35 Environmental Impact Tables

35.1 Introduction

35.1.1 This chapter summarises the potential environmental impacts of the proposed scheme in tabular form.

35.1.2 Potential environmental impacts are provided for each environmental parameter, with a Mitigation Item Number corresponding to the Schedule of Environmental Commitments for the Southern Leg of the proposed scheme (Chapter 36).

35.1.3 The residual impact (i.e. following implementation of mitigation) is provided in terms of magnitude and significance, where appropriate, and is considered an adverse impact unless otherwise stated.

Table 35.1: Environmental Impact Table

Description of Impact Note: these are potential environmental impacts (i.e. *before* specific mitigation)	**Mitigation Item Number (refer to Chapter 36)**	**Sensitivity /value of Receptor**	**Residual Impact (i.e. *with* mitigation)**	
			Magnitude	**Significance**
Land Use (Chapter 22)				
Craighill Farm Land Ref 430; loss of 0.2ha. (1% of the total farmed area) with severance.	LU1-LU18, LU23	Low	Low	Negligible/Slight
Land near Portlethen Land Ref 320; loss of 0.40ha. (3% of the total farmed area).	LU1-LU19, LU23	Low	Low	Negligible/Slight
Unknown Landowner Land Ref 334; loss of 0.27ha. (5% of the total farmed area).	LU1-LU18, LU23	Low	Low	Negligible/Slight
Land at Bothiebrig Land Ref223; loss of 0.50ha. (6% of the total farm area).	LU1-LU18, LU23	Low	Medium	Slight/Moderate
Land at Recraigs Land Ref 422; loss of 0.29ha. (1% of the total farmed area).	LU1-LU18, LU23	Low	Low	Negligible/Slight
Land near Charleston Land Ref 329; loss of 0.36ha. (7% of the total farmed area).	LU1-LU18, LU23	Low	Medium	Slight/Moderate
Newton of Charleston, Land Ref288; loss of 0.11ha. (5% of the total farmed area).	LU1-LU18, LU23	Low	Medium	Slight/Moderate
Lochview Croft Land Ref 290; loss of 1.10ha. (16% of the total farmed area).	LU1-LU18, LU23	Low	High	Moderate
Charleston Estate Land Ref 233; loss of 4.03ha. (9% of the total farmed area).	LU1-LU18, LU23	Low	Medium	Slight/Moderate
Mains of Charleston Land Ref 230 and 217; loss of 2.70ha. (9% of the total farmed area) with severance.	LU1-LU18, LU23	Medium	Medium	Moderate
Banchory-Devenick Estates Land Ref 214; loss of 3.74ha., including woodland (1% of the total farmed area) with severance.	LU1-LU23	Medium	Low	Slight
Rigifa Land Ref 214; loss of 2.62ha. (1% of the total farmed area) with severance and disruption to access.	LU1-LU18, LU23	Medium	Low	Slight
Bankhead Land Ref 210; loss of 0.02ha. (0.1% of the total farmed area).	LU1-LU18, LU23	Medium	Low	Slight
Duff's Hill Wood Land Ref 256; loss of 0.63ha. (2% of the total farmed area) with severance although area is felled.	LU1-LU8, LU10-LU12, LU14-LU15, LU17, LU19-LU23	Low	Low	Negligible/Slight
Duffshill Farm Land Ref 209; loss of 2.66ha. (12% of the total farmed area).	LU1-LU18, LU23	Low	High	Moderate
Jameston Farm Land Ref 206; loss of 3.17ha. (6% of the total farmed area).	LU1- LU18, LU23	Medium	Medium	Moderate
Land at Hare moss Land Ref 282; loss of 0.13ha. (7% of the total farmed area).	LU1-LU18, LU23	Low	Medium	Slight/Moderate
Land at Hare moss Land Ref 312; loss of 0.42ha. (2% of the total farmed area) and access disrupted.	LU1-LU18, LU23	Low	Low	Negligible/Slight
Bishopton Land Ref 5004; loss of 6.16ha. (7% of the total farmed area) with severance.	LU1-LU18, LU23	High	Medium	Moderate/ Substantial
Clochandighter Wood Land Ref 590; loss of 0.10ha. (0.2% of the total farmed area) although area is felled.	LU1-LU8, LU10-LU12, LU14-LU15, LU17, LU19- LU23	Low	Low	Negligible/Slight
Newlands Farm Land Ref 211; loss of 2.63ha. (14% of the total farmed area) with severance.	LU1- LU23	Low	High	Moderate
Cowford Farm Land Ref 211; loss of 2.34ha. (1% of the total farmed area) with severance.	LU1-LU18, LU23	Medium	Low	Slight

Description of Impact Note: these are potential environmental impacts (i.e. *before* specific mitigation)	**Mitigation Item Number (refer to Chapter 36)**	**Sensitivity /value of Receptor**	**Residual Impact (i.e. *with* mitigation)**	
			Magnitude	**Significance**
Merchant's Croft Land Ref 637 and part 228; loss of 5.57ha. (6% of the total farmed area) with severance.	LU1-LU18, LU23	Medium	High	Moderate/Substantial
Swellhead Farm Land Ref 634; loss of 13.76ha. (7% of the total farmed area) with severance.	LU1- LU23	Medium	Medium	Moderate
Kingcausie Estate Land Ref 556; loss of 11.66ha. (2% of the total farmed area) with severance and moderate-high windthrow risk.	LU1-LU23	Medium	Medium	Moderate
Milltimber Farm Land Ref 438; loss of 10.30ha. (11% of the total farmed area) with severance.	LU1-LU18, LU23	High	High	Substantial
Woodend Farm Land Ref 5175; loss of 5.41ha. (9% of the total farmed area) with severance.	LU1-LU18, LU23	Low	Moderate	Slight/Moderate
Victoria Sawmills Land Ref 584; loss of 0.12ha. (1% of the total farmed area).	LU1-LU8, LU10-LU12, LU14-LU15, LU17, LU19-LU23	Low	Negligible	Negligible
Nether Beanshill Land Ref 510; loss of 12.71ha. (18% of the total farmed area) with severance.	LU1-LU18, LU23	High	High	Substantial
Binghill House Land Ref 580; loss of 0.48ha. (11% of the total farmed area).	LU1-LU18, LU23	Low	High	Moderate
Beanshill Cottage Land Ref 578; loss of 2.31ha. (11% of the total farmed area) with severance.	LU1-LU18, LU23	Low	High	Moderate
Westfield Land Ref 723; loss of 1.82ha. (2% of the total farmed area) with severance.	LU1-LU18, LU23	Low	High	Moderate
South Last Land Ref 557; loss of 2.13ha. (1% of the total farmed area) with severance.	LU1-LU18, LU23	Medium	Low	Slight
Kingshill and Gairnhill Wood Land Ref 253; loss of 0.89ha. (0.8% of the total farmed area) and moderate to high windthrow risk.	LU1-LU8, LU10-12, LU14-LU15, LU17, LU19-LU23	Low	Low	Negligible/Slight
Gairnlea Land Ref 566; loss of 2.46ha. (55% of the total farmed area).	LU1-LU18, LU23	Low	High	Moderate
Silverburn Farm Land Ref 610; loss of 4.36ha. (10% of the total farmed area) with severance.	LU1-LU19, LU23	Low	High	Moderate
East Brotherfield Land Ref 561, loss of 1.10ha. (4% of the total farm area).	LU1-LU18, LU23	Medium	Low	Slight
Gairn Farm Land Ref 486; loss of 2.82ha. (9% of the total farmed area) with severance.	LU1-LU18, LU23	Medium	Medium	Moderate
Craiglug Land Ref 483; loss of 3.20ha. (23% of the total farmed area) with severance and disruption to organic field rotation.	LU1-LU18, LU23	High	High	Substantial
Auchlea Land Ref 477; loss of 1.33ha. (1% of the total farmed area).	LU1-LU18, LU23	High	Low	Slight/Moderate
Backhill (Aldersyde) Land Ref 473; loss of 2.65ha. (3% of the total farmed area) with severance.	LU1-LU18, LU23	High	Moderate	Moderate/Substantial
Backhill of Brodiach Land Ref 466; loss of 7.11ha. (24% of the total farmed area) with severance.	LU1-LU18, LU23	Low	High	Moderate
East Kingford Livery Land Ref 460; loss of 5.42ha. (27% of the total farmed area) with severance.	LU1-LU18, LU23	High	High	Substantial
West Hatton Land Ref 333; loss of 4.84ha. (12% of the total farmed area) with severance.	LU1-LU23	Low	High	Moderate
Denburn Livery & Stud Farm Land Ref 105; loss of 2.48ha. (10% of the total farmed area) with severance and loss of equestrian facilities.	LU1-LU23	High	High	Substantial
Derbeth Farm Land Ref 103; loss of 15.00ha. (9% of the total farmed area) with severance.	LU1-LU23	Medium	High	Moderate/ Substantial

