

# 18 Summary of Residual Effects

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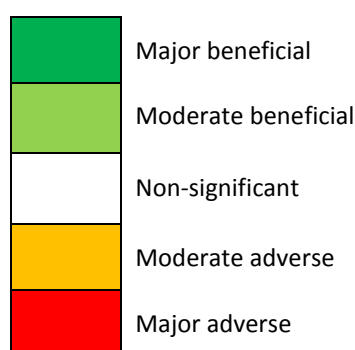
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# 18 Summary of Residual Effects

## 18.1 Introduction

18.1.1 Tables 18.1 and 18.2 provide a quick reference to the significant residual environmental effects identified in the technical sections of this Environmental Statement (ES), as well as a cross reference to the relevant mitigation measures identified.

18.1.2 The significant residual effects are highlighted in a “traffic light” formula for easy identification of beneficial and adverse effects as shown below.



18.1.3 The final column on Tables 18.1 and 18.2 provides a quick reference of the changes to the residual effects identified for the Consented Development and the Revised Development.

18.1.4 Table 18.3 provides a summary of the cumulative effects of the Revised Development in combination with other proposed, consented and operation developments within the area.

Table 18.1 - Summary of Residual Effects – Construction and Decommissioning/Restoration Phases

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		Comparison with the Consented Development
	Significance	Beneficial/ Adverse		Significance	Beneficial/ Adverse	
<b>Landscape and Visual</b>						
<i>Landscape Character</i>						
Landscape Character Types and Sub-Types	Worst-case additional Minor	Adverse	N/A	Worst-case additional Minor	Adverse	No Change
<i>Visual Receptors</i>						
Visual receptors within the study area	Worst-case additional Minor	Adverse	N/A	Worst-case additional Minor	Adverse	No Change
<b>Ecology and Nature Conservation</b>						
Direct and indirect habitat loss to wet heath	Minor and Not Significant	Adverse	Restoration/ enhancement of habitats (Appendix 7.8).	Negligible	Neutral	No Change
<b>Ornithology</b>						
<i>Geese</i>						
Construction disturbance	Minor	Adverse	N/A	Minor	Adverse	No Change
Habitat loss	Negligible	Neutral		Negligible	Neutral	No Change
<i>Black Grouse</i>						
Construction disturbance	Minor	Adverse	Pre-construction surveys; spatial and temporal restrictions around lek sites	Negligible	Neutral	No Change
Habitat loss	Negligible	Neutral		Negligible	Neutral	No Change
<i>Hen harrier</i>						
Construction disturbance	Minor	Adverse	N/A	Minor	Adverse	No Change

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		Comparison with the Consented Development
	Significance	Beneficial/ Adverse		Significance	Beneficial/ Adverse	
Habitat loss	Minor	Adverse		Minor	Adverse	No Change
<b>Waders</b>						
Construction disturbance	Minor	Adverse	N/A-	Minor	Adverse	No Change
Habitat loss	Minor	Adverse		Minor	Adverse	No Change
<b>Noise and Vibration</b>						
Construction /Decommissioning site noise	Not significant	Adverse	Contractor will be required to comply with the Construction (and Decommissioning) Environmental Management Plan (CEMP), requiring work to be undertaken in accordance with current best-practice, and pre-defined working hours.	Not significant	Adverse	No Change
<b>Cultural Heritage</b>						
Sites (1, 3, 6 -16) – No direct impact	Negligible	Neutral	N/A	Negligible	Neutral	No material difference. There are 13 sites which will not be directly impacted by the Revised Development. This compares with 15 sites which would not be directly impacted by the Consented Development, although this total includes Sites (17)

