Minor Road to Strathy Point and B24: Properties at south Portskerra at more than 4.5 km distant. Strathy Switching Station is unlikely to be visible. Cumulative effects would be no greater than those arising from the Alternative Alignment in isolation (**Minor adverse and not significant**). This takes into account the presence of Melvich Wind Energy Hub.
- 4.11.20 There would be visibility of blade tips of Kirkton Energy Park turbines from built receptors B23: Properties on A836 west of portskerra Moderate, B25: Melvich Park Cottage and Coastline Café, and B26: Properties south of the Coastline Café at more than 4 km distant. Cumulative effects would be no greater than those arising from the Alternative Alignment in isolation (Moderate adverse and significant). This takes into account the presence of Melvich Wind Energy Hub.
- 4.11.21 There would be no visibility of Kirkton Energy Park turbines or Strathy Switching Station from built receptors B27: Properties east of Melvich Terrace and B28: Properties at Central Melvich Minor and cumulative effects would therefore be no greater than for the Alternative Alignment in isolation (Minor adverse and not significant). This takes into account the presence of Melvich Wind Energy Hub.
- 4.11.22 Viewpoint 3 in the Kirkton Energy Park EIA is representative of the view seen from built receptor B30: Halladale Inn. It has been assessed as accruing moderate adverse effects from the wind turbines. Strathy Switching Station would be unlikely to be visible from this built receptor. Although the Alternative Alignment would add further energy infrastructure into the view, it is not considered that cumulative effects would be any higher than those arising from Kirkton Energy Park in isolation (Moderate adverse and significant). This takes into account the presence of Melvich Wind Energy Hub.
- 4.11.23 The Kirkton Energy Park EIA reports major moderate significant effects for viewpoint 5 which is representative of built receptor B31: Bighouse Lodge, Strathview and The Barracks. Strathy Switching Station would unlikely be visible from this built receptor. The Alternative Alignment would add additional energy infrastructure into the view, but it considered that the cumulative level of effect would be no greater than that arising from the Kirkton Energy Park in isolation (Major to Moderate adverse and significant). This takes into account the presence of Melvich Wind Energy Hub.



- 4.11.24 Strathy Switching Station would unlikely be visible from built receptor B33: Properties east of Bighouse Lodge. Viewpoint 4 in the Kirkton Energy Park EIA is a suitable proxy for this built receptor as it as at a similar elevation although closer to the proposed turbines. This viewpoint has been assessed as accruing major moderate significant effects and although the Alternative Alignment would add additional energy infrastructure into the view, it is considered that the cumulative level of effect would be no greater than that arising from the Kirkton Energy Park in isolation (Major to Moderate adverse and significant). This takes into account the presence of Melvich Wind Energy Hub.
- 4.11.25 Viewpoint 3 in the Kirkton Energy Park EIA is a suitable proxy for built receptor B34: Lochend, Melvich. It has been assessed as accruing moderate adverse effects from the wind turbines. Strathy Switching Station would unlikely be visible from this built receptor. Although the Alternative Alignment would add further energy infrastructure into the view, it is not considered that cumulative effects would be any higher than those arising from Kirkton Energy Park in isolation (Moderate adverse and significant). This takes into account the presence of Melvich Wind Energy Hub.
- 4.11.26 Major adverse significant effects are predicted for residents at viewpoint 2 in the Kirkton Energy Park EIA. This is representative of the view from built receptor B36: Properties at Strath Halladale north. Strathy Switching Station would be unlikely to be visible from this built receptor. While the Alternative Alignment would be seen in conjunction with the wind turbines, the cumulative effect can be no higher than those arising from Kirkton Energy Park in isolation (Major adverse and significant). This takes into account the presence of Melvich Wind Energy Hub.
- 4.11.27 Strathy Switching Station would unlikely be visible from B37: Properties at Kirkton. The EIA for Kirkton Energy Park does not include this location as a viewpoint but their viewpoint 1 can be considered as a proxy as it is also to the north-east of the turbines albeit a kilometre further away than B37. The assessment for this viewpoint in the Kirkton Energy Park EIAR identifies a major moderate significant effect. For B37, the rotors of the turbines at Kirkton Energy Park would be seen similarly behind the Alternative Alignment with turbines skylining. Cumulative effects would likely be greater than those arising from the Alternative Alignment or Kirkton Energy Park in isolation and would be **Moderate adverse and significant** during operation. This takes into account the presence of Melvich Wind Energy Hub.
- 4.11.28 Although not assessed in the EIA for Kirkton Energy Park, built receptor B38: Tigh na Breac, Strath Halladale is likely to accrue a similar level of effect to viewpoint 2 included within the Kirkton Energy Park EIA (major adverse). Strathy Switching Station would unlikely be visible from this built receptor. This built receptor is also predicted to accrue major adverse effects from the Alternative Alignment. While the Alternative Alignment would add additional energy infrastructure into the view, the level of effect can be no higher than Major adverse and significant. This takes into account the presence of Melvich Wind Energy Hub.
- 4.11.29 Kirkton Energy Park and Strathy Switching Station would not be visible from built receptors B47: Bowside Lodge, B48: The Bothy, B49: Bowside Cottage (Gamekeeper's Cottage) or B50: Dallangwell and no cumulative effects would arise from any of these receptors. This takes into account the presence of Melvich Wind Energy Hub.