Description of Impact Note: these are potential environmental impacts (i.e. *before* specific mitigation)	**Mitigation Item Number (refer to Chapter 36)**	**Sensitivity /value of Receptor**	**Residual Impact (i.e. *with* mitigation)**	
			Magnitude	**Significance**
Demolition of 13 residential properties.	LU24	n/a	n/a	Substantial
Demolition of International School.	LU24	n/a	n/a	Adverse
Loss of 11% of total area and severance at Milltimber Farm.	LU24	n/a	n/a	Adverse
Loss of 13% of total area at Kippie Lodge.	LU24	n/a	n/a	Adverse
Loss of 18% of total area (4% of Livery) and severance at Nether Beanshill.	LU24	n/a	n/a	Adverse
Loss of 4% of total area at East Brotherfield.	LU24	n/a	n/a	Adverse
Loss of 27% of total area at East Kingsford Livery.	LU24	n/a	n/a	Adverse
Loss of 10% of total area, demolition of outbuildings and severance at Denburn Livery & Stud (Denhead of Cloghill).	LU24	n/a	n/a	Adverse
Potential relocation or reconfiguration depending on risk assessment.	None proposed awaiting outcome of risk assessment.	n/a	n/a	Neutral
Improved access to north & south for: Jeeves Couries; Jeeves Group Storage; ANC Express; R&B services; Smiddy Brae Industrial Units (Clark & Sutherland; King Street Autobody and LD Motors); W. Enterprises Aberdeen Ltd and Ardene House Veterinary Hospital.	LU25	n/a	n/a	Beneficial
Minor changes to business access (i.e. no major diversions required) at: W. Leiper, Newton of Charleston Farm, Optima Solutions, Alexander Duncan (Aberdeen) Ltd., EIS Waste Services, Dennis Irvine Superbike Centre; Ewing Motors, Marywell Park Homes Ltd., Artward Bound, Northeast Reprographics, SBS Logistics, Maryculter Play Group, Storybook Glen Theme Park, Lower Deeside Holiday Park, Old Mill Inn, Albyn School Playing Fields and Five Mile Petrol Station Garage & Caravan Site.	LU25	n/a	n/a	Neutral
Major Changes to Access (i.e. lengthy diversions required) at Bothiebrig Garage.	LU25	n/a	n/a	Adverse
Loss of development land (P22s and P24s).	LU24	n/a	n/a	Adverse
Potential loss of amenity (P2s, P3s, P10s).	n/a	n/a	n/a	Adverse
Potential loss of amenity (P21s).	LU26 (refer to landscape/ecology planting)	n/a	n/a	Adverse
Potential loss of amenity (P13s).	LU26 (refer to landscape/ecology planting)	n/a	n/a	Mixed
Improved access arrangements and transport links (P23s, P26s, P27s, OP2s, and OP3s).	n/a	n/a	n/a	Beneficial
Neutral impacts to planning applications and development land (P1S, P5S –P8S, P15S–P20S and OP4s and OP5s).	n/a	n/a	n/a	Neutral

Description of Impact Note: these are potential environmental impacts (i.e. *before* specific mitigation)	**Mitigation Item Number (refer to Chapter 36)**	**Sensitivity /value of Receptor**	**Residual Impact (i.e. *with* mitigation)**	
			Magnitude	**Significance**
Loss of 6.48% of total woodland area and severance at Greenhowe Plantation.	LU24, LU26 (refer to landscape/ecology planting)	Low	Low	Negligible/Slight
Loss of 1.87% of total woodland area at Duff's Hill.	LU24, LU26 (refer to landscape/ecology planting)	Low	Low	Negligible/Slight
Loss of 0.56% of total woodland area at Clochandighter.	LU24, LU26 (refer to landscape/ecology planting)	Low	Negligible	Negligible
Loss of 8.65% of total woodland area and severance at Cleanhill Wood.	LU24, LU26 (refer to landscape/ecology planting)	Low	Low	Negligible
Loss of 6.42% of total woodland area at Milltimber wood.	LU24, LU26 (refer to landscape/ecology planting)	Low	Negligible	Negligible
Loss of 3.67% of total woodland area at Guthrie Hill Plantation.	LU24, LU26 (refer to landscape/ecology planting)	Low	Low	Negligible/Slight
Loss of 0.8% of total woodland area at Rotten O'Gairn/Gairnhill.	LU24, LU26 (refer to landscape/ecology planting)	Low	Negligible	Negligible
Loss of 9.04% of total woodland area at Upper Beanshill.	LU24, LU26 (refer to landscape/ecology planting)	Low	Low	Negligible/Slight
Loss of 2.96% of total woodland area at West Hatton.	LU24, LU26 (refer to landscape/ecology planting)	Low	Low	Negligible/Slight
Loss of 51.39% of total woodland area at Wood near Fairley Home Farm.	LU24, LU26 (refer to landscape/ecology planting)	Low	High	Moderate
Loss of 13.34% of total woodland area at Wood near Derbeth Farm.	LU24, LU26 (refer to landscape/ecology planting)	Low	Low	Negligible/Slight
Geology, Contaminated Land and Groundwater (Chapter 23)				
Disturbance of solid geology during ground excavations.	n/a	Low	Negligible	Negligible
Disturbance of drift deposits during ground excavations.	n/a	Low - Medium	Negligible to Low	Negligible to Slight

