Chapter 14
Summary of Residual Effects

14 Summary of Residual Effects

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14 Summary of Residual Effects

14.1 Introduction

14.1.1 **Tables 14.1** and **14.2** provide a quick reference to the significant residual environmental effects identified in the technical chapters of this Environmental Impact Assessment (EIA) Report, as well as a cross reference to the relevant mitigation measures identified.

14.1.2 The residual effects are highlighted in **bold** where an effect is considered to be significant.

14.1.3 **Table 14.3** provides a summary of the cumulative effects of the Proposed Development in combination with other relevant proposed, consented and operational developments within the local area.

Table 14.1 - Summary of Residual Effects – Construction and Decommissioning

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
Chapter 6: Landscape and Visual					
Effects on Landscape Character					
LCT 5 ii Plateau Farmland - Western Plateau: Larkhall/Lesmahagow/Coalburn	Minor	Adverse	Standard best-practice construction methods. No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor	Adverse
LCT 5B Plateau Farmland Opencast Mining	Minor	Adverse	Standard best-practice construction methods. No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor	Adverse
LCT 7 Rolling Moorland covering the south-western part of the site – *Eastern part*	Moderate major significant	Adverse	Standard best-practice construction methods. No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	**Moderate major significant**	**Adverse**
LCT 7 Rolling Moorland covering the south-western part of the site – *Western part*	Minor	Adverse	Standard best-practice construction methods. No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor	Adverse
LCT 7 Rolling Moorland located approximately 440 m to the north-east of the Proposed Development – *Southern edge of the LCT*	Moderate not significant	Adverse	Standard best-practice construction methods. No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Moderate not significant	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
LCT 7 Rolling Moorland located approximately 440 m to the north-east of the Proposed Development – *Northern part of the LCT*	Minor	Adverse	Standard best-practice construction methods. No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor	Adverse
LCT 7 Rolling Moorland located approximately 1.9 km to the south-east of the Proposed Development to the east of the Ayr Valley	Minor	Adverse	Standard best-practice construction methods. No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor	Adverse
LCT 7 ii Rolling Moorland - Crawfordjohn/Cairn Table (South of Douglas Water) located approximately 2.1 km to the south-west of the Proposed Development	Minor	Adverse	Standard best-practice construction methods. No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor	Adverse
LCT 7 Rolling Moorland located approximately 2.8 km to the south-west of the Proposed Development	Minor	Adverse	Standard best-practice construction methods. No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor	Adverse
LCT 7 Rolling Moorland located approximately 4.1 km to the south of the Proposed Development	Minor	Adverse	Standard best-practice construction methods. No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor	Adverse
LCT 7A Rolling Moorland Forestry located approximately 0.26 km to the north of the Proposed Development	Minor	Adverse	Standard best-practice construction methods. No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
LCT 7A Rolling Moorland Forestry located approximately 1.3 km to the south-west of the Proposed Development	Minor	Adverse	Standard best-practice construction methods. No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor	Adverse
LCT 7A Rolling Moorland Forestry located approximately 2.7 km to the south of the Proposed Development	Minor	Adverse	Standard best-practice construction methods. No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor	Adverse
LCT 7B Rolling Moorland Windfarm. The majority of the Proposed Development is located in this LCT – *Eastern part*	Moderate major significant	Adverse	Standard best-practice construction methods. No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	**Moderate major significant**	**Adverse**
LCT 7B Rolling Moorland Windfarm. The majority of the Proposed Development is located in this LCT – *Western part*	Minor	Adverse	Standard best-practice construction methods. No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor	Adverse
LCT 8 iii Upland River Valley - Douglas Water located approximately 0.37 km to the south-east of the Proposed Development	Minor	Adverse	Standard best-practice construction methods. No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor	Adverse
LCT 8A Upland River Valley Incised located approximately 0.74 km to the south-west of the Proposed Development	Minor	Adverse	Standard best-practice construction methods. No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
LCT 8B Upland River Valley Opencast Mining located approximately 1.7 km to the south of the Proposed Development	Minor	Adverse	Standard best-practice construction methods. No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor	Adverse
LCT 9 iii Broad Valley Upland - Douglas Water located approximately 5.4 km to the north-east of the Proposed Development	Minor	Adverse	Standard best-practice construction methods. No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor	Adverse
LCT 10 i Foothills - Carmichael/Roberton located approximately 4.6 km to the east of the Proposed Development	Minor	Adverse	Standard best-practice construction methods. No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor	Adverse
Effects on Visual Receptors					
Viewpoint 19 (within the site)	Major significant	Adverse	Standard best-practice construction methods. No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	**Major significant**	**Adverse**
Viewpoints 3, 9, 12, 13 17 and 18 (lower lying locations within the Douglas Water Valley)	Minor	Adverse	Standard best-practice construction methods. No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor	Adverse
Viewpoints 11, 14 and 16 (elevated locations)	Minor moderate	Adverse	Standard best-practice construction methods. No additional mitigation – consideration of landscape and visual	Minor moderate	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
			matters was inherent in the design process.		
Viewpoints 1, 2, 4, 5, 6, 7, 8, 10 and 15	Minor	Adverse	Standard best-practice construction methods. No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor	Adverse
Chapter 7: Ecology					
Wet Modified Bog - direct habitat loss, indirect habitat loss/modification and temporary habitat loss/modification.	Not significant	Minor adverse	No mitigation above and beyond embedded mitigation required. Compensation and additional enhancement via the implementation of a Biodiversity Enhancement and Management Plan (BEMP) which includes upland moorland/peatland restoration/enhancement.	Not significant	Minor adverse in short-term. Minor beneficial in long-term.
Chapter 8: Ornithology					
Impacts on black grouse.	Negligible	Adverse	Embedded mitigation: Bird Disturbance Management Plan (BDMP) including pre-construction surveys to avoid disturbance to lekking breeding birds. Marking of temporary fencing to reduce collision risks.	Negligible	Adverse
Impacts on goshawk.	Negligible	Adverse	Embedded mitigation: BDMP including pre-construction surveys to avoid disturbance to breeding birds.	Negligible	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
Impacts on curlew.	Negligible	Adverse	Embedded mitigation: BDMP including pre-construction surveys to avoid disturbance to breeding birds.	Negligible	Adverse
Impacts on golden plover.	Negligible	Adverse	No mitigation required.	Negligible	Adverse
Chapter 9: Geology, Hydrology, Hydrogeology & Peat					
Degradation of peat and carbon-rich soils.	Minor	Adverse	Mitigation by design by generally avoiding areas of peat >1 m deep and adherence to good practice measures. Final Construction Environmental Management Plan (CEMP) to be submitted for the written approval of SLC. Adoption of a soil management plan.	Negligible	Beneficial
Generation of pollution impairing surface water, groundwater, licenced water abstractions and Ground Water Dependent Terrestrial Ecosystems (GWDTE).	Negligible	Adverse	Mitigation by design including 50 m buffer to watercourses and adherence to good practice measures. The 50 m buffer was not adhered to at the manmade watercourse shown within the northern extent of the Long Duration Electricity Storage (LDES) compound, it will be diverted around the edge of the compound area. Any diversion of the watercourse will be undertaken in accordance with the Environmental Authorisations Scotland Regulations (EASR) and agreed with Scottish Environment Protection Agency (SEPA) prior to any works being undertaken.	Negligible	Beneficial