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		Comparison with the Consented Development
	Significance	Beneficial/ Adverse		Significance	Beneficial/ Adverse	
						and (18) which have been regraded as their exact location is unknown (below).
Site (5) - Potential direct impact: Located near proposed infrastructure works	Minor	Adverse	Sites delineated and marked prior to excavation works to avoid damage	Negligible	Neutral	No material difference.
Sites (2, 4 and 22) - Direct impact: Cut by site infrastructure	Minor	Adverse	An archaeological watching brief will be maintained during all ground breaking works in the vicinity of these monuments. This will ensure these are adequately recorded prior to, and during, any disruption.  Those areas of the affected sites which will remain unaffected by development will be appropriately delineated to avoid unnecessary disturbance.	Negligible	Adverse	3 sites will be directly impacted by the Revised Development, compared to 2 for the Consented Development as infrastructure now impacts upon Site 2.  The impact upon Site 4 is likely to be less for the Revised Development as only one of the two recorded enclosures will be directly affected.
Sites (17 and 18) – Potential direct impact. Exact location of these sites is unknown	Minor	Adverse	An archaeological watching brief will be maintained during all ground breaking works across the southern part of the site, ensuring that any	Negligible	Adverse	No material difference.

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		Comparison with the Consented Development
	Significance	Beneficial/ Adverse		Significance	Beneficial/ Adverse	
			direct impact upon these monuments will be identified and adequately recorded.			
Site (19) – Potential direct impact. Exact location of site is unknown, although this area was likely disturbed by coal extraction	Minor	Adverse	During site works associated with the installation of the site compounds, an archaeological watching brief will be maintained should this area be shown to be undisturbed.	Negligible	Adverse	No material difference.
Sites (20 and 21) – No direct impact: Although exact location is unknown, sites likely removed by coal extraction	Negligible	Adverse	It is almost certain these areas have been compromised by coal extraction. However, the Contractor will be issued with guidance and a toolbox talk about how to react should archaeological remains be encountered during works in this area of the site.	Negligible	Neutral	No material difference.
Direct impact: Potential for damage to previously unrecorded features	Moderate	Adverse	An archaeological watching brief will be maintained during all ground breaking works across those areas of the site unaffected by opencast mining.  This will ensure any previously unrecorded archaeological deposits are identified and recorded.	Minor	Adverse	No material difference.  The potential for damage to unrecorded archaeological deposits remains the same for both the Revised Development and the Consented Development.
<b>Geology, Hydrology and Hydrogeology</b>						
Pollution impact from sediment run-off	Major	Adverse	50 m buffer around watercourses. Water quality monitoring.	Minor	Adverse	No Change

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		Comparison with the Consented Development
	Significance	Beneficial/ Adverse		Significance	Beneficial/ Adverse	
			Pre-construction site investigations. CEMP, construction site management and pollution management plans.			
Pollution impact from chemical contaminated run-off	Major	Adverse	50 m buffer around watercourses for new infrastructure where practical. Water quality monitoring. CEMP and construction site management. Micro-siting of concrete batching area, with no batching activities, concrete transfer between vehicles or into vehicles taking place within 30 m of watercourses and water bodies.	Minor	Adverse	No Change
Impact from soil compaction	Moderate	Adverse	Detailed ground investigations and micro siting away from sensitive areas. Stripped soils will be stored in temporary windrows on either side of the road, and then used in forming soft verges to roads, or to improve soil cover on the previously opencast areas within the site. The CEMP will include a requirement for defined and delineated working areas for heavy machinery to avoid unnecessary compaction of soils.	Negligible	Neutral	No Change
Impact on the integrity of banking	Major	Adverse	CEMP (including water-crossing design) and construction site management plan.	Negligible	Adverse	No Change
Direct discharge of untreated foul drainage	Major	Adverse	50m buffer around watercourses.	Minor	Adverse	No Change



Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		Comparison with the Consented Development
	Significance	Beneficial/ Adverse		Significance	Beneficial/ Adverse	
			Water quality monitoring. CEMP and construction site management. Welfare facilities will be approved by Scottish Water and SEPA.			
<b>Transport and Traffic</b>						
Traffic impact during construction and decommissioning	Negligible	Adverse	Construction Traffic Management Plan	Negligible	Adverse	No Change
<b>Socio-Economic (Bold text indicates a Significant Effect)</b>						
Effect on local tourism sector due to additional expenditure by workers during the construction phase.	Negligible	Beneficial	n/a	Negligible	Beneficial	No Change
Effect of expenditure of workers in tourism businesses within 5km of the Revised Development during the construction phase.	Moderate	Beneficial	n/a	<b>Moderate</b>	<b>Beneficial</b>	No Change
Effect on national economy of construction related expenditure.	Negligible	Beneficial	n/a	Negligible	Beneficial	No Change
Effect on regional/local economy of construction related expenditure.	Moderate	Beneficial	n/a	<b>Moderate</b>	<b>Beneficial</b>	No Change
Effect of decommissioning expenditure on regional/national/local economy	Negligible/ Minor	Beneficial	n/a	Negligible/ Minor	Beneficial	No Change
<b>Aviation, Radar and Telecommunication</b>						
Effects on aviation, radar and telecommunication interests during construction and decommissioning	Negligible	Neutral	Aviation lighting will be installed if requested by the MoD.	Negligible	Neutral	No Change