Description of Impact Note: these are potential environmental impacts (i.e. *before* specific mitigation)	**Mitigation Item Number (refer to Chapter 36)**	**Sensitivity /value of Receptor**	**Residual Impact (i.e. *with* mitigation)**	
			Magnitude	**Significance**
Disturbance of contaminated land encountered during road construction. Including known and suspected contamination identified through site investigations, and any unknown contamination discovered during construction works.	G1-G3	n/a	n/a	Slight Beneficial
Impact on groundwater quality caused by accidental spillages and road drainage system.	G4	Low to High	None - Negligible	Slight
Impact of cuttings on groundwater flow.	G5	Low to High	None - Negligible	Negligible
Impact on groundwater quality and human health caused by cone of influence of road cutting reaching areas of potential contaminated land and contamination flowing towards humans and groundwater.	G6	Low to High	None - Negligible	Negligible
Impact on Hare moss water balance and quality.	G7-G9	High	Negligible - Low	Moderate/Slight
Water Environment (Chapter 39)				
Generic Construction Impacts	W1, W15, W20, W22, W23-W26	n/a	n/a	n/a
Surface Water Hydrology –regime/ flow impacts from diversions & realignments, vegetation clearance.		n/a	n/a	n/a
Fluvial Geomorphology - suspended solids release during construction works, vegetation clearance.	W1-W6, W10- W15, W20, W22, W23-W29	n/a	n/a	n/a
Water Quality – pollutant spillages, leaks, contaminated land etc	W1-W15, W20, W22, W23-W29	n/a	n/a	n/a
Generic Operational Impacts – Road Drainage	W17, W23-W26	n/a	n/a	n/a
Surface Water Hydrology – volume increases/ flow changes etc arising from new impermeable areas		n/a	n/a	n/a
Fluvial Geomorphology - Increased turbidity, sediment transport, erosion	W17, W18, W19, W23-W26	n/a	n/a	n/a
Water Quality - Road runoff contaminants, accidental spillage.	W17, W18, W19, W23-W26	n/a	n/a	n/a
Generic Operational Impacts – Watercourse Crossing Impacts	W16, W20	n/a	n/a	n/a
Surface Water Hydrology - Channel/culvert/bridges have potential to affect flood risk				
Fluvial Geomorphology - Culverting may cause increase in sedimentation and erosion.	W16, W20	n/a	n/a	n/a
Water Quality – Sediment increase may release contaminants. O2 sags from low light in culverts	W16, W20	n/a	n/a	n/a
Generic Operational Impacts – Watercourse Realignment Impacts	W21	n/a	n/a	n/a
Surface Water Hydrology – Possible impacts d'stream of some realignments or if .catchment affected				
Fluvial Geomorphology – Possible impacts on sediment supply, rate of transfer, erosion and deposition.	W21	n/a	n/a	n/a
Water Quality – Sediment released as a result of the realignment, may include contamination.	W21	n/a	n/a	n/a

Description of Impact Note: these are potential environmental impacts (i.e. *before* specific mitigation)		**Mitigation Item Number (refer to Chapter 36)**	**Sensitivity /value of Receptor**	**Residual Impact (i.e. *with* mitigation)**	
				Magnitude	**Significance**
Specific Environmental Impacts			Medium	Low	Slight
Loirston Burn	**Construction**				
	Hydrology – Impact through changes to hydrological pathways.	W1, W15, W22			
	Geomorphology - Culverting of existing straightened channel will involve earthworks, possibly resulting in sediment release and short-term change to morphological diversity and turbidity of the water column.	W1-W6, W10- W15, W22, W27			
	Water Quality- Risk of accidental spillage of pollutants.	W1-W15, W22, W27			
	Operation			Negligible	Negligible
	Hydrology - Culverting and realignment will impact flow paths and potential flood risk.	W16, W21			
	Geomorphology - Long-term decrease to morphological diversity due to extensive culverting and realignment of channel.	W16, W21			
	Water Quality - No outfall planned therefore only impacted as a result of diffuse pollution. Potential pollution to surface water from groundwater. However it is likely that drainage from the amended A90 layout will continue to outfall here.	W16, W21			
Greengate Ditch	**Construction**		Low	Negligible	Negligible
	Overall – A section of the watercourse downstream of the proposed road may be lost through re-direction. Release of fine sediment or construction pollutants may occur.	W1-W14			
	Operation			Negligible	Negligible
	Overall - A section of the watercourse downstream of road may be lost.	n/a			
Jameston Ditch	**Construction**		High	Negligible	Unknown
	Hydrology - Changes to the discharge regime as a result of extent and duration of works.	W1, W15, W24			
	Geomorphology – Construction of treatment ponds will involve some earthworks, possibly resulting in sediment release and short-term change to turbidity of the water column.	W1-6, W10-15, W24, W27			
	Water Quality- Slight potential for accidental spillage of fuel and concrete due to the distance of works to watercourse.	W1-W15, W24, W27			
	Operation			Unknown	Unknown
	Hydrology - Change to discharge regime due to road run-off discharge to the burn may lead to siltation and the requirement for dredging, which in turn may impact the hydrological functioning of the Moss.	W17, W18, W19, W21, W24			
	Geomorphology – Road run-off discharge to the burn may lead to siltation and scouring of bed and banks.	W17, W18, W19, W21, W24			

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				Magnitude	**Significance**
	Water Quality - Sediment loaded untreated road run-off, soluble and insoluble pollution may occur increasing levels of copper and zinc over EQS values. - Increased accidental spillage risk due to traffic loadings. - Pollution may impact upon Hare Moss water quality. - Infiltration to groundwater may occur.	W17, W18, W19, W21, W24, W30			
Burn of Ardoe	**Construction**		High	Negligible	Slight/ Negligible
	Hydrology – Extent and duration of works may impact upon the surface water hydrology and flow paths associated with the watercourse.	W1, W15, W22			
	Geomorphology - Culverting of existing straightened channel will involve some earthworks, possibly resulting in sediment release and short-term change to morphological diversity and turbidity of the water column.	W1-W6, W10- W15, W22, W27			
	Water Quality- Potential for small scale spillage of potential pollutants; however this has the potential to impact the moss downstream.	W1-W15, W22, W27			
Burn of Ardoe	**Operation**			Negligible	Slight/ Negligible
	Hydrology - Minimal change to flow and sediment regime as a result of culvert provided it is sized correctly.	W16, W21			
	Geomorphology – Interruption to the morphology of the watercourse through introduction of a culvert.	W16, W21			
	Water Quality - No outfall planned therefore only impacted as a result of diffuse pollution. Infiltration to groundwater may occur.	W16, W21, W30			
Bishopston Ditch	**Construction**		High	Negligible	Slight/ Negligible
	Hydrology - Culvert construction provides temporary obstruction to hydrological pathways to Hare Moss.	W1, W15, W22			
	Geomorphology - Culverting of existing straightened channel will involve some earthworks, possibly resulting in sediment release and short-term change to morphological diversity and turbidity of the water column.	W1-W6, W10- W15, W22, W27			
	Water Quality- Potential for small scale spillage of potential pollutants; however this has the potential to impact the moss downstream.	W1-W15, W22, W27			
	Operation			Negligible	Slight/ Negligible
	Hydrology – Culverting could impact flow paths and potential flood risk.	W16, W21			
	Geomorphology – Minimal change to flow and sediment regime as a result of culvert.	W16, W21			

	Description of Impact Note: these are potential environmental impacts (i.e. *before* specific mitigation)	**Mitigation Item Number (refer to Chapter 36)**	**Sensitivity /value of Receptor**	**Residual Impact (i.e. *with* mitigation)**	
				Magnitude	**Significance**
	Water Quality - No outfall planned therefore only impacted as a result of diffuse pollution and culvert blocking light. Infiltration to groundwater may occur.	W16, W21, W30			
Heathfield Burn	**Construction**		High	Negligible	Slight/ Negligible
	Hydrology - Culvert construction provides temporary obstruction to hydrological pathways to Hare Moss.	W1, W15, W22			
	Geomorphology - Culverting of existing straightened channel will involve some earthworks, possibly resulting in sediment release and short-term change to morphological diversity and turbidity of the water column.	W1-W6, W10- W15, W22, W27			
	Water Quality- Potential for small scale spillage of potential pollutants; however this has the potential to impact the moss downstream.	W1-W15, W22, W27			
	Operation			Negligible	Slight/ Negligible
	Hydrology – Culverting could impact flow paths and potential flood risk.	W16, W21			
	Geomorphology – Change to flow and sediment regime as a result of culvert.	W16, W21			
	Water Quality - No outfall planned therefore small impact as a result of diffuse pollution and culvert blocking light.	W16, W21			
Hare Moss	**Construction**		High	Negligible/ Unknown	Slight/ Negligible/ Unknown
	Hydrology – Culverting of 3 burns which provide hydraulic connectivity to the moss may disrupt flow paths.	W1, W15, W22, W24			
	Geomorphology – not applicable	n/a			
	Water Quality – Potential indirect pollution from feeder burns during works.	W1-W15, W22, W24, W27			
	Operation			Negligible/ Unknown	Unknown
	Hydrology – Indirectly affected through disturbance of water balance of hydrological inputs in the area.	W16, W21, W24			
	Geomorphology –not applicable	n/a			
	Water Quality – Introduction of polluted water from hydrological inputs of Moss especially due to the direct outfall to Jameston Ditch. Infiltration to groundwater may occur.	W16-W19, W21, W24, W30			
White stone Burn	**Construction**		Low	Negligible	Negligible
	Hydrology - Changes to the discharge regime as a result of extent and duration of works.	W1, W15, W22			