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
			Final CEMP to be submitted for the written approval of South Lanarkshire Council (SLC). Confirmatory water quality monitoring, the scope and frequency of which will be agreed with SLC prior to construction commencing.		
Erosion and sedimentation impairing surface water, groundwater, and licenced water abstractions.	Negligible	Adverse	Mitigation by design including 50 m buffer to watercourses and adherence to good practice measures. The 50 m buffer was not adhered to at the manmade watercourse shown within the northern extent of the LDES compound, it will be diverted around the edge of the compound area. Any diversion of the watercourse will be undertaken in accordance with EASR and agreed with SEPA prior to any works being undertaken. Final CEMP to be submitted for the written approval of SLC. Confirmatory water quality monitoring, the scope and frequency of which will be agreed with SLC prior to construction commencing.	Negligible	Beneficial
Increased flood risk to downstream receptors during construction.	Negligible	Adverse	Commitment to deploy sustainable drainage systems (SuDS) and prepare a detailed drainage design as part of the final CEMP.	Negligible	Beneficial
Potential impacts on surface water and groundwater levels and flow which may	Negligible	Adverse	Adherence to good practice measures including use of Environmental Clerk of	Negligible	Beneficial

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
affect water contribution to areas of peat, GWDTE, and licenced abstractions.			Works/ Ecological Clerk of Works (EnvCoW/ECoW). Final CEMP to be submitted for the written approval of SLC. Commitment to manage any required water abstractions or temporary dewatering during construction in accordance with EASR.		
Potential effects on licenced water abstractions.	Negligible	Adverse	Adherence to good practice measures. Final CEMP to be submitted for the written approval of SLC. Confirmatory water quality monitoring, the scope and frequency of which will be agreed with SLC prior to construction commencing.	Negligible	Beneficial
Chapter 10: Cultural Heritage					
Impacts on identified heritage assets within the Inner Study Area, including hitherto unknown archaeological remains.	Negligible to Minor	Adverse	Avoidance of and marking out of visible remains Recording of upstanding remains where avoidance is not possible. Archaeological monitoring (watching briefs) in areas of heightened archaeological potential and/or where heritage assets may survive as buried remains. Mitigation to be agreed with West of Scotland Archaeology Service (WoSAS) and detailed in a Written Scheme of Investigation (WSI).	Negligible	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
Chapter 11: Noise & Vibration					
Construction noise and vibration.	Not significant	Adverse	Implementation of CEMP.	Not significant	Adverse
Chapter 12: Access, Traffic & Transport					
Severance	Negligible	Adverse	No mitigation required, but Construction Traffic Management Plan (CTMP) would be prepared.	Negligible	Adverse
Road Vehicle Driver and Passenger Delay	Negligible	Adverse		Negligible	Adverse
Non-Motorised User Delay	Negligible	Adverse		Negligible	Adverse
Non-Motorised User Amenity	Negligible	Adverse		Negligible	Adverse
Fear and Intimidation of and by Road Users	Negligible	Adverse		Negligible	Adverse
Road User and Pedestrian Safety	Negligible	Adverse		Negligible	Adverse
Hazardous / Large Loads	Negligible	Adverse		Negligible	Adverse

