

Aberdeen Western Peripheral Route
Environmental Statement Appendices 2007
Part C: Southern Leg
Appendix 25.12 – Mitigation and Residual Impacts

Summary of Site-Specific Mitigation and Residual Impacts (for pre-mitigation impacts of at least Moderate significance)

Ecological Receptor	Habitat Area	Impact	Impact Significance	Site-specific Mitigation	Residual Impact Significance
Section SL1					
Terrestrial Habitats	Blue Hill Wood, S3	Direct habitat loss of woodland and open habitats, quarry pond and associated habitats. Fragmentation and disturbance of woodland habitats. Potential pollution during construction and operation	Moderate	Generic mitigation reduces potential pollution and disturbance. Fragmentation would be reduced by roadside plantings (ch206100-206320). This planting also offsets habitat loss. A replacement pond with replacement wet woodland will be created at ch206030-206100 to offset habitat loss.	Minor
Badger	Greenhowe Social Group H, S3, S6	Risk of direct mortality due to RTAs, particularly where the proposed scheme crosses actual and probable badger paths at ch205400, ch205700, ch20600 and ch20650.	Moderate	The installation of badger-proof fencing at ch206800 – ch205900 and along the A90 375m south and 600m north of Charleston Overbridge in conjunction with other fencing as below will prevent badgers finding their way onto the carriageway while the provision of crossing structures will allow badgers to cross the scheme safely.	Negligible
		Severance of badger setting and foraging habitat likely to lead to an increase in territorial conflict with neighbouring social groups.	Moderate	The scheme will be made porous to badgers through the provision of three crossing points within the Group's territory.	Negligible
Bats	Lochview Croft ,S2	Increased disturbance to roost due to noise during construction of the scheme.	Moderate	Generic mitigation will reduce the risk of disturbance, including avoiding night-time working where practicable, maintaining a 30m buffer around roost sites and following best practice guidelines.	Minor
	Hare Moss, agricultural fields around Sunnyside to Causeyport S10, S13.	Habitat loss, fragmentation and severance of commuting and foraging routes adjacent to Hare Moss cottages during construction of the scheme.	Moderate	Best practice methods will be followed throughout the construction period, including compliance with published guidance from SNH. Any disturbance and/or fragmentation impacts during construction would be temporary.	Minor
	Agricultural fields around Sunnyside to Causeyport, S13.	Loss of foraging habitat as a result of changes in water regime. Reduced suitability of roost sites during construction of	Moderate	Generic mitigation will reduce the risk of disturbance to roost sites, including avoiding night-time working where practicable and maintaining a 30m buffer around roost sites.	Minor

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		the scheme.		Best practice methods will be followed throughout the construction period, including compliance with published guidance from SNH.	
	Duff's Hill, S7	Potential risk of direct mortality of commuting bats during operation of the scheme.	Moderate	Re-stocking of the felled woodland at Duff's Hill (ch205400) will help alleviate the risk of direct mortality by providing safe foraging areas.	Minor
	Hare Moss and Clochandigther Wood S10, S13	Possible habitat loss along southern edge of Hare Moss during operation of the scheme as a result of changes in water regime.	Moderate	Generic mitigation will help prevent habitat loss, including use of Sustainable Urban Drainage Systems (SUDS).	Minor
	Clochandigther Wood, S13	Reduced suitability of potential roosts at Lochview Cottages and cottages east of Hare Moss during the operation of the scheme.	Moderate	Bat boxes will erected and several buildings will be enhanced to provide roosting potential for bats.	Minor
Breeding Birds	Greenhowe Wood, S6	Potential fragmentation, isolation, disturbance and pollution during construction of the scheme.	Moderate	Generic mitigation, including best practice guidelines will be followed to alleviate temporary fragmentation and potential pollution impacts. Construction activities will be timed to avoid periods when birds are nesting – i.e. March-August to reduce disturbance.	Minor
		Potential risk of direct mortality due to RTAs, fragmentation / isolation, disturbance, habitat loss and pollution during the operation of the scheme.	Moderate	Generic mitigation including best practice guidelines will be followed to reduce potential pollution impacts. Habitat creation at ch205200-206000 will alleviate habitat loss and fragmentation and will indirectly reduce the risk of RTAs.	Minor to Negligible
	Hare Moss , S10	Potential pollution during construction and operation of the scheme.	Moderate	Generic mitigation including application of SEPA Pollution Prevention Guidelines (PPGs) to prevent pollution of watercourses and the implementation of SUDS.	Minor to Negligible