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				Magnitude	**Significance**
	Geomorphology - Culverting of existing straightened channel will involve some earthworks, possibly resulting in sediment release and short-term change to morphological diversity and turbidity of the water column.	W1-W6, W10- W15, W22, W27			
	Water Quality – Potential for small scale spillage of potential pollutants.	W1-W15, W22, W27			
	Operation				
	Hydrology – Culverting and realignment will impact flow paths and potential flood risk.	W16, W21		Negligible	Negligible
	Geomorphology – Minimal change to flow and sediment regime as a result of culvert.	W16, W21			
	Water Quality - No outfall planned therefore small impact as a result of diffuse pollution.	W16, W21			
Burnhead Burn	**Construction**		High	Low	Moderate
	Hydrology - Changes to the discharge regime as a result of extent and duration of works.	W1, W15, W22, W25			
	Geomorphology - Extensive culverting and realignment will involve major earthworks, possibly resulting in sediment release and straightening of the channel, leading to loss of morphological diversity and increasing short-term suspended solid loads possibly impacting the downstream SAC.	W1-W6, W10- W15, W22, W25, W27, W28, W29			
	Water Quality – Construction of a culvert, realignment and an extensive outfall may increase risk of accidental spills/pollution due to amount of major construction activity near watercourse.	W1-W15, W22, W27, W25, W28, W29			
Burnhead Burn	**Operation**			Medium	Moderate/ Substantial
	Hydrology - Road run-off outfall and realignment has the potential to change discharge regime leading to siltation and the requirement for dredging. - Potential flood risk to properties as a result of potential blockage of the new culvert.	W16, W17, W21, W25			
	Geomorphology – Long term decreased geomorphological diversity due to burn realignment, with culverting.	W16, W17, W18, W19, W21, W25			
	Water Quality - Sediment loaded untreated road run-off, soluble and insoluble pollution may occur and increased risk from accidental spillage likely as a result of traffic volumes. - Length of culvert likely to impact on water quality due to lack of light. - Infiltration to groundwater may occur.	W16, W17, W18, W19, W21, W25, W30			
Blaikiewell Burn	**Construction**		High	Neglgible	Slight/Negligible
	Hydrology – Bridge construction will have short term impact on surface water and flood risk.	W1, W20			
	Geomorphology - Bridging will involve extensive earthworks, possibly resulting in sediment release, leading to short term increase to suspended sediment loads and turbidity within the channel. Geomorphological diversity likely to be reduced.	W1-W6, WW10-W14, W20, W28, W29			

	Description of Impact Note: these are potential environmental impacts (i.e. *before* specific mitigation)	**Mitigation Item Number (refer to Chapter 36)**	**Sensitivity /value of Receptor**	**Residual Impact (i.e. *with* mitigation)**	
				Magnitude	**Significance**
	Water Quality – Sediment loads and turbidity in the channel decreases water quality. Infiltration to groundwater may occur.	W1-W14, W20, W28, W29, W30			
Blaikiewell Burn	**Operation**				
	Hydrology - Installation of a bridge may result in an increased discharge to the burn (in addition to upstream proposed outfall).	W20		Low	Moderate
	Geomorphology – Increased discharge will change sediment regime and erosion/deposition patterns impacting upon the turbidity.	W20			
	Water Quality – Increased turbidity will impact on water quality of the channel and perhaps the downstream SAC.	W20			
Kingcausie Burn	**Construction**		High		
	Hydrology – Changes to the discharge regime as a result of extent and duration of works.	W1, W15, W22		Medium	Moderate/ Substantial
	Geomorphology – Extensive culverting and realignment will involve earthworks, possibly resulting in sediment release and straightening of the channel, leading to loss of morphological diversity and short-term increase in suspended solid loads.	W1-W6, W10- W15, W22, W27, W28, W29			
	Water Quality – Potential risk of accidental spillage of pollutants due to the length of works in close proximity to the watercourse.	W1-W15, W22, W27, W28, W29			
	Operation				
	Hydrology – Culverting and realignment will impact flow paths and potential flood risk.	W16, W21		Medium	Moderate/ Substantial
	Geomorphology - Long-term decreased morphological diversity due to long section of culverting and proposed realignments which straighten the channel reducing sinuosity and decrease morphological diversity in close proximity to the SAC. - Change to discharge regime due to shortening realignment may lead to localised siltation or erosion.	W16, W21			
	Water Quality - Length of culvert may impact on water quality due to lack of light. Infiltration to groundwater may occur.	W16, W21, W30			
Cumulative Impacts on Crynoch Burn	**Construction**		High		
	Overall – Potential release of sediment and pollutants during works from burns draining into Crynoch Burn (Burnhead, Blakiewell and Kingcausie).	W1-W15, W20, W25, W27-W29		Low	Moderate
	Operation				
	Overall - Drainage outfall to Burnhead Burn is likely to release sediment and pollutants which may reach Crynoch Burn in lesser quantities, therefore reducing impact on water quality and geomorphology with distance.	W16, W20, W25		Low	Moderate

	Description of Impact Note: these are potential environmental impacts (i.e. *before* specific mitigation)	**Mitigation Item Number (refer to Chapter 36)**	**Sensitivity /value of Receptor**	**Residual Impact (i.e. *with* mitigation)**	
				Magnitude	**Significance**
River Dee	**Construction**		High	Low	Moderate
	Hydrology – Impacts due to amount and duration of works required on floodplain.	W1, W20, W26			
	Geomorphology - Bridging will involve extensive earthworks, possibly resulting in sediment release leading to short term increase to suspended sediment loads and turbidity.	W1-W6, W10-W14, W20, W26, W28, W29			
	Water Quality- Bridging across an active floodplain likely to impact on water quality through increased sediment supply and turbidity.	W1-W14, W20, W26, W28, W29			
River Dee	**Operation**			Low	Moderate
	Hydrology - Potential change to discharge regime due to road run-off outfall. Bridging will cause localised constriction to flow and increased flood risk.	W17, W20, W26			
	Geomorphology – High volumes of fine sediment potentially deposited in the river, increasing turbidity and disrupting current morphological forms.	W17- W20, W26			
	Water Quality - Sediment loaded untreated road run-off, soluble and insoluble pollution may occur - Increased risk from accidental spillage likely as a result of traffic volumes. - Infiltration to groundwater may occur.	W17- W20, W26, W30			
Milltimber Burn	**Construction**		Low	Negligible	Negligible
	Hydrology – Impact due to culverting and associated realignment.	W1, W15, W22			
	Geomorphology - Culverting of existing straightened channel will involve some earthworks, possibly resulting in sediment release and short-term change to morphological diversity and turbidity of the water column.	W1-W6, W10- W15, W22, W27			
	Water Quality- Potential for small scale spillage of potential pollutants.	W1-W15, W22, W27			
	Operation			Negligible	Negligible
	Hydrology – Impact due to culverting and realignment of already straightened channel.	W16, W21			
	Geomorphology - Minimal change to flow and sediment regime as a result of culvert and associated realignment.	W16, W21			
	Water Quality - No outfall planned therefore only impacted as a result of diffuse pollution. Infiltration to groundwater may occur.	W16, W21, W30			
Culter House Burn	**Construction**		Low	Negligible	Negligible
	Overall - Watercourse to be re-directed into pre-earthworks drainage design. Release of fine sediment or construction pollutants may occur.	W1-W14, W15			
	Operation			Negligible	Negligible