#### Cumulative Visual Assessment - Route Based Receptors

- 4.11.30 The Kirkton Energy Park EIA reports moderate minor effects for the A836 (Receptors 1a and 1b in this assessment) overall with localised major moderate effects in the vicinity of Strath Halladale. Strathy Switching Station is likely to be theoretically visible intermittently between east of Armadale Bay and just east of the River Strathy. Cumulative effects arising from the addition of the Alternative Alignment to either or both of these other developments would be no greater than for the Alternative Alignment in isolation for Route Receptor 1a (i.e. Moderate adverse and significant), but in the vicinity of Halladale Bridge, cumulative effects are predicted to be Major adverse and significant as the Alternative Alignment would be seen in combination with the turbines at Kirkton Energy Park adding further man-made, although smaller vertical elements with horizontal wires, passing in front of the wind farm. Cumulative effects for route-based Receptor 1b would be no greater than for the Alternative Alignment in isolation (Moderate adverse and significant). This takes into account the presence of Melvich Wind Energy Hub.
- 4.11.31 The Kirkton Energy Park would be prominent in views from the A897 (Receptors R2a and R2b in this assessment) and the EIAR reported major moderate significant adverse effects for users of this route. Strathy Switching Station would not be visible from this route receptor. The addition of the Alternative Alignment would add further vertical man-made elements to the mid ground of the view for south-bound travellers of this route with turbines beyond. Cumulative effects would be **Major Moderate adverse and significant** for south-bound travellers which is the same level of effect predicted for the Kirkton Energy Park in isolation. For north-bound travellers, the cumulative effect would be no greater than that arising from Kirkton Energy Park in isolation (**Major to Moderate adverse and significant**) although the Alternative Alignment would also be visible intermittently from this route. This takes into account the presence of Melvich Wind Energy Hub.
- 4.11.32 The Kirton Energy Park EIA does not assess the effects on the minor road to Kirkton (Receptors 3a and 3b in this assessment), but examination of the ZTV for Kirkton Energy Park confirms it would be continuously visible for south-bound travellers and would be seen beyond the Alternative Alignment. Strathy Switching Station would not be visible from this route receptor. The wind turbines are likely to be the dominant features in the view and cumulative effects would be no greater than those likely to arise from Kirkton Energy Park in isolation (anticipated as Moderate to Major adverse and significant). This takes into account the presence of Melvich Wind Energy Hub.
- 4.11.33 Kirkton Energy Park would not be visible from Scottish Hill Track 344 (Receptors 4a and 4b in this assessment). Strathy Switching Station would be visible from sections of the track around 1 km north of Bowside and from fragmented areas around Reroy. It is however considered that cumulative effects would be no greater than those arising from the addition of the Alternative Alignment for users of this route (i.e. Moderate adverse and significant (in both directions). This takes into account the presence of Melvich Wind Energy Hub.
- 4.11.34 Kirkton Energy Park would not be visible from Receptor R5: Forest / Estate Access Tracks at Dallangwell. Strathy Switching Station is unlikely to be noticeable from this viewpoint at more than 3.5 km distant and therefore there would be no cumulative effects greater than the Alternative Alignment in isolation (**Minor adverse and not significant**). This takes into account the presence of Melvich Wind Energy Hub.
- 4.11.35 The EIA for Kirkton Energy Park assessed the effect on Core Path SU 19.03 (Receptor R6a and 6b in this assessment) as major moderate and significant. Strathy Switching Station would not be visible from this route receptor. The cumulative effects resulting from the addition of the Alternative Alignment would be no greater than those arising from Kirkton Energy Park in isolation for south-bound users of the core path (Major to Moderate adverse and significant) but Major adverse and significant cumulative effects can be anticipated for north-bound path users as the Alternative Alignment would be seen ahead in views with the turbines at Kirkton Energy Park, present on the skyline to the west. This takes into account the presence of Melvich Wind Energy Hub.



