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INTRODUCTION

- 7.1 SLR has been commissioned by the applicant to undertake a review of the landscape and visual effects that could arise from the relocation of one wind turbine (Turbine No.7), together with those as a result of the evolving status and design of wind farms in the cumulative study. This has resulted in a need for a reassessment of the potential cumulative landscape and visual effects of the proposed development, as reported in the Landscape and Visual Impact Assessment (LVIA).
- 7.2 This Supplementary Environmental Information (SEI) Chapter adds to **Chapter 7: Landscape and Visual** of the 2020 Kirkton Energy Park Environmental Impact Assessment (EIA) Report. The methodology employed in this SEI is as set out in EIA Report **Technical Appendix 7.1: Methodology**.
- 7.3 The following key documents should be read in conjunction with this SEI:
 - EIA Report Volume 2 Chapter 7: Landscape and Visual (2022);
 - EIA Report Volumes 3a to 3c Chapter 7 Plan Figures and Visualisations (2022); and
 - EIA Report Volume 4a Chapter 7 Technical Appendices (2022).
- 7.4 The Candidate Flow Country World Heritage Site (WHS) has been identified as an issue in relation to the potential ecological effects of the proposed development. The Statement of Outstanding Universal Value in the nomination draft of the 'Management Plan for the Proposed Flow Country World Heritage Site' (December 2022) is focussed on its ecological value with no specific reference to landscape character, scenic quality, important views and visual relationships. The Candidate WHS has not been identified as an LVIA issue in the consultation feedback from NatureScot or The Highland Council (THC), either in written responses or discussions that have taken place to define the scope of the SEI. Therefore, the Candidate WHS is not considered in this SEI chapter.

CONSULTEE RESPONSES TO 2022 EIA REPORT

7.5 **Table 7-1** below provides a summary of the landscape and visual related responses to the 2022 Kirkton Energy Park application, received from key consultees. A response to the consultee responses is also provided in **Table 7-1**.

Consultee	Summary of Key Issues	Response to Comments
The Highland Council (THC) 17 May 2023	"The cumulative picture around Strathy is getting very complicated with 4 onshore wind farm applications pending consideration: Bettyhill Phase 2 (23/00142/FUL)	Through consultation with THC it has been agreed to provide additional assessment in relation to the following proposed wind farms:
	 Armadale (22/01972/S36 - amended scheme pending submission) 	 Armadale Wind Farm (variation) in planning
	• Kirkton (22/05533/S36)	 Melvich Wind Energy Hub – in planning
	 Melvich (23/02320/S36) 	

Table 7-1: Consultee Responses



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Then we also have:

"Landscape and Visual

- Ackron wind farm (withdrawn and new Scoping layout expected 2-3 months time – site circled pink).
- Dounreay Test and Demo Floating wind farm (16/04775/S36 and 20/05164/SCOP).
- Pentland Offshore Wind Farm (22/03864/S36 – THC Raised No Objection in December 2022).
- West of Orkney Wind Farm (22/01589/SCOP), plus associated onshore connection infrastructure (22/00972/SCOP & 22/05500/PAN – note likely A836 traffic impacts).

In light of the evolving cumulative position, the Council require each of the technical chapters within the Kirkton EIAR to be reviewed, with provision of updated cumulative assessments. These should ideally also include all applications at Scoping stage to help avoid further EIAR AI / FEI."

We would request that alongside the assessment text, a

series of updated cumulative ZTV mapping, and new

wireframes be provided to illustrate Kirkton alonaside all

other development proposals. This should include both

onshore and offshore schemes, with this requirement

also identified within NatureScot's consultation response.

Whilst the Council is still in the process of considering the

landscape and visual assessment, with a response from

our Landscape Officer still pending, it is advised that upon

receipt of the EIAR AI wireframes, it would then be our

intention to run the Council's Panoramic Viewer and

insert individual wind farm scheme's photomontages so

that the cumulative impact can be considered and

presented to committee. To do this we would require

panoramic images (a full colour photomontage and a

monochrome photomontage showing the updated

cumulative position) for select viewpoints. We can

confirm the exact viewpoints in due course, but currently

consider merit in including: VP8 – Beinn Ratha and VP9 –

Strathy Point, however this is subject to further discussion

with the Council's Landscape Officer. Please refer to Section 5 of THC's Visualisation Standards for submission

Pentland Offshore Wind Farm consented

West of Orkney Offshore Wind Farm – at EIA Scoping stage when this SEI chapter was prepared (further clarification is provided in the Cumulative Developments Update section below and in **SEI Chapter 5**.

Additional assessment text and judgements are included in this chapter of the SEI in respect of the current cumulative position as requested by THC. This comprises an update to the judgements made in the EIA report and the same approach has been taken in relation to the assessment i.e. the contribution that Kirkton Energy Park would make to cumulative effects has been assessed.

Revised and additional Figures have been prepared. These comprise updated and new Zones of Theoretical Visibility showing Kirkton Energy Park in conjunction with the other proposed wind farms. In addition, updated visualisations have been prepared showing both Turbine No.7 in the revised location and the other proposed wind farms. The details of these Figures are provided below.

Additional images, as described in the comments made by THC, can be provided when the requirements are confirmed.

requirements."



DESIGN AMENDMENTS

- 7.6 As outlined in **SEI Chapter 3: Description of Development**, the only design amendment from the site layout of the 2022 Kirkton Energy Park application (as detailed in the 2022 EIA Report) is the repositioning of Turbine No.7 (and associated crane pad) approximately 53m north, and the realignment of proposed access track to Turbines No.5 11. This relatively minor repositioning of Turbine No.7 has been undertaken in order to accommodate a request from SEPA and move the turbine away from sensitive habitat. The repositioning of Turbine No.7 has not been as a result of any landscape and visual related responses from consultees.
- 7.7 The movement of Turbine No.7, in relation to potential landscape and visual effects has been reviewed. There would be no material change to the judgements made in the LVIA. There are no discernible changes to the pattern of theoretical visibility for Kirkton Energy Park in the ZTV (SEI Figure 7.2a). In addition, reviewing the wirelines and photomontages that have been prepared (SEI Figure 7.5 to SEI Figure 7.26 and SEI Figure 7.28 to SEI Figure 7.49) identifies that the overall appearance of Kirkton Energy Park would be consistent with the site layout assessed in the 2022 EIA Report. The adjustments made to the location of Turbine No.7 would result in no changes to the judgements made in the submitted LVIA.

REVISED FIGURES, WIRELINES AND VISUALISATIONS

Figures

- 7.8 In order to update the graphic information previously issued with the 2022 EIA Report, a series of revised Figures, including revised Zone of Theoretical Visibility (ZTV) Figures have been produced for the SEI. Where these Figures supersede those that were included in the EIA Report the same number has been applied, but with an SEI prefix. Three additional Figures have been prepared (SEI Figures 7.4m and 7.4n), which continue on from the numbering sequence used for the EIA Report, again with the SEI prefix. These Figures comprise:
 - SEI Figure 7.2a Blade Tip & Hub Height ZTV;
 - SEI Figure 7.3a Cumulative Wind Farm Sites Within SEI Assessment;
 - SEI Figure 7.4h Cumulative ZTV Kirkton with Armadale;
 - SEI Figure 7.4I Cumulative ZTV Consented and Operational, In Planning, and Kirkton;
 - SEI Figure 7.4m Cumulative ZTV Kirkton with Melvich Wind Energy Hub;
 - SEI Figure 7.4n Cumulative ZTV Kirkton with Pentland;
 - SEI Figure 7.40 Cumulative ZTV Kirkton with West of Orkney;
 - SEI Figure 7.6.1a Sequential Assessment NC500 East;
 - SEI Figure 7.6.1b Sequential Assessment NC500 West; and
 - SEI Figure 7.6.2 Sequential Assessment A897 (SEI Sequential Assessment Wirelines also included).



Visualisations

- 7.9 In order to illustrate the SEI cumulative context the visualisations previously issued with the 2022 EIA Report, a series of additional wirelines and photomontages have been produced as part of the SEI, as follows:
- **SEI Figure 7.5a** to **SEI Figure 7.26e** comprise updated visualisations prepared in accordance with guidance published by NatureScot; and
- **SEI Figure 7.28** to **SEI Figure 7.49** comprise updated visualisations prepared in accordance with guidance published by THC.

CUMULATIVE DEVELOPMENTS UPDATE

- 7.10 The scope of the cumulative assessment for the Kirkton Energy Park LVIA was agreed with THC in April/May 2022. A degree of flexibility was factored into the approach taken, with Bettyhill Wind Farm Extension included after this cut-off date, based on knowledge of the pending submission at the time. It is typical for such an approach to be taken and it would be normal to expect submissions that post-date the application for Kirkton Energy Park to take account of this proposed development (i.e. Kirkton Energy Park) as an application stage project within the cumulative assessments carried out in support of any subsequent applications.
- 7.11 It is also not common practice to take account of wind farm proposals that are at EIA Scoping stage in a cumulative assessment. This is due to uncertainty in relation to whether a proposed development would proceed to a planning or s36 consent application (or marine licence application in the case of offshore development) and also due to the site layout and design evolution that can take place between EIA Scoping and a planning application. THC has advised that the West of Orkney Offshore Wind Farm should be taken into consideration and therefore it is included in this SEI.
- 7.12 Since the 2022 Kirkton Energy Park application was made to THC, the cumulative wind farm situation in the study area has changed. The relevant changes to the cumulative context since the 2022 Kirkton Energy Park application are as follows:
- Melvich Wind Farm (application): located immediately to the north of the proposed development, with approximately 1.4km between the closest wind turbines. Twelve wind turbines at 149.9m to blade tip height;
- Armadale (application layout amendment); located to the west of the proposed development, with approximately 6.8km between the closest wind turbines. Nine wind turbines, Compared with 12 wind turbines, at 149.9m to blade tip height;
- Pentland Offshore (approved): Located to the north of the proposed development, with approximately 13km between the closest wind turbines. Seven wind turbines at 300m to blade tip height; and
- West of Orkney Offshore (Scoping): located to the north/north west of the proposed development, with approximately 33km between the closest wind turbines. Up to 125 wind turbines at up to 370m to blade tip height.
- 7.13 The West of Orkney Offshore development was at EIA Scoping Stage when the assessment work for this SEI chapter was undertaken. However, the marine licence application for this proposed



development has now been submitted. The ZTVs and visualisations that have been prepared as part of the SEI chapter (as referred to in paragraphs 7.8 and 7.9) show the West of Orkney offshore development as a scoping stage development with the turbine layout and dimensions reflecting the details that were available at the time. Whilst the details contained within the marine licence application for this proposed development differ from those that were available at EIA Scoping Stage they are not considered to affect the judgements made in this SEI chapter i.e. the potential cumulative effects resulting from the addition of Kirkton Energy Park.

ASSESSMENT OF CUMULATIVE EFFECTS

- 7.14 The following assessment revisits judgements that were included in the LVIA. This approach has been taken to ensure consistency with the LVIA and to provide a degree of context to this supplementary assessment. Both landscape and visual receptors have been considered. The assessment has been kept as concise as possible to ensure it remains focussed and proportionate.
- 7.15 **Technical Appendix 7.4: Residential Visual Amenity Assessment** (RVAA) of the EIA Report, has not been updated as part of this SEI. The Landscape Institute Guidance on RVAA (Landscape Institute, March 2019, RVAA, Technical Guidance Note 2/19) states *"as a rule, future cumulative visual effects are not assessed in RVAA"*. THC has not requested any update to the RVAA in their exchanges or during meetings. In addition, it is noted that the LVIA for Melvich Wind Energy Hub did not consider potential future cumulative effects as part of the RVAA for that proposed development, i.e. Kirkton Energy Park was not considered as part of the RVAA for Melvich. The majority of residential properties that were included in the Kirkton Energy Park RVAA, i.e. those located on the eastern side of Strath Halladale, were excluded from the RVAA for Melvich Wind Energy Hub based on their location beyond 2km from the proposed wind turbines. Two of the viewpoints (Viewpoints 1 and 2) subject to this SEI, are located within Strath Halladale and are representative of views seen by residents within the Strath.
- 7.16 **Technical Appendix 7.5: Wild Land Area Assessment** of the EIA Report, has not been updated in the SEI. In relation to NatureScot Wild Land Areas, Policy 4(g) of National Planning Framework 4 states that *"development proposals in areas identified as wild land and the Nature Scot Wild Land Areas map will only be supported where the proposal* [inter alia]....*will support meeting renewable energy targets"*. It goes on to identify that such proposals should be supported by a wild land impact assessment. It also states that *"buffer zones around wild land will not be applied, and effects of development outwith wild land areas will not be a significant consideration"*. As Kirkton Energy Park lies outside the East Halladale Flows Wild Land Area, the Wild Land Area Assessment has not been specifically reviewed as part of the SEI. However, effects on the landscape in which this Wild Land Area is located have been considered.

Landscape Effects

7.17 **Table 7-2** below provides an analysis of the potential cumulative effects of Kirkton Energy Park. This focusses on the potential effects of the proposed development in relation to the baseline landscape plus the other proposed wind farms, including those THC has requested be considered in this SEI. **Table 7-2** is based on **Table 7-11** in the EIA Report (within the Landscape and Visual chapter). The five left hand columns are consistent with the content of the EIA Report, which help to provide context to the supplementary judgments being made. The SEI cumulative assessment



judgements are included in the right hand column. For clarity the columns that are consistent with the EIA Report are shaded grey.