	Description of Impact Note: these are potential environmental impacts (i.e. *before* specific mitigation)	**Mitigation Item Number (refer to Chapter 36)**	**Sensitivity /value of Receptor**	**Residual Impact (i.e. *with* mitigation)**	
				Magnitude	**Significance**
	Overall - Entire section of watercourse to be filled in.	n/a			
Beans Burn	**Construction**		Low	Negligible	Negligible
	Overall – A section of the watercourse downstream of the proposed road may be lost through re-direction. Release of fine sediment or construction pollutants may occur**.**	W1-W14, W15			
	Operation			Negligible	Negligible
	Overall - A section of the watercourse downstream of road may be lost.	n/a			
Upper Beanshill Burn	**Construction**		Low	Negligible	Negligible
	Overall – A section of the watercourse downstream of the proposed road may be lost through re-direction. Release of fine sediment or construction pollutants may occur.	W1-W14, W15			
	Operation			Negligible	Negligible
	Overall – A section of the watercourse downstream of road may be lost.	n/a			
Gairn Burn	**Construction**		Medium	Low	Slight
	Hydrology – Short-term constriction of flows and alteration of pathways.	W1, W15, W22, W23			
	Geomorphology - The construction of an extensive outfall, culvert and realignment will involve major earthworks, possibly resulting in sediment release, leading to loss of morphological diversity and increasing short-term suspended solid loads.	W1-W6, W10- W15, W22, W23, W27			
	Water Quality- Increased risk of accidental spills/pollution due to amount of major construction activity near watercourse.	W1-W15, W22, W23, W27,			
	Operation			Low	Slight
	Hydrology - Potential change to discharge regime due to road run-off outfall, culvert and realignment.	W16, W17, W21, W23			
	Geomorphology - Road run-off discharge to the burn may lead to siltation and scouring of bed and banks.	W16-W19, W21, W23			
	Water Quality – Sediment loaded untreated road run-off, soluble and insoluble pollution may occur and increased risk from accidental spillage likely as a result of traffic volumes. Infiltration to groundwater may occur.	W16-W19, W21, W23, W30			
Auchlea Drainage	**Construction**		High	Negligible	Slight/ Negligible
	Hydrology – Changes to the discharge regime as a result realignments and culverting.	W1, W15, W22			
	Geomorphology - Culverting of existing straightened channel will involve some earthworks, possibly resulting in sediment release and short-term change to morphological diversity and turbidity of the water column.	W1-W6, W10- W15, W22, W27			

Description of Impact Note: these are potential environmental impacts (i.e. *before* specific mitigation)		**Mitigation Item Number (refer to Chapter 36)**	**Sensitivity /value of Receptor**	**Residual Impact (i.e. *with* mitigation)**	
				Magnitude	**Significance**
	Water Quality - Potential for small scale spillage of pollutants, which has the potential to impact the moss downstream.	W1-W15, W22, W27			
Moss of Auchlea Drainage System	**Operation**				
	Hydrology – Culvert will potentially cause localised constriction of flow and flood risk.	W16, W21		Negligible	Slight/ Negligible
	Geomorphology – realignment may cause slight increase in channel gradient and decrease in bank height.	W16, W21			
	Water Quality - No outfall planned therefore only impacted as a result of diffuse pollution. Infiltration to groundwater may occur.	W16, W21, W30			
Moss of Auchlea	**Construction**		High		
	Hydrology – Disturbance to surface water pathways feeding into the moss during works	W1, W15, W22		Negligible	Slight/ Negligible
	Geomorphology – not applicable	N/A			
	Water Quality- Culverting provides high potential for pollution of the moss.	W1-W14			
	Operation				
	Hydrology - There are no direct hydrological impacts to the Moss of Auchlea assuming that the catchment area draining to the burn is maintained. The culvert on the Moss of Auchlea drainage system allows connectivity of the moss to the catchment area upstream of the road.	W16, W21		Negligible	Slight/ Negligible
	Geomorphology – not applicable	n/a			
	Water Quality - No outfall planned therefore only impacted as a result of diffuse pollution. Infiltration to groundwater may occur.	W30			
Westholme Burn	**Construction**		Low		
	Hydrology – Potential change to discharge regime during outfall construction.	W1, W15, W24		Negligible	Negligible
	Geomorphology - The construction of an extensive outfall will involve major earthworks, possibly resulting in sediment release, leading to loss of morphological diversity and increasing short-term suspended solid loads possibly impacting the downstream fisheries designated river.	W1-6, W10-15, W24, W27			
	Water Quality- Construction of an extensive outfall may increase risk of accidental spills/pollution due to amount of major construction activity near watercourse.	W1-W15, W24, W27			
	Operation			Low	Negligible
	Hydrology - Potential change to discharge regime due to road run-off outfall.	W17, W18, W19, W21, W24			

Description of Impact Note: these are potential environmental impacts (i.e. *before* specific mitigation)	**Mitigation Item Number (refer to Chapter 36)**	**Sensitivity /value of Receptor**	**Residual Impact (i.e. *with* mitigation)**	
			Magnitude	**Significance**
Geomorphology - Road run-off discharge to the burn may lead to siltation and changes in channel morphology.	W17, W18, W19, W21, W24			
Water Quality - Sediment loaded untreated road run-off, soluble and insoluble pollution may occur. - Increased risk from accidental spillage likely as a result of traffic volumes.	W17, W18, W19, W21, W24			
Ecology and Nature Conservation (Chapter 25)				
See Table 35.2				
Landscape (Chapter 26)				
Directly Affected Areas	L1-L10, L11-L20			Slight to Moderate
Open Farmland : Loirston (ch 206100-207200)				
• A90/A956 Corridors		Low	Low	
• Loirston Loch		Low/Medium	Low	
• Scattered Settlement and local access routes		Low/Medium	Medium	
• Farmland		Low/Medium	Medium	
Wooded Farmland: Duffs Hill (ch205200-206100) • All areas	L1-L10 ,L21	Low	Medium	Slight
Open Farmland: Hare moss (ch202200-2052000)	L1-L10, L22-L26			Moderate to Substantial
• Haremoss		Medium	Medium	
• Open rural landscape		Medium	Medium	
• Sattered dwellings and farms		High	High	
Open Farmland: Merchants Croft (ch201100-202200) • All areas	L1-L10, L27	Medium	Medium	Moderate
Open Farmland: Blaikiewell (ch200000-201100 and 100000-100100) • All areas	L1-L10, L28-L30	Medium to High	Medium to High	Moderate to Substantial
Hill: Craigingles (ch101100-101400) • All areas	L1-L10, L31-L33	High	Medium	Substantial
Wooded Farmland: Netherly / Altries (ch101400-101900) • All areas	L1-L10, L34	High	Medium	Moderate to Substantial
Valley Type: Dee Valley (ch101900-102800) • All areas	L1-L10, L35-L36	High	Medium to High	Substantial to Severe