## Cumulative Visual Assessment - Outdoor Based Receptors

- 4.11.36 Kirkton Energy Park would not be visible from outdoor receptor Rec 1: Strathy Cemetery / Strathy Bay Car Park. Strathy Switching Station is likely to be theoretically visible at approximately 3 km distant from this outdoor receptor. Cumulative effects are considered to be likely to be no higher than those arising from the Alternative Alignment in isolation (i.e. Minor adverse and not significant). This takes into account the presence of Melvich Wind Energy Hub.
- 4.11.37 Kirkton Energy Park would not be visible from outdoor receptor Rec 2: Strathy War Memorial. Strathy Switching Station is likely to be theoretically visible at approximately 2.6 km distant. Cumulative effects are considered to be likely to be no higher than those arising from the Alternative Alignment in isolation (i.e. Minor adverse and not significant). This takes into account the presence of Melvich Wind Energy Hub.
- 4.11.38 The EIAR for Kirkton Wind Energy Hub predicts negligible effects for Rec 3: Melvich and Portskerra War Memorial with only a small number of blade tips being theoretically visible. Cumulative effects are considered likely to be no higher than those arising from the Alternative Alignment in isolation (i.e. Moderate adverse and significant). This takes into account the presence of Melvich Wind Energy Hub.
- 4.11.39 Two blade tips of the turbines at Kirkton Energy Park would be visible from outdoor receptor Rec 7: Melvich Campsite North Coast Touring Park. Strathy Switching Station would not be visible from this outdoor receptor. Cumulative effects are not predicted to be any greater than for the Alternative Alignment in isolation (i.e. Minor adverse and not significant). This takes into account the presence of Melvich Wind Energy Hub.
- 4.11.40 The turbines at Kirkton Energy Park would be visible from outdoor receptor Rec 8: Kirkton Cemetery. Strathy Switching Station would not be visible from this outdoor receptor. Cumulative effects can be expected to be Moderate to Major adverse and significant as the Alternative Alignment would be seen in front of the proposed turbines from this outdoor receptor. This takes into account the presence of Melvich Wind Energy Hub.
- 4.11.41 Kirkton Energy Park would not be visible from outdoor receptor R10: River Strathy. There is likely to be theoretical visibility of Strathy Switching Station from parts of the river to the immediate west. Cumulative effects on this outdoor receptor are however considered to be unlikely to be greater than for the Alternative Alignment in isolation (i.e. Minor adverse and not significant). This takes into account the presence of Melvich Wind Energy Hub.
- 4.11.42 The Kirkton Energy Park EIA identifies major moderate significant effects for outdoor receptor Rec 11: Halladale River. Strathy Switching Station would not be visible from this outdoor receptor. As the Alternative Alignment would only be visible from Beat 4<sup>14</sup> (assuming the anglers focus is upstream), cumulative effects are not anticipated to be any greater than those arising from the wind turbines at Kirkton Energy Park (Major to Moderate adverse and significant). This takes into account the presence of Melvich Wind Energy Hub.
- 4.11.43 **Table V5-4.7** summarises the effects of the addition of the Alternative Alignment to Kirkton Energy Park and Strathy Switching Station. Those effects highlighted in grey are significant effects.