Landscape Character Type (LCT)	Key Characteristics	Landscape Value, Susceptibility and Sensitivity to the Proposed Development	Magnitude of Change Due to the Proposed Development (Including Consideration of Baseline Wind Farms)	Level and Significance of Landscape Effects	Magnitude of Change and Potential Effects due to the Proposed Development in Relation to Baseline and Proposed Wind Farms
134: Sweeping Moorland and Flows	 Gently sloping or undulating landform which lies generally below 350 metres. Occasional isolated hills of limited height form local landmark features. Lochs and mature, meandering rivers. Very distinct flora, dominated by sphagnum mosses, produced by the wetness and infertility of the flows. Areas of peat cuttings and hagging. Pockets of improved grazing, mainly within the outer fringes of sweeping moorland. Coniferous forest forming a dominant characteristic within some parts of this landscape character type. Ribbons of broadleaf woodland occasionally run along the water courses and loch edges. Very sparsely settled with dispersed crofts, farms and estate buildings largely found on the outer edges of this landscape or near a strath. Vehicular tracks within parts of the landscape. Wind farms, transmission lines, the A9 and a network of minor roads are key features within Caithness. Long, low and largely uninterrupted skylines offering extensive views across this landscape and result in a feeling of huge space. Consistent views to the distant Lone Mountains and Rugged Mountain Massif – Caithness & Sutherland. Great sense of exposure on areas of flat peatland on upland plateau. A strong sense of remoteness is associated within the largely uninhabited, inaccessible 	Within the study area the Sweeping Moorland and Flows largely comprises one continuous area, the exceptions being two discrete areas in north west Caithness. Parts of the LCT lie within SLAs: Farr Bay, Strathy and Portskerra; Bens Griam and Loch nan Clar; The Flow Country and Berreidale Coast; and Ben Klibreck and Loch Choire. Parts of the LCT are also within the four WLAs within the study area: WLA 35 Ben Klibreck – Armine Forest, WLA 36 Causeymire – Knockfin Flows, WLA 38 Ben Hope – Ben Loyal, WLA 39 East Halladale Flows (see Figure 7.2e). Therefore, a relatively large proportion of the LCT is designated at a local authority level or lies within a WLA. It is a distinctive landscape with strong and continuous character and clear ecological interest. It also generally has a sense of remoteness, particularly within the core parts of the LCT. There are some detracting elements, notably large areas of commercial forestry, wind farms and power lines. The LCT is considered to be of High-medium value Considering the baseline characteristics of the landscape, the character area is considered to have a Medium level of susceptibility to the type of development. This is particularly due to the large scale of the landscape, limited scale indicators, simple horizontal form and the presence of existing wind farms and overhead power lines. Combining the judgements on the level of susceptibility to change and the value attributed to this landscape character type, the overall sensitivity is Medium . This judgement is made based on the scale and simplicity of the landscape, together with the ZTV pattern being	The proposed development would be located in the northern part of this LCT, just to the south of the coastal LCTs and west of Strath Halladale (Strath – Caithness and Sutherland LCT). Kirkton Energy Park would be seen at both relatively close distances (within 5km) and also at longer distances. Beyond 15km the pattern of visibility becomes increasingly fragmented and the wind farm would be seen in the context of the expansive sweeping moorland and would comprise a relatively limited element. Due to the extent of this LCT there would be large areas from which the proposed development would not be visible. Figure 7.2f illustrates theoretical visibility across the LCT. Key ancillary elements of the operational development would be located within this LCT, including the access tracks, and substation compound. The access tracks would add to the existing farm tracks within the site and would comprise wider routes. The substation compound (including the substation and control building and battery storage unit) would be positioned in the northern part of the site, on the edge of the LCT. The substation compound has been positioned on lower ground to limit its potential prominence and utilise the local landform and vegetation to provide screening of the proposed structures. Where the proposed development would be visible, it would generally be seen together with existing or consented wind farms, particularly the Strathy and Limekiln Wind Farms, which are also located within this LCT. Kirkton Energy Park would occupy a gap between these baseline wind farm developments, but it would also be smaller in size and comprise a simple, evenly spaced line of turbines. In a broader context, the existing and consented wind farms at Causeymire are also positioned within the LCT. As a result, the proposed development would not introduce new elements, but it would reinforce an existing pattern of development. The proposed Sutherland Space Hub would be located within this LCT, in the western part of the study area, and has been ident	Combining the judgements regarding sensitivity and magnitude of change, the proposed development is predicted to give rise to a Moderate adverse level of effect on this character area. However, given the size of the change that would occur in the part of the LCT closest to the proposed development this is considered to be a Significant effect on parts of the LCT within up to approximately 8km to 10km.	The key proposed (planning application stage wind farms) with which Kirkton Energy Park could result in additional cumulative effects are Armadale Wind Farm and Bettyhill Extension Wind Farm to the west of the site, and Melvich Wind Energy Hub to the north. The ridgeline to the west of Strathy Forest, which includes Beinn Ruadh, restricts the potential for combined visibility of Armadale Wind Farm and Bettyhill Extension Wind Farm with Kirkton Energy Park, although there would be potential for people travelling through the landscape to experience sequential visibility of the different developments. Armadale Wind Farm and Bettyhill Extension Wind Farms and cumulative effects are likely to be greater in relation to these combined developments, especially at a local level. Melvich Wind Energy Hub would typically be seen in conjunction with Kirkton Energy Park (see SEI Figure 7.4m), although there are some areas where Melvich Wind Energy Hub would be seen alone, e.g. parts of Melvich and Portskerra. As with the analysis of Kirkton Energy Park in relation to baseline wind farms, the visibility of Kirkton Energy Park and Melvich Wind Energy Hub would generally be in the context of operational and/or consented wind farms. Both these proposed developments would also be positioned between the Strathy and Limekiln Wind Farms, as well as being visible in

Table 7-2: Landscape Baseline and Predicted Landscape Effects

Kirkton Energy Park SEI – Volume 2



Landscape Character Type (LCT)	Key Characteristics	Landscape Value, Susceptibility and Sensitivity to the Proposed Development	Magnitude of Change Due to the Proposed Development (Including Consideration of Baseline Wind Farms)	Level and Signifi Landscape Effec
	core flows and moorlands of this landscape.	primarily coincidental with the non-designated parts of the LCT.	potential cumulative effects. This development has been granted planning permission and therefore forms part of the baseline. The potential for cumulative effects between the Sutherland Space Hub and Kirkton Energy Park is limited. The intervening distance between the Space Hub and the closest turbine is approximately 33km. In addition, existing and consented wind farms lie between the Space Hub and Kirkton Energy Park. The proposed development would relate to the human- influenced character of the fringes of this landscape. Also, being placed on the northern edge of the LCT would help to limit the overall extent of the change. An integral part of the of the proposed development is the removal of the commercial forestry within the northern part of the site and restoration of this area to peatland. This forestry removal would be positive in terms of landscape character and would occur through both the operational life of the wind farm and beyond. The proposed wind turbines, access tracks, crane pads borrow pits and substation would collectively contrast to the prevailing simplicity of the moorland slopes, although the restoration of disturbed ground would help to limit the magnitude of change through the operational phase. The proposed abnormal load turning areas would have limited effects on this LCT. They occupy are relatively small areas of land and would be used intermittently for short periods of time. They would not contain any permanent structures, although they would affect land cover. The addition of the proposed development would appear to collectively increase the distribution of wind turbines within the LCT. However, change specifically associated with the proposed development would be relatively localised, visible over parts of the overall LCT, predominately the northern part of the LCT and at the junction of several smaller scale LCT at the north end of Strath Halladale, where there is a transition to the Sweeping Moorland and Flows. It would also be seen in relation to a large scale, open landscap	

ance of	Magnitude of Change and Potential Effects due to the Proposed Development in Relation to Baseline and Proposed Wind Farms
	conjunction with the more distant wind farms at Causeymire in a broader context.
	Other proposed wind farms (Forss Extension 3, Slickly, Tormsdale and Golticlay) are located more distantly in the eastern part of the study area and would be closely associated with the existing pattern of wind farms within this LCT.
	Overall Kirkton Energy Park, in addition to the baseline of operational / consented wind farms and the proposed wind farms included in the SEI, would comprise a wind farm of relatively limited size. The key landscape effects would relate to the parts of the LCT that are more local to the site. However, in the context of the LCT overall, the potential effects on landscape character would be more limited.
	Therefore, in addition to the baseline and proposed wind farms, the magnitude of cumulative change of the proposed development is considered to remain Moderate . The effect on the LCT would remain Moderate and Significant for parts of the Sweeping Moorland and Flows LCT within approximately 10km of the site.
	The overall judgement in relation to the potential effect of Kirkton Energy Park, in addition to existing and consented wind farms, and proposed winds farms is the same as that assessed in the EIA Report.

Landscape Character Type (LCT)	Key Characteristics	Landscape Value, Susceptibility and Sensitivity to the Proposed Development	Magnitude of Change Due to the Proposed Development (Including Consideration of Baseline Wind Farms)	Level and Significance of Landscape Effects	Magnitude of Change and Potential Effects due to the Proposed Development in Relation to Baseline and Proposed Wind Farms
142: Strath – Caithness and Sutherland	 Straths range from fairly straight deeply incised troughs to more winding valleys with a number of minor side glens. River terraces and hummocky lower side slopes a common feature. Water is a key characteristic with straths accommodating a central river meandering across the floodplain, often traced by clumps of birch and alder. Lochs in some straths, where a string of small lochs add to the scenic richness of the lower strath. Areas of wetland often present on the strath floors. Smooth and fairly large pastures the predominant land cover on the floodplains of the straths, commonly enclosed by wire fences. Semi-improved pastures, heather and grass moorland and coniferous plantations covering lower side slopes. Increasing extent of moorland and woodland generally further up the straths, where the floodplain narrows and settlement is sparser. Smaller strip-fields present on often hummocky, lower side slopes and associated with croft houses arranged in linear groups raised on terraces above the floodplain and sometimes backed by woodland. Some crofts within the Straths more randomly dispersed or staggered on lower hill slopes. Occasional small farms located in the broader and more fertile parts of the straths. Settlement generally denser within the lower reaches of many straths, especially 	There are five occurrences of the Strath – Caithness and Sutherland within the study area. The enclosed nature of this LCT limits visual connections with the surrounding landscape and as a consequence, Kirkton Energy Park would not be visible in four of the straths within the study area. However, Strath Halladale lies almost immediately to the east of the proposed development, and would affect its character. Therefore, the following analysis concentrates on Strath Halladale. Strath Halladale does not lie within any landscape designation. The western edge of WLA 19 East Halladale Flows abuts and theoretically overlaps the eastern edge of the LCT. However, the characteristics of the Strath broadly differ from the attributes and qualities of the WLA and vice versa. It is a distinctive landscape with the sides of the Strath creating a sense of enclosure that differs from much of the surrounding context. This gives rise to a degree of distinctiveness at a local level, but it is not an unusual or rare landscape type. At the edges it comprises a transitional landscape, particularly as it meets the Sweeping Moorland and Flows to the east, south and west, and the coastal LCTs to the north. It has a quiet, rural and settled character, with a dispersed pattern of properties close to the base of the Strath. The floor of the northern part of the valley adjacent to the site supports mixed farming, mainly grazing with fields separated by post and wire fences and some walls. There are some detracting elements, notably a quarry south west of Loch Mor, south of Melvich, Connagill Substation on the opposite side of the valley further south as well as larger farm outbuildings and the timber processing development at Upper Bighouse. Baseline wind farm developments are not prominent	The proposed development would be located immediately to the west of this LCT, towards the more northerly part of Strath Halladale. Theoretically, visibility would extend throughout the majority of the Strath and field survey identifies that there would be limited vegetation that would provide screening. Figure 7.2f illustrates theoretical visibility across the LCT. Where the proposed development would be visible, it would generally be seen in isolation, or any visibility of baseline wind farms would be relatively limited due to the enclosure provided by landform. Therefore, Kirkton Energy Park would typically be seen alone, or would be notably more prominent than any other development. The Strath is a relatively intimate landscape, with multiple features that provide a sense of scale that could be referenced against the wind turbines. Kirkton Energy Park would comprise a simple, evenly spaced line of tall turbines seen above the Strath with blade movement apparent. The rising landform to the west would provide a degree of separation. The position and orientation of views means it is predicted there would be limited potential for the turbines to overlap. The proposed wind turbines, access tracks, crane pads, borrow pits and substation would collectively contrast to the prevailing simplicity of the rising moorland slopes, although the lower elevation of Strath relative to the site, would limit the prominence of the tracks and crane pads. The restoration of disturbed ground would also help to limit the magnitude of change through the operational phase. In addition, the substation compound (including the substation and control building and battery storage units) is proposed to be positioned on lower ground within the site, where existing topography and vegetation would provide a degree of visual screening. A positive change would result from the removal of the commercial forestry within the northern part of the site, and restoration of this area to peatland. This forestry forms a relatively prominent element abo	Combining the judgements regarding sensitivity and magnitude of change, the proposed development is predicted to give rise to a Major adverse level of effect on this LCT. This is therefore considered to be Significant .	Melvich Wind Energy Hub would be clearly visible from the Strath and essentially adjoin the northern edge of Kirkton Energy Park. The ZTV pattern for Melvich Wind Energy Hub within Strath Halladale is very similar to the pattern for Kirkton Energy Park. However, the position of Melvich Wind Energy Hub compared with Kirkton Energy Park means the relative prominence of this proposed development reduces more quickly at locations further south within the Strath. The Dounreay Test and Floating Demo Floating Offshore Wind Farm is also likely to visible from parts of Strath Halladale, most likely the northern part of the Strath. Pentland and West of Orkney Offshore Wind Farms would also both be theoretically visible with Strath Halladale. However, this predicted visibility is more fragmented, constrained by the local landform and also vegetation within the Strath. Overall, the relative prominence of Kirkton Energy Park within Strath Halladale means the potential cumulative magnitude change resulting of the proposed development, in addition to the proposed wind farms, would be Substantial. Therefore the cumulative effect of Kirkton Energy Park on Strath Halladale would be Major and Significant . The overall judgement in relation to the potential effect of Kirkton Energy Park, in addition to existing and consented wind farms, and proposed winds farms



Landscape Character Type (LCT)	Key Characteristics	Landscape Value, Susceptibility and Sensitivity to the Proposed Development	Magnitude of Change Due to the Proposed Development (Including Consideration of Baseline Wind Farms)	Level and Significa Landscape Effects
	 at bridging points, on the coast and close to major roads. Many areas rich in archaeology with cairns, roundhouses, brochs and old field systems, usually found on side slopes. Abandoned crofts, particularly within the upper straths and in narrow side glens. Focus in views from roads provided by a number of estate shooting lodges, and clustered, predominantly 19th Century, often estate style buildings. Narrow roads, commonly aligned along the edge of the floodplain, from which views are strongly channelled by the side slopes. Rounded Hills often forming prominent edges to the straths with shapely well- defined hills, providing a distinctive skyline and scenic backdrop. Highly scenic backdrop of mountains often revealed in some of the upper reaches of these straths. 	features, with intermittent visibility of Strathy Wind Farms and the Dounreay Tri offshore development from parts of the Strath, particularly the west facing slopes. The River Halladale is fished but otherwise, there is limited recreation value. The LCT is considered to be of Medium value Considering the baseline characteristics of the landscape, the character area is considered to have a High level of susceptibility to the type of development. This is particularly due to the level of enclosure, small scale of the landscape and features that form references of size/scale. Combining the judgements on the level of susceptibility to change and the value attributed to this landscape character type, the overall sensitivity is High – Medium .	The proposed abnormal load turning areas would have no effects on this LCT. It is judged that the magnitude of change due to the proposed development would be Substantial .	
135: Rounded Hills – Caithness and Sutherland	 Rolling hills forming broad, subtly rounded summits but with some more pronounced hills also occurring, these often featuring steeper slopes along the coast or where truncated by deep glens. Hills cut by numerous narrow burns and small lochans lie within dips, corries and on plateau summits. Predominantly dense heather ground cover and moorland grasses, but also some areas of bog. Fragments of broadleaf woodland in inaccessible locations. Scarcely settled with a largely uninhabited interior and widely scattered crofts and farms on lower slopes adjoining straths and farmed landscapes. Narrow glens and lower hill slopes often rich in archaeology with features such as 	Parts of the LCT lie overlap with SLAs: Bens Griam and Loch nan Clar; The Flow Country and Berriedale Coast; Ben Klibreck and Loch Choire; and Loch Fleet, Loch Brora and Glen Loth. Parts of the LCT are also within the WLAs within the study area: WLA 35 Ben Klibreck – Armine Forest and WLA 36 Causeymire – Knockfin Flows. Therefore, a relatively large proportion of the LCT is designated at a local authority level or lies within a WLA. There is generally a sense of remoteness, particularly within the core parts of the LCT. The LCT is considered to be of High-medium value Considering the baseline characteristics of the landscape, the character area is considered to have a Medium level of susceptibility to the type of development.	The ZTV shows a very limited and fragmented pattern of visibility within the occurrences of this LCT. The closest part of this LCT to the site lies to the south west, at a distance of approximately 14km from the closest turbine. However, Strathy South Wind Farm would be located in the foreground to middle distance of any views towards Kirkton Energy Park, diminishing the relative prominence of the proposed development. Where the proposed development would be visible, it would generally be seen together with existing or consented wind farms, particularly the Strathy and Limekiln Wind Farms, and as part of expansive open views over the Sweeping Moorland and Flows LCT. In addition, the intervening distance would limit size of the proposed development and the extent of any intervisibility would be very limited. The proposed abnormal load turning areas would have no effects on this LCT.	Combining the judgements regard sensitivity and magnitude of chan the proposed development is predicted to give r a Minor adverse le effect on this LCT. therefore consider be Not Significant .