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Ecological Receptor	Habitat Area	Impact	Impact Significance	Site-specific Mitigation	Residual Impact Significance
Otter	Loirston Burn and Tributary, S2, S4-S6	Risk of direct mortality and disturbance due to construction	Moderate	Best practice guidelines will be followed during construction including the suspension of night time works within 30m of a watercourse or holt/couch and siting works compounds away from valuable areas of habitat. This will ensure minimal disturbance to otters using the burn and reduce the risk of direct mortality.	Negligible
		Increased risk of direct mortality due to RTAs and/or drowning where the proposed scheme crosses the burn	Moderate	Culverts with integral mammal ledges will be constructed where the scheme crosses the burn, thus allowing otters to continue their nightly journeys within the confines of the burn corridor. The erection of otter proof fencing at ch207300 – ch206850, ch205900 – ch205425 and ch204200 – ch202675 and along the A90 300m north and 150m south of Loirston Burn Culvert in conjunction with the badger fencing above will prevent otters finding their way onto the carriageway.	Negligible
		Potential pollution due to construction and operation	Moderate	Road drainage system will ensure that road runoff entering the burn complies with Environmental Quality Standards.	Negligible
	Burn of Ardoe, S13	Risk of direct mortality and disturbance due to construction	Major	Best practice guidelines will be followed during construction including the suspension of night time works within 30m of a watercourse or holt/couch (50m of a breeding site) and siting works compounds away from valuable areas of habitat. This will ensure minimal disturbance to otters using the Moss and reduce the risk of direct mortality. Otters lying-up in the Moss may suffer some disturbance although this would be temporary.	Minor
		Risk of direct mortality due to RTAs where the scheme passes close to the burn, due to operation	Major	Culverts with integral mammal ledges will be constructed where the scheme crosses the watercourse, thus allowing otters to continue their nightly journeys within the confines of the burn corridor. The erection of otter/badger proof fencing along the scheme as above will prevent otters finding their way onto the carriageway.	Negligible
		Potential pollution due to construction and operation; potential downstream effects on	Major	Road drainage system will ensure that road runoff entering the burn complies with Environmental Quality Standards.	Negligible

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Ecological Receptor	Habitat Area	Impact	Impact Significance	Site-specific Mitigation	Residual Impact Significance
		Dee SAC			
Wintering birds	Greenhowe Woods, S6	Risk of direct mortality due to RTA, permanent fragmentation and isolation, habitat loss of coniferous plantation.	Moderate	Generic mitigation including best practice guidelines will be followed. Habitat creation at ch205200-206000 will alleviate habitat loss and fragmentation and will indirectly reduce the risk of RTAs.	Minor
		Fragmentation, isolation and disturbance during construction.	Moderate	Generic mitigation including timing of works in key wintering bird habitats (avoid October –March were practicable) will minimise disturbance during construction.	Minor
	Loirston Loch and Loirston Burn, S6; Hare Moss, Burn of Ardoe, S10	Potential pollution of Loirston Burn/Loirston Loch and the Burn of Ardoe during construction and operation.	Moderate	Generic mitigation including Best Practice PPG guidelines from SEPA and SUDS guidelines will prevent / mitigate for potential pollution events	Negligible
Section SL2					
Badger	Merchant's Croft Group I, S16	Scheme would come within 30m of main sett I1 and therefore badgers in the sett are likely to suffer disturbance during the construction period.	Moderate	Best practice guidelines will be followed during construction.	Minor
		Increased risk of RTAs, particularly where the scheme crosses probable badger paths at ch201300, ch201350, ch201550 and ch201700.	Moderate	The installation of badger-proof fencing at ch202675 – ch202400, ch202100 – ch201500 and ch200825 – ch200600 and around the perimeter of Cleanhill Junction and the River Dee embankments in conjunction with otter fencing below will prevent badgers finding their way onto the carriageway while the provision of crossing structures will allow badgers to cross the scheme safely.	Negligible
		Fragmentation and severance of territory and foraging habitat which is likely to lead to increased territorial conflict with neighbouring social groups G and J.	Moderate	Severance will be minimised through the provision of three crossing points within the Group's territory. There will however be no crossing structure between ch202050 and ch201300 meaning that badgers would still face energetically expensive detours.	Minor
Bats	Greenloaning Cottage, S16	Demolition of potential roost resulting in increased risk of direct mortality during construction of the scheme.	Moderate	Generic mitigation will reduce the risk of direct mortality, including pre-construction surveys. Roost exclusion will be carried out under licence from the Scottish Executive	Negligible

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				Environment and Rural Affairs Department (SEERAD).	
	Agricultural fields around Sunnyside to Causeyport and agricultural fields to the east of Burnhead to Greenloaning, S13, S16.	Severance of commuting routes including access track to Heatherknowe, the road between Clochandigther and Auchlunies, the access track south of Whitestone and the road to the south of Cleanhill Wood. Permanent habitat loss through the loss of potential roosts at Greenloaning Cottage and the loss of small areas of high value linear foraging and commuting habitat alongside roads and field boundaries at Bishopton and south of Whitestone.	Moderate	Roadside planting at ch203150-203275 and habitat creation at ch201300-201750 will mitigate for habitat loss and fragmentation. Bat boxes will be erected and several buildings will be enhanced to provide roosting potential for bats.	Minor
Breeding Birds	Agricultural fields around Sunnyside to Causeyport and agricultural fields to the east of Burnhead to Greenloaning, S13, S16.	Potential pollution due to accidental spills during construction of the scheme.	Moderate	Best practice guidelines will be implemented during construction, including adherence to PPGs.	Negligible
		Potential risk of direct mortality, fragmentation / isolation, disturbance, habitat loss and pollution due to runoff during operation of the scheme.	Moderate	Roadside planting at ch203150-203275 and habitat creation at ch201300-201750 will mitigate for disturbance, habitat loss, fragmentation and will indirectly reduce the risk of RTA. Road drainage system will ensure that road runoff entering the burn complies with Environmental Quality Standards.	Minor to Negligible
Otter	Burnhead Burn, S16	Risk of direct mortality and disturbance due to construction including Cleanhill junction and C5K overbridge construction.	Moderate	Best practice guidelines will be followed during construction including the suspension of night time works within 30m of a watercourse or holt/couch and siting works compounds away from valuable areas of habitat. This will ensure minimal disturbance to otters using the burn	Negligible
		Risk of direct mortality through RTAs or drowning due to operation.	Moderate	Culverts with integral mammal ledges will be constructed where the scheme crosses the burn, thus allowing otters to continue their nightly journeys within the confines of the burn corridor. The erection of otter proof fencing at ch202400 – ch202100, ch201500 – ch200825 and ch200600 – ch102250 in conjunction with badger fencing above will prevent otters finding their way onto the carriageway.	Negligible
		Loss of medium value habitat comprising	Moderate	Scrub and woodland planting between the burn and the	Negligible