Description of Impact Note: these are potential environmental impacts (i.e. *before* specific mitigation)	**Mitigation Item Number (refer to Chapter 36)**	**Sensitivity /value of Receptor**	**Residual Impact (i.e. *with* mitigation)**	
			Magnitude	**Significance**
Urban Type: Milltimber (ch102800- 10,600) • All areas	L1-L10, L37-L38	Medium to High	Medium to High	Substantial to Severe
Wooded Farmland Type: Craigton (ch103600-104400) • All areas	L1-L10, L39-L40	Medium to High	Medium to High	Moderate
Hill Type: Beanshill (ch104400-106000)	L1-L10, L41-L42			Substantial
• North of Beanshill		Medium	High	
• Agricultural land south of Beanshill		Medium	High	
Wooded Farmland Type: Broomfold (ch106000-107700)	L1-L10, L43-L45			Moderate
• West of Bishops Court		Low	Low	
• Silverburn		High	High	
Hill Type: Fifeshill (ch 107700-108500)	L1-L10, L46-L50			Substantial
• Kingshill Wood coniferous plantation		Low to Medium	High	
• Farmland on lower slopes of Kingshill		Low to Medium	High	
Hill Type: Auchlea (ch107700-108800) • All areas	L1-L10, L46-L50	Low to Medium	Medium	Moderate
Open Farmland Type: Clinterly / West Brimmond (ch108500-109000) All areas	L1-L10, L46-L50	Low to Medium	Medium to High	Moderate to Substantial
Wooded Farmland Type: Kingswells (ch109000-111300)	L1-L10, L51-L55			Moderate
• Kingswells Bypass road corridor		Low	Medium	
• Woodland and farmland west of Kingswells Bypas		Medium to High	High	
Indirectly Affected Areas				
Hill: Kincorth Hill • All areas	L1-L10	Medium to High	Low	Negligible
Open Farmland: Den of Leggart • All areas	L1-L10	Medium	Low	Slight to Negligible
Hill: Greenhowe • All areas	n/a	Low to Medium	No change	None
Hill: Lochend • All areas	L1-L10	Medium	Low	Negligible

Description of Impact Note: these are potential environmental impacts (i.e. *before* specific mitigation)	**Mitigation Item Number (refer to Chapter 36)**	**Sensitivity /value of Receptor**	**Residual Impact (i.e. *with* mitigation)**	
			Magnitude	**Significance**
Coast: Kincardine Cliffs • All areas	n/a	Medium	No change	None
Wooded Farmland: Auchlunies • All areas	L1-L10	Low to Medium	Low	Slight to Negligible
Hill: Clochandighter • All areas	L1-L10	Low to Medium	Low	Negligible
Urban: Badentoy Park • All areas	n/a	Low	No change	None
Recreation: Portlethen Golf Course • All areas	n/a	Low to Medium	No change	None
Urban Type: Portlethen • All areas	n/a	Low to Medium	No change	None
Hill: Stranog • All areas	L1-L10	Medium to High	Low	Slight
Open Farmland Type: Craiglug • All areas	n/a	Low to Medium	No change	None
Wooded Farmland Type: Normandykes • All areas	n/a	Low to Medium	No change	None
Urban Type: Peterculter • All areas	n/a	Low to Medium	No change	None
Wooded Farmland: Murtle • All areas	n/a	Medium	No change	None
Open Farmland: Anguston • All areas	L1-L10	Low to Medium	Low	Negligible
Open Farmland: Westfield • All areas	n/a	Low to Medium	No change	None
Wooded Farmland: Countesswells • All areas	n/a	Low to Medium	No change	None
Wooded Farmland: Hazelhead • All areas	n/a	Low to Medium	No change	None

Description of Impact Note: these are potential environmental impacts (i.e. *before* specific mitigation)	**Mitigation Item Number (refer to Chapter 36)**	**Sensitivity /value of Receptor**	**Residual Impact (i.e. *with* mitigation)**	
			Magnitude	**Significance**
Recreation: Hazelhead Golf Course • All areas	n/a	Low to Medium	No change	None
Open Farmland: Kingshill / Bogskeathy • All areas	n/a	Low to Medium	No change	None
Open Farmland: Maidencraig • All areas	n/a	Low to Medium	No change	None
Urban Type: Kingswells • All areas	L1-L10	Medium	Low	Slight
Open Farmland: Greenferns (assessed with Northern Leg) • All areas	n/a	Low to Medium	No change	None
Hill Type: Brimmond Hill (assessed with Northern Leg) • All areas	L1-L10	Medium	Low	Negligible
Visual (Chapter 27)				
Overall impact from Southern Leg of the new road across open farmland in winter year of scheme opening: Built receptors: 747 receptors affected by moderate or greater adverse impact Outdoor receptors: 142 receptors affected by moderate or greater adverse impact	L1-L10 & V1, V2	n/a	Various magnitude dependant of a variety of factors	Built receptors: 448 affected by moderate or greater impact Outdoor receptors: 116 affected by moderate or greater impact
Cultural Heritage (Chapter 28)				
Removal of known and unknown remains of cultural heritage significance.	CH1, CH2, CH3, CH4	Less than Local – National	Low - Medium	None - Slight
Visual impact on known site of cultural heritage significance.	CH5	Low - High	Unknown	Unknown
Air Quality (Chapter 29)				
Increase in traffic-related air pollution near to proposed scheme.	n/a	High	Extremely Small to Very Large Increases	Negligible to Moderate
Reduction in traffic-related air pollution adjacent to nearby roads.	n/a	High	Extremely Small to Medium Decreases	Negligible to Slight Beneficial

Description of Impact Note: these are potential environmental impacts (i.e. *before* specific mitigation)	**Mitigation Item Number (refer to Chapter 36)**	**Sensitivity /value of Receptor**	**Residual Impact (i.e. *with* mitigation)**	
			Magnitude	**Significance**
Traffic Noise and Vibration, Ground Floor, Year of Opening (Chapter 30)[1]				
Increased effects from traffic at Westholme, Kingswells, Aberdeen, AB15 8RX	N1	High	High	Substantial
Increased effects from traffic at Clark and Sutherland, Brae, Kingswells, Aberdeen, AB15 8SL	N2	High	High	Moderate/ Substantial
Increased effects from traffic at Tigh-na Bruaich, Kingswells, Aberdeen, AB15 8QQ	N3	High	High	Substantial
Increased effects from traffic at Gairn Farm, Blacktop, Kingswells, Aberdeen, AB15 8QJ	N4	High	High	Substantial
Increased effects from traffic at Ardnamoine Kingswells, Aberdeen, AB15 8QL	N5	High	High	Substantial
Increased effects from traffic at Beanshill Lodge, Milltimber, AB13 0ER	N6	High	High	Substantial
Increased effects from traffic at 69B Culter House Road, Milltimber, AB13 0EP	N7	High	High	Substantial
Increased effects from traffic at Aberdeen Petroleum Club, Kippie Lodge, North Deeside Road, Milltimber AB13 0AB	N8	High	High	Moderate/ Substantial
Increased effects from traffic at Beltane, Camphill, Milltimber, AB13 0AP	N9	High	High	Substantial
Increased effects from traffic at The Gables, Milltimber Brae, Milltimber, AB13 0AA	N10	High	Low	Moderate
Increased effects from traffic at Kingcausie House, Maryculter, Aberdeen, AB12 5FR	N11	High	High	Substantial
Increased effects from traffic at 2 Eastland House, Maryculter, Aberdeen, AB12 5FS	N12	High	High	Substantial
Increased effects from traffic at Burnhead Cottage, Blairs, Aberdeen, AB12 5YX	N13	High	High	Substantial
Increased effects from traffic at Sunnyside Auchlunes Cottage, Blairs, Aberdeen, AB12 5YA	N14	High	High	Substantial
Increased effects from traffic at The Beaches, Banchory Devenick, Aberdeen, AB12 5YD	N15	High	High	Substantial
Increased effects from traffic at Turnamiddle House, Portlethen, Aberdeen, AB12 4RX	N16	High	High	Substantial
Increased effects from traffic at Whistlebrae Farmhouse, Banchory Devenick, Aberdeen, AB12 5YT	N17	High	High	Substantial
Increased effects from traffic at Novara, Nigg, Aberdeen, AB12 3LL	N18	High	High	Substantial