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<sup>&</sup>lt;sup>14</sup> Beat 4 extends from just south of Halladale Bridge to just south of Connagill substation as shown on the interactive map at <a href="https://www.strathhalladale.com/fishing.php">https://www.strathhalladale.com/fishing.php</a>



**Table V5-4.7: Summary of Cumulative Effects** 

Period	Effect of Alternative	Cumulative effect of the Alternative Alignment in addition to Kirkton Energy Park (and associated substation and grid connection) and Strathy Switching Station
Receptor	Alignment in isolation	
Farr Bay, Strahy and Portskerra SLA SQ2 – Moorland and Crofting Mosaic	Minor	No greater than for Kirkton Energy Park in isolation (Moderate adverse and significant).
WLA 39: East Halladale Flows Q1 An awe-inspiring simplicity of landscape at the broad scale, with a strong horizontal emphasis, 'wide skies' and few foci	Minor	No greater than for Kirkton Energy Park in isolation (Major to Major – Moderate adverse and significant at distances of up to 8 – 10 km)
WLA 39: East Halladale Flows  Q4 A remarkably open landscape with extensive visibility, meaning tall or high features in the distance are clearly visible	Minor	No greater than for Kirkton Energy Park in isolation (Major to Major – Moderate adverse and significant at distances of up to 8 – 10 km)
LCT 134 Sweeping Moorland and Flows (Minor - Moderate direct and Moderate indirect);	Minor - Moderate direct	No greater than for Kirkton Energy Park in isolation (Moderate direct adverse and significant).
	Moderate indirect	No greater than for either development in isolation (Moderate indirect adverse and significant).
LCT 136 Rocky Hills and Moorland	Minor indirect	No greater than for Kirkton Energy Park in isolation (Moderate to Minor indirect adverse and not significant).
LCT 140 Sandy Beaches and Dunes	Minor indirect	No greater than for Kirkton Energy Park in isolation (Moderate indirect adverse and not significant due to the focus being on the coast and out to sea).
LCT 141 High Cliffs and Sheltered Bays	Minor indirect	No greater than for the Kirkton Energy Park in isolation (Moderate – Minor indirect adverse and not significant.
LCT 142 Strath - Caithness and Sutherland	Minor – Moderate direct	No greater than for the Alternative Alignment in isolation (Minor – Moderate direct and indirect adverse and not significant.
	Minor – Moderate indirect	No greater than for Kirkton Energy Park in isolation (Major indirect adverse and significant).

Period	Effect of Alternative Alignment in isolation	Cumulative effect of the Alternative Alignment in addition
Receptor		to Kirkton Energy Park (and associated substation and grid connection) and Strathy Switching Station
LCT 144 Coastal Crofts and Small Farms	Minor Indirect	No greater than for Kirkton Energy Park in isolation (Moderate to Moderate – Minor indirect and not significant due to the focus being on the coast and out to sea).
B1: Properties on Minor Road to Strathy Point (North Section)	Minor	No greater than for Kirkton Energy Park in isolation (Major – Moderate adverse and significant).
B2 Properties on Minor Road to Strathy Point (South Section)	Minor	No greater than for Kirkton Energy Park in isolation (Major – Moderate adverse and significant).
B3 Strathy Pods	Minor	No greater than for Kirkton Energy Park in isolation (Major – Moderate adverse and significant).
B4 Properties at Strathy along the A836 West of the River Strathy	Minor	No greater than for Kirkton Energy Park in isolation (Moderate adverse and significant).
B6 Strathy Village Hall	Minor	No greater than for the Alternative Alignment in isolation (Minor adverse and not significant).
B7 Properties at Strathy east of the River Strathy and north of the A836	Minor - Moderate	No greater than for the Alternative Alignment in isolation (Minor adverse and not significant).
B8 New House at Strath	Minor - Moderate	No greater than for the Alternative Alignment in isolation (Minor – Moderate adverse and not significant).
B9 Properties at Strathy east of the River Strathy and south of the A836	Minor	No greater than for the Alternative Alignment in isolation (Minor adverse and not significant).
B10 Properties at Ballagill	Minor - Moderate	No greater than for the Alternative Alignment in isolation (Minor - Moderate adverse and not significant).
B21 Properties at south central Portskerra	Minor	No greater than for the Alternative Alignment in isolation (Minor adverse and not significant).
B22 Properties in south Portskera	Minor	No greater than for the Alternative Alignment in isolation (Minor adverse and not significant).
B23 Properties on A836 west of Portskerra	Moderate	No greater than for the Alternative Alignment in isolation (Moderate adverse and significant).