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Ecological Receptor	Habitat Area	Impact	Impact Significance	Site-specific Mitigation	Residual Impact Significance
		riparian scrub woodland and associated foraging and potential lying-up habitat.		scheme will offset the loss of habitat along the burn.	
		Fragmentation, severance and disturbance of burn habitats during the operational scheme.	Moderate	It is possible that some otters may be reluctant to use Burnhead Burn Culvert due to its length, however alternative potential commuting routes from Blaikiewell Burn exist.	Minor
		Potential pollution due to runoff from the scheme during operation.	Moderate	Road drainage system will ensure that road runoff entering the burn complies with Environmental Quality Standards.	Negligible
Freshwater	Burnhead Burn, S16	Culverting of existing channel would involve some earthworks, leading to potential sediment and/or other pollution release. A localised decrease in bankside and in-stream habitat complexity may also occur during both construction and operation	Moderate	Use best practice during construction to protect water environment such as minimising the area of disturbance, implementation of erosion control measures and periodic monitoring of effectiveness of mitigation. Culverts with suitable replacement substrate would be installed.	Minor
Wintering Birds	Bishopston, S13	Risk of direct mortality through RTAs. Disturbance and permanent habitat isolation and fragmentation is also predicted. Loss of improved/ semi-improved grassland with occasional broad-leaved copses and marshy grassland would also occur due to operation	Moderate	Habitat loss would be addressed through the creation of habitat (ch203150-203275). and as detailed in the terrestrial habitat mitigation above) This habitat creation and landscaping will also reduce operational disturbance, fragmentation and potential RTA impacts.	Minor
		Potential pollution of Heathfield Burn and Bishopston Ditch due to accidental spills during construction	Moderate	Generic mitigation including Best Practice PPG guidelines from SEPA and SUDS guidelines will prevent / mitigate for potential pollution events	Negligible
	Burnhead, S16	Increased risk of direct mortality due to RTAs, habitat fragmentation and isolation and disturbance are predicted. Habitat loss of improved grassland, marshy grassland, dense/continuous scrub and occasional broad-leaved standard trees due to operation would also occur.	Moderate	Habitat loss would be addressed through the creation of habitat (ch201300-201750 and as detailed in the terrestrial habitat mitigation above). This habitat creation and landscaping will also reduce and offset operational disturbance, fragmentation and potential RTAs.	Minor

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Ecological Receptor	Habitat Area	Impact	Impact Significance	Site-specific Mitigation	Residual Impact Significance
		Potential pollution of Whitestone Burn due to runoff during construction and operation.	Moderate	The use of approved pollution prevention schemes (e.g. oil separators) will be installed to prevent potentially polluted surface water from flowing into wetlands and/or other waterbodies. Generic mitigation including Best Practice PPG guidelines from SEPA and SUDS guidelines will prevent / mitigate for potential pollution events.	Negligible
Section SL3					
Terrestrial Habitats	Cleanhill Wood, S20	Permanent loss of woodland habitat. Fragmentation and severance of woodland blocks would occur during construction and operation. Possible loss of status as DWI. Disturbance and pollution impacts, including impacts on land drains through forest blocks are predicted during construction and operation.	Moderate	Generic mitigation reduces potential pollution problems. Wildlife bridge (ch100600) reduces fragmentation. Landscape planting(ch100200-100800 and ch100990) and wildlife bridge planting offsets habitat loss.	Minor
	Floodplain and immediate surrounds of Crynoch Burn (north) and Blaikiewell Burn, S22	Permanent loss of fen and wet woodland of Blaikiewell Burn and severance of wet habitats from other side of route. Potential pollution and disturbance to areas adjacent to route, including Blaikiewell Burn may occur during operation. Potential hydrological impacts to the wider habitat are also predicted.	Major	Generic mitigation reduces potential pollution impacts. Hydrological impacts are mitigated for by road design. Wet woodland habitat loss would be mitigated by sympathetic planting (ch100150-100200). Bridging of the burn and immediate environs reduces fragmentation and habitat loss.	Minor
	Agricultural fields within Kingcausie, S23	Permanent loss of species poor semi-improved grassland. Severance of grassland from other side of route and potential pollution and disturbance to areas adjacent to route would occur during construction and operation.	Moderate	Generic mitigation reduces potential pollution impacts. Potential hydrological impacts have been avoided through road design.	Minor