ance of	Magnitude of Change and Potential Effects due to the Proposed Development in Relation to Baseline and Proposed Wind Farms
	is the same as that assessed in the EIA Report.
ding nge, rise to evel of This is red to	The proposed (planning application stage wind farms) included in the scope of this SEI with potential to result in additional cumulative effects are located in the northern and eastern parts of the study area. In the context of this LCT, Kirkton Energy Park would remain a distant element in expansive views separate from the wind farms at planning application stage. Kirkton Energy Park would be seen together with Melvich Wind Energy Hub, but collectively they would still comprise distant elements in the landscape. Therefore, in addition to the baseline and proposed wind farms, the magnitude of cumulative change of the proposed development is considered to

Landscape Character Type (LCT)	Key Characteristics	Landscape Value, Susceptibility and Sensitivity to the Proposed Development	Magnitude of Change Due to the Proposed Development (Including Consideration of Baseline Wind Farms)	Level and Significance of Landscape Effects	Magnitude of Change and Potential Effects due to the Proposed Development in Relation to Baseline and Proposed Wind Farms
	 standing stones, brochs and medieval townships. Wind farms located in more accessible and generally lower rolling hills, either close to extensive forestry or the high voltage transmission line aligned broadly parallel to the south-east Sutherland coast. Convex character of hill slopes limiting distant visibility and views of the hill tops when travelling through the landscape. Views into the interior of the hills very restricted. Strong sense of wild character can be experienced within the more remote and little modified parts of this landscape. 	Combining the judgements on the level of susceptibility to change and the value attributed to this landscape character type, the overall sensitivity is Medium .	It is judged that the magnitude of change due to the proposed development would be Slight - negligible .		remain Slight – negligible . The effect on the LCT would remain Minor and Not Significant for the Rounded Hills – Caithness and Sutherland LCT. The overall judgement in relation to the potential effect of Kirkton Energy Park, in addition to existing and consented wind farms, and proposed winds farms is the same as that assessed in the EIA Report.
136: Rocky Hills and Moorland	 Rough landcover with an abundance of scattered rocks, boulders and rock outcrops. Many lochans sited within rocky-edged cavities contributing to the complexity of the rocky moorland. Pockets of broadleaf woodland and scrub accentuating the rough texture of the rocky moorland. Particularly distinctive rocky hills lying on the fringes of the Kyle of Tongue and at the head of Loch Eriboll. A number of often prominent rocky hills outcropping along the coast, increasing scenic diversity. Extensive moorland found in the Cape Wrath area with less exposed bedrock and some large areas of more gently undulating peatland. Currently largely uninhabited landscape, although abutting more settled coasts and loch shores. Numerous prehistoric and historic environment features, with concentrations around the straths and coasts. 	Parts of the LCT lie overlap with the Kyle of Tongue NSA, and the Farr Bay, Strathy and Portskerra SLA. Parts of the LCT are also within the Ben Hope – Ben Loyal WLA. Therefore, parts of this LCT are designated at a national and local authority level or lies within a WLA. There is generally a sense of remoteness, particularly within the core parts of the LCT. The LCT is considered to be of High to High- medium value Considering the baseline characteristics of the landscape, the character area is considered to have a High - Medium level of susceptibility to the type of development. Combining the judgements on the level of susceptibility to change and the value attributed to this landscape character type, the overall sensitivity is High – Medium .	The ZTV shows a limited and fragmented pattern of visibility within the occurrences of this LCT. The closest part of this LCT lies to the west, at a distance of approximately 6km from the closest turbine. However, Strathy North Wind Farm would be located in the foreground to middle distance of views towards Kirkton Energy Park from this part of the LCT, diminishing the relative prominence of the proposed development. Other occurrences of this LCT lie to the west of the site, at greater distance (over 15km) and the Kirkton Energy Park would be positioned beyond the Strathy Wind Farms. Where the proposed development would be visible, it would generally be seen together with existing or consented wind farms, particularly the Strathy Wind Farms, and as part of expansive open views over the Sweeping Moorland and Flows LCT. In addition, the intervening distance would limit size of the proposed development and the extent of any intervisibility would be very limited. The proposed abnormal load turning areas would have no effects on this LCT. It is judged that the magnitude of change due to the proposed development would be Slight , reducing to Negligible with greater distance.	Combining the judgements regarding sensitivity and magnitude of change, the proposed development is predicted to give rise to a Moderate – minor to Minor adverse levels of effect on this LCT. This is therefore considered to be Not Significant .	The key proposed (planning application stage wind farms) with potential to result in additional cumulative effects in relation to Kirkton Energy Park are Armadale Wind Farm and Bettyhill Extension Wind Farm. Both Armadale Wind Farm and Bettyhill Extension Wind Farm are located to the west of the proposed development, and are both positioned within this LCT. Therefore, these application stage developments would be more prominent than the proposed development, which would be in the adjacent Sweeping Moorland and Flows LCT. Kirkton Energy Park and Melvich Wind Energy Hub would be seen collectively in views from this LCT.



Landscape Character Type (LCT)	Key Characteristics	Landscape Value, Susceptibility and Sensitivity to the Proposed Development	Magnitude of Change Due to the Proposed Development (Including Consideration of Baseline Wind Farms)	Level and Significance of Landscape Effects	Magnitude of Change and Potential Effects due to the Proposed Development in Relation to Baseline and Proposed Wind Farms
	 Highly visible from the coast road around north-west Sutherland. Provides the foreground to spectacular views over the coast and sea and also inland to the Lone Mountains. Feeling of containment and seclusion, increased by small knolls, dips and narrow valleys. 				stage. Therefore the cumulative magnitude of change resulting from the addition of Kirkton Energy Park in relation to the baseline and application stage wind farms is considered to reduce to Negligible . The effect on the LCT would reduce to Minor and remain Not Significant for the Rocky Hills and Moorland LCT. The overall judgement in relation to the potential effect of Kirkton Energy Park, in addition to existing and consented wind farms, and proposed winds farms is the same as that assessed in the EIA Report.
138: Lone Mountains	 Individual mountains forming landmarks seen widely and at considerable distance across expansive lower-lying Sweeping Moorland and Flows and Cnocan – Caithness & Sutherland. Mountains possess a distinctive profile, usually comprising steep, sweeping, concave slopes, making them look quite elegant and graceful. Height of mountains varies, but even the smaller mountains can appear high because of their isolation, steep-sided profiles and when seen in juxtaposition with lower-lying Sweeping Moorland and Flows. Peaks generally topped by exposed rock and sparse dwarf vegetation which gradually merges into the moorland surrounds. Ribbons of broadleaf scrub woodland associated with the many water courses that tumble down steep glens. Largely uninhabited, creating a distinct sense of remoteness, although some of its 	This LCT occurs in several discrete parts of the study area The occurrences of this LCT typically overlap with the Kyle of Tonge NSA (Ben Loyal and Ben Hope) or the SLAs: Bens Griam and Loch nan Clar (Ben Griam Beg and Ben Griam Mòr), The Flow Country and Berriedale Coast (Morven and Scaraben), and Ben Klibreck and Loch Choire (Ben Klibreck). The exception to this is Ben Stumandadh, which is not covered by any landscape designation. Parts of the LCT are also within the WLAs within the study area: WLA 35 Ben Klibreck – Armine Forest, WLA 36 Causeymire – Knockfin Flows and WLA 38 Ben Hope – Ben Loyal. Therefore, a relatively large proportion of the LCT is designated at a national or local authority level and/or lies within a WLA. There is generally a sense of remoteness, particularly within the core parts of the LCT. The LCT is considered to be of High to High-medium value	The ZTV shows a limited and fragmented pattern of visibility within the occurrences of this LCT. The closest occurrence lies to the south (Ben Griam Beg and Ben Griam Mòr), at a distance of approximately 16km from the closest turbine. This location has been considered in the assessment of Viewpoint 13: Ben Griam Beg (see Technical Appendix 7.3), where a slight magnitude of change was identified due to a combination of the influence of baseline wind farms, the intervening distance and the expansive, open view in which Kirkton Energy Park would be seen. The prominence of Kirkton Energy Park would be further reduced in relation to the occurrences of the Lone Mountains LCT to the west of the site, due to the Strathy Wind Farms occurring in front of Kirkton Energy Park. This point is also recognised in NatureScot's Scoping Response, identifying that the Kyle of Tongue NSA could be scoped out of the LVIA. The proposed abnormal load turning areas would have no effects on this LCT. It is judged that the magnitude of change due to the proposed development would be Slight - negligible .	Combining the judgements regarding sensitivity and magnitude of change, the proposed development is predicted to give rise to a Minor adverse level of effect on this character area. This is therefore considered to be Not Significant .	The key proposed (planning application stage wind farms) with potential to result in additional cumulative effects in relation to Kirkton Energy Park are Melvich Wind Energy Hub, Armadale Wind Farm and Bettyhill Extension Wind Farm. Both Armadale Wind Farm and Bettyhill Extension Wind Farm are located to the west of the proposed development and would reinforce the pattern of wind farms in the vicinity of the Strathy developments. Kirkton Energy Park and Melvich Wind Energy Hub would be seen collectively in views from this LCT at distances of over 16km. Therefore, in addition to the baseline and proposed wind farms, the magnitude of cumulative change of the proposed development is considered to remain Slight – negligible . The effect



Landscape Character Type (LCT)	Key Characteristics	Landscape Value, Susceptibility and Sensitivity to the Proposed Development	Magnitude of Change Due to the Proposed Development (Including Consideration of Baseline Wind Farms)	Level and Significance of Landscape Effects	Magnitude of Change and Potential Effects due to the Proposed Development in Relation to Baseline and Proposed Wind Farms
	 peaks attract significant numbers of hill walkers, especially during the summer months. Peaks offer extensive views of the surrounding area including the distinctive watery landscapes of the Flows. Near continuous stretch of sandy beach 	 have a High level of susceptibility to the type of development, particularly due to the level of intervisibility with surrounding LCTs. Combining the judgements on the level of susceptibility to change and the value attributed to this landscape character type, the overall sensitivity is High. There are four occurrences of the Sandy 	The proposed development would be located approximately	Combining the	would remain Minor and Not Significant for the Lone Mountains LCT. The overall judgement in relation to the potential effect of Kirkton Energy Park, in addition to existing and consented wind farms, and proposed winds farms is the same as that assessed in the EIA Report. The Pentland and West of Orkney
140: Sandy Beaches and Dunes	 between the Dornoch Firth and Brora. Low shingle ridges backing many of these sandy beaches and forming the base for dune systems. Large sand banks, splayed sandy beach and spit 13asely13ng at the mouth of the Dornoch Firth, backed by low dunes and expansive grassy links. Wide plain covered with gorse, heather and rough grazing land at Cuthill Links in the Dornoch Firth, Shingle bars at the mouth of Loch Fleet. Undulating machair abutting dunes and dune slacks along parts of the east Sutherland coast, with golf courses occupying some of these areas. Post-glacial raised shorelines backed by relict cliffs to the north of Brora with the sandy beach being narrow in this area. Long gently curved sandy arcs of Sinclairs Bay and Dunnet Bay in Caithness. Striking complex landscape pattern at Torrisdale Bay. The long sandy beach at Balnakeil, with extensive dune system and machair. Remoteness of Sandwood Bay in west Sutherland. Focus for recreation with camp sites, caravan parks and car parks located close 	Beaches and Dunes LCT within the study area. These Sandy Beaches and Dunes are typically enclosed by the landform and as a consequence Kirkton Energy Park would not be visible in three of the occurrences of this LCT within the study area. However, the Sandy Beaches and Dunes at Melvich Bay lies approximately 3.2km to the north of the site, and as consequence the proposed development would affect its character. Therefore, the following analysis concentrates on the Sandy Beaches and Dunes at Melvich Bay. The Sandy Beaches and Dunes at Melvich Bay lie within the Farr Bay, Strathy and Portskerra SLA. It is an attractive landscape with recreational activity. A Core Path connects Bighouse with Melvich and helps to facilitate access to the beach and there is a car park to the west of Melvich. There is a range of tourist accommodation available in Melvich including hotels, bed and breakfast accommodation, and camping sites. This occurrence of the LCT is not remote or particularly wild, due to its proximity to Melvich, but the dunes and beaches are natural features of the landscape. Baseline wind farm developments are not prominent features, with the consented Dounreay Tri the only	 3.2km to the south of this LCT. The ZTV shows visibility from the LCT, although this is restricted to turbine blades (see Figure 7.2f). The nature of the predicted visibility of the proposed development is also demonstrated by Viewpoint 5: Bighouse (Technical Appendix 7.3), which is close to this LCT and predominately shows predicted visibility of turbine blades (with the hubs of two turbines just visible). Visibility is predicted to occur within the southern part of the LCT, with this most likely to be experienced from the sand dunes south of the beach. Where the proposed development would be visible, it would generally be seen in isolation, or any visibility of baseline wind farms would be relatively limited due to the enclosure provided by landform. The exception to this would be the consented Dounreay Tri turbines, which would be positioned approximately 10km from the coastline at the closest point and seen in views to the north. Therefore, Kirkton Energy Park would typically be seen alone, or would be notably more prominent than any other development. It would be seen in views looking inland, away from the beaches and dunes. The LCT is a relatively small scale landscape, albeit with a strong relationship with the coastline and sea. The proposed abnormal load turning areas would have no Effects on this LCT. It is judged that the magnitude of change due to the proposed development would be Medium. 	judgements regarding sensitivity and magnitude of change, the proposed development is predicted to give rise to a Moderate adverse level of effect on this LCT. In the case of this LCT this effect is considered to be Not Significant due to the primary focus and association with the coastline and sea to the north, away from the proposed development.	Offshore Wind Farms would be visible from the Sandy Beaches and Dunes LCT at Melvich. The offshore wind farms would extend across views to the north east, north and north west with Pentland Offshore Wind Farm being the more conspicuous due to its closer proximity at approximately 8km from the coast. The scoping stage West of Orkney Offshore Wind Farm would be located at distances of over 25km to the north west. Melvich Wind Energy Hub would be visible from parts of the adjacent occurrence of the LCT, particularly from the sand dunes to the south of Melvich Beach. Kirkton Energy Park and Melvich Wind Energy Hub are likely to be seen simultaneously from such locations. However, the closer distance of Melvich Wind Energy Hub and the greater horizontal extent occupied by its wind turbines means it would be more prominent than the Kirkton Energy Park. Therefore, in addition to the baseline and proposed wind farms, the magnitude of cumulative change of the proposed development is considered to remain Medium . The effect on the LCT