Period	Effect of Alternative	Cumulative effect of the
Receptor	Alignment in isolation	Alternative Alignment in addition to Kirkton Energy Park (and associated substation and grid connection) and Strathy Switching Station
B24 Properties at South Portskerra	Minor	No greater than for the Alternative Alignment in isolation (Minor adverse and not significant).
B25 Melvich Park Cottage and Coastline Cafe	Moderate	No greater than for the Alternative Alignment in isolation (Moderate adverse and significant).
B26 Properties south of Coastline Cafe	Moderate	No greater than for the Alternative Alignment in isolation (Moderate adverse and significant).
B27 Property east of Melvich Terrace	Minor	No greater than for the Alternative Alignment in isolation (Minor adverse and not significant).
B28 Properties at central Melvich	Minor	No greater than for the Alternative Alignment in isolation (Minor adverse and not significant).
B30 Halladale Inn	Minor	No greater than for Kirkton Energy Park in isolation (Moderate adverse and significant).
B31 Bighouse Lodge, Strathview and The Barracks	Minor	No greater than for Kirkton Energy Park in isolation (Major – Moderate adverse and significant).
B33 Properties east of Bighouse Lodge	Moderate	No greater than for Kirkton Energy Park in isolation (Major – Moderate adverse and significant).
B34 Lochend, Melvich	Minor	No greater than for Kirkton Energy Park in isolation (Moderate adverse and significant).
B36 Properties at Strath Halladale north	Moderate - Major	No greater than for Kirkton Energy Park in isolation (Major adverse and significant).
B37 Properties at Kirkton	Moderate	The addition of the Alternative Alignment to Kirkton Energy Park would result in what would be likely to be Moderate adverse and significant cumulative effects arising from Kirkton Energy Park or the Alternative Alignment in isolation.
B38 Tigh na Breac, Strath Halladale	Major	No greater than for either development in isolation (Major adverse and significant).
B47 Bowside Lodge	Minor	No cumulative effects
B48 The Bothy	Minor	No cumulative effects



Period	Effect of Alternative Alignment in isolation	Cumulative effect of the Alternative Alignment in addition
Receptor		to Kirkton Energy Park (and associated substation and grid connection) and Strathy Switching Station
B49 Bowside Cottage (Gamekeeper's Cottage)	Moderate	No cumulative effects
B50 Dallangwell	Minor	No cumulative effects
R1a A836/NCR1 west-bound	Moderate	For the majority of this route, effects would be no greater than for the Alternative Alignment in isolation (Moderate adverse and significant). In the vicinity of Strath Halladale, cumulative effects can be expected to be Major adverse and significant.
R1b A836/NCR1 east-bound	Moderate	No greater than for the Alternative Alignment in isolation (Moderate adverse and significant).
R2a A897 north-bound	Moderate	Cumulative effects would be no greater than those arising from the Kirkton Energy Park in isolation (Major – Moderate adverse and significant).
R2b A897 south-bound	Moderate	Cumulative effects would be no greater than those arising from the Kirkton Energy Park in isolation (Major – Moderate adverse and significant).
R3a Minor Road to Kirkton north- bound	Minor	Cumulative effects are predicted from the addition of the Alternative Alignment to Kirkton Energy Park but these are unlikely to be any greater than those arising from the wind turbines in isolation (predicted as Moderate – Major adverse and significant).
R3b Minor Road to Kirkton south-bound	Moderate	Cumulative effects are predicted from the addition of the Alternative Alignment to Kirkton Energy Park but these are unlikely to be any greater than those arising from the wind turbines in isolation (predicted as Moderate – Major adverse and significant).
R4a Scottish Hill Track 344 – Strath Halladale (Trantlebeg) to Strathy south-bound	Moderate	No greater than for the Alternative Alignment in isolation (Moderate adverse and significant).
R4b Scottish Hill Track 344 – Strath Halladale (Trantlebeg) to Strathy North-bound	Moderate	No greater than for the Alternative Alignment in isolation (Moderate adverse and significant).