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	Kingcausie, S24	Habitat loss of semi-natural woodland and lowland wood-pasture and parkland habitats. Fragmentation and severance of dry stone wall and habitats adjacent to route, disturbance and potential pollution impacts, including impacts on Kingcausie Burn and possible hydrological impacts to wetland within Kingcausie Wood may also occur during construction and operation.	Moderate	Generic mitigation reduces potential pollution impacts. Sympathetic landscape planting (ch101500-101900) offsets loss of woodland. Hydrological impacts are mitigated for by road design. Fragmentation of wood pasture and ancient parkland habitats cannot be offset.	Moderate
	Floodplain and immediate surrounds of the River Dee, S28	Permanent habitat loss of rich semi-improved grassland and fragmentation and severance of grassland habitat is predicted. Potential disturbance and pollution impacts, including impacts to River Dee may occur during construction and operation.	Moderate	Generic mitigation reduces potential pollution impacts. Bridge design reduces fragmentation of grassland by the abutment now being located in S29.	Negligible
	Deeside Old Railway, S31	Permanent habitat loss of semi-natural habitats is predicted. Fragmentation and severance of linear feature and wildlife corridor, possible loss of status as DWI and potential pollution and disturbance impacts may occur during construction and operation.	Moderate	Wildlife bridge and associated planting reduces fragmentation and offsets habitat loss. Disturbance and potential pollution impacts will be reduced by generic mitigation. Planting either side of the route alignment increases the ability of the area to act as a wildlife corridor.	Minor
Badger	Cleanhill Social Group J, S20.	Increased risk of RTAs, particularly where the scheme crosses a probable badger path at ch100950.	Major	The installation of badger-proof fencing at ch102250 – 102525 in conjunction with otter fencing below will prevent badgers finding their way onto the carriageway while the provision of crossing structures will allow badgers to cross the scheme safely.	Negligible
	Kingcausie Social Group K (S24, S26 – S28)	Increased risk of RTAs, particularly where the scheme crosses probable badger paths at ch101200 and ch101875.	Major	The installation of badger-proof fencing will prevent badgers finding their way onto the carriageway while the provision of crossing structures will allow badgers to cross the scheme safely.	Negligible
		Severance of approximately 15% of badger group's territory, including high value foraging habitat adjacent to the River Dee. Woodland and pasture fields at Kingcausie	Moderate	Severance will be reduced through the provision of three crossing points within the Group's territory.	Negligible

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		would be severely fragmented.			
Bats	Kingcausie, S24	Potential risk of direct mortality due to demolition of currently unsurveyed mature trees during the construction of the scheme.	Major	Generic mitigation will reduce the risk of direct mortality, including pre-construction surveys. Any roost exclusion will be carried out under licence from the Scottish Executive Environment and Rural Affairs Department (SEERAD).	Minor
	Agricultural fields south of the River Dee, S27	Risk of direct mortality as a result of RTAs within Cleanhill Wood where the proposed scheme would sever at least five commuting routes at the woodland edges and along the South Deeside Road during the operation of the scheme.	Major	Ecology and landscape planting as detailed in the terrestrial habitat sections above will reduce the risk of direct mortality by providing safe commuting/foraging areas.	Minor
			Moderate		Minor
	Throughout Section SL3, S17-S31	Potential for disturbance from increased human presence, felling of trees, junction and bridge construction throughout whole section. Possible reduction of suitability of roosts located nearby to proposed carriageway.	Moderate	Generic mitigation will reduce disturbance. This will include implementation of a 30m buffer around identified roost sites and timing construction activities to avoid sensitive periods (i.e. summer and winter) and avoiding night time working where practicable.	Minor
	River Dee, S28	Potential pollution of the River Dee would have an adverse impact on prey species availability during construction of the scheme.	Major	Generic mitigation including Best Practice PPG guidelines from SEPA and SUDS guidelines will prevent / mitigate for potential pollution events.	Negligible
	Deeside Old Railway, S31	Severance of foraging and possible commuting route during construction and operation of the scheme.	Moderate	Wildlife bridge at ch100600 and associated planting will help offset habitat fragmentation.	Minor
	Cleanhill Wood and Kingcausie, S20, S24	Potential risk of direct mortality due to felling of trees with high roost potential which are as yet unsurveyed, during construction.	Major	Generic mitigation will reduce the risk of direct mortality, including pre-construction surveys. Any roost exclusion will be carried out under licence from the Scottish Executive Environment and Rural Affairs Department (SEERAD).	Minor
		Increased disturbance during construction	Moderate	Generic mitigation will reduce disturbance. This will include implementation of a 30m buffer around identified roost sites and timing construction activities to avoid sensitive periods	Minor

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				(i.e. summer and winter) and avoiding night time working where practicable.	
		Permanent habitat loss, fragmentation and severance of areas of high value roosting, foraging and commuting habitat, including due to the realignment of Kingcausie Burn. Loss of high value riparian and aquatic habitat during construction and operation of the scheme.	Moderate	Best practice guidelines will be followed during construction. Habitat creation as detailed in the terrestrial habitats section above will reduce impacts associated with habitat loss and fragmentation.	Minor
	Blaikiewell Farm, Cleanhill Junction, S19	Long-term disturbance of bat foraging and commuting habitat as a result of lighting at Cleanhill Junction.	Major (for some species only)	Lighting disturbance would be an adverse impact to some species and would be of benefit to others. Road lighting has the potential to attract insects and is considered a reliable food source, for species such as pipstrelles. <i>Plecotus</i> and <i>Myotis</i> species however tend to avoid lights to escape predation from birds, and thus for these species a significant residual impact will remain.	Major (for some species only)
Breeding Birds	River Dee, S27, S28.	Potential for pollution of the River Dee due to accidental spills during construction and operation of the scheme.	Moderate	Generic mitigation including Best Practice PPG guidelines from SEPA and SUDS guidelines will prevent / mitigate for potential pollution events.	Minor to Negligible
Otter	River Dee S28	Risk of direct mortality due to construction and through RTAs or drowning during operation	Major	Best practice guidelines will be followed including demarcation of the river and SAC within 30m of active otter lying-up sites (50m of breeding sites) to ensure that otters are not killed or disturbed during construction; suspension of night time works and siting works compounds away from valuable areas of habitat. Commuting routes to remain open on both banks during bridge construction. This will ensure that minimal disturbance to otters using the river and reduce the risk of direct mortality. The installation of otter/badger proof fencing along the carriageway will prevent otters from finding their way on to the road.	Negligible
		Permanent loss of medium value riparian habitat including couch	Major	Bridge structure with set back piers will allow habitat underneath to remain relatively intact. Minimum habitat loss to be undertaken and there will be sufficient light under the bridge for new habitat to grow.	Negligible