Landscape Character Type (LCT)	Key Characteristics	Landscape Value, Susceptibility and Sensitivity to the Proposed Development	Magnitude of Change Due to the Proposed Development (Including Consideration of Baseline Wind Farms)	Level and Significance of Landscape Effects	Magnitude of Change and Potential Effects due to the Proposed Development in Relation to Baseline and Proposed Wind Farms
	 to more accessible areas of coast with golf courses present where links and machair areas are more extensive. Many small crofting communities located on the fringes of beaches, particularly in north and west Sutherland. Castles with historic gardens and designed landscapes, as well as prehistoric brochs and cists, cairns, and hut circles. Strong sense of space, light and exposure, and extensive visibility on the larger and more open stretches of sandy beach. Contained smaller beaches on the north coast with views focused along the beach to rocky headlands and out to sea to near shore islands. Strong contrast of the white/pale pink sands of the beaches in the north-west with surrounding darker cliffs and moorland. Wildness character to of all these seascapes, more intensely experienced on the more remote beaches along the north and west coasts of Sutherland. 	development predicted to be visible from the LCT. The LCT is considered to be of High – Medium value Considering the baseline characteristics of the landscape, the character area is considered to have a Medium level of susceptibility to the type of development. This is particularly due to the much greater connection with the coastline and sea, rather than landscapes inland to the south. Combining the judgements on the level of susceptibility to change and the value attributed to this landscape character type, the overall sensitivity is High – Medium .			would remain Moderate and Not Significant for this LCT. This was not assessed in the EIA Report as no wind farms at planning application stage were predicted to be visible from this occurrence of the LCT.
141: High Cliffs and Sheltered Bays	 Duncansby Head, with high, fissured and blocky cliffs, jagged asymmetric rock stacks, arches and geos. Dunnet Head, with towering cliffs edged by low rocky reefs. Occasional inlets and coves, often with very deep and sheltered waters, and sometimes containing tiny harbours tucked between cliffs and not readily visible from the main coast road and settlement. Harbours on the east Caithness coast which have a strong association with settlements which are perched above the cliff. 	This LCT occurs intermittently along the coastline within the study area. The High Cliffs and Sheltered Bays within the study area predominately lie within the Kyle of Tongue NSA, the Farr Bay, Strathy and Portskerra SLA and Dunnet Head SLA. Two sections of the LCT, east of Melvich and west of Scrabster do not lie within any landscape designations. It is a dramatic and distinctive LCT with strong focal points, in the cliffs, headlands and lighthouses. There is a general absence of development and strong sense of naturalness. The cliff tops offer elevated open views, particularly along the coastline and towards the sea. The LCT is	The proposed development would be located at very variable distances from this LCT. The closest section is west of Melvich, with the nearest turbine lying approximately 4.7km to the south of this LCT. The ZTV shows limited and fragmented visibility from the LCT overall. The part of the LCT where the proposed development is predicted to be more visible is the east facing coastline between Strathy and Strathy Point. The nature of visibility of the proposed development is 2: Totegan, near Strathy Point, which is close to this LCT and shows predicted visibility of turbine blades and blade tips. Where the proposed development would be visible, it would generally be seen in conjunction with other wind farms. This would include the Strathy Wind Farms in the vicinity of Strathy Point and the wind turbines at Forss and Baillie Wind	Combining the judgements regarding sensitivity and magnitude of change, the proposed development is predicted to give rise to a Moderate-minor adverse level of effect on this LCT. In the case of this LCT this effect is considered to be Not Significant due to its primary focus and association with the coastline and sea to the	The key proposed wind farms with potential to result in additional cumulative effects in relation to Kirkton Energy Park are Melvich Wind Energy Hub, Armadale Wind Farm and Bettyhill Extension Wind Farm, together with the West of Orkney and Pentland Offshore Wind Farms. The proposed Forss Extension 3 development is also located close to the coastline, but this would comprise a relatively limited addition to the existing wind turbines at this location. Both Armadale and Bettyhill Extension Wind Farms would be located to the



Landscape Character Type (LCT)	Key Characteristics	Landscape Value, Susceptibility and Sensitivity to the Proposed Development	Magnitude of Change Due to the Proposed Development (Including Consideration of Baseline Wind Farms)	Level and Significance of Landscape Effects	Magnitude of Change and Potential Effects due to the Proposed Development in Relation to Baseline and Proposed Wind Farms
	 Moorland largely abutting this LCT which is particularly open and sweeping to the east and north within Caithness. The most prominent and exposed headlands marked by lighthouses. Exhilarating experience of being precariously perched upon a high edge on the cliff tops, offering open elevated views and a perception of huge space. Views of turbulent currents at the juncture of the Pentland Firth and North Sea, heightening the sense of wildness experienced from the headland. The absence of development along the remote stretches of coast and a strong sense of naturalness creating a wild landscape character. 	considered to be of High to High – Medium value Considering the baseline characteristics of the landscape, the character area is considered to have a Medium level of susceptibility to the type of development. This is particularly due to its strong connection and functional relationship with the coastline and sea, rather than landscapes inland to the south. Combining the judgements on the level of susceptibility to change and the value attributed to this landscape character type, the overall sensitivity is High – Medium .	Farms for more easterly occurrences of this LCT. The Dounreay Tri Wind Turbines would be apparent from this LCT but the relative size of this consented development is limited, and it would be positioned in a very different context to Kirkton Energy Park. Where the proposed development is apparent, it would form a small component of the overall view and typically away from the primary focus of this LCT. The proposed abnormal load turning areas would have no effects on this LCT. It is judged that the magnitude of change due to the proposed development would be Slight .	north, away from the proposed development.	 west of the proposed development and would reinforce the pattern of wind farms in the vicinity of the Strathy developments. Melvich Wind Energy Hub would be visible from parts LCT, and is likely to be seen simultaneously with Kirkton Energy Park (as indicated by the ZTV in SEI Figure 7.4m). The closer distance of Melvich Wind Energy Hub and the greater horizontal extent occupied by its wind turbines means it is likely to be more prominent than the Kirkton Energy Park. The proposed West of Orkney and Pentland Offshore Wind Farms would change the seaward context of this LCT considerably, with these developments potentially extending across views to the north west, north and north east. There is also a clear connection/relationship between this LCT and the sea to the north. Therefore, in addition to the baseline and proposed wind farms, the magnitude of cumulative change of the proposed development is considered to reduce to Negligible. The effect on the LCT would reduce to Minor and Not Significant for the High Cliffs and Sheltered Bays LCT. Dounreay Test and Floating Demo Floating Offshore Wind Farm (at EIA Scoping stage is also likely to visible from parts of the LCT, reinforcing the pattern of offshore wind farm development described above.

Landscape Character Type (LCT)	Key Characteristics	Landscape Value, Susceptibility and Sensitivity to the Proposed Development	Magnitude of Change Due to the Proposed Development (Including Consideration of Baseline Wind Farms)	Level and Significance of Landscape Effects	Magnitude of Change and Potential Effects due to the Proposed Development in Relation to Baseline and Proposed Wind Farms
					The overall judgement in relation to the potential effect of Kirkton Energy Park, in addition to existing and consented wind farms, and proposed winds farms would be less than that assessed in the EIA Report.
143: Farmed Lowland Plain	 A generally open, low-lying plain, gently undulating to form shallow broad valleys, which are often filled with lochs and mosses, and subtle low ridges. Occasional smooth hills rise above the more low-lying plain forming local landmarks. The broad and shallow valley of the River Wick forming the largest of a series of valleys generally aligned south-east/north- west across the plain. Agriculture the predominant land cover. More intensively managed farmland near the coast around Thurso and Wick, and close to Loch Watten. Distinctive Caithness flagstone fences in some parts, creating low, sharp edges to fields. Sparse woodland, mainly comprising small angular coniferous plantations planted for shelter on farms. Larger conifer woodlands located at the transition with the Sweeping Moorland and Flows standing out where they are planted on poorer wetter ground on low ridges. Farm buildings and houses forming focal points within the landscape. Occasional loose clusters of croft houses located on more marginal upper slopes and near the coast. A number of historic environment features, including conspicuous castles, Baronial mansions and tall 'Lairds' houses, usually 	Within the study area there are no landscape designations associated with the Farmed Lowland Farmland Plain LCT. It is a settled, working agricultural landscape. It is typically an open landscape and there are dramatic views, particularly towards the coastline in places as well as towards the Lone Mountains. There are also features and elements that create a degree of distinctiveness. The LCT is considered to be of Medium value Considering the baseline characteristics of the landscape, the character area is considered to have a Medium level of susceptibility to the type of development. This is particularly due to the scale of the landscape, simple horizontal form and the presence of existing wind farms and overhead power lines. Combining the judgements on the level of susceptibility to change and the value attributed to this landscape character type, the overall sensitivity is Medium .	The proposed development would be located to the west of this LCT, with the closest part to the west of Reay, approximately 7.6km from the nearest proposed wind turbine. Overall visibility of the proposed development from this LCT is predicted to be limited. The blade tip ZTV (Figure 7.2f) shows areas of theoretical visibility from locations closer to the coastline. However, comparing this with the hub height ZTV (Figure 7.2c) demonstrates this visibility would be largely limited to turbine blades. Where it would be seen, baseline wind farms form a key component of the landscape. This particularly relates to Baillie Wind Farm and the wind turbines at Forss, which are prominent elements in the north western part of the Farmed Lowland Plain. This pattern of baseline wind farms is reinforced by the consented Limekiln Wind Farm. The key areas where these baseline turbines are also broadly coincidental with the areas that Kirkton Energy Park would be seen. In this context the proposed development would comprise a relatively limited change. Locations within the Farmed Lowland Plain have also been considered in the assessment of Viewpoints 14: Forss and Viewpoint 19: A836, Balmore (see Technical Appendix 7.3). These demonstrate the limited prominence of the proposed development, and no significant effects are predicted at either location. The proposed abnormal load turning areas would no effects on this LCT. It is judged that the magnitude of change due to the proposed development would be Slight .	Combining the judgements regarding sensitivity and magnitude of change, the proposed development is predicted to give rise to a Moderate-minor adverse level of effect on this LCT. In the case of this LCT this effect is considered to be Not Significant , particularly due to the limited visibility of the proposed development and relative prominence of the baseline wind farms.	The key proposed (planning application stage wind farms) with potential to result in additional cumulative effects in relation to Kirkton Energy Park for this LCT are closely related to the baseline pattern of wind farms i.e. at Forss, Causeymire and Hill of Stroupster. Melvich Wind Energy Hub would be seen in conjunction with the proposed development (as indicated by the ZTV in SEI Figure 7.4m) and would increase the prominence of wind turbines in the vicinity of the site at distances of over 10km. However, even collectively these wind farms would remain less conspicuous than the baseline wind farms on the western edge of this LCT. Therefore, in addition to the baseline and proposed wind farms, the magnitude of cumulative change of the proposed development is considered to remain Slight . The effect on the LCT would remain Moderate-minor and Not Significant for the Farmed Lowland Plain LCT. The key development at EIA Scoping stage is Cairnmore Hill Wind Farm, which would be more closely related to the existing Baillie and Forss developments.



Landscape Character Type (LCT)	Key Characteristics	Landscape Value, Susceptibility and Sensitivity to the Proposed Development	Magnitude of Change Due to the Proposed Development (Including Consideration of Baseline Wind Farms)	Level and Significar Landscape Effects
	 with broadleaf shelter woods planted around them. Roads reinforce the settlement pattern, often following the field and property boundaries, running straight and then swinging around sharp corners. A number of large settlements, including the towns of Thurso and Wick, situated on the coast, as well as several smaller settlements. Many historic features, including brochs and cairns, dotted across farmland and situated on hills within, or adjacent to, this area. Small groups of large wind turbines sited on some of the low ridges and hills and prominent visibility of larger wind farms in adjacent Landscape Character Types. Extensive views due to the openness of the landscape, and the clarity of northern air and light. Dramatic views from the northern part of this landscape to Dunnet Head and the distant Orkney islands, and views from the A9 on the western edge of this landscape of the Lone Mountains of Morven and Scaraben seen across the low-lying Sweeping Moorland and Flows. 			
144: Coastal Crofts and Small Farms	 Narrow, settled and farmed coastal fringe with subtle variations in topography, from long stretches of strongly contained coastal shelves and raised beaches, to smaller pockets at river mouths and squeezed between dunes and areas of Cnocan – Caithness & Sutherland. Pastures and occasional arable fields, most often divided by post and wire fences, with the division of fields marked by crop colour and texture rather than boundaries. 	This LCT occurs intermittently along the coastline within the study area, associated with the sporadic small settlements. The Coastal Croft and Small Farms within the study area predominately lie within the Kyle of Tongue NSA, the Farr Bay, Strathy and Portskerra SLA and Dunnet Head SLA. There are distinctive small settlements, with a strong relationship with the coastline and sea. The LCT is considered to be of High to High – Medium value	The proposed development would be located at very variable distances from this LCT. The closest occurrence is at Melvich, with the nearest turbine lying approximately 2.3km to the south of this LCT. The ZTV shows limited and fragmented visibility from the LCT overall, with no visibility predicted for the majority of the LCT. The key exceptions to this are Melvich and Portkerra, as well as Strathy. At Melvich and Portskerra there is predicted visibility from small parts of the LCT, but this is largely restricted to turbine blades. Locations within Melvich and Portskerra have also been considered in the assessment of Viewpoints 3: on the	Combining the judgements regardi sensitivity and magnitude of change the proposed wind is predicted to give to a Moderate to Moderate-minor adverse level of effe on this LCT. In the co of this LCT this effect