Table 14.2 - Summary of Residual Effects – Operation

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
Chapter 6: Landscape and Visual					
Effects on Landscape Character During Daylight Hours					
LCT 7B Rolling Moorland Windfarm. The majority of the Proposed Development is located in this LCT – Extending from the eastern edge of the LCT, west to approximately 1.4 km LCT 7 Rolling Moorland covering the south-western part of the site – Extending from south-east edge of LCT approximately 1.6 km to the north-west	Moderate major	Adverse	Standard best-practice construction methods. No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	**Moderate major significant**	**Adverse**
LCT 7B Rolling Moorland Windfarm. The majority of the Proposed Development is located in this LCT – Beyond approximately 1.4 km to the west LCT 7 Rolling Moorland covering the south-western part of the site – Beyond approximately 1.6 km to the north-west LCT 8A Upland River Valley Incised located approximately 0.74 km to the south-west of the Proposed Development – Kennox Water limb LCT 8B Upland River Valley Opencast Mining located approximately 1.7 km to the south of the Proposed Development	Moderate not significant	Adverse	Standard best-practice construction methods. No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Moderate not significant	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
LCT 7 Rolling Moorland located approximately 440 m to the north-east of the Proposed Development LCT 7 Rolling Moorland located to the south-east of the Ayr Valley – Between approximately 1.9 km and 5 km LCT 8 iii Upland River Valley - Douglas Water located approximately 0.37 km to the south-east of the Proposed Development – Beyond approximately 5 km to the north-east LCT 8A Upland River Valley Incised located approximately 0.74 km to the south-west of the Proposed Development – Douglas Water limb	Minor moderate	Adverse	Standard best-practice construction methods. No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor moderate	Adverse
LCT 5 ii Plateau Farmland - Western Plateau: Larkhall/Lesmahagow/Coalburn – Within approximately 10km LCT 5 ii Plateau Farmland - Western Plateau: Larkhall/Lesmahagow/Coalburn – Beyond approximately 10km LCT 5B Plateau Farmland Opencast Mining LCT 7 ii Rolling Moorland - Crawfordjohn/Cairn Table (South of Douglas Water) to the south-west of the Proposed Development – Between approximately 2.1 km and 11 km	Minor	Adverse	Standard best-practice construction methods. No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
LCT 7 Rolling Moorland located approximately 2.8 km to the south-west of the Proposed Development LCT 7 Rolling Moorland located approximately 4.1 km to the south of the Proposed Development LCT 7A Rolling Moorland Forestry located approximately 0.26 km to the north of the Proposed Development LCT 7A Rolling Moorland Forestry located to the south-west of the Proposed Development – Between approximately 1.3 km and 5 km LCT 7A Rolling Moorland Forestry located to the south-west of the Proposed Development – Beyond approximately 5 km LCT 7A Rolling Moorland Forestry located approximately 2.7 km to the south of the Proposed Development LCT 9 iii Broad Valley Upland - Douglas Water located approximately 5.4 km to the north-east of the Proposed Development LCT 10 i Foothills - Carmichael/Roberton located approximately 4.6 km to the east of the Proposed Development – Between approximately 4.6 km and 8 km LCT 10 i Foothills - Carmichael/Roberton located					