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		Fragmentation, severance and disturbance of otter territories	Major; Moderate for disturbance during operation	Construction of a wide-span bridge with set back piers will allow otters to pass safely between the abutments of the bridge and the riverbank during high water levels. Mitigation to reduce direct mortality (detailed above) and provision of screening on the Dee crossing will limit the amount of light from vehicles entering the banks with no residual impacts of disturbance on the otter population.	Negligible
		Deterioration in water quality due to runoff from the scheme during operation	Major	Road drainage system will ensure that road runoff entering the River complies with Environmental Quality Standards.	Negligible
	Blaikiewell Burn, S22; Kingcausie Burn, S20, S22, S24; Milltimber Burn, S29, S30	Risk of direct mortality and/or disturbance due to construction (especially due to burn realignment at Kingcausie Burn) and operation through RTAs.	Moderate	Best practice guidelines and demarcation of the burn within 30m of active otter lying-up sites to ensure that otters are not killed or disturbed during construction. Best practice guidelines will be followed during construction including the suspension of night time works within 30m of the watercourse and holt/couch and siting works compounds away from valuable areas of habitat. This will ensure that minimal disturbance to otters using the burn Construction of a buried structure with adequate clearance on the banks at Blaikiewell Burn and culverts at Kingcausie and Milltimber Burns and the presence of alternative commuting routes will ensure otters can pass without having to climb up to the road during high water levels. The installation of otter proof fencing at ch102525 – 102850 in conjunction with badger fencing above will prevent otters finding their way onto the carriageway.	Negligible
		Fragmentation and disturbance of otter territories due to operation	Moderate	Buried structure at Blaikiewell Burn and depressed invert box culverts with integral mammal ledges will be constructed where the scheme crosses Kingcausie Burn, thus allowing otters to continue their nightly journeys within the confines of the burn corridor. The erection of otter/badger proof fencing along the entire scheme will prevent otters finding their way onto the carriageway. The construction of culverts at crossing points will allow otters to move freely within and between available areas of	Negligible

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				habitat. Alternative overland routes have also been shown to exist. Planting as per terrestrial habitats will act as a screen from the road and otters are likely to become accustomed to the disturbance in the short - long term	
		Potential pollution of burn due to runoff from the scheme during operation	Moderate	Road drainage system will ensure that road runoff entering the burn complies with Environmental Quality Standards.	Negligible
Red Squirrel	Cleanhill Wood, S20; Kingcausie S24	Risk of direct mortality during clearance of woodland for construction	Major	Method statement will be followed including: phased tree clearance and implementation of exclusion zones around active dreys to avoid felling drey trees.	Negligible
		Risk of red squirrel disturbance due to construction activities. Likely to force red squirrels to retreat deeper into the wood.	Moderate	Generic mitigation measures include erection of temporary fencing to define exclusion zones around active dreys, as per method statement, will minimise disturbance. Any disturbance will be temporary.	Minor
		Risk of direct mortality through RTAs if red squirrels attempt to cross the carriageway when foraging or dispersing to other woodland areas.	Major	Installation of wildlife bridge at Cleanhill Wood will help reduce the risk of direct mortality by providing a safe crossing point. However, it may take some time for red squirrels to become accustomed to using the overbridge. Mitigation for habitat loss as per terrestrial habitats above will also indirectly mitigate for RTAs.	Minor
		Loss of high value mixed woodland habitat.	Moderate	Woodland and scrub habitat creation (as detailed in the terrestrial habitats section above) together with sympathetic management of surrounding woodland areas for red squirrel conservation will help ameliorate habitat loss impacts. However, it may take some time for planted areas of woodland habitat to mature.	Minor
		Fragmentation of Cleanhill Wood and Kingcausie Wood from Durris Forest and Crynoch Burn would sever red squirrel dispersal between woodland areas.	Major	Installation of wildlife bridge will help mitigate for habitat fragmentation although it may take some time for red squirrels to become accustomed to using the overbridge. See also mitigation for habitat loss.	Minor
Amphibians	Eastlands Pond, S23	Increased risk of disturbance and pollution during the operational scheme	Moderate	Generic mitigation including Best Practice PPG guidelines from SEPA and SUDS guidelines will prevent / mitigate for potential pollution events.	Negligible