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		Comparison with the Consented Development
	Significance	Beneficial/ Adverse		Significance	Beneficial/ Adverse	
<b>Shadow Flicker</b>						
No effects anticipated during construction or decommissioning.						No Change

**Table 18.2 - Summary of Residual Effects – Operation**

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		Comparison with the Consented Development
	Significance	Beneficial/ Adverse		Significance	Beneficial/ Adverse	
<b>Landscape and Visual (Bold text indicates a Significant Effect)</b>						
<i>Landscape Character</i>						
5. Plateau Farmland	<b>Moderate (up to approx 4km)</b>	<b>Adverse</b>	<b>N/A</b>	<b>Moderate (Up to approx 4km)</b>	<b>Adverse</b>	No Change
	Moderate (approx 4km -7km)	Adverse	N/A	Moderate (Approx 4km - 7km)	Adverse	No Change
	Moderate/ Minor (Over 7km)	Adverse	N/A	Moderate/ Minor (Over 7km)	Adverse	No Change
5B. Plateau Farmland Opencast Mining	<b>Moderate</b>	<b>Adverse</b>	<b>N/A</b>	<b>Moderate</b>	<b>Adverse</b>	No Change
6. Plateau Moorland	<b>Moderate</b>	<b>Adverse</b>	<b>N/A</b>	<b>Moderate</b>	<b>Adverse</b>	No Change
7. Rolling Moorland	<b>Major/Moderate (area within which the Revised Development is partially located)</b>	<b>Adverse</b>	<b>N/A</b>	<b>Major/ Moderate (area within which the Revised Development is partially located)</b>	<b>Adverse</b>	No Change

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		Comparison with the Consented Development
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse	
	Moderate (area 3-6km south east and 6-10km south west)	Adverse	N/A	Moderate (area 3-6km south east and 6-10km south west)	Adverse	No Change
8. Upland River Valley	No Effect (Douglas Water Valley - within 1.5km)	N/A	N/A	No Effect (Douglas Water Valley - within 1.5km)	N/A	No Change
	<b>Major/Moderate (Douglas Water Valley - south east of the Douglas Water and where vegetation or buildings do not obstruct views of the turbines)</b>	Adverse	N/A	<b>Major/Moderate (Douglas Water Valley - south east of the Douglas Water and where vegetation or buildings do not obstruct views of the turbines)</b>	Adverse	No Change

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		Comparison with the Consented Development
	Significance	Beneficial/ Adverse		Significance	Beneficial/ Adverse	
	Moderate (Douglas Water Valley – Douglas village and River Nethan Valley – within 3km)	Adverse		Moderate (Douglas Water Valley – Douglas village and River Nethan Valley – within 3km)	Adverse	No Change
	Moderate/ Minor (River Nethan Valley – beyond 3km)	Adverse		Moderate/ Minor (River Nethan Valley – beyond 3km)	Adverse	No Change
9. Broad Valley Upland	Moderate (up to 5km)	Adverse	N/A	Moderate (up to 5km)	Adverse	No Change
	Moderate/ Minor (over 5km)	Adverse	N/A	Moderate/ Minor (over 5km)	Adverse	No Change
10. Foothills	Moderate (up to 5km)	Adverse	N/A	Moderate (up to 5km)	Adverse	No Change
	Moderate/ Minor (over 5km)	Adverse	N/A	Moderate/ Minor (over 5km)	Adverse	No Change