Period  Receptor	Effect of Alternative Alignment in isolation	Cumulative effect of the Alternative Alignment in addition to Kirkton Energy Park (and associated substation and grid connection) and Strathy Switching Station
R5 Forest / Estate Access Tracks at Dallangwell	Minor	No greater than for the Alternative Alignment in isolation (Minor adverse and not significant).
R6a Core Path SU19.03 north- bound	Moderate - Major	Major adverse and significant.
R6b Core Path SU19.03 south- bound	Moderate	No greater than for Kirkton Energy Park in isolation (Major – Moderate adverse and significant).
Rec1 Strathy Cemetery / Strathy Bay carpark	Minor	No greater than for the Alternative Alignment in isolation (Minor adverse and not significant).
Rec 2 Strathy War Memorial	Minor	No greater than for the Alternative Alignment in isolation (Minor adverse and not significant)
Rec 3 Melvich and Portskerra War Memorial	Moderate	Cumulative effect would be no greater than for the Alternative Alignment in isolation (Moderate adverse and significant).
Rec 7 North Coast Touring Park	Minor	Cumulative effect would be no greater than for the Alternative Alignment in isolation (Minor adverse and not significant).
Rec 8 Kirkton Cemetery	Moderate	Moderate – Major adverse and significant.
Rec 10 River Strathy	Minor	No greater than for the Alternative Alignment in isolation (Minor adverse and not significant).
Rec 11 Halladale River	Minor	No greater than for Kirkton Energy Park in isolation (Major – Moderate adverse and significant).

4.11.44 As detailed in paragraph 4.2.5 the Alternative Alignment would be closely associated with and dependent on the construction of the consented Strathy South and Strathy Wood wind farms and the Strathy Wood Wind Farm Grid Connection. The assessment of effects has therefore taken these developments into account as part of the baseline for the Alternative Alignment. The Melvich Wind Energy Hub has also been assumed to be present within the baseline for the Alternative Alignment, because the purpose of the Alternative Alignment is specifically to avoid this proposed development, should it go ahead. Other known development proposals within the study area likely to affect the baseline characteristics, including the proposed Kirkton Energy Park and its associated grid connection and the (pre-scoping stage) Strathy Switching Station, have been considered in the cumulative assessment of effects.



4.11.45 The combined effects of all developments on the landscape character and visual resource of the study area would lead to a notable change. The contribution of the Alternative Alignment to these effects would be noticeable but of a lesser degree than the contribution of the wind farms at Strathy South and Strathy Wood, Melvich Wind Energy Hub and Kirkton Energy Park due to the scale of the turbines.

#### 4.12 Mitigation

Embedded and Implementation Stage Mitigation

4.12.1 Details are provided in **Section 6.12** of **Volume 1: Chapter 6: Landscape and Visual** and remain relevant to the Alternative Alignment.

#### 4.13 Residual Effects

4.13.1 The assessment of operational effects takes into account the likely benefits of the embedded and implementation phase mitigation measures which are proposed and therefore the operational effects identified should be considered representative of residual effects.