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Freshwater	Blaikiewell Burn, S22	Bridging of existing channel would involve some earthworks, possibly resulting in sediment and/or other pollution release. A localised decrease in bankside and in-stream habitat complexity may also occur during construction and operation.	Moderate	Use best practice during construction to protect water environment such as minimising the area of disturbance, implementation of erosion control measures and periodic monitoring of effectiveness of mitigation. Ensure substrate and habitat complexity will be retained through minimising disturbance to habitat during construction. Generic mitigation including Best Practice PPG guidelines from SEPA and SUDS guidelines will prevent / mitigate for potential pollution events.	Minor
	Kingcausie Burn, S20, S22, S24	Culverting and realignment of existing semi-natural channel would involve earthworks, resulting in considerable potential sediment and/or other pollution release during construction.	Major	Use best practice during construction to protect water environment such as minimising the area of disturbance, implementation of erosion control measures, periodic monitoring of effectiveness of mitigation. Generic mitigation including Best Practice PPG guidelines from SEPA and SUDS guidelines will prevent / mitigate for potential pollution events.	Minor
		Permanent loss of habitat and species assemblages due to burn re-alignment. There would also be a localised impact upon habitat complexity within the culvert which may lead to localised changes in species distribution	Major	Create suitable habitat within, and transfer substrate to, the new realignment channel. Culverts with suitable replacement substrate to be installed.	Minor
	River Dee, S28	Bridge construction may lead to potential sediment and/or other pollution release into the River Dee. This may impact upon the integrity of salmon spawning areas. Noise and vibration disturbance to fish such as Atlantic salmon may also occur during construction.	Major	Use best practice during construction to protect water environment such as minimising the area of disturbance, implementation of erosion control measures, periodic monitoring of effectiveness of mitigation. Generic mitigation including Best Practice PPG guidelines from SEPA and SUDS guidelines will prevent / mitigate for potential pollution events.	Minor
		Night-time lighting of the bridge may affect migratory fish behaviour	Major	Any lights on site compounds or during construction will be directed away from water. Ensure street lighting is directed away from the water surface.	Minor

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Ecological Receptor	Habitat Area	Impact	Impact Significance	Site-specific Mitigation	Residual Impact Significance
Freshwater Pearl Mussel	River Dee, S28: Crynoch Burn, S18, S22.	Risk of direct mortality due to potential sedimentation during construction and operation	Major	Sensitive design of culverts and burn realignments at Blaikiewell Burn, Kingcausie Burn and Crynoch Burn and the restriction of works away from the River will reduce changes in sediment load and prevent fragmentation of salmonid routes.	Negligible
		Habitat loss and disturbance of suitable mussel settling areas due to changes in sediment loading and fragmentation of salmonid routes during construction and operation.	Major		Negligible
		Potential pollution during to construction and operation	Major		Generic mitigation including Best Practice PPG guidelines from SEPA and SUDS guidelines will prevent / mitigate for potential pollution events.
Wintering Birds	River Dee, S28	Potential pollution of the River Dee due to accidental spills during construction and due to runoff from the operational scheme.	Moderate	Generic mitigation including Best Practice PPG guidelines from SEPA and SUDS guidelines will prevent / mitigate for potential pollution events.	Negligible
Section SL4					
Terrestrial Habitats	Beans Hill north, S39	Permanent loss of acid grassland habitat. Potential hydrological impacts to acid grassland and hydrological connections to adjacent dry heath during construction and operation. Potential pollution and disturbance impacts during operation of the proposed scheme.	Moderate	Generic mitigation reduces potential pollution impacts. Hydrological impacts are mitigated for by road design.	Minor
Badger	Milltimber Social Group L, S35	Risk of direct mortality during construction due to potential loss of outlier sett L3.	Moderate	Badgers will be excluded from the sett between July 1 and November 30 inclusive, prior to sett closure. Exclusions will be undertaken using prescribed methods, in consultation and under licence from SNH.	Negligible
		Risk of direct mortality through RTAs, particularly where the scheme crosses actual and probable badger paths at ch103550, ch103750, ch104150 and ch104600.	Moderate	The installation of badger and otter-proof fencing at ch103550 – ch104975, ch104975 - ch105650, ch105650 – ch105900 and ch105900 – ch106950 and around the perimeter of Milltimber Junction and side roads will prevent badgers finding their way onto the carriageway while the provision of crossing structures will allow badgers to cross	Negligible

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Ecological Receptor	Habitat Area	Impact	Impact Significance	Site-specific Mitigation	Residual Impact Significance
				the scheme safely.	
		Fragmentation, severance and disturbance of setting and foraging habitat leading to increased conflict with neighbouring social groups.	Moderate	There will be only one crossing point for badgers within their territory meaning that badgers would face energetically expensive detours.	Moderate
Bats	International School, Milltimber, S32	Risk of direct mortality due to demolition of mixed common pipistrelle and brown long-eared bat roost during construction of the scheme.	Major	Generic mitigation will reduce the risk of direct mortality, including pre-construction surveys. Any roost exclusion will be carried out under licence from the Scottish Executive Environment and Rural Affairs Department (SEERAD).	Negligible
	Agricultural fields south of Milltimber, Peterculter and Western Milltimber, Milltimber, S29, S32, S33.	Risk of direct mortality due to demolition of building with roost potential during construction of the scheme, although no emergence observed.	Moderate		Negligible
		Risk of direct mortality as a result of RTAs where carriageway crosses known commuting routes along the North Deeside Road, Culter House Wood, Culter House Road, Contlaw Road and the access track to Beans Hills during operation of the scheme.	Moderate for HA S29 Major for HA S32 and S33	Ecology and landscape planting (including at ch102150-102850, ch103800-104100) will reduce the risk of direct mortality by providing safe commuting/foraging areas.	Minor
		Reduced suitability of potential roosts located in close proximity to the proposed carriageway	Moderate	The habitat creation and planting detailed above will help reduce and offset disturbance impacts.	Minor
	Beans Hill (S38, S39)	Habitat fragmentation and loss of foraging habitat during operation of the scheme.	Moderate	Ecology and landscape planting (including at ch106000-106500) will offset habitat loss and reduce and offset fragmentation.	Minor
		Loss of foraging habitat and habitat fragmentation due to demolition of trees and buildings with roosts or roosting potential.	Moderate	Habitat creation detailed above will help mitigate for loss of foraging habitat. Bat boxes will be erected and buildings enhanced to provide roosting potential for bats (locations to be determined).	Minor