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
approximately 4.6 km to the east of the Proposed Development – Beyond approximately 8 km					
LCT 8 iii Upland River Valley - Douglas Water located approximately 0.37 km to the south-east of the Proposed Development – Within approximately 5 km to the north-east	Moderate significant	Adverse	Standard best-practice construction methods. No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	**Moderate significant**	**Adverse**
Effects on Landscape Character During Hours of Darkness					
LCT 7B Rolling Moorland Windfarm. The majority of the Proposed Development is located in this LCT – Extending from the eastern edge of the LCT, west to approximately 1.4 km LCT 7 Rolling Moorland covering the south-western part of the site – *Beyond approximately 1.6 km to the north-west* LCT 7 Rolling Moorland located approximately 440 m to the north-east of the Proposed Development LCT 7 Rolling Moorland located to the south-east of the Ayr Valley – *Between approximately 1.9 km and 5 km* LCT 7 ii Rolling Moorland - Crawfordjohn/Cairn Table (South of Douglas Water) to the south-west of the Proposed Development – *Between approximately 2.1 km and 11 km*	Minor	Adverse	No additional mitigation – mitigation of effects of visible aviation lighting embedded into the design to include dimming (2000cd/200cd) when atmospheric visibility is greater than 5 km and vertical directional intensity which reduces the perceived intensity of lighting at angles below the level of the visible aviation lights.	Minor	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
LCT 7 Rolling Moorland located approximately 2.8 km to the south-west of the Proposed Development LCT 7 Rolling Moorland located approximately 4.1 km to the south of the Proposed Development LCT 7A Rolling Moorland Forestry located to the south-west of the Proposed Development – *Between approximately 1.3 km and 5 km* LCT 7A Rolling Moorland Forestry located approximately 2.7 km to the south of the Proposed Development LCT 8 iii Upland River Valley - Douglas Water located approximately 0.37 km to the south-east of the Proposed Development – *Beyond approximately 5 km to the north-east* LCT 8A Upland River Valley Incised located approximately 0.74 km to the south-west of the Proposed Development – *Douglas Water limb* LCT 8B Upland River Valley Opencast Mining located approximately 1.7 km to the south of the Proposed Development LCT 9 iii Broad Valley Upland - Douglas Water located approximately 5.4 km to the north-east of the Proposed Development					

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
LCT 10 i Foothills - Carmichael/Roberton located approximately 4.6 km to the east of the Proposed Development – Between approximately 4.6 km and 7.1 km					
LCT 5 ii Plateau Farmland - Western Plateau: Larkhall/Lesmahagow/Coalburn – *Within approximately 10 km* LCT 5 ii Plateau Farmland - Western Plateau: Larkhall/Lesmahagow/Coalburn – *Beyond approximately 10 km* LCT 5B Plateau Farmland Opencast Mining LCT 7A Rolling Moorland Forestry located approximately 0.26 km to the north of the Proposed Development LCT 7A Rolling Moorland Forestry located to the south-west of the Proposed Development – *Beyond approximately 5 km* LCT 10 i Foothills - Carmichael/Roberton located approximately 4.6 km to the east of the Proposed Development – Beyond approximately 7.1 km	Minor/no effect	Adverse	No additional mitigation – mitigation of effects of visible aviation lighting embedded into the design to include dimming (2000cd/200cd) when atmospheric visibility is greater than 5 km and vertical directional intensity which reduces the perceived intensity of lighting at angles below the level of the visible aviation lights.	Minor/no effect	Adverse
LCT 8 iii Upland River Valley - Douglas Water located approximately 0.37 km to the south-east of the Proposed	Minor moderate	Adverse	No additional mitigation – mitigation of effects of visible aviation lighting embedded into the design to include dimming (2000cd/200cd) when	Minor moderate	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
Development – *Within approximately 5 km to the north-east*			atmospheric visibility is greater than 5 km and vertical directional intensity which reduces the perceived intensity of lighting at angles below the level of the visible aviation lights.		
Effects on Visual Receptors – Representative Viewpoints During Daylight Hours					
Viewpoints 1, 2, 4, 5, 6, 8, 9, 11 and 16	Minor moderate	Adverse	No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor moderate	Adverse
Viewpoints 3, 13 and 17	Moderate significant	Adverse	No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	**Moderate significant**	**Adverse**
Viewpoints 7, 10 and 15	Minor	Adverse	No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor	Adverse
Viewpoints 12 and 18	Moderate major significant	Adverse	No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	**Moderate major significant**	**Adverse**
Viewpoint 14	Moderate not significant	Adverse	No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Moderate not significant	Adverse
Viewpoint 19	Major significant	Adverse	No additional mitigation – consideration of landscape and visual	**Major significant**	**Adverse**