[1] Note:

- noise impacts listed do not take account of mitigation measures for operational noise impacts, as these have yet to be determined
- noise impacts results listed are for design year at 1st floor level
- results listed are for selected properties only. See Chapter 30 for more information

Description of Impact Note: these are potential environmental impacts (i.e. *before* specific mitigation)	**Mitigation Item Number (refer to Chapter 36)**	**Sensitivity /value of Receptor**	**Residual Impact (i.e. *with* mitigation)**	
			Magnitude	**Significance**
Pedestrians, Cyclists, Equestrians and Community Effects (Chapter 31)				
Journey Length	P2, P5	High	Minor Negative	Slight
Hatton track: The track will be closed. The AWPR will dissect the track 200m north of Bothy Brig Cottage.				
U59K: The road will be closed. The AWPR will dissect the road just north of Bishopton Farm, closing access to vehicles.	P2, P5	Low	Moderate Negative	Slight
Sunnyside Steading access track: The track will be closed. The AWPR will dissect the track just north of Sunnyside Steading.	P4, P5	High	Minor Beneficial	Slight Beneficial
Merchant's Croft access track: The track will be closed. The AWPR will dissect the track 150m west of the C30K.	P4, P5	High	Negligible Adverse	Slight
Whitestone track: The track will be closed. The AWPR will dissect the track 100m east of Whitestone.	P4, P5	High	Moderate Adverse	Moderate
Blaikiewell Farmhouse track (east): The track will be closed.	P5	High	Major Adverse	Major
Boundary track in Cleanhill Wood: The track will be closed as the AWPR will dissect it in two locations.	P4, P5	High	Negligible Beneficial	Slight Beneficial
Eastland track: The track will be closed.	P2, P4, P5	High	Moderate Adverse	Slight
Mitchell Farm access track (south): The track will be closed.	P2, P4, P5	High	Moderate Adverse	Slight
Mitchell Farm access track (north): The track will be closed.	P2, P4, P5	High	Major Adverse	Moderate
Old Deeside Line ROW (GC45): The AWPR will dissect the ROW east of Milltimber Farm.	P5	High	Negligible Adverse	Slight
Culter House access road: Culter House access road will be closed.	P4, P5	Very High	Minor Adverse	Moderate
Culter House Road: Culter House Road will be closed.	P4, P5	Very High	Major Adverse	Major
Upper Beanshill track/ROW across Contlaw Road (GC46): The AWPR will dissect the path/ROW.	P4, P5	High	Negligible Adverse	Slight
Gairn Farm access track: The track will be closed.	P2, P5	High	Moderate Adverse	Slight
Track from Kingshill Wood to Moss of Auchlea: The path will be closed.	P2, P5	High	Major Adverse	Moderate
Short ROW (GC23) joining the two other ROWs: from A944 (East Kingsford) south to Kingshill Wood (GC25), and A944 (West Kingsford) to Auchlea (GC22): The path will be closed. The AWPR will dissect the path 100m west of Ben View.	P2, P5	High	Major Adverse	Major
ROW (GC25) from A944 (East Kingsford) south to Kingshill Wood: The path will be closed. The AWPR will dissect the path between Hillview and Ben View.	P2, P5	High	Major Adverse	Major
A944: The AWPR will intersect the A944 100m east of Kingsford Industrial Estate. The AWPR mainline will be taken under the A944, and a new roundabout will allow traffic to access the AWPR from the A944.	P3, P4, P5	Low	Negligible Adverse	Negligible
Road from A944 past East Kingsford Cottage to West Hatton Croft: The road will be closed.	P3, P5	High	Major Adverse	Moderate

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			Magnitude	**Significance**
Consumption Dyke track to West Hatton Croft: The track will be closed. The AWPR will cross the track 100m north east of Highfield Farm.	P2, P4, P5	High	Major Adverse	Moderate
Access track to Denhead of Cloghill from West Hatton: The track will be closed.	P2, P4, P5	High	Minor Adverse	Slight
Track along the bottom of Cloghill, north of Denhead of Cloghill: The track will be closed. The AWPR will cross the track at Cloghill.	P2, P4, P5	High	Negligible Adverse	Slight
Access road to Woodside of Cloghill: The road will be closed.	P2, P4, P5	High	Major Adverse	Major
Track heading southwest out of Fairley Home Farm: The track will be closed.	P2, P4, P5	High	Major Adverse	Moderate
Track from Fairley House to Brimmond Hill: The track will be closed.	P2, P4, P5	High	Negligible Beneficial	Slight Beneficial
Track from Derberth Farm to Hillhead of Derberth: The track will be closed.	P2, P4, P5	High	Moderate Adverse	Slight
Amenity Value	P6	High	n/a	Negligible
Old Stonehaven Road (U168K)				
Hilldowntree - Causeyport Road (C34K)	P7	High	n/a	Slight
Blaikiewell Road (U63K)	P7	High	n/a	Slight
North Deeside RoW (GC40)	n/a	High	n/a	Moderate
Mitchell Farm access track (south)	n/a	High	n/a	Moderate
Milltimber Brae Road	P6, P7	High	n/a	Negligible
A93 (North Deeside Road)	P6	High	n/a	Negligible
Culter House access road	P6, P7	High	n/a	Moderate
Contlaw Road	P7	High	n/a	Slight
Silverburn Road (C127)	P7	High	n/a	Moderate
Track from Kingshill Wood to Moss of Auchlea	P7	High	n/a	Slight
A944: Pedestrians and cyclists will need to negotiate the new roundabout.	P6	High	n/a	Moderate
Track along the bottom of Cloghill, north of Denhead of Cloghill	n/a	High	n/a	Moderate
Track from Fairley House to Brimmond Hill	P7	High	n/a	Negligible
Community Severance	P5	Negligible	n/a	Slight
Redwing Livery Yards and Blaikiewell Animal Sanctuary				
Redwing Riding School (Eastland Lodge)	P5	Negligible	n/a	Slight
Kirkton of Maryculter Cemetery and Kirkton and Cookney Parish Church	n/a	Very High	n/a	Negligible Beneficial
Storybook Glen Theme Park	n/a	Negligible	n/a	Negligible Beneficial
Corbie Park Playing Fields	n/a	Very High	n/a	Negligible Beneficial