	The overall judgement in relation to the potential effect of Kirkton Energy Park, in addition to existing and consented wind farms, and proposed winds farms is the same as that assessed in the EIA Report.
ding nge, d farm e rise ffect case	The key proposed wind farms with potential to result in additional cumulative effects in relation to Kirkton Energy Park are Melvich Wind Energy Hub, Armadale Wind Farm and Bettyhill Extension Wind Farm, together with the West of Orkney and Pentland Offshore Wind Farms. The proposed Forss Extension 3 development is also located close to the

andscape Key Characteristics haracter ype (LCT)	Landscape Value, Susceptibility and Sensitivity to the Proposed Development	Magnitude of Change Due to the Proposed Development (Including Consideration of Baseline Wind Farms)	Level and Significance of Landscape Effects	Magnitude of Change and Potential Effects due to the Proposed Development in Relation to Baseline and Proposed Wind Farms
 Low stone walls enclosing fields on the shelf above the High Cliffs and Shelter Bays between Dunbeath and Wick. Little woodland within the more expresent at the outlet of more shelter straths or along the eastern shores or of Tongue and Loch Eriboll. Settlement most concentrated where Landscape Character Type broadens mouths of major rivers along the east coast, where larger farms and crofts concentrated. Small, hunkered-down croft houses a outbuildings loosely clustered or sometimes aligned in a linear fashion the top of terraces or ridges above the coast or a river floodplain. More dispersed settlement pattern of Brora. Newer housing most evident to the so of Brora with larger modern houses of infilling spaces between older croft h and contrasting with the size and for these original buildings. A number of settlements, often locat bridging points and at the junction w straths, many with harbours particula the east coast of Sutherland and Cait Major communications routes on the coast including the A9, the railway ar transmission line aligned along the east this landscape. A number of historic sites including churches, castles, mills and cemeteric Highly visible landscape, seen from m roads and, on the east Sutherland co the railway. 	e Considering the baseline characteristics of the landscape, the character area is considered to have a Medium level of susceptibility to the type of development. This is particularly due to its much greater connection and functional relationship with the coastline and sea, rather than landscapes inland to the south, where the proposed wind farm would be located. Combining the judgements on the level of susceptibility to change and the value attributed to this landscape character type, the overall sensitivity is High – Medium .	south east edge of Melvich and Viewpoint 7: Portskerra (see Technical Appendix 7.3) . These demonstrate the limited prominence of the proposed development, and no significant effects are predicted at either location. At Strathy there is predicted visibility of the proposed wind turbines. Again, this is largely restricted to turbine blades. The area of theoretical visibility is also associated with the part of the LCT that extends along the eastern side of the headland towards Strathy Point. This part of the LCT has been considered in the assessment of Viewpoint 7: Totegan, near Strathy Point (see Technical Appendix 7.3), where a moderate, not significant, effect on landscape character is predicted to occur. There is also limited predicted visibility at Armadale, but this would be associated with a small part of the LCT and the ZTV shows this would be limited to turbine blades. Where the proposed development would be visible, it would generally be seen in conjunction with other wind farms. This would include the Strathy Wind Farms in the case of Armadale, and the Dourreay Tri development in the case of Melvich and Portskerra. The eastern proposed abnormal load turning area adjacent to Melvich would be within this LCT and would have adverse effects. The area of hardstanding would be clearly visible from a small part of the settlement and LCT. Whilst it would be a detracting element, this would be in the context of the built form of the settlement, albeit a change from the current use of this area for semi-improved grazing. This abnormal load turning area has the potential to result in a localised Medium magnitude of change within the LCT. Overall, it is judged that the magnitude of change due to the proposed wind farm would be Slight .	Significant due to the primary focus and association with the coastline and sea to the north, away from the proposed development. Combining the judgements regarding sensitivity and magnitude of change, the proposed abnormal load turning area is predicted to give rise to a Moderate adverse level of effect on this LCT. In the case of this LCT this effect is considered to be potentially Significant in the context of the limited extent of this occurrence of the LCT. The effects associated with the abnormal load turning area could be mitigated by the detailed design of this element of the proposed development.	relatively limited addition to the existing wind turbines at this location. Both Armadale and Bettyhill Extension Wind Farms would be located to the west of the proposed development and would reinforce the pattern of wind farms in the vicinity of the Strathy developments. Melvich Wind Energy Hub would be visible from parts of the LCT, and is likely to be seen simultaneously with Kirkton Energy Park in places (see SEI Figure 7.4m). However, the closer distance of Melvich Wind Energy Hub and the greater horizontal extent occupied by its wind turbines means it is likely to be more prominent than the Kirkton Energy Park, as is demonstrated by SEI Figure 7.10 . The proposed west of Orkney and Pentland Offshore Wind Farms would change the seaward context of the occurrences of this LCT considerably, with these developments potentially extending across views to the north west, north and north east. There is also a clear connection/relationship between the LCT and the sea to the north. Arguably the magnitude of change that would result from the Kirkton Energy Park, in addition to the baseline and proposed wind farms, would be less than the judgement in relation to the baseline alone. However, recognising that the abnormal load turning area for the proposed development could be located within this LCT, the magnitude of cumulative change of the proposed wind farm Is considered to remain



Landscape Character Type (LCT)	Key Characteristics	Landscape Value, Susceptibility and Sensitivity to the Proposed Development	Magnitude of Change Due to the Proposed Development (Including Consideration of Baseline Wind Farms)	Level and Significance of Landscape Effects	Magnitude of Change and Potential Effects due to the Proposed Development in Relation to Baseline and Proposed Wind Farms
	 Complex visual composition of views tending to focus on the detail of houses, field patterns and crops, yet with the wider context of backdrop hills and sea adding diversity. 				Slight. The effect on the LCT would remain Moderate to Moderate – Minor and Not Significant for the Coastal Crofts and Small Farms LCT. Dounreay Test and Floating Demo Floating Offshore Wind Farm (at EIA Scoping stage) is also likely to visible from parts of the LCT, reinforcing the pattern of offshore wind farm development described above. The overall judgement in relation to the potential effect of Kirkton Energy Park, in addition to existing and consented wind farms, and proposed winds farms is the same as that assessed in the EIA Report.

- 7.18 In summary, based on this analysis, it is predicted that Kirkton Energy Park would not result in greater effects on landscape character when considered in addition to the baseline context and proposed wind farms with the additional wind farms being considered in this SEI. Therefore, the extent and pattern of significant effects identified in the EIA Report are consistent with those assessed in this SEI. There are LCTs where the addition of Kirkton Energy Park to a context that comprises the baseline plus proposed wind farms, would result in a reduced magnitude of change and related effects when compared with potential effects in relation to the baseline landscape, such as LCT 141: High Cliffs and Sheltered Bays.
- 7.19 Landscape designations have not been assessed separately as part of this SEI. However, landscape value judgements, including designations, form a key element of landscape sensitivity and therefore have been taken into account in the above analysis. Therefore, it is predicted that Kirkton Energy Park would also not result in greater effects on landscape designations when considered in addition to the baseline context and proposed wind farms included in this SEI.

Visual Effects

7.20 The following analysis of visual effects considers the potential cumulative effects of Kirkton Energy Park in addition to other proposed wind farms set out in paragraph 7.12, as well as the proposed wind farms assessed in the LVIA. As with the approach taken in relation to potential effects on landscape character, **Table 7-3**, below, is based on **Table 7-12** of the LVIA. The potential effects of Kirkton Energy Park in relation to the baseline context, as set out in **Table 7-12** of the LVIA are replicated here for context. The 10 left hand columns are consistent with the content of the EIA Report. The revised cumulative assessment judgements are included in the right hand column, with a commentary to provide justification for these judgements. For clarity the columns that are consistent with the EIA Report are shaded grey.



VP	Viewpoint Location	Visual Receptor Type	Approx. distance to the nearest turbine (km)	Direction of view to proposed development	Value	Susceptibility	Sensitivity	Magnitude of change	Visual Effect	Magnitude of Change: Existing/ consented/ Proposed + Kirkton Energy Park	Visual Effect Existing/ consented/ Proposed + Kirkton Energy Park	Commentary
VP1	A897, Strath Halladale, Achiemore	Residents Road users	1.5	North west	High Medium	High Medium	High Medium	Substantial	Major – moderate	Substantial	Major – Major – moderate	Kirkton Energy extend across Energy Hub wo Park, comprisin northern end o of the turbines the intervening Pentland Offshi location, but t vegetation wou and the interve to be discernib Kirkton Energy proposed wind that would occ other proposed the proposed of Cumulative eff assessed in the predicted to be

Table 7-3: Summary of Effects on Visual Amenity as Assessed at Each Viewpoint

SEI LANDSCAPE AND VISUAL 7

Park would lie in front of Melvich Energy Hub and the view to the north west of this location. Melvich ould contrast with the linear form of Kirkton Energy ing a more compact group of wind turbines at the of the ridge to the west of Strath Halladale. The extent s visible within Melvich Energy Hub would be limited by landform.

nore Wind Farm would theoretically be visible from this this would be limited to blade tips and intervening ould also limit potential visibility. Given these factors, ening distance, Pentland Offshore Wind Farm is unlikely le from this location.

Park would comprise the most prominent of the farms. The magnitude of change and level of effect cur from the addition of Kirkton Energy Park with the ed wind farms is considered to remain as assessed for development in the baseline context.

ffects in relation to proposed wind farms were not he EIA Report as no in planning wind farms were visible from this viewpoint.

VP	Viewpoint Location	Visual Receptor Type	Approx. distance to the nearest turbine (km)	Direction of view to proposed development	Value	Susceptibility	Sensitivity	Magnitude of change	Visual Effect	Magnitude of Change: Existing/ consented/ Proposed + Kirkton Energy Park	Visual Effect Existing/ consented/ Proposed + Kirkton Energy Park	Commentary
VP2	A837, Goval, Strath Halladale	Residents Road users	2.2	South west	High Medium	High Medium	High Medium	Substantial	Major Major – moderate	Substantial	Major – moderate	Kirkton Energy F from this location on the ridge on the as distinctly dif consecutive view development is Park comprising of Strath Hallace cluster of turbin from this location West of Orkn theoretically be vegetation and proposed development Kirkton Energy P The magnitude the addition of farms is consist development in Cumulative effet assessed in the predicted to be

Park would lie to the left of Melvich Energy Hub seen tion. Both proposed developments would be present in the west side of Strath Halladale. They would be seen lifferent and separate wind farms, being present in ews. The contrasting design rationale of each proposed s clearly evident from this location, with Kirkton Energy ng a single line of turbines, along the ridge to the west adale, whilst Melvich Wind Energy Hub comprises a ines, with turbines stacking behind each other viewed tion.

aney and Pentland Offshore Wind Farms would be visible. However, a combination of intervening ad distance would limit the prominence of these elopments from this location, particularly in the case of more Wind Farm.

Park would comprise a prominent element of the view. e of change and level of effect that would occur from of Kirkton Energy Park with the other proposed wind sidered to remain as assessed for the proposed n the baseline context.

fects in relation to proposed wind farms were not he EIA Report as no in planning wind farms were e visible from this viewpoint.

VP	Viewpoint Location	Visual Receptor Type	Approx. distance to the nearest turbine (km)	Direction of view to proposed development	Value	Susceptibility	Sensitivity	Magnitude of change	Visual Effect	Magnitude of Change: Existing/ consented/ Proposed + Kirkton Energy Park	Visual Effect Existing/ consented/ Proposed + Kirkton Energy Park	Commentary
VP3	A836, south east edge of Melvich	Residents, Caravan/ca mp site Road users	3.1	South	High High	High Medium	High High - medium	Slight	Moderate - minor	Slight	Moderate - minor	Kirkton Energy I from this location on the ridge on the second

Park would lie to the left of Melvich Energy Hub seen tion. Both proposed developments would be present in the west side of Strath Halladale. They would be seen different and separate wind farms. However, the **I Figures 7.7a** and **7.7b** demonstrate that the visibility e proposed developments would be limited by the indform, with only two turbine blades or blade tips in redicted to be seen from this location.

eney and Pentland Offshore Wind Farms would e seen. However, both proposed developments would y intervening buildings. Adjustments to the viewpoint reveal these developments, but other factors may tential visibility of Kirkton Energy Park.

e addition of Kirkton Energy Park to the baseline and I farms assessed in this SI is considered to result in the de of change and effect as the baseline context. This is the limited extent of the proposed development that from this viewpoint.

fects in relation to proposed wind farms were not ne EIA Report as no in planning wind farms were e visible from this viewpoint.

VP	Viewpoint Location	Visual Receptor Type	Approx. distance to the nearest turbine (km)	Direction of view to proposed development	Value	Susceptibility	Sensitivity	Magnitude of change	Visual Effect	Magnitude of Change: Existing/ consented/ Proposed + Kirkton Energy Park	Visual Effect Existing/ consented/ Proposed + Kirkton Energy Park	Commentary
VP4	A836, junction to Bighouse	Road users	3.7	South west	High	Medium	High - medium	Substantial	Major- moderate	Substantial	Major- moderate	Kirkton Energy I from this location on the ridge on the as distinctly dif design rationale from this location of turbines, alo Melvich Wind I degree of overla West of Orkney However, a com limit the actual location. Kirkton Energy F seen with Melvi and level of eff Energy Park wit remain as assess context.

Park would lie to the left of Melvich Energy Hub seen tion. Both proposed developments would be present in the west side of Strath Halladale. They would be seen lifferent and separate wind farms. The contrasting ale of each proposed development is clearly evident tion, with Kirkton Energy Park comprising a single line ong the ridge to the west of Strath Halladale, whilst Energy Hub comprises a cluster of turbines, with a rlap between the turbines from this location.

ey Offshore Wind Farms would theoretically be seen. mbination of intervening landform and distance would al visibility of this proposed development from this

Park would comprise a prominent element of the view vich Energy Hub to the south. The magnitude of change effect that would occur from the addition of Kirkton vith the other proposed wind farms is considered to essed for the proposed development in the baseline

VP	Viewpoint Location	Visual Receptor Type	Approx. distance to the nearest turbine (km)	Direction of view to proposed development	Value	Susceptibility	Sensitivity	Magnitude of change	Visual Effect	Magnitude of Change: Existing/ consented/ Proposed + Kirkton Energy Park	Visual Effect Existing/ consented/ Proposed + Kirkton Energy Park	Commentary
VP5	Bighouse	Residents Walkers (Core Path)	3.9	South	High Medium	High High	High - Medium	Medium	Major - Moderate Major - Moderate	Medium	Major - Moderate Major - Moderate	Kirkton Energy I from this locati on the ridge on as distinctly diff proposed wind thus, blades an None of the oth this SEI would be baseline wind fa The visibility of be constrained intervening dist farms (3.9km to approximately 2 Hub) means the to the view. Me to its closer dis the location co view to the sour The magnitude the addition of farms is consi development in Cumulative effe assessed in the predicted to be

Park would lie to the left of Melvich Wind Energy Hub tion. Both proposed developments would be present in the west side of Strath Halladale. They would be seen fferent and separate wind farms. The visibility of both I farms would be limited by the intervening landform to and blade tips.

ther proposed wind farms being considered as part of be visible from this location. In addition, none of the farms are visible from this location.

f both proposed wind farms from this viewpoint would ed by the intervening landscape. However, the stance between the viewpoint and the proposed wind to the nearest turbine within Kirkton Energy Park and 2.3km to the nearest turbine at Melvich Wind Energy wind turbines would comprise conspicuous additions lelvich Wind Energy Hub would be more prominent due istance. However, the Kirkton Energy Park seen from omprises a relatively dense cluster of turbines in the uth.

e of change and level of effect that would occur from of Kirkton Energy Park with the other proposed wind sidered to remain as assessed for the proposed n the baseline context.

ects in relation to proposed wind farms were not EIA Report as no in planning wind farms were e visible from this viewpoint.