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
			matters was inherent in the design process.		
Effects on Visual Receptors – Representative Viewpoints During Hours of Darkness					
Viewpoints 1, 2, 6, 7, 8 and 13	Minor	Adverse	No additional mitigation – mitigation of effects of visible aviation lighting embedded into the design to include dimming (2000cd/200cd) when atmospheric visibility is greater than 5 km and vertical directional intensity which reduces the perceived intensity of lighting at angles below the level of the visible aviation lights.	Minor	Adverse
Viewpoints 3, 18 and 19	Moderate not significant	Adverse	No additional mitigation – mitigation of effects of visible aviation lighting embedded into the design to include dimming (2000cd/200cd) when atmospheric visibility is greater than 5 km and vertical directional intensity which reduces the perceived intensity of lighting at angles below the level of the visible aviation lights.	Moderate not significant	Adverse
Viewpoints 4, 5, 11, 12, 14, 16 and 17	Minor moderate	Adverse	No additional mitigation – mitigation of effects of visible aviation lighting embedded into the design to include dimming (2000cd/200cd) when atmospheric visibility is greater than 5 km and vertical directional intensity which reduces the perceived intensity of lighting at angles below the level of the visible aviation lights.	Minor moderate	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
Viewpoint 9	Moderate minor	Adverse	No additional mitigation – mitigation of effects of visible aviation lighting embedded into the design to include dimming (2000cd/200cd) when atmospheric visibility is greater than 5 km and vertical directional intensity which reduces the perceived intensity of lighting at angles below the level of the visible aviation lights.	Moderate minor	Adverse
Viewpoints 10 and 15	No effects	N/A	No additional mitigation – mitigation of effects of visible aviation lighting embedded into the design to include dimming (2000cd/200cd) when atmospheric visibility is greater than 5 km and vertical directional intensity which reduces the perceived intensity of lighting at angles below the level of the visible aviation lights.	No effects	N/A
Effects on Visual Receptors – Properties During Daylight Hours					
P4, P6, P7, P8, P9, P7, G6	Moderate major	Adverse	No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	**Moderate major**	**Adverse**
P10, P16	Minor	Adverse	No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor	Adverse
P11, P12, P13, P14	Major	Adverse	No additional mitigation – consideration of landscape and visual	**Major**	**Adverse**

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
			matters was inherent in the design process.		
P18, G3, S1	Moderate significant	Adverse	No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	**Moderate significant**	**Adverse**
G4	Moderate not significant	Adverse	No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Moderate not significant	Adverse
Effects on Visual Receptors – Properties During Hours of Darkness					
P4, G4, S1	Minor moderate	Adverse	No additional mitigation – mitigation of effects of visible aviation lighting embedded into the design to include dimming (2000cd/200cd) when atmospheric visibility is greater than 5 km and vertical directional intensity which reduces the perceived intensity of lighting at angles below the level of the visible aviation lights.	Minor moderate	Adverse
P6, P7, P8, P9, P11, P12, P13, P14, P17, P18, G3, G6	Moderate not significant	Adverse	No additional mitigation – mitigation of effects of visible aviation lighting embedded into the design to include dimming (2000cd/200cd) when atmospheric visibility is greater than 5 km and vertical directional intensity which reduces the perceived intensity of lighting at angles below the level of the visible aviation lights.	Moderate not significant	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
P10	Minor	Adverse	No additional mitigation – mitigation of effects of visible aviation lighting embedded into the design to include dimming (2000cd/200cd) when atmospheric visibility is greater than 5 km and vertical directional intensity which reduces the perceived intensity of lighting at angles below the level of the visible aviation lights.	Minor	Adverse
P16	Minor/ no effect	Adverse	No additional mitigation – mitigation of effects of visible aviation lighting embedded into the design to include dimming (2000cd/200cd) when atmospheric visibility is greater than 5 km and vertical directional intensity which reduces the perceived intensity of lighting at angles below the level of the visible aviation lights.	Minor/ no effect	Adverse
Effects on Visual Receptors – Settlements During Daylight Hours					
Coalburn, Rigside and Douglas Water	Minor moderate	Adverse	No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor moderate	Adverse
Glespin	Moderate significant	Adverse	No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	**Moderate significant**	**Adverse**
Douglas	Moderate major significant	Adverse	No additional mitigation – consideration of landscape and visual	**Moderate major significant**	**Adverse**