## 4.14 Summary and Conclusions

- 4.14.1 This Chapter describes the key sensitivities and potential changes to the physical and visual environment arising from the Proposed Development with the Alternative Alignment.
- 4.14.2 The Alternative Alignment would be dependent on or associated with a number of other consented and proposed developments. Therefore, for the purposes of the LVIA, various other developments have been assumed to be present within the baseline landscape. The Alternative Alignment would be dependent on the presence of the consented Strathy South Wind Farm, Strathy Wood Wind Farm and the proposed Strathy Wood Wind Farm Grid Connection. In addition, the purpose of the Alternative Alignment is to avoid conflict with the proposed Melvich Wind Energy Hub by providing an alignment that goes around rather than through this development.
- 4.14.3 The inclusion of the Melvich Wind Energy Hub within the baseline is predicted to reduce the sensitivity of some landscape and visual receptors to development. Therefore, this LVIA should not be compared on a like-for-like basis with the LVIA for the Proposed Alignment included in **Volume 1: Chapter 6: Landscape and Visual**, which considers a baseline scenario without Melvich Wind Energy Hub.

Landscape Effects

- 4.14.4 The landscape assessment has established that the only significant landscape effects resulting from the Alternative Alignment would be Moderate adverse direct and indirect effects on LCT 134 Sweeping Moorland and Flows during construction, and Moderate adverse indirect effects during operation, and Moderate adverse direct and indirect effects on LCT 142 Strath Caithness and Sutherland during construction and operation. These two LCTs, however, occupy more than three quarters of the study area. Significant direct landscape effects are due to the presence of construction operations associated with the Alternative Alignment within these LCTs, while significant indirect effects are associate with a high degree of visibility of construction operations associated with the Alternative Alignment from within these LCTs.
- 4.14.5 There would be no significant direct effects arising for the other four LCTs within the study area nor for any designated or protected landscapes because construction operations would not take place within these areas and the Alternative Alignment would not be located within these areas. There would be no significant indirect effects arising for the other four LCTs within the study area, nor for any designated or protected landscapes because visibility of construction operations associated with the Alternative Alignment would either be non-existent or very limited.



#### Visual Effects

- 4.14.6 The detailed visual assessment set out in Volume 4: Appendix V5-4.3: Visual Assessment Tables Alternative Alignment has established that significant effects on visual receptors would be limited to eight building-based receptors, nine route based receptors (both directions of travel), and one outdoor based receptor.
- 4.14.7 Major adverse effects during both construction and operation are predicted for people at, or using, the following receptors:
  - B38 Tigh na Breac, Strath Halladale.
- 4.14.8 Major adverse effects during construction, reducing to Moderate Major adverse during operation, are predicted for people using the following route-based receptors:
  - R6a Core Path SU19.03 (north-bound).
- 4.14.9 Moderate Major adverse effects during both construction and operation are predicted for people at the following building receptors:
  - B36 Properties at Strath Halladale north.
- 4.14.10 Moderate Major adverse effects during construction, reducing to Moderate adverse during operation are predicted for people using the following route-based receptor:
  - · B37 Properties at Kirkton; and
  - R6b Core Path SU19.03 southbound.
- 4.14.11 Moderate adverse effects during both construction and operation are predicted for people at, or using, the following receptors:
  - B23 Properties on A836 west of Portskerra;
  - B25 Melvich Park Cottage and Coastline Café;
  - B26 Properties south of the Coastline Café;
  - B33 Properties east of Bighouse Lodge;
  - B49 Bowside Cottage (Gamekeepers Cottage);
  - R1a and R1b A836/NCR1 (west and east-bound);
  - R2a and R2b A897 (north and south-bound);
  - R3b Minor road to Kirkton (south-bound);
  - Rec 4a and R4b Scottish Hill Track 344 Strath Halladale (Trantlebeg) to Strathy (north and southbound); and
  - Rec 8 Kirkton Cemetery.