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		Comparison with the Consented Development
	Significance	Beneficial/ Adverse		Significance	Beneficial/ Adverse	
<b>Representative Viewpoints</b>						
Viewpoints 1 and 3	Major	Adverse	N/A	Major	Adverse	No Change
Viewpoint 4	Major	Adverse	N/A	Major	Adverse	Change from Moderate/ Major to Major
Viewpoint 13	Moderate/ Major	Adverse	N/A	Moderate/ Major	Adverse	No Change
Viewpoints 2 and 5	Moderate	Adverse	N/A	Moderate	Adverse	No Change
Viewpoints 6, 7, 9 and 20	Moderate	Adverse	N/A	Moderate	Adverse	No Change
Viewpoint 8	Moderate/ Minor to Moderate	Adverse	N/A	Moderate/ Minor to Moderate	Adverse	Change from Moderate/ Minor to Moderate/ Minor to Moderate
Viewpoints 10, 11, 14 and 15	Moderate/ Minor	Adverse	N/A	Moderate/ Minor	Adverse	No Change
Viewpoint 12	Minor to Moderate/ Minor	Adverse	N/A	Minor to Moderate/ Minor	Adverse	Change from Minor to Minor to Moderate/ Minor
Viewpoints 16, 17, 18 and 19	Minor	Adverse	N/A	Minor	Adverse	No Change

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		Comparison with the Consented Development
	Significance	Beneficial/ Adverse		Significance	Beneficial/ Adverse	
<b>Residential Amenity and Settlements</b>						
West Toun House, Westerhouse, and Craigend	Moderate	Adverse	N/A	Moderate	Adverse	No Change
Blackwood Cottage and Station House	Moderate	Adverse	N/A	Moderate	Adverse	Change from a Moderate and Not Significant effect to a Moderate and Significant effect
3 Westoun Steadings	Moderate/ Minor	Adverse	N/A	Moderate/ Minor	Adverse	No Change
1 Westoun Steadings	Moderate/ Minor	Adverse	N/A	Moderate/ Minor	Adverse	Change from Minor to Moderate/Minor
Some properties located within 1.2 km and 2 km	<b>Worst-case Moderate/ Major</b>	<b>Adverse</b>	<b>N/A</b>	<b>Worst-case Moderate/M ajor</b>	<b>Adverse</b>	No Change
Parts of Coalburn and Braehead	<b>Worst-case Major</b>	<b>Adverse</b>	<b>N/A</b>	<b>Worst-case Major</b>	<b>Adverse</b>	No Change
Parts of Douglas	<b>Worst-case Moderate/ Major</b>	<b>Adverse</b>	<b>N/A</b>	<b>Worst-case Moderate/M ajor</b>	<b>Adverse</b>	No Change

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		Comparison with the Consented Development
	Significance	Beneficial/ Adverse		Significance	Beneficial/ Adverse	
<b>Routes</b>						
B7078 between the southern edge of Lesmahagow and Junction 11 of the M74	<b>Moderate</b>	<b>Adverse</b>	<b>N/A</b>	<b>Moderate</b>	<b>Adverse</b>	No Change
NCN74 between the southern edge of Lesmahagow and Junction 11 of the M74	<b>Moderate</b>	<b>Adverse</b>	<b>N/A</b>	<b>Moderate</b>	<b>Adverse</b>	Not previously assessed as particular part of route not in existence
Other Routes within the Study Area	No greater than Moderate	Adverse	N/A	No greater than Moderate	Adverse	No Change
Unnamed Aspirational Core Paths and Wider Network Path (running through the site between Coalburn and the dismantled railway on the coal haul road, originating at the end of Core Path CL /5735/3, and located in close proximity to T1 and T2)	<b>Worst-case Major</b>	<b>Adverse</b>	<b>N/A</b>	<b>Worst-case Major</b>	<b>Adverse</b>	No Change
Parts of Core Paths CL/5734/1, CL5735/1, CL5735/2, CL5/5735/3, CL/3457/1, CL5192/4, CL/5192/3 and CL/5192/1	<b>Worst-case Major</b>	<b>Adverse</b>	<b>N/A</b>	<b>Worst-case Major</b>	<b>Adverse</b>	No Change
Parts of Core Paths CL/3332/1 and CL/3334/1	<b>Moderate/ Major</b>	<b>Adverse</b>	<b>N/A</b>	<b>Moderate/Major</b>	<b>Adverse</b>	No Change



Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		Comparison with the Consented Development
	Significance	Beneficial/ Adverse		Significance	Beneficial/ Adverse	
Other Core Paths, Aspirational Core Paths and Wider Network Paths within the study area	Worst-case Moderate	Adverse	N/A	Worst-case Moderate	Adverse	No Change
<b>Recreation and Tourism</b>						
Parts of Douglas Castle Grounds Recreational Area	<b>Worst-case Major</b>	<b>Adverse</b>	<b>N/A</b>	<b>Worst-case Major</b>	<b>Adverse</b>	No Change
Open Space at Former Dalquhandy Opencast Site	<b>Worst-case Major</b>	<b>Adverse</b>	<b>N/A</b>	<b>Worst-case Major</b>	<b>Adverse</b>	No Change
<b>Ecology and Nature Conservation</b>						
Collision risk/barotrauma to bats	For medium risk <i>Pipistrelle</i> sp. bats: minor	Adverse	Avoidance of linear features (design mitigation) NB. Already factored into original assessment.	For medium risk <i>Pipistrelle</i> sp. bats: minor	Adverse	No Change
	<i>Nyctalus</i> sp.: minor	Adverse		<i>Nyctalus</i> sp.: minor	Adverse	Change from negligible to minor
	<i>Myotis</i> sp.: negligible.	Neutral		<i>Myotis</i> sp.: negligible.	Neutral	No Change
<b>Ornithology</b>						
<b>Geese</b>						
Operational disturbance and displacement	Negligible	Neutral	N/A	Negligible	Neutral	No Change

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		Comparison with the Consented Development
	Significance	Beneficial/Adverse		Significance	Beneficial/Adverse	
Collision risk	Negligible	Neutral		Negligible	Neutral	No Change
<b>Black grouse</b>						
Operational disturbance and displacement	Minor	Adverse	Additional Habitat Enhancement to the west of the site.	Negligible	Neutral	No Change
Collision risk	Negligible	Neutral	N/A	Negligible	Neutral	No Change
<b>Hen harrier</b>						
Operational disturbance and displacement	Minor	Adverse	N/A	Minor	Adverse	No Change
Collision risk	Minor	Adverse		Minor	Adverse	No Change
<b>Waders</b>						
Operational disturbance and displacement	Minor	Adverse	Habitat management cross the site.	Minor	Adverse	No Change
Collision risk	Negligible	Neutral	N/A	Negligible	Neutral	No Change
<b>Noise and Vibration</b>						
Operational noise	Not Significant	Adverse	Operational monitoring to ensure compliance, with the option of selective constraint of turbine operation if found to be a requirement.	Not Significant	Adverse	No Change
<b>Cultural Heritage</b>						
Site (23/26) - Indirect impact: St Bride's Chapel /Church	Minor	Adverse	Continued presence of vegetation both within the curtilage of the monument, and on the Long Plantation between the monument and the Revised Development.	Minor	Adverse	No material difference. Nine turbine hubs are theoretically visible from both

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		Comparison with the Consented Development
	Significance	Beneficial/ Adverse		Significance	Beneficial/ Adverse	
			Residual impact offset by promoting the monument as part of the Heritage Trail being developed.			the Consented and the Revised Development.  The blades of four turbines will be theoretically visible from the Revised Development, as opposed to three theoretically visible from the Consented Development.
Site (24, 34 & 37) - No indirect impact/ intervisibility with the Revised Development.	None	Neutral	N/A	None	Neutral	No change.
Site (25) – Indirect impact: Douglas, Monument to James, Earl of Angus	Minor	Adverse	Continued presence of vegetation both immediately adjacent to the monument, and on the Long Plantation between the monument and the Revised Development.	Minor	Adverse	No material difference.  Seven turbine hubs and 4 blades will be theoretically visible from both the Consented and the Revised Developments.
Site (27 to 33, 35, 36, and 38): Indirect impact.	Negligible	Neutral	N/A	Negligible	Neutral	No material difference.