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
			matters was inherent in the design process.		
Effects on Visual Receptors – Settlements During Hours of Darkness					
Glespin and Coalburn	Minor	Adverse	No additional mitigation – mitigation of effects of visible aviation lighting embedded into the design to include dimming (2000cd/200cd) when atmospheric visibility is greater than 5 km and vertical directional intensity which reduces the perceived intensity of lighting at angles below the level of the visible aviation lights.	Minor	Adverse
Douglas	Moderate not significant	Adverse	No additional mitigation – mitigation of effects of visible aviation lighting embedded into the design to include dimming (2000cd/200cd) when atmospheric visibility is greater than 5 km and vertical directional intensity which reduces the perceived intensity of lighting at angles below the level of the visible aviation lights.	Moderate not significant	Adverse
Rigside and Douglas Water	Minor moderate	Adverse	No additional mitigation – mitigation of effects of visible aviation lighting embedded into the design to include dimming (2000cd/200cd) when atmospheric visibility is greater than 5 km and vertical directional intensity which reduces the perceived intensity of lighting at angles below the level of the visible aviation lights.	Minor moderate	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
Effects on Visual Receptors – Core Paths During Daylight Hours					
South Lanarkshire core paths A70 Millbank to Douglas and Lanark to Douglas cycle route comprising: CL/3323/5, CL/3328/1, CL/3323/2, CL/3323/2, CL/3323/3, CL/3323/4 South Lanarkshire core paths within Douglas Estate comprising: CL/3330/1, CL/3331/1, CL/3332/1, CL/3333/1, CL/3334/1, CL/3335/1, CL/3337/1, CL/3338/1, CL/3339/1, CL/3330/1 *Remaining parts of this group of core paths* South Lanarkshire core paths leading towards Hagshaw Hill Wind Farm comprising: CL/3460/2, CL/3457/1, CL/3458/1, CL/3461/1, CL/3459/1, CL/3460/1 *Approximate remaining 4.7 km of the routes*	Moderate not significant	Adverse	No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Moderate not significant	Adverse
South Lanarkshire core paths following part of the NCN 74 comprising: CL/3319/1, CL/3321/1, CL/3322/1, CL/3323/1, CL/3323/2, CL/3323/3, CL/3462/1, CL/3462/2, CL/3463/1, CL/3463/2, CL/3463/3, CL/3463/4, CL/3463/5	Minor	Adverse	No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
South Lanarkshire core paths within Douglas Estate comprising: CL/3330/1, CL/3331/1, CL/3332/1, CL/3333/1, CL/3334/1, CL/3335/1, CL/3337/1, CL/3338/1, CL/3339/1, CL/3330/1 *Approximate 1.4 km section of CL3339/1, and CL3335/1 north of Douglas Water*	Moderate significant	Adverse	No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	**Moderate significant**	**Adverse**
South Lanarkshire core paths in the vicinity of Douglas comprising: CL/3202/1, CL/3202/2, CL/3202/3, CL/3202/4, CL/3329/1, CL/3336/1, CL/3341/1, CL/3342/1, CL/3343/1, CL/3343/2, CL/3344/1, CL/3344/2, CL/3345/1, CL/3346/1, CL/3347/1, CL/3348/1, CL/3349/1, CL/3450/1, CL/3451/1 *Approximate 0.35 km section of CL/3450/1 at the north-west corner of Windrow Wood*	Major significant	Adverse	No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	**Major significant**	**Adverse**
South Lanarkshire core paths in the vicinity of Douglas comprising: CL/3202/1, CL/3202/2, CL/3202/3, CL/3202/4, CL/3329/1, CL/3336/1, CL/3341/1, CL/3342/1, CL/3343/1, CL/3343/2, CL/3344/1, CL/3344/2, CL/3345/1, CL/3346/1, CL/3347/1, CL/3348/1, CL/3349/1, CL/3450/1, CL/3451/1	Moderate major significant	Adverse	No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	**Moderate major significant**	**Adverse**

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
Approximate 0.5 km section of CL3346/1 near Scrogtonhead Farm and approximate 0.6 km section of CL/3451/1 near Hazelside South Lanarkshire core paths leading towards Hagshaw Hill Wind Farm comprising: CL/3460/2, CL/3457/1, CL/3458/1, CL/3461/1, CL/3459/1, CL/3460/1 *Approximate 1.1 km section along the site boundary at Broadlea Burn* South Lanarkshire core paths leading towards Hagshaw Hill Wind Farm comprising: CL/3460/2, CL/3457/1, CL/3458/1, CL/3461/1, CL/3459/1, CL/3460/1 *Approximate 2 km section at Broadlea Burn to Arkney Hill and the northern site boundary at T1* South Lanarkshire core paths following the disused railway between Douglas and Glespin comprising: CL/3453/1, CL/3454/1, CL/3455/1, CL/3456/1, CL/3452/1 *Approximate 1.5 km section to the north-east of Glespin*					
South Lanarkshire core paths following the disused railway between Douglas and Glespin comprising:	Major significant	Adverse	No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	**Major significant**	**Adverse**