Description of Impact Note: these are potential environmental impacts (i.e. *before* specific mitigation)	**Mitigation Item Number (refer to Chapter 36)**	**Sensitivity /value of Receptor**	**Residual Impact (i.e. *with* mitigation)**	
			Magnitude	**Significance**
Corbie Hall (also known as Maryculter Community Hall)	n/a	Very High	n/a	Negligible Beneficial
Peterculter community facilities	P4, P5	Very High	n/a	Severe
Milltimber community facilities	P4, P5	Very High	n/a	Severe
Nether Beanshill Livery Yard	n/a	Negligible	n/a	Slight
East Brotherfield Livery Yard	n/a	Negligible	n/a	Slight
Ardene House Veterinary Hospital	n/a	Negligible	n/a	Slight
Five Mile Petrol Station & Garage	n/a	Negligible	n/a	Slight
East Kingsford Livery Yard	n/a	Negligible	n/a	Slight
Friends Burial Ground	P5	High	n/a	Slight
Denburn Stud Farm and Livery	P2, P5	High	n/a	Slight
Kingswells community facilities	P2, P5	Very High	n/a	Moderate
Westhill community facilities	n/a	Very High	n/a	Negligible
Relocation of the bus stops from the A90 to the A90 slip road at the Charleston Junction	P5, P6	Very High	n/a	Slight Beneficial
Vehicle Travellers (Chapter 32)				
Views from the AWPR will offer significant change to those currently available from the A90(T). Sections for the route will offer attractive open views across the rolling countryside around Aberdeen, which will become more enclosed as proposed planting matures. The journey will provide a more pleasant experience for drivers than the generally enclosed urban journey through Aberdeen.	L1-L10 & VT1, VT2	n/a	<u>Significance not assessed. Impacts considered as % and type of view:</u> *No View:* 23.6% of views in winter year of opening increasing to 39.8% in summer 15 years after. *Restricted View:* 17.9% of views in winter year of opening reducing to 16.6% in summer 15 years after. *Intermittent View:* 17% of views in winter year of opening increasing to 18% in summer 15 years after. *Open View:* 41.5% of views in winter year of opening reducing to 25.63% in summer 15 years after.	
Changes to driver stress levels: main sections of road network where driver stress levels are predicted to decrease due to the proposed scheme.	VT2	n/a	Key predicted driver stress decreases: • The A90(T) Charleston to Bridge of Dee (Moderate to Low). • The B9077 South Deeside Road eastbound (east of B979) eastbound (High to Moderate). • The B979 between A944 and A96	

Description of Impact Note: these are potential environmental impacts (i.e. *before* specific mitigation)	**Mitigation Item Number (refer to Chapter 36)**	**Sensitivity /value of Receptor**	**Residual Impact (i.e. *with* mitigation)**	
			Magnitude	**Significance**
			southbound (High to Moderate).	
Disruption due to Construction (Chapter 33)				
Damage to land (e.g. due to movement of machinery, storage of materials, access routes).	D1	See Land Use Impact summary	Not assessed	Not Significant
Dust and emission impacts on arable crop production (e.g. dust covering plant leaves - reducing photosynthesis).	D1			
Temporary restriction of access to farm buildings and severance of land preventing movement of machinery or livestock.	D2			
Temporary restriction of access to local business premises.	D3			
Visual impact of machinery including heavy excavators, earth moving plant, concrete batching plant, pile drivers, cranes etc. Also vehicles moving machinery and materials to and from the site including barges used in bridge construction.	D4	See Visual Impact summary	Not assessed	Significant adverse landscape and visual impacts possible near construction compounds, major structures and/or earthworks. Precise details of construction programme and approach required for full assessment
Visual impact of site compound areas including site accommodation and parking.	D4			
Visual impact of construction works including structures, earthworks, road surfacing and ancillary works, temporary soil storage heaps, night-time working and construction material stockpiles.	D4			
Generation of dust. A risk of soiling 1071 properties within 500m of the proposed length of the Southern Leg. A risk of enhanced PM_{10} concentrations for 309 properties within 200m of the proposed length of the Southern Leg.	D5, D6	High	Large	Moderate
Construction related vehicle emissions.	D5, D6	High	Very Small	Negligible
Increased noise and vibration levels to properties nearby to construction works.	D7	High	Not assessed	Adverse impacts likely at several properties close to the works
Temporary obstruction of routes used by pedestrians and others due to construction activities.	D8	See Pedestrian Impact summary	Not assessed	Short-term adverse impacts likely on some routes
Increases to driver stress (e.g. due to increased journey times, diversions, queuing traffic).	D9, D10	Not assessed	Not assessed	Not significant
Policies and Plans (Chapter 34)				
Refer to Policy Summaries (Tables 34.3 to 34.6 in Chapter 34)				

Table 35.2: Environmental Impact Table, Ecology and Nature Conservation (Chapter 25)

Description of Impact2	Risk of Significant Adverse Residual Impacts	Comments and Recommendations for Further Studies/Development of Mitigation
Hare Moss hydrological impacts.	Moderate	Requires detailed hydrological studies and sensitive drainage design.
Habitat loss of Greenhowe Pond	Moderate	Pond creation recommended
Fragmentation and habitat loss, with severance of bat commuting routes between Hill of Blairs and Burnhead.	Moderate	Provision of green bridges recommended where practicable. The C30K overbridge could be used for safe passage with appropriate planting.
Horizontal and vertical realignment of Burnhead Burn, risk of increasing sediment loads to Crynoch Burn.	High	Requires geomorphological modelling to inform detailed design and development of mitigation to prevent increasing sediment loads to Crynoch Burn.
Fragmentation and habitat loss of Kingcausie Woodland detrimental to squirrels and bats.	High	Impacts can be reduced through: • minimisation of fragmentation with the provision of a wildlife overbridge • Management of Kingcausie for wildlife including bat and bird boxes. • Off site habitat creation and management.
Horizontal and vertical realignment of Kingcausie Burn, risk of increasing sediment loads to Crynoch Burn.	High	Requires geomorphological modelling to inform detailed design and development of mitigation to prevent increasing sediment loads to Crynoch Burn.
Construction activities associated with River Dee crossing could affect SAC qualitfying species	Low	Will be controlled through timing of activities and other mitigation. Studies on salmon are ongoing. Further mitigation may be required to secure negligible residual impact
Outfall to River Dee increasing sediment loads on freshwater pearl mussel.	Low	Assumes outfall will be specifically designed in accordance with best practice construction and operational methods.
Fragmentation and habitat loss on the Deeside Old Railway DWS, particularly affecting commuting routes for bats.	Moderate	Provision of overbridge or underbridge recommended where practicable. This could be planted in order to direct bats safely over the carriageway.
Severance of two large woodland areas (Milltimber Wood and Guttrie Hill Wood) which support red squirrels, bats and badgers	Moderate to High	Provision of green bridge or dry mammal underpasses recommended, along with grey squirrel management
Fragmentation and habitat loss of important wildlife corridor for all species, particularly red squirrel and badger, around the Rotten O' Gairn DWS, Silver Burn and Gairnhill Wood. Main badger sett to be lost in the Gairnhill Wood area.	Moderate	Provision of overbridge or underbridge recommended, where practicable, to allow safe passage of mammals and birds and planting to connect Silverburn Wood to Broomhill plantation to the west.
Isolation and potential hydrogeological impacts to the Moss of Auchlea DWS, potentially affecting commuting routes for bats and birds in particular.	Low	Assumes impacts can be reduced through planting to screen the areas and to direct animals to the nearby underpass to the south
Fragmentation and habitat loss at West Hatton Wood DWS. Potential loss of tree roosts.	Moderate	Provision of green bridge, through planting at Fairley-Cloghill overbridge, is recommended to provide safe crossing for animals to the remaining fragments of the wood. Impacts can be reduced through provision of bat and bird boxes

[2] Due to qualitative nature of ecological assessment, this table summarises the likely risk of significant adverse residual impacts only (refer to Chapter 25: Ecology and Nature Conservation).

Description of Impact2	Risk of Significant Adverse Residual Impacts	Comments and Recommendations for Further Studies/Development of Mitigation
Fragmentation of bat and bird commuting routes and loss of tree roosts at Fairley and Derbeth Farm Woods.	Moderate	Provision of a green bridge is recommended in order to provide safe crossing and creation of bat boxes