Cumulative Landscape and Visual Effects

- 4.14.12 The cumulative landscape and visual assessment takes into account the addition of the Alternative Alignment to Kirkton Energy Park, its associated substation and grid connection, and Strathy Switching Station.
- 4.14.13 The cumulative landscape assessment has identified that there would be no cumulative landscape effects greater than the levels of effect arising from either the Alternative Alignment or Kirkton Energy Park in isolation.
- 4.14.14 The cumulative visual assessment has identified a very limited number of receptors which would experience an increase in the level of effect identified for either Kirkton Energy Park or the Alternative Alignment in isolation. These are:



- TRANSMISSION
  - R1a: A836 / NCR1 west-bound in the vicinity of Strath Halladale (Major adverse and significant);
  - R6a: Core Path SU19.03 north-bound (Major adverse and significant); and
  - Rec 8: Kirkton Cemetery (Moderate Major adverse and significant).

#### Conclusions

- 4.14.15 The Landscape and Visual Impact Assessment has established that there would be significant adverse construction effects for a small number of people:
  - Those who may be present within LCT 134 Sweeping Moorland and Flows and LCT 142 Strath –
     Caithness and Sutherland:
  - Those who may be present at building based receptors B23 Properties on A836 west of Portskerra;
     B25 Melvich Park Cottage and Coastline Café; B26 Properties south of the Coastline Café; B33
     Properties east of Bighouse Lodge; B36 Properties at Strath Halladale north; B37 Properties at Kirkton;
     B38 Tigh na Breac, Strath Halladale; and B49 Bowside Cottage (Gamekeepers Cottage);
  - Those who may be present on route based receptors at R1a and R1b A836/NCR1 (west and east-bound); R2a and R2b A897 (north and south-bound); R3b Minor road to Kirkton (south-bound); R6a and R6b Core Path SU19.03 (north and south-bound); and R4a and R4b Scottish Hill Track 344 Strath Halladale (Trantlebeg) to Strathy (north and south-bound); and
  - Those who may be present at outdoor receptor Rec 8 Kirkton Cemetery.
- 4.14.16 Significant adverse effects are predicted for a small number of people during operation:
  - Those who may be present within LCT 134 Sweeping Moorland and Flows and LCT 142 Strath –
     Caithnesss and Sutherland;
  - Those who may be present at building based receptors B23 Properties on A836 west of Portskerra;
     B25 Melvich Park Cottage and Coastline Café; B26 Properties south of the Coastline Café; B33
     Properties east of Bighouse Lodge; B36 Properties at Strath Halladale north; B37 Properties at Kirkton B49 Bowside Cottage (Gamekeepers Cottage);
  - Those who may be present at route based receptors R1a and R1b A836/NCR1 (west and east-bound);
     R2a and R2b A897 (north and south-bound);
     R3b Minor road to Kirkton (south-bound);
     R6a and R6b Core Path SU19.03 (north and south-bound),
     R4a and R4b Scottish Hill Track 344 Strath Halladale (Trantlebeg) to Strathy (north and south-bound);
     and
  - Those who may be present at outdoor based receptor Rec 8 Kirkton Cemetery.
- 4.14.17 The cumulative landscape assessment has established that the effects of the addition of the Alternative Alignment would not result in any increase in the levels of effect arising from either Kirkton Energy Park or the Alternative Alignment in isolation.
- 4.14.18 The cumulative visual assessment has identified there would be no cumulative visual effects for building based receptors greater than the levels of effect arising from either the Alternative Alignment or Kirkton Energy Park in isolation.
- 4.14.19 Cumulative effects for route based receptors are predicted for R1a: A836/NCR1 west-bound in the vicinity of Strath Halladale (Major adverse and significant) and for R6a: Core Path SU19.03 north-bound (Major adverse and significant) as a result of the addition of the Alternative Alignment to Kirkton Energy Park. For all other route based receptors assessed, there would be no cumulative effects greater than those arising from either the Alternative Alignment or Kirkton Energy Park in isolation.
- 4.14.20 There would be no cumulative effects greater than those arising from either the Alternative Alignment or Kirkton Energy Park in isolation for any of the recreation outdoor based receptors assessed aside from receptor Rec 8: Kirkton Cemetery (Moderate Major adverse and significant).



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