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Ecological Receptor	Habitat Area	Impact	Impact Significance	Site-specific Mitigation	Residual Impact Significance
Red Squirrel	Milltimber Wood, S35	Risk of direct mortality through RTAs if red squirrels attempt to cross the carriageway to disperse to other woodland areas, such as Guttrie Hill Wood.	Major	Sympathetic woodland management for red squirrels and replanting western section of Milltimber Wood will provide refuge habitat. Squirrels less likely to attempt to cross road to forage and/or breed if already have access to high quality habitat.	Moderate
		Proposed scheme would isolate Milltimber Wood from nearby Guttrie Hill Wood.	Major	Although sympathetic management woodland management of red squirrels will help alleviate fragmentation impacts to some extent, the small size of Milltimber Wood means it is probably too small to support a red squirrel population in isolation. Fragmentation could therefore lead to loss of genetic diversity and ultimately local extinction of red squirrels from the woodland.	Major
	Guttrie Hill Wood, S34	Risk of red squirrel mortality during clearance of woodland for construction works.	Major	Method statement will be followed including: phased tree clearance and implementation of exclusion zones around active dreys to avoid felling drey trees.	Negligible
		Risk of red squirrel disturbance due to construction activities. Likely to force red squirrels to retreat deeper into the wood.	Moderate	Generic mitigation measures include erection of temporary fencing to define exclusion zones around active dreys, as per method statement, will ensure minimal disturbance. Any disturbance will be temporary.	Minor
		Risk of direct mortality through RTAs if red squirrels attempt to cross the carriageway to disperse to other woodland areas, such as Milltimber Wood.	Major	Sympathetic woodland management for red squirrels of Guttrie Hill Wood will provide refuge habitat. Squirrels less likely to attempt to cross road to forage and/or breed if already have access to high quality habitat, however, the risk of mortality is still considered to be a Major adverse impact.	Major
		Proposed scheme would isolate Guttrie Hill Wood from nearby Milltimber Wood.	Major	Sympathetic woodland management for red squirrels (as per mitigation for habitat loss) will indirectly help alleviate fragmentation impacts to some extent and benefit the species however, habitat fragmentation is still considered to be a Major significant impact.	Major

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Ecological Receptor	Habitat Area	Impact	Impact Significance	Site-specific Mitigation	Residual Impact Significance
Section SL5					
Terrestrial Habitats	Rotten O'Gairn, S24	Habitat loss and fragmentation and severence of marsh habitat. Potential hydrological impacts to wetland site and hydrological connections during construction and operation. Potential pollution and disturbance impacts during operation are also predicted.	Moderate	Generic mitigation reduces potential pollution impacts. Hydrological impacts are mitigated for by road design. Habitat loss will be mitigated by sympathetic planting (ch106500-106580). Fragmentation would be reduced by roadside planting connecting S42 with S40 and S44. Loss of high value semi-improved grassland will be mitigated by offset creation.	Minor
	Gairnhill and Kingshill Wood, S43	Permanent loss of woodland edge habitat, including wet woodland. Potential hydrological impacts to wetland site and hydrological connections during construction and operation. Potential pollution and disturbance impacts may also occur during operation.	Moderate	Generic mitigation reduces potential pollution impacts. Hydrological impacts are mitigated for by road design. Habitat loss would be mitigated by sympathetic planting (ch106500-106800).	Minor
	Moss of Auchlea, S45	Potential hydrological impacts from pollution during construction and operation. Potential disturbance in adjacent habitat may also occur during operation of the proposed scheme.	Moderate	Generic mitigation reduces potential pollution impacts. Hydrological impacts are mitigated for by road design. Habitat area will be increased by sympathetic planting (ch107350-107700).	Negligible
Badger	Gairnhill Group N, S43	Scheme would result in the partial loss/damage of main sett N1 and outlier sett N3, leading to the possible injury or fatality of badgers in the setts.	Major	Badgers will be excluded from the setts between July 1 and November 30 inclusive, prior to sett closure. Exclusions will be undertaken using prescribed methods, in consultation and under licence from SNH.	Negligible
		Proposed scheme is within 30m of annexe sett N2 and therefore badgers are likely to suffer disturbance during construction and/or possible fatality.	Moderate	Best practice guidelines will be followed during construction including the suspension of night time works within 100m of a main sett and procurement of a SNH sett disturbance licence.	Minor
		Increased risk of RTAs, particularly where the proposed scheme crosses probable badger paths at ch106000, ch106250 and ch106450.	Major	The installation of badger-proof fencing at ch106950 – ch107250 and ch107600 – Northern Leg in conjunction with otter fencing below will prevent badgers finding their way onto the carriageway while the provision of crossing structures will allow badgers to cross the scheme safely.	Negligible