VP	Viewpoint Location	Visual Receptor Type	Approx. distance to the nearest turbine (km)	Direction of view to proposed development	Value	Susceptibility	Sensitivity	Magnitude of change	Visual Effect	Magnitude of Change: Existing/ consented/ Proposed + Kirkton Energy Park	Visual Effect Existing/ consented/ Proposed + Kirkton Energy Park	Commentary
VP6	Portskerra	Residents	4.6	South	High	High	High	Negligible	Minor	Negligible	Minor	Kirkton Energy F contrast, Melvid development or landform and b would be seen. West of Orkn theoretically be this precise loca Kirkton Energy view from this cumulative wind that would occu other proposed de The overall judg Energy Park, in proposed winds
VP7	A836, west of Strathy	Road users	6.9	South east	High	Medium	High- medium	Slight	Moderate	Negligible	Moderate - minor	Kirkton Energy from this location the proposed of Melvich Wind development, w south east. Pentland Offshor view from this West of Orkney but the majorith by the intervenith As a consequent of effect that w with the other p assessed for the Cumulative effect assessed in the predicted to be

Park would barely be discernible from this location. In vich Wind Energy Hub would comprise a prominent on the ridgeline, although noting that the intervening building would limit the extent of the turbines that the states.

e seen, but with some local restrictions to visibility from cation.

/ Park would make a very limited contribution to the s location in relation to the baseline and proposed nd farms. The magnitude of change and level of effect cur from the addition of Kirkton Energy Park with the d wind farms is considered to remain as assessed for development in the baseline context.

dgement in relation to the potential effect of Kirkton n addition to existing and consented wind farms, and Is farms is the same as that assessed in the EIA Report.

/ Park would comprise a limited addition to the view ion. The intervening landform restricts the visibility of development to blades and blade tips. In contrast, Energy Hub would form a much more prominent with complete turbines visible on the horizon to the

ore Wind Farm would be a conspicuous addition to the s location, positioned in the view across Strathy Bay. ey Offshore Wind Farm would be theoretically visible, ity of this proposed development is likely to screened hing landform.

nce of these factors, the magnitude of change and level would occur from the addition of Kirkton Energy Park proposed wind farms is considered to be less than that he proposed development in the baseline context.

fects in relation to proposed wind farms were not he EIA Report as no in planning wind farms were e visible from this viewpoint.

VP	Viewpoint Location	Visual Receptor Type	Approx. distance to the nearest turbine (km)	Direction of view to proposed development	Value	Susceptibility	Sensitivity	Magnitude of change	Visual Effect	Magnitude of Change: Existing/ consented/ Proposed + Kirkton Energy Park	Visual Effect Existing/ consented/ Proposed + Kirkton Energy Park	Commentary
VP8	Beinn Ratha	Walkers	7.4	West	High - medium	High	High	Medium	Major- moderate	Medium	Major- moderate	Kirkton Energy F from this location on the ridge on the as distinctly dif design rationale from this location of turbines, alo Melvich Wind E degree of overla West of Orkney north west and direction. The f the closer proxim The magnitude the addition of farms is consist development im relative proximi view that it would The overall judge Energy Park, in proposed winds

Park would lie to the left of Melvich Energy Hub seen tion. Both proposed developments would be present in the west side of Strath Halladale. They would be seen lifferent and separate wind farms. The contrasting ale of each proposed development is clearly evident tion, with Kirkton Energy Park comprising a single line ong the ridge to the west of Strath Halladale, whilst Energy Hub comprises a cluster of turbines, with a rlap between the turbines from this location.

ey and Pentland Offshore Wind Farms would lie to the nd north and would extend across the sea in this e Pentland turbines would be more prominent due to kimity of this development.

e of change and level of effect that would occur from of Kirkton Energy Park with the other proposed wind sidered to remain as assessed for the proposed in the baseline context. This is largely due to the nity of Kirkton Energy Park and the proportion of the build occupy.

dgement in relation to the potential effect of Kirkton n addition to existing and consented wind farms, and Is farms is the same as that assessed in the EIA Report.

VP	Viewpoint Location	Visual Receptor Type	Approx. distance to the nearest turbine (km)	Direction of view to proposed development	Value	Susceptibility	Sensitivity	Magnitude of change	Visual Effect	Magnitude of Change: Existing/ consented/ Proposed + Kirkton Energy Park	Visual Effect Existing/ consented/ Proposed + Kirkton Energy Park	Commentary
VP9	Totegan, near Strathy Point	Visitors to Strathy Point Walkers Residents (all same sensitivity)	9.1	South east	High	High	High	Medium	Major - moderate	Negligible	Moderate - minor	Kirkton Energy above the horize above Strathy I contrast, Melvi prominent dev horizon to the Farms would als prominence of t the greater sepa Pentland and potentially con- especially in cle extend across the As a consequ prominence of Park, the magni from the additi wind farms is proposed develo

y Park would comprise a line of turbine blades seen izon of the intervening landform. These would be seen Bay in a relatively distinctive part of the view. In vich Wind Energy Hub would form a much more evelopment, with complete turbines visible on the e south east. Armadale and Bettyhill Extension Wind also be visible further round to the south, although the f these turbines would be reduced, in relative terms, by paration distance and the intervening landform.

West of Orkney Offshore Wind Farms would be nspicuous additions to the view from this location clear conditions. These Offshore Wind Farms would the north west, north and north east segments of the e sea.

uence of these factors, particularly the relative f Melvich Wind Energy Hub in front of Kirkton Energy nitude of change and level of effect that would occur tion of Kirkton Energy Park with the other proposed considered to be less than that assessed for the elopment in the baseline context.

dgement in relation to the potential effect of Kirkton n addition to existing and consented wind farms, and ds farms is less than that assessed in the EIA Report.

VP	Viewpoint Location	Visual Receptor Type	Approx. distance to the nearest turbine (km)	Direction of view to proposed development	Value	Susceptibility	Sensitivity	Magnitude of change	Visual Effect	Magnitude of Change: Existing/ consented/ Proposed + Kirkton Energy Park	Visual Effect Existing/ consented/ Proposed + Kirkton Energy Park	Commentary
VP10	A836, west of Armadale	Road users	10.8	South east	High	Medium	High - medium	Slight	Moderate - minor	Negligible	Minor	Kirkton Energy F the intervening broadly horizon intervening land resulting from t limited by the pu- the layout for th reduction in the judgement state The proposed A the Kirkton Ener of the proposed A the Kirkton Ener of the proposed A than Kirkton Ener of the proposed A than Kirkton Ener of the proposed A than Kirkton Ener Bettyhill Extensiv be limited to blac and proposed win proposed develor considered to b proposed Armada amenity would r Melvich Wind E would largely by tips only just pre- As a conseque prominence of A The magnitude of farms is consid development in The overall judge Energy Park, in a proposed winds

Park would comprise a line of turbine blades due to g landform. These would be seen above a simple, ontal horizon, with a slightly stepped moorland in the ndscape. As stated in the LVIA, the cumulative effect in the introduction of Kirkton Energy Park would be proportion of the turbines that would be seen. Whist the proposed Armadale wind farm has changed, with a ne number of proposed turbines, it is assessed that the ted in the LVIA for Kirkton Energy Park would not alter. Armadale Wind Farm would be positioned in front of ergy Park site and would further diminish the presence ed development. Whilst there would be fewer turbines /ind Farm and these would not extend as far left in the s location, they would remain much more prominent nergy Park.

sion would be visible to the south, however this would lades and blade tips. Overall, in addition to the baseline wind farms, the magnitude of cumulative change of the elopment with baseline and proposed wind farms is be Negligible due to the relative prominence of the adale Wind Farm and the cumulative effects on visual d reduce.

Energy Hub and the proposed offshore wind farms by screened by the intervening landform, with blade redicted to be visible from this location.

uence of these factors, particularly the relative f Armadale Wind Farm in front of Kirkton Energy Park, e of change and level of effect that would occur from of Kirkton Energy Park with the other proposed wind sidered to remain as assessed for the proposed n the baseline context.

lgement in relation to the potential effect of Kirkton addition to existing and consented wind farms, and Is farms is the same as that assessed in the EIA Report.

VP	Viewpoint Location	Visual Receptor Type	Approx. distance to the nearest turbine (km)	Direction of view to proposed development	Value	Susceptibility	Sensitivity	Magnitude of change	Visual Effect	Magnitude of Change: Existing/ consented/ Proposed + Kirkton Energy Park	Visual Effect Existing/ consented/ Proposed + Kirkton Energy Park	Commentary
VP11	Observation tower, RSPB Forsinard Flows Reserve	Visitors to RSPB reserve Road users	15.8	North	Medium	High – medium Medium	High- medium Medium	Negligible	Minor	Negligible	Minor Minor	The location of the proposed tu compact group of of the wide, op horizon. Melvicl would also com combination of intervening land The compact fo the view means would occur fro proposed wind proposed develo Cumulative effe assessed in the predicted to be

f this viewpoint relative to Kirkton Energy Park means turbines would cluster in the view. They would form a p of turbines, seen in the context of seen in the context open moorland landscape and extensive horizontal ich Wind Energy Hub and Pentland Offshore Wind Farm mprise relatively limited additions to this view due a of distance and the screening influence of the adform.

form of Kirkton Energy Park and the expansiveness of ns the magnitude of change and level of effect that rom the addition of Kirkton Energy Park with the other d farms is considered to remain as assessed for the elopment in the baseline context.

fects in relation to proposed wind farms were not he EIA Report as no in planning wind farms were e visible from this viewpoint.

VP	Viewpoint Location	Visual Receptor Type	Approx. distance to the nearest turbine (km)	Direction of view to proposed development	Value	Susceptibility	Sensitivity	Magnitude of change	Visual Effect	Magnitude of Change: Existing/ consented/ Proposed + Kirkton Energy Park	Visual Effect Existing/ consented/ Proposed + Kirkton Energy Park	Commentary
VP12	Northern edge of Causeymire – Knockfin Flows Wild Land Area	Walkers Train passengers (acknowledg ed but not specifically assessed)	16	North west	High - medium	High	High	Slight	Moderate - minor	Slight	Moderate - minor	Kirkton Energy P Sletill Hill. In re this SEI, it would West of Orkney Offshore Wind F and lower parts addition, these clear conditions Melvich Wind Er of the view. The as one wind farm would add a de overlapping of the Pentland Offsho Sletill Hill. Arm operational Stra which would col to the north west The addition of K farms would be the proposed de due to the high Melvich Wind Er complexity in th of change result wind farms is co The overall judg Energy Park, in proposed winds

Park would comprise a group of turbines to the left of relation to the additional cumulative sites included in uld be seen in front of Melvich Wind Energy Hub and ey Offshore Wind Farm. However, West of Orkney d Farm would be located over 45km from this location rts of these turbines will limit their prominence. In e offshore wind turbines are only likely to be seen in ns. Kirkton Energy Park would be directly in front of Energy Hub and would extent across a very similar part he two developments would therefore essentially read rm from this location. However, as a consequence, this degree of complexity and clutter to the view, with the turbines.

nore Wind Farm would be positioned to the right of madale Wind Farm would essentially merge with the rathy North and consented Strathy Wood Wind Farms, ollectively comprise a line of turbines along the horizon est.

f Kirkton Energy Park in relation to these proposed wind e arguably less than the change that would result from development in relation to the baseline context. This is h degree of overlap between Kirkton Energy Park and Energy Hub. However, as this would also increase the the appearance of these developments the magnitude lting from Kirkton in addition to baseline and proposed considered to remain as assessed in the LVIA.

dgement in relation to the potential effect of Kirkton n addition to existing and consented wind farms, and Is farms is the same as that assessed in the EIA Report.

VP	Viewpoint Location	Visual Receptor Type	Approx. distance to the nearest turbine (km)	Direction of view to proposed development	Value	Susceptibility	Sensitivity	Magnitude of change	Visual Effect	Magnitude of Change: Existing/ consented/ Proposed + Kirkton Energy Park	Visual Effect Existing/ consented/ Proposed + Kirkton Energy Park	Commentary
VP13	Ben Griam Beg	Walkers	17.4	North east	High - medium	High	High	Slight	Moderate	Slight	Moderate	Kirkton Energy turbines toward the more prom comprise the St from this Summ situation, being turbines. Pentland Offsho Kirkton Energy I located on the beyond the Stra a distance of ow In this context of would make a re development. If seen against the degree view. The Kirkton in additi to remain as ass The overall judg Energy Park, in proposed winds

y Park would comprise a relatively small group of rds the coastline. It would be positioned to the right of minent, larger concentration of wind farms, which Strathy sites to the left side of the view looking north nit. Melvich Wind Energy Hub would also lie in a similar ng slightly isolated from this larger group of wind

hore Wind Farm would be located directly behind v Park. West of Orkney Offshore Wind Farm would be e left hand side of the view in a northerly direction, rathy Wind Farms. However, these would be located at ver 45km and would only be visible in clear conditions.

of baseline and proposed wind farms Kirkton Energy relatively limited contribution to the overall pattern of It would comprise a relatively small group of turbines, he landscape as part of an expansive, panoramic 360 Therefore, the magnitude of change resulting from tion to baseline and proposed wind farms is considered ssessed in the LVIA.

dgement in relation to the potential effect of Kirkton n addition to existing and consented wind farms, and ds farms is the same as that assessed in the EIA Report.

VP	Viewpoint Location	Visual Receptor Type	Approx. distance to the nearest turbine (km)	Direction of view to proposed development	Value	Susceptibility	Sensitivity	Magnitude of change	Visual Effect	Magnitude of Change: Existing/ consented/ Proposed + Kirkton Energy Park	Visual Effect Existing/ consented/ Proposed + Kirkton Energy Park	Commentary
VP14	A836, Forss	Residents Road users	19.5	South west	High High	High Medium	High- medium	Slight	Moderate - minor	Negligible-	Moderate - minor - Minor	Kirkton Energy above the horiz above a simple landscape. As s the introductio proportion of t farms comprise with turbines to The proposed N with the propose turbines that conspicuous that turbines visible, Pentland and V the view to the Orkney Wind Fa Overall Kirkton component of t conspicuous that level of effect t Park with the ot that assessed for The overall judg Energy Park, in proposed winds

y Park would comprise a line of turbine blades seen zon of the intervening landform. These would be seen e, broadly horizontal horizon, above the agricultural stated in the LVIA, the cumulative effect resulting from on of Kirkton Energy Park would be limited by the the turbines that would be seen. The baseline wind e relatively prominent element in the middle distance, o the left and right hands of the view to the south west.

Melvich Wind Energy Hub would be seen in conjunction osed Bettyhill Extension and Armadale Wind Farm. The form part of these wind farms would be more nan Kirkton Energy Park with a greater proportion of the e, extending above the horizon.

West of Orkney Offshore Winds Farms would occupy e east and north east, although the proposed West of Farm would be relatively distant.

n Energy Park would comprise a relatively limited the view. The proposed wind farms would be more han Kirkton Energy Park and magnitude of change and that would occur from the addition of Kirkton Energy other proposed wind farms is considered to be less than for the proposed development in the baseline context.

dgement in relation to the potential effect of Kirkton n addition to existing and consented wind farms, and Is farms is less than that that assessed in the EIA Report.