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		Comparison with the Consented Development
	Significance	Beneficial/ Adverse		Significance	Beneficial/ Adverse	
						<p>The Consented Development was theoretically visible from nine sites in the Middle Study Area.</p> <p>The Revised Development will be theoretically visible from ten sites in the Middle Study Area.</p>
<b>Geology, Hydrology and Hydrogeology</b>						
Surface water drainage	Major	Adverse	Site design, including drainage design. 50 m buffer around watercourses.	Minor	Negligible	No Change
Fluvial Geomorphology	Major	Adverse	Site design, including drainage design and CAR authorisations will be agreed with SEPA prior to construction in order to ensure that impacts are minimised.	Negligible	Adverse	No Change
Direct discharge of untreated foul drainage	Major	Adverse	Installation of septic tank in line with manufacturer's recommendations. Regular cleaning and maintenance.	Negligible	Adverse	No Change
Pollution Impact from Chemical Contaminated Runoff	Major	Adverse	Appropriately impermeable bunded fuelling and chemical storage areas. All staff trained in emergency clean up procedures.	Negligible	Adverse	No Change

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		Comparison with the Consented Development
	Significance	Beneficial/ Adverse		Significance	Beneficial/ Adverse	
			Regular maintenance of vehicles and equipment to minimise risk of leaks to soil and surface waters.			
<b>Transport and Traffic</b>						
Traffic impact during operation	Negligible	Adverse	Construction Traffic Management Plan	Negligible	Adverse	No Change
<b>Socio-Economic (Bold text indicates a Significant Effect)</b>						
Effect on national/regional economy of operational expenditure.	Negligible/ Minor	Beneficial	n/a	Negligible/ Minor	Beneficial	No Change
Effect on local economy of operational expenditure.	Moderate	Beneficial	n/a	<b>Moderate</b>	<b>Beneficial</b>	No Change
Effect of community benefit funding on local economic opportunities during the operational phase.	Moderate	Beneficial	n/a	<b>Moderate</b>	<b>Beneficial</b>	No Change
Effect of additional tourism visitors attracted to the area by the development of a new Heritage Trail on local tourism sector during the operational phase.	Moderate	Beneficial	n/a	<b>Moderate</b>	<b>Beneficial</b>	No Change
Effect on turnover of tourist accommodation providers due to changes in visitor behaviour.	Minor-negligible	Adverse	n/a	Minor-negligible	Adverse	No Change
Effect on amenity value of local leisure assets.	Negligible	Adverse	n/a	Negligible	Adverse	No Change
Effect on visitor numbers to local tourist attractions.	Minor-negligible	Adverse	n/a	Minor-negligible	Adverse	No Change

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		Comparison with the Consented Development
	Significance	Beneficial/ Adverse		Significance	Beneficial/ Adverse	
Effect on number of tourists using tourist routes in the local area.	Minor-negligible	Adverse	n/a	Minor-negligible	Adverse	No Change
<b>Aviation, Radar and Telecommunications</b>						
Effects on telecommunications and TV reception during the operational period	Negligible	Neutral	n/a	Negligible	Neutral	No Change
Effects on MoD low flying interests during the operational period	Negligible	Neutral	Aviation lighting will be installed if requested by the MoD.	Negligible	Neutral	No Change
Effects on NATS infrastructure during the operational period	Major	Adverse	Mitigation measure agreed between the Applicant and NATS	Negligible	Neutral	No Change
<b>Shadow Flicker</b>						
Shadow Flicker effects on 6 nearby residential properties	Negligible	Adverse	Implementation of a Shadow Flicker Protocol to be agreed with South Lanarkshire Council.	Negligible	Adverse	No Change