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
CL/3453/1, CL/3454/1, CL/3455/1, CL/3456/1, CL/3452/1 *Approximate 1.3 km section as the route passes through the eastern site boundary*					
South Lanarkshire core paths following the disused railway between Douglas and Glespin comprising: CL/3453/1, CL/3454/1, CL/3455/1, CL/3456/1, CL/3452/1 *Approximate 2.2 km section to the south-west of Glespin*	Minor moderate	Adverse	No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor moderate	Adverse
Effects on Visual Receptors – Core Paths During Hours of Darkness					
Effects on Core Paths during the hours of darkness.	Worst-case moderate not significant	Adverse	No additional mitigation – mitigation of effects of visible aviation lighting embedded into the design to include dimming (2000cd/200cd) when atmospheric visibility is greater than 5 km and vertical directional intensity which reduces the perceived intensity of lighting at angles below the level of the visible aviation lights.	Worst-case moderate not significant	Adverse
Effects on Visual Receptors – Roads During Daylight Hours					
M74 Southbound from Larkhall: *Approximate 6.4 km section between Larkhall and Blackwood* *Approximate 3.4 km section through Middle Clyde Valley SLA* M74 Northbound from Abington:	Negligible	Adverse	No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Negligible	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
Approximate 2.4 km to the west north-west of White Rig A70 travelling north-east from Cumnock: *Approximate 3.9 km section through Muirkirk*					
M74 Southbound from Larkhall: *Approximate 5.8 km section between Auldton Farm and Nether Fauldhouse* *Approximate 3.4 km section through Douglas Valley SLA* M74 Northbound from Abington: *Approximate 1.7 km to the west north-west of Wedder Law* A70 travelling north-east from Cumnock: *Approximate 1.0 km section through East Ayrshire Uplands and Moorlands LLA* A70 travelling south-west from Carstairs: *Approximate 4.7 km section through Rigside*	Minor	Adverse	No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor	Adverse
A70 travelling north-east from Cumnock *Approximate 1.9 km section between Debog and Monksfoot*	Minor to minor moderate	Adverse	No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor to minor moderate	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
A70 travelling north-east from Cumnock: *Approximate 1.4 km section from Kennoxhead Farm to NE edge of Glespin* B7078: *Approximate 4.3 km section to the south of Lesmahagow*	Minor moderate	Adverse	No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor moderate	Adverse
A70 travelling north-east from Cumnock *Approximate 3.1 km section between Glespin and Douglas, within Douglas Valley SLA*	Moderate significant	Adverse	No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	**Moderate significant**	**Adverse**
A70 travelling south-west from Carstairs *Approximate 6.3 km section between Carstairs and Hyndford Bridge*	Minor to Negligible	Adverse	No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor to Negligible	Adverse
A70 travelling south-west from Carstairs *Approximate 4.3 km section through Upper Clyde Valley and Tinto SLAs*	Minor moderate to Minor	Adverse	No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Minor moderate to Minor	Adverse
A70 travelling south-west from Carstairs *Approximate 5.2 km section between Rigside and Douglas, within Douglas Valley SLA*	Moderate not significant	Adverse	No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Moderate not significant	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
Effects on Visual Receptors – Roads During Hours of Darkness					
Effects on roads during the hours of darkness.	Worst-case moderate not significant	Adverse	No additional mitigation – mitigation of effects of visible aviation lighting embedded into the design to include dimming (2000cd/200cd) when atmospheric visibility is greater than 5 km and vertical directional intensity which reduces the perceived intensity of lighting at angles below the level of the visible aviation lights.	Worst-case moderate not significant	Adverse
Effects on Visual Receptors – Douglas Valley Special Landscape Area (SLA)					
Effects to the landscape and visual qualities of the SLA during daylight hours.	Significant but localised extending to 5 km to the north-east of the Proposed Development	Adverse	No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	**Significant but localised**	**Adverse**
Effects to the landscape and visual qualities of the SLA during hours of darkness.	Moderate not significant	Adverse	No additional mitigation – mitigation of effects of visible aviation lighting embedded into the design to include dimming (2000cd/200cd) when atmospheric visibility is greater than 5 km and vertical directional intensity which reduces the perceived intensity of lighting at angles below the level of the visible aviation lights.	Moderate not significant	Adverse
Chapter 7: Ecology					
Bats (high collision risk species: common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle and *Nyctalus* spp.)	Not significant	Minor adverse	N/A	Not significant	Minor adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
Fatality through barotrauma or collision.					
Chapter 8: Ornithology					
Black grouse – displacement	Minor	Adverse	No mitigation above and beyond embedded mitigation required. Additional enhancement via the implementation of a BEMP which includes management and restoration of moorland habitats and riparian planting.	Minor	Beneficial
Goshawk – displacement	Negligible	Adverse	No mitigation required.	Negligible	Adverse
Curlew – displacement	Negligible	Adverse	No mitigation above and beyond embedded mitigation required. Additional enhancement via the implementation of a BEMP which includes management and restoration of moorland habitats.	Minor	Beneficial
Golden plover – displacement	Negligible	Adverse	No mitigation required.	Negligible	Adverse
Black grouse – collision risk	Negligible	Adverse	Marking of fencing and guy wires to reduce collision risks. Additional enhancement via the implementation of a BEMP which includes management and restoration of moorland habitats and riparian planting.	Negligible	Adverse
Goshawk – collision risk	Negligible	Adverse	No mitigation required.	Negligible	Adverse
Curlew – collision risk	Negligible	Adverse	No mitigation above and beyond embedded mitigation required. Additional enhancement via the	Negligible	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
			implementation of a BEMP which includes management and restoration of moorland habitats		
Golden plover – collision risk	Negligible	Adverse	No mitigation required.	Negligible	Adverse
Chapter 9: Geology, Hydrology, Hydrogeology & Peat					
Generation of pollution impairing surface water, groundwater, licenced water abstractions and water dependent designated sites.	Negligible	Adverse	Adherence to good practice measures adopted through an Operations Environmental Management Plan (OEMP), incorporating appropriate storage and handling of potential pollutants in accordance with the EASR. Commitment to adopt an appropriate drainage design at the LDES which includes firewater management.	Negligible	Beneficial
Erosion and sedimentation impairing surface water, groundwater, and licenced water abstractions.	Negligible	Adverse	Adherence to good practice measures, utilising appropriate drainage design that incorporates sediment management measures. Adopted through a OEMP and post construction monitoring programme.	Negligible	Beneficial
Increased flood risk to downstream receptors during operation.	Negligible	Adverse	Inspection of the operational drainage system and maintenance of the drainage design agreed with SLC at the detailed design stage. Commitment to ensure all watercourse crossings are designed in accordance with good practice and construction details are agreed with SEPA prior to construction.	Negligible	Beneficial