VP	Viewpoint Location	Visual Receptor Type	Approx. distance to the nearest turbine (km)	Direction of view to proposed development	Value	Susceptibility	Sensitivity	Magnitude of change	Visual Effect	Magnitude of Change: Existing/ consented/ Proposed + Kirkton Energy Park	Visual Effect Existing/ consented/ Proposed + Kirkton Energy Park	Commentary
VP15	Ben Alisky	Walkers	25.4	North west	High - medium	High	High	Slight	Moderate	Negligible	Moderate – minor	Kirkton Energy turbines toward proposed wind Orkney and Pen relatively small wind turbines t north of this vie In this context would make a r development. I seen against th degree view. Th occur from the proposed wind the proposed de The overall judg Energy Park, in proposed winds
VP16	Achnahuaigh,	Potentially residents Road users	30.4	East								Not Applicable -
VP17	Ben Loyal	Walkers	31.5	North east								Not applicable -

y Park would comprise a relatively small group of rds the coastline. In the context of the baseline and d farms (including the Armadale, Melvich, West of entland developments) it would comprise one of, and a l group of turbines, in relation to existing and proposed that extend along the horizon to the north east and iewpoint.

t of baseline and proposed wind farms Kirkton Energy relatively limited contribution to the overall pattern of It would comprise a relatively small group of turbines, he landscape as part of an expansive, panoramic 360 The magnitude of change and level of effect that would he addition of Kirkton Energy Park with the other d farms is considered to be less than that assessed for development in the baseline context.

dgement in relation to the potential effect of Kirkton n addition to existing and consented wind farms, and ds farms is less than that assessed in the EIA Report.

e – Scoped out of LVIA, as explained in the EIA Report.

- Scoped out of LVIA, as explained in the EIA Report.

VP	Viewpoint Location	Visual Receptor Type	Approx. distance to the nearest turbine (km)	Direction of view to proposed development	Value	Susceptibility	Sensitivity	Magnitude of change	Visual Effect	Magnitude of Change: Existing/ consented/ Proposed + Kirkton Energy Park	Visual Effect Existing/ consented/ Proposed + Kirkton Energy Park	Commentary
VP18	Dunnet Head	Visitors to local point of interest Walkers Ordnance Survey marked viewpoint	36	South west	High	High	High	Negligible	Moderate - minor	Negligible	Minor	As stated in the element, lying 3 the far side of in to the south we development we with the hubs ar blades and blad would occupy a view. The proposed w add to this conte comprise a limit and the magnitu development in remain negligibl The overall judg Energy Park, in a proposed winds

e LVIA, Kirkton Energy Park would comprise a distant 36km from this viewpoint. It would be positioned on intervening landform which forms part of the horizon rest of this location. The majority of the proposed would be screened by this intervening higher ground, and blades of two turbines visible together with the de tips of nine turbines. The proposed development a small proportion of the open, expansive 360 degree

wind farms being considered as part of this SEI would ntext. However, Kirkton Energy Park would still nited component of the overall view from this location tude of change resulting from the proposed in relation to baseline and proposed wind farms would ble.

Igement in relation to the potential effect of Kirkton addition to existing and consented wind farms, and Is farms is the same as that assessed in the EIA Report.

VP	Viewpoint Location	Visual Receptor Type	Approx. distance to the nearest turbine (km)	Direction of view to proposed development	Value	Susceptibility	Sensitivity	Magnitude of change	Visual Effect	Magnitude of Change: Existing/ consented/ Proposed + Kirkton Energy Park	Visual Effect Existing/ consented/ Proposed + Kirkton Energy Park	Commentary
VP19	A836, Balmore	Residents Road users	15	South west	High	High Medium	High- medium	Negligible	Moderate – minor Minor	Negligible	Moderate – minor Minor	As stated in the the far side of in south west of the development we only the blade ti visible. It is an of A836 at this loca and the views to with the road di discernible as the against the sky. be seen directly the wirelines de development we The proposed we add to this conte prominent than would still comp this location and proposed develow wind farms would The overall judg Energy Park, in a proposed winds

e LVIA, Kirkton Energy Park would be positioned on intervening landform, which forms the horizon to the this viewpoint. The majority of the proposed would be screened by this intervening landform, with tips of the proposed development predicted to be open, expansive 360 degree view. However, the cation is roughly orientated north east to south west towards the site (south west) would be directly in line direction at this point. Blade movement would be the turbines break the horizon and would be seen y. The proposed Kirkton Energy Park turbines would ly in front of the Strathy South Wind Farm, although demonstrate that the visibility of this consented would be very limited at this location.

wind farms being considered as part of this SEI would ntext, with Melvich Wind Energy Hub being more in the proposed development. Kirkton Energy Park inprise a limited component of the overall view from and the magnitude of change resulting from the elopment in relation to the baseline and proposed build remain negligible.

Igement in relation to the potential effect of Kirkton addition to existing and consented wind farms, and ds farms is the same as that assessed in the EIA Report.

- 7.21 In summary, based on this analysis it is predicted that Kirkton Energy Park would not result in greater effects on visual amenity when considered in addition to the baseline context and proposed wind farms, including the additional wind farms being considered in this SEI. Therefore, the extent and pattern of significant effects identified in the EIA Report are consistent with those assessed in this SEI.
- 7.22 There are viewpoints where the addition of Kirkton Energy Park to a context that comprises the baseline plus proposed wind farms, would result in a reduced magnitude of change and related effect on visual amenity when compared with potential effects in relation to the baseline landscape, such as Viewpoint 9: Totegan, near Strathy Point (SEI Figure 7.13) and Viewpoint 10: A836, west of Armadale (SEI Figure 7.14), due to the relative prominence of the proposed cumulative developments. In such cased, the reduction in the contribution that Kirkton Energy Park would make to cumulative effects results from the relative prominence of the other proposed developments in the intervening landscape, in front of the proposed development.
- 7.23 The viewpoint assessment considers the potential effects of Kirkton Energy Park at a wide range of locations around the site and reflects different receptors at varying distances and directions. Given no viewpoints have been identified where Kirkton Energy Park would result in a greater contribution to cumulative effects when considered in relation to the additional proposed developments included in the SEI, it has not been considered necessary to revisit all the visual receptors that were assessed in the LVIA. The review of the viewpoint assessment provides a clear indication of where the potential effects of Kirkton Energy Park would be greatest, including its contribution to cumulative effects, i.e. in the vicinity of Strath Halladale.

SEQUENTIAL ROUTE ASSESSMENT

- 7.24 **Technical Appendix 7.6** of the EIA Report assessed the potential sequential effects of Kirkton Energy Park on key routes within the LVIA study area:
 - The A836;
 - The A838;
 - The A897; and
 - National Cycle Network (outwith the A836).
- 7.25 The A838 was scoped out of detailed analysis in the LVIA due to a combination of limited theoretical visibility of Kirkton Energy Park, the separation distance and the presence of baseline wind farms in the intervening landscape.
- 7.26 The following section provides an assessment of the sequential effects of Kirkton Energy Hub in relation to the proposed wind farms, including those requested by THC for inclusion in this SEI. This assessment is supported by the following Figures:
 - SEI Figure 7.6.1a Sequential Assessment NC500 East;
 - SEI Figure 7.6.1b Sequential Assessment NC500 West; and
 - SEI Figure 7.6.2 Sequential Assessment A897.



7.27 In addition, **SEI Sequential Assessment Wirelines** (presented with **SEI Figures 7.6.1 – 7.6.2**) contain a sequence of wireline images for locations along the A897.

The A836

- 7.28 The A836 is the larger and busier of the two primary roads through the study area from which Kirkton Energy Park is predicted to be visible. The A836 is closely aligned with the north coast between John o' Groats, beyond the eastern edge of the study area; and Tongue, to the west. Several settlements lie along this route including (from east to west) Dunnet, Castletown, Thurso, Reay, Melvich, Strathy, Bettyhill and Tongue. At Tongue the A836 heads in a southerly direction towards Lairg (outside the study area to the south west). The closest section of the A836 to the proposed development is at the northern end of Strath Halladale, in the vicinity of Melvich, at approximately 2.6km to the north of the nearest proposed wind turbine. Kirkton Energy Park would be accessed from the A836, via the minor road to Kirkton.
- 7.29 Two potential vehicle turning areas for abnormal load deliveries are proposed along the A836. The more easterly of these is at Melvich, near the junction to Portskerra. The alternative is approximately 2.4km to the west of Melvich. Only one of the vehicle turning areas would be constructed. More detail on the vehicle turning areas is provided in the EIA Report: **Chapter 3: Description of Development** and **Chapter 7: Landscape and Visual**.
- 7.30 Based on analysis of the blade tip ZTV (SEI Figures 7.6.1a and 7.6.1b) it is estimated that approximately 18% of the A836 within the study area would have theoretical visibility of the proposed development. This equates to a total of approximately 21km of the 115km length of the route through the study area. The ZTVs show that the predicted visibility of the proposed development would be intermittent, occurring in nine separate sections of the road. When the ZTV for the hub height for the proposed wind turbines is analysed (SEI Figures 7.6.1a and 7.6.1b), this shows that the majority of theoretical visibility from the A836 would be limited to turbine blades. The key exception to this is in the vicinity of Strath Halladale, where the ZTVs show that a greater proportion of the wind turbines would be visible, as confirmed by the viewpoint illustrations for Viewpoint 4 (SEI Figure 7.8). A summary of the extent of theoretical visibility from the A836 is provided in Table 4-1 below.

Route Section	Approximate total length of road within study area	Approximate length of road from which Kirkton Energy Park Wind Turbines visible	Percentage of route
A836 between John o' Groats and Tongue (within study area)	86km	19.1km	22%
A836 between Tongue and Lairg (within study area)	29km	1.8km	6%
Full extent of A836 within study area	115km	20.9km	18%

Table 4-1: Predicted Visibility of Kirkton Energy Park Wind Turbines from A836

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- 7.31 The ZTVs identify theoretical visibility based on bare earth terrain data. Roadside hedgerows, trees or walls are not modelled into the analysis charts and therefore the visibility is likely to be less than illustrated. However, the landscape alongside the A836 is typically open, affording views over the surroundings.
- 7.32 The cumulative ZTVs that form part of the LVIA (LVIA **Figures 7.4a to 7.4l**), are supplemented by **SEI Figures 7.4h**, **7.4l**, **7.4m**, **7.4n** and **7.4o**) The LVIA ZTVs show that there is potential visibility of multiple operational and consented wind farms from the much of the A863 within the study area. The exception to this is the section to the south of Tongue, where the theoretical visibility becomes more fragmented. The key operational and consented wind farms that are visible from the A836, particularly in conjunction with Kirkton Energy Park, are Baillie Hill, the wind turbines at Forss, the consented Limekiln development, the Strathy Wind Farms (Strathy North which is operational as well as the consented Strathy Wood and Strathy South developments) and the two turbines at Bettyhill.
- 7.33 As much of the route of the A836 within the study area forms part of the NC500 and North and West Highlands Scenic Route, as well as part of NCR1, the value of views is considered to be High. The susceptibility of road users to the proposed development is considered to be Medium. The sensitivity of people travelling along the A836, including cyclists, is typically considered to be Highmedium, noting that south of Tongue the A836 does not form part of a promoted scenic route but does remain part of NCR1.
- 7.34 Melvich Wind Energy Hub would lie in close proximity to the A836, to the north of Kirkton Energy Park. The comparable location in the landscape and similar turbine height to blade tip (150m) means the overall pattern of theoretical visibility is very similar to Kirkton Energy Park, with Melvich Wind Energy Hub being closer to the route.
- 7.35 Armadale Wind Farm would lie relatively close to the south of the A836 within 12km of Kirkton Energy Park. Should this proposed development be granted planning permission and be constructed, the turbines would comprise prominent structures that would reduce the relative prominence of Kirkton Energy Park in the vicinity of Armadale Wind Farm.
- 7.36 West of Orkney and Pentland Offshore Wind Farms would be positioned off the north coast, and would be seen in views to the north west, north and north east. There are strong visual connections between the A836 and sea, meaning these offshore wind farms would be seen from multiple locations along this route. In broad terms the theoretical visibility of these proposed offshore developments is more continuous between Strathy and Thurso, and more fragmented between Strathy and Bettyhill.
- 7.37 At locations beyond approximately 12km to the west of the site, the ZTVs show almost no visibility of Kirkton Energy Park. The exception to this is a very short section (less than 2km in length) to the south of Tongue, where turbine blade visibility is indicated at a distance of over 25km. In addition, it is likely that the proposed development would be seen behind the Strathy Wind Farms, meaning any effect on visual amenity for people travelling along this part of the A836 would be limited.
- 7.38 In the vicinity of Strath Halladale, to the north of the site, Kirkton Energy Park would comprise a prominent addition to the baseline landscape. It would be seen in conjunction with the Melvich Wind Energy Hub which would on the ridgeline to the north of Kirkton Energy Park. The more enclosed nature of the landscape, resulting from the local landform, limits the theoretical visibility



of operational and consented wind farms, although the Strathy Wind Farms are theoretically visible from the west facing slopes and the consented Dounreay Tri floating wind turbines would be visible to the north. In the context of the additional proposed wind farms included in this SEI, the West of Orkney and Pentland Offshore Wind Farms would also be visible to the north.

- 7.39 Collectively Kirkton Energy Park and Melvich Wind Energy Hub would be the key wind farms seen from this section of the A836. Kirkton Energy Park would comprise a line of turbines above the western side of the Strath, whilst Melvich Wind Energy Hub would comprise a more irregular cluster of turbines to the north. Melvich Wind Energy Hub is likely be more visible over a greater length of the A836 in the immediate vicinity of Melvich due to its position further north along the ridgeline. Viewpoints 3 and 4 (**SEI Figures 7.7** and **7.8**) show the nature of views seen from the A836 in the vicinity of Strath Halladale.
- 7.40 Viewpoint 3 shows the restricted extent of the turbines that would be seen from the edge of Melvich. Therefore, for people travelling in an easterly direction the visibility of the proposed turbines would be limited along this section of the A836, as for the most part they would be to the rear of the direction of travel. However, Viewpoint 4 shows the open views towards Kirkton Energy Park for people travelling in a westerly direction as they descend towards the River Halladale. The linear, regularly spaced layout would result in the proposed wind farm having a relatively simple appearance. However, the wind turbines would be prominent and blade movement would be clearly visible. At Viewpoint 3 a Moderate-minor (Not Significant) effect on visual amenity is predicted for road users. However, at Viewpoint 4 a Major-moderate (Significant) effect is predicted. These predicted effects take account of Kirkton Energy Park both in relation to the baseline context and also in addition to proposed cumulative wind farm developments included in this SEI.
- 7.41 In a broader the theoretical visibility of the proposed development from the A836 is relatively limited, with fragmented areas of theoretical visibility and for much of the route the intervening landform would restrict visibility to turbine blades. In addition, the existing and consented wind farms would influence the relative prominence of Kirkton Energy Park, particularly from locations to the east of Reay to the east of the site (as demonstrated by Viewpoints 14 and 19). In relation to proposed wind farms, Armadale Wind Farm and Melvich Wind Energy Hub would be seen in front of Kirkton Wind Farm and be more prominent in views from the A836 to the west (as demonstrated by Viewpoints 7 and 10).
- 7.42 Taking these factors into account, it is considered that the overall magnitude of cumulative change from Kirkton Energy Park in addition to the baseline and proposed wind farms included in this SEI on users of the A836 would be Slight to Negligible. As road users travelling along the A836 have a High-medium sensitivity, the resulting effect would be Moderate-minor overall and Not Significant. However, it is recognised that in the vicinity of Strath Halladale the proposed development would be prominent and would have locally Major-moderate and Significant effects on visual amenity for people travelling along the A836.