Table 18.3 – Cumulative Effects

Construction, Operation or Decommissioning of the Revised Development	Description of Effect	Proposed, Consented and Operational Developments	Significance	Beneficial/ Adverse
<b>Landscape and Visual ((Bold text indicates a Significant Effect))</b>				
Phase of Development	Receptor	Proposed, Consented or Operational Development	Significance of Additional Effect from Introducing the Revised Development	Beneficial/ Adverse
Construction & Decommissioning	Landscape Character	Scenario 1	Worst-case Minor	Adverse
		Scenario 2	Worst-case Minor	Adverse
	Visual Amenity	Scenario 1	Worst-case Minor	Adverse
		Scenario 2	Worst-case Minor	Adverse
Operational	Landscape Character LCU 5b and 7	Scenario 1	Minor	Adverse
		Scenario 2	Minor	Adverse
	LCT 8	Scenario 1	<b>Moderate</b>	<b>Adverse</b>
		Scenario 2	<b>Moderate</b>	<b>Adverse</b>
	Other Character Areas	Scenario 1	Minor	Adverse
		Scenario 2	Minor	Adverse
	West Toun House, Westerhouse, West Toun Steadings and Craigend B&B	Scenario 1	<b>Worst-case Moderate</b>	<b>Adverse</b>
		Scenario 2	<b>Worst-case Moderate</b>	<b>Adverse</b>
	Douglas Castle Grounds Recreational Area	Scenario 1	<b>Worst-case Moderate</b>	<b>Adverse</b>
		Scenario 2	<b>Worst-case Moderate</b>	<b>Adverse</b>
	Open Space at Former Dalquhandy Opencast Site	Scenario 1	Worst-case Minor	Adverse
		Scenario 2	Worst-case Minor	Adverse
	All Other Receptors	Scenario 1	Worst-case Minor	Adverse
		Scenario 2	Worst-case Minor	Adverse

Construction, Operation or Decommissioning of the Revised Development	Description of Effect	Proposed, Consented and Operational Developments	Significance	Beneficial/ Adverse
<b>Ecology and Nature Conservation</b>				
Construction/ Operation & Decommissioning	Direct and indirect habitat loss to wet heath	All	Minor	Adverse
Operation	Collision risk/ barotrauma to bats	All	Minor / Negligible	Adverse/ Neutral
<b>Ornithology</b>				
Construction	Disturbance – displacement of geese	All	Minor	Adverse
Operation	Collision Risk – Geese	All	Negligible	Neutral
Construction	Disturbance – displacement of Black Grouse	All	Minor	Adverse
Operation	Collision Risk – Black Grouse	All	Negligible	Neutral
Construction	Disturbance – displacement of Hen Harrier	All	Minor	Adverse
Operation	Collision Risk – Hen Harrier	All	Minor	Adverse
Construction	Disturbance – displacement of wader assemblage	All	Minor	Adverse
Operation	Collision Risk – wader assemblage	All	Minor	Adverse
<b>Noise and Vibration</b>				
Operation	Wind turbine noise	All	Not significant	Adverse
<b>Cultural Heritage</b>				
Operation	Setting effects to heritage site within the wider landscape	All	Negligible	Adverse
	Setting effects on those monuments within Douglas (Sites 23, 26) (Site 25) and (Site 27)	All	Minor Minor Negligible	Adverse



Construction, Operation or Decommissioning of the Revised Development	Description of Effect	Proposed, Consented and Operational Developments	Significance	Beneficial/ Adverse
<b>Geology, Hydrology, Hydrogeology</b>				
Cumulative effects on geology, hydrology and hydrogeology are considered as negligible.				
<b>Traffic and Transport</b>				
Construction	Concurrent construction timescales for the Revised Development and nearby developments	Dalquhandy, Poniel, Broken Cross and Poniel Built development	Negligible	Adverse
<b>Socio-economic, Tourism, Recreation and Land Use</b>				
Operation	Visual impact on tourism receptors	All wind Farms	Minor	Adverse
Operation	Help local renewable supply chain	Phase 2 and 3 development potential	Minor	Beneficial
Operation	National and Regional economy and employment	Phase 2 and 3 development potential	Minor-Negligible	Beneficial
<b>Aviation, Radar and Telecommunications</b>				
Cumulative effects on aviation, radar or telecommunications are considered as negligible.				
<b>Shadow Flicker</b>				
The cumulative shadow flicker residual effect across the study area is considered to be of no significance.				