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
			Commitment to regularly remove blockages from watercourse crossings and regular maintenance of any SuDS.		
Potential impacts on surface water and groundwater levels and flow which may affect water contribution to areas of peat, GWDTE, and licenced abstractions.	Negligible	Adverse	Adherence to good practice measures adopted through a longer-term OEMP and adoption of appropriate drainage plan.	Negligible	Beneficial
Generation of pollution impairing surface water, groundwater, and licenced water abstractions water.	Negligible	Adverse	Adherence to good practice measures incorporating appropriate storage and handling of potential pollutants in accordance with the EASR.	Negligible	Beneficial
Chapter 10: Cultural Heritage					
Impacts on the settings of designated heritage assets and nationally and regionally significant non-designated heritage assets within the Inner and Outer Study Areas	Negligible to Minor	Adverse	N/A	Negligible to Minor	Adverse
Chapter 11: Noise & Vibration					
Operational noise from wind turbines	Not significant	Adverse	None required.	Not significant	Adverse
Operational noise from fixed non-turbine plant	Not significant	Adverse	None required.	Not significant	Adverse
Chapter 12: Access, Traffic & Transport					
Scoped-out of assessment.					

Table 14.3 – Summary of Cumulative Effects

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
Chapter 6: Landscape and Visual					
Cumulative landscape character effects	Worst-case moderate not significant - LCT 8 Upland River Valley iii Douglas Water	Adverse	No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	Worst-case moderate not significant - LCT 8 Upland River Valley iii Douglas Water	Adverse
Totality of cumulative landscape character effects	Worst-case moderate major significant - LCT 8 Upland River Valley iii Douglas Water	Adverse	No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	**Worst-case moderate major significant - LCT 8 Upland River Valley iii Douglas Water**	**Adverse**
Cumulative visual effects	Worst-case moderate major significant – Viewpoint 19	Adverse	No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	**Worst-case moderate major significant – Viewpoint 19**	**Adverse**
Cumulative effects on Settlements	Worst-case moderate significant – Douglas	Adverse	No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	**Worst-case moderate significant – Douglas**	**Adverse**
Cumulative sequential visual effects	The Proposed Development would not introduce a cumulative sequential significant visual effect		No additional mitigation – consideration of landscape and visual matters was inherent in the design process.	No change	Adverse
Totality of cumulative visual effects	Worst-case major significant - Viewpoints 3, 12,	Adverse	No additional mitigation – consideration of landscape and visual	**Worst-case major significant - Viewpoints 3, 12,**	**Adverse**

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
	13 (Glespin), 18 (Douglas), 19, the section of the A70 between Glespin and Douglas, and core paths in the vicinity of Viewpoint 3 at Douglas Castle.		matters was inherent in the design process.	**13 (Glespin), 18 (Douglas), 19, the section of the A70 between Glespin and Douglas, and core paths in the vicinity of Viewpoint 3 at Douglas Castle.**	
Chapter 7: Ecology					
None identified.					
Chapter 8: Ornithology					
Impacts on curlew.	Minor	Adverse	None required.	Minor	Adverse
Chapter 9: Geology, Hydrology, Hydrogeology & Peat					
No cumulative effects are anticipated as a result of the Proposed Development.					
Chapter 10: Cultural Heritage					
Impacts on the settings of designated heritage assets and nationally and regionally significant non-designated heritage assets within the Inner and Outer Study Areas	Negligible to Minor	Adverse	N/A	Negligible to Minor	Adverse
Chapter 11: Noise & Vibration					
Operational noise from wind turbines	Not significant	Adverse	Implementation of noise management strategy.	Not significant	Adverse
Chapter 12: Access, Traffic & Transport					
Severance	Negligible	Adverse		Negligible	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect	
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse
Road Vehicle Driver and Passenger Delay	Negligible	Adverse	No mitigation required, but CTMP would be prepared.	Negligible	Adverse
Non-Motorised User Delay	Negligible	Adverse		Negligible	Adverse
Non-Motorised User Amenity	Negligible	Adverse		Negligible	Adverse
Fear and Intimidation of and by Road Users	Negligible	Adverse		Negligible	Adverse
Road User and Pedestrian Safety	Negligible	Adverse		Negligible	Adverse
Hazardous / Large Loads	Negligible	Adverse		Negligible	Adverse