A897

7.43 The A897 comprises a single track road between the A836 east of Melvich and Helmsdale to the south south east, just outside the study area. The northern part of the A897 is routed through Strath Halladale, then crosses higher ground to the south of Forsinard, and is then routed through



the Strath of Kildonan/Strath Ullie towards Helmsdale. The settlement pattern along this road is relatively limited and dispersed. However, there are residential properties located along this road between near the junction with the A836 and Forsinard, with the pattern becoming increasingly sparse the further south along the road. Further properties lie to the south of the higher ground south of Forsinard, in the vicinity of Kinbrace. The closest section of the A836 to the proposed wind turbines is at Achiemore, which lies approximately 1.5km from the closest turbine.

7.44 Based on analysis of the blade tip ZTV (SEI Figure 7.6.2) it is estimated that approximately 46% of the A897 within the study area would have theoretical visibility of the proposed development. This equates to a total of approximately 22km of the route. The ZTVs shows that the predicted visibility of the proposed development would be continuous along much of the A897 between the junction with the A836 and Forsinain. South of Forsinain the pattern of visibility becomes more limited and fragmented. LVIA Viewpoint 1 (LVIA Figure 7.5) and Viewpoint 2 (LVIA Figure 7.6) illustrate the predicted appearance of the proposed development from the A897, these viewpoint illustrations have been augmented by a sequence of wirelines along the A897, which are included in SEI Sequential Assessment Wirelines (presented with SEI Figures 7.6.1 – 7.6.2). A summary of the extent of theoretical visibility from the A836 is provided in Table 5-1 below.

Route Section	Approximate total length of road within study area	Approximate length of road from which Kirkton Energy Park Wind Turbines visible	Percentage of route
A897 between junction with A836 and Helmsdale (within study area)	53km	22.2km	41%

Table 5-1: Predicted Visibility of Kirkton Energy Park Wind Turbines from A897

- 7.45 The ZTVs identify theoretical visibility based on bare earth terrain data. Roadside hedgerows, trees or walls are not modelled into the analysis charts and therefore the visibility is likely to be less than illustrated. However, the landscape alongside the A897 is typically open, affording views over the surroundings.
- 7.46 The cumulative ZTVs that form part of the LVIA (LVIA Figures 7.4a to 7.4l, are supplemented by SEI Figures 7.4h, 7.4l, 7.4m, 7.4n and 7.4o). These show that there is limited potential visibility of operational and consented wind farms from the A897 within the study area. The SEI Sequential Assessment Wirelines (presented with SEI Figures 7.6.1 7.6.2) further demonstrate this, only showing visibility of existing and consented wind farms from locations along the A897 in the vicinity of higher ground to the south of Forsinard. Therefore, in relation to the current baseline landscape, the effects on visual amenity for road users on the A897 would be primarily associated with Kirkton Energy Park.
- 7.47 However, the SEI Sequential Assessment Wirelines (presented with SEI Figures 7.6.1 7.6.2) demonstrate there would be visibility of proposed wind farms along the route of the A897. At Location Reference: A897-13 (SEI Sequential Assessment Wirelines), in the vicinity of Forsinard there would be theoretical views of West of Orkney and Pentland Offshore Wind Farms, however the actual visibility of these developments is likely to be limited by the separation distance and intervening landform. Melvich Wind Energy Hub would be visible, in conjunction with Kirkton Energy Park, with the two developments seen adjacent to each other. Combined visibility of Kirkton



Energy Park and Melvich Wind Energy Hub would occur sequentially between Forsinard and the junction with the A836, which is demonstrated by the **SEI Sequential Assessment Wirelines** (presented with **SEI Figures 7.6.1 – 7.6.2**), together with the wirelines for Viewpoints 1 and 2 (**SEI Figures 7.5** and **7.6** respectively). Throughout the majority of this route, Kirkton Energy Park would be the more prominent of the proposed developments and would cause the greatest visual effect. The wirelines demonstrate that at several locations the presence of Melvich Wind Energy Hub behind Kirkton Energy Park complicates the array of turbines that is seen. A key part of the design intent for Kirkton Energy Park was achieving a simple, linear arrangement of turbines following the landform of the ridge on the west side of Strath Halladale. This will be compromised by the juxtaposition of the two developments particularly where they would be seen one behind the other.

- 7.48 At the northern end of Strath Halladale there would be potential views of West of Orkney and Pentland Offshore Wind Farms. However, such views are expected to be localised, constrained by the local landform and vegetation. In addition, visibility of the offshore developments and their prominence would be influenced by atmospheric conditions.
- 7.49 The A897 is not promoted as a scenic route. It is also not located within any landscape designations, although a section south of Forsinard lies immediately to the east of the Bens Griamand Loch nan Clàr Special Landscape Area (SLA). The value of views from the A897 is considered to be Medium overall, noting this could rise to High-medium adjacent to the SLA. The susceptibility of road users to the proposed development is considered to be Medium and the sensitivity of people travelling along the A836 is considered to be Medium.
- 7.50 Travelling south from the junction with the A836, Kirkton Energy Park would comprise a prominent addition to the baseline landscape generally seen in conjunction with Melvich Wind Hub, see Viewpoints 1 and 2 (**SEI Figures 7.5** and **7.6**). These figures show the nature of views seen from the A897 within Strath Halladale, where a substantial magnitude of change and Major-moderate (Significant) effect on visual amenity is predicted at both locations for road users with the addition of Kirkton Energy Park to the baseline and the proposed wind farms included in this SEI. This magnitude of change would be applicable for the proposed development in relation to the baseline as well as in relation to proposed wind farms.
- 7.51 Kirkton Energy Park would be positioned on the landform above the western side of Strath Halladale. The linear, regularly spaced layout of the turbines would result in the proposed wind farm having a relatively simple appearance. In the vicinity of Meall Mòr a' Bealaich, north of Culfern, the landform would screen the lower parts of some turbines. However, the wind turbines would be prominent with blade movement clearly apparent. The size of the wind turbines would also contrast with the relatively small scale of the Strath landscape. Features within this landscape, such as buildings and trees, would provide scale references against which to judge the size of the wind turbines. The ancillary elements of the proposed development (tracks, crane pads, borrow pits and substation compound) would also be visible from some locations. However, the main visual effects would be associated with the wind turbines. Road users travelling south would pass roughly parallel with the proposed wind turbines between Loch Earacha and Achiemore. South of Achiemore Kirkton Energy Park would be to the rear of the direction of travel.
- 7.52 Travelling north along the A897 the blade tip ZTV (**Figure 7.6.2**) indicates small areas of theoretical visibility in the vicinity of Kinbrace and also near Loch an Ruathair. However, wirelines for these locations (see **SEI Sequential Assessment Wirelines** (presented with **SEI Figures 7.6.1 7.6.2**)) show



no, or very limited visibility of the proposed wind turbines. Theoretical visibility increases near Forsinard but would still be limited by the intervening landform and also commercial forestry. Up to the vicinity of Craigtown Rock, approximately 2km to the south of the most southern wind turbine, the wind turbines would be partly screened by the landform on the western side of the Strath. As with road users travelling south, from locations north of Achiemore, people would travel roughly parallel with the site with the proposed wind turbines forming prominent structures on the ridge to the west.

7.53 Overall, there would be continuous visibility of the proposed development from a large proportion of the A897, seen together with Melvich Wind Energy Hub (as demonstrated by the ZTV in **SEI Figure 7.4m** and the **SEI Sequential Assessment Wirelines** (presented with **SEI Figures 7.6.1 – 7.6.2**). This would particularly be the case for people travelling in a northerly direction, with the turbines at both developments increasing in relative size as people travel further north. The design of the proposed development means the turbines would have a simple linear layout, consistent with landform on the west side of the Strath. This would contrast with the group of turbines at Melvich Wind Energy Hub. Notwithstanding these factors the proposed development would be prominent in views from the A897, particularly between north of Craigtown Rock and the junction with the A897. Whilst there would be more limited effects on visual amenity on more southerly parts of the A897, there would be recurring Major-moderate and Significant effects on visual amenity for people travelling along this route with the addition of Kirkton Energy Park to the baseline and the proposed wind farms included in this SEI.

National Cycle Network (outwith the A836)

- 7.54 One route that forms part of the National Cycle Network traverses the study area, linking Inverness and John O' Groats . Much of this follows the A836 and therefore the cumulative effects on this part of the route would be as assessed for in paragraphs 7.28 – 7.42 above. However the route diverges from the A836 to the east of Reay and follows the minor road through Shebster, Westfield and Newlands of Geise towards Thurso. The LVIA identifies that theoretical visibility of the proposed development is fragmented and limited to turbine blades. In addition, this road is located relatively close to the operational Baillie and consented Limekiln Wind Farms. These developments are considerably closer than Kirkton Energy Park and would reduce the prominence of the proposed wind turbines. This would be particularly the case in relation to Limekiln Wind Farm, which, when constructed, would lie between this road and Kirkton Energy Park. The key proposed wind farm that is relevant to this part of the National Cycle Network is Melvich Wind Energy Hub, which would be seen in conjunction with Kirkton Energy Park. West of Orkney and Pentland Offshore Wind Farms would also be intermittently visible from this section of the route. However, the more prominent wind farms in relation to this part of the National Cycle Network are Baillie and Limekiln Wind Farms.
- 7.55 Given the limited predicted visibility, intervening distance and relative prominence of existing and consented cumulative wind farm developments in relation to the proposed wind farms, it is considered that the addition of Kirkton Energy Park would result in a limited change to the view. Therefore, is it considered that the proposed development would have a Negligible magnitude of change for the road users. As this cycle route forms part of the National Cycle Network it is considered to be of High value and cyclists are considered to be of Medium susceptibility. Cyclists in this context are considered to be of High-medium sensitivity, the resulting effect would be Moderate-minor and Not Significant for this part of NCR1. The key effects on this route would be



as described for the A836, particularly the predicted Significant effects in the vicinity of Strath Halladale.

APPROACH TO DESIGN EVOLUTION

- 7.56 Considerable work was undertaken in relation to the design evolution of Kirkton Energy Park. This is reported in **Chapter 2: Site Description and Design Evolution** of the EIA Report. Key landscape and visual focussed objectives that were identified at an early stage of the site design process included:
 - Reduce the extent of the proposed development visible and consider the appearance of the turbines from the SLAs along the northern coastline, particularly Farr Bay, Strathy and Portskerra SLA;
 - Reduce the potential effects on the Wild Land Area 39 as far as possible through consideration of the design/layout of the turbines and ancillary infrastructure, including avoiding the need for visible aviation lighting;
 - Ensure an organised and well balanced layout from views along the A836 (heading west), transitioning from Caithness into Sutherland;
 - Reduce the potential effects on views from within Strath Halladale, particularly for residential receptors and people travelling along the A897, by creating an organised and well balanced layout; and
 - Minimise the extent of the proposed development visible from the more populated areas of Melvich and Portskerra.
- 7.57 These objectives were achieved largely through a combination of avoiding placing wind turbines in the northern part of the site, in order to limit the extent of the wind farm and a rigorous process to achieve a single line of turbines. This simplified the appearance of the proposed development and ensured it responded to the local landscape as far as practical, including the prevailing site constraints. The relocation to Turbine No.7 makes no material difference to the design principles for the site. These principles are explained in the **Design and Access Statement** and the EIA Report, particularly **Chapter 2: Site Description and Design Evolution** and **Chapter 7: Landscape and Visual** of the EIA Report.
- 7.58 These points are relevant to consideration of Kirkton Energy Park in addition to the proposed wind farms included in this SEI, particularly in relation to Melvich Wind Energy Hub which is the nearest of the other proposed wind farms, and with which it has a contrasting design and layout.

SUMMARY OF CHANGES TO THE SIGNIFICANCE OF EFFECTS

- 7.59 As detailed in Paragraph 7.7, the adjustments made to the location of Turbine No.7 would result in no changes to the judgements made in **Chapter 7: Landscape and Visual** of the EIA Report.
- 7.60 With regards to the key potential cumulative landscape and visual effects of the proposed development, these would remain as assessed and presented in **Chapter 7: Landscape and Visual** of the EIA Report.

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CONCLUSIONS

- 7.61 The landscape and visual input to the SEI report has carefully considered the consultation comments made by THC after submission of the application for Kirkton Energy Park. This chapter concentrates on assessing the potential cumulative effects of Kirkton Energy Park in the context of the additional proposed wind farms and changes to the proposed Armadale Wind Farm, as identified through exchanges with THC.
- 7.62 The Figures that were prepared to support the LVIA, included in the EIA Report for Kirkton Energy Park have been updated and supplemented where necessary. This includes new and updated ZTV Figures, together with revised visualisations prepared in accordance with the THC and NatureScot guidance.
- 7.63 There has been one design change to the wind farm layout, which comprises a change in the location of Turbine No.7. This turbine has moved approximately 53m from the location proposed in the 2022 application. This revised location has been taken into account in the revised visualisations and an updated ZTV for the proposed development has been prepared. The limited movement of this turbine would make no material difference to the appearance of Kirkton Energy Park or the judgements made in the LVIA.
- 7.64 The additional proposed wind farms and changes to Armadale Wind Farm have been considered in relation to the potential cumulative effects of Kirkton Wind Farm. This analysis has concentrated on effects on the landscape character types and the viewpoints that were assessed in the LVIA. In addition, the judgements reached in the sequential route assessment (**Technical Appendix 7.6** of the EIA Report) have also been reviewed.
- 7.65 Assessment of this revised potential cumulative context (the addition of Kirkton Energy Park with the operational and consented wind farms, and the proposed wind farms included in this SEI) results in limited adjustments to the judgements presented in the LVIA. No increased cumulative landscape or visual effects have been assessed from the addition of Kirkton Wind Farm with the proposed wind farms included in this SEI. The only changes identified as a consequence of assessing the potential future cumulative context included in this SEI, are slight reductions to the magnitude of change and related effects, as identified in respect of LCT141 High Cliffs and Sheltered Bays and Viewpoints 9, 14 and 15. This is due to a combination of the relatively limited extent of Kirkton Energy Park that would be seen from certain locations, together with the relative prominence of the proposed wind farms, which would be positioned in the intervening landscape.
- 7.66 A key consideration linked with Kirkton Energy Park is its design rationale and how this would relate to the nearby proposed Melvich Wind Energy Hub. The difference in the appearance of these developments would be clearly apparent and the design intent for Kirkton Energy Park would be compromised to some degree by the relationship with Melvich Wind Energy Hub from certain locations, particularly within and immediately around Strath Halladale.
- 7.67 In overall terms the key potential landscape and visual effects of the proposed development would remain those stated in the LVIA. These would particularly relate to the potential effects on Strath Halladale and the residents of the properties within the Strath.



REFERENCES

Landscape Institute (2019). Residential Visual Amenity Assessment, Technical Guidance Note 2/19.

The Flow Country World Heritage Site Bid Steering Group (2022). Management Plan for the Proposed Flow Country World Heritage Site, Nomination Draft, December 2022.