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Ecological Receptor	Habitat Area	Impact	Impact Significance	Site-specific Mitigation	Residual Impact Significance
		The loss/damage of main sett N1 would result in a series of impacts on the social group including: displacement from their home range and main sett, and increased territorial conflict with neighbouring social groups (Groups L, M and O). It is unlikely that the social group would continue to exist.	Major	An artificial sett will be provided within close proximity to the existing sett. The location and design of the compensatory sett will be decided in agreement with SNH.	Minor
		Severance of approximately 50% of badger group's territory, including potential foraging habitat leading to increased territorial conflict with neighbouring social groups (group L).	Major	Severance will be minimised through the provision of four crossing points within the Group's territory.	Negligible
	Kingshill Group P,S43	Increased risk of RTAs, particularly where the scheme (side road) crosses probable badger paths at ch108000 and ch108375.	Major	The installation of badger-proof fencing will prevent badgers finding their way onto the carriageway while the provision of crossing structures will allow badgers to cross the scheme safely.	Negligible
	Bishops Court Group QS44 and outside the study area.	Increased risk of RTAs, particularly where the scheme crosses actual and probable badger paths at ch107700, ch107690, ch107810 and ch107975.	Major	The installation of badger-proof fencing will prevent badgers finding their way onto the carriageway while the provision of crossing structures will allow badgers to cross the scheme safely.	Negligible
Bats	Rotten O'Gairn, East Silverburn Woods, Gairnhill Wood and between Auchlea Moss and Kingshill Wood, S40-S45.	Fragmentation and isolation between areas of key foraging habitats and roosts during construction and operation of the scheme.	Moderate	Implementation of best practice guidelines will reduce impacts during construction. Habitat creation and planting, including at ch106000-106500, ch106500-106580, ch106500-106800 and ch107350-107700, will help alleviate fragmentation impacts.	Minor
		Risk of direct mortality as a result of RTAs where the scheme crosses known bat commuting routes during the operation of the scheme.	Moderate/ Major	Ecology and landscape planting detailed above will reduce the risk of direct mortality by providing safe commuting/foraging areas.	Minor
Breeding Birds	East Silverburn, S42	Pollution of watercourses.	Moderate	Generic mitigation including Best Practice PPG guidelines from SEPA and SUDS guidelines will prevent / mitigate for potential pollution events.	Negligible

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Ecological Receptor	Habitat Area	Impact	Impact Significance	Site-specific Mitigation	Residual Impact Significance
Otter	Upper Beanshill Burn, Gairn Burn, S40, S42, S44, S48	Risk of direct mortality and disturbance during construction. Increased risk of direct mortality through RTAs during operation of the scheme.	Moderate	Best practice guidelines will be followed during construction including the suspension of night time works within 30m of a watercourse or holt/couch and siting works compounds away from valuable areas of habitat. This will ensure that minimal disturbance to otters using the burn and reduce the risk of direct mortality. Underpass will be constructed near the likely crossing point, thus allowing otters to continue their nightly journeys within the confines of the burn corridor. The erection of otter proof fencing at ch105900 – ch106950 and ch107250 – ch107600 in conjunction with badger fencing above will prevent otters finding their way onto the carriageway.	Negligible
		Loss of medium value habitat (Gairn Burn only) comprising woodland scrub suitable for lying-up in area used regularly by otters during operation	Moderate	Maintenance of scrub and replacement to provide cover for otters will allow habitat to remain relatively intact with no long-term impacts on resource availability.	Negligible
		Fragmentation of otter territories during operation of the proposed scheme	Moderate	Provision of underpass at Upper Beanshill Burn, enhanced by scrub planting and guided by otter/badger fencing will allow otters to pass safely and freely within and between areas of habitat. The location of the underpass in relation to the existing crossing point may result in some loss of connectivity, but it is anticipated that otters will become accustomed to the crossing in the medium-long term. The Gairn Burn culvert will be 12m long and located in an area already used by otters so has a high chance of success. Alternative commuting routes between catchments will be provided as per Upper Beanshill Burn above.	Minor (Upper Beanshill Burn); Negligible (Gairn Burn)
		Potential pollution due to runoff from the operational scheme.	Moderate	Road drainage system will ensure that road runoff entering the burn complies with Environmental Quality Standards.	Negligible
	Moss of Auchlea, S45	Increased risk of direct mortality due to RTAs where the scheme passes between the Moss and Kingshill Wood during operation.	Moderate	Culverts with integral mammal ledges will be constructed where the scheme crosses the watercourse, thus allowing otters to continue their nightly journeys within the confines of the burn corridor. The erection of otter/badger proof fencing along the scheme will prevent otters finding their way onto	Negligible

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Ecological Receptor	Habitat Area	Impact	Impact Significance	Site-specific Mitigation	Residual Impact Significance
				the carriageway.	
		Disturbance due to construction and operation	Moderate	Best practice guidelines will be followed during construction including the suspension of night time works within 30m of a watercourse or holt/couch (50m of a breeding site) and siting works compounds away from valuable areas of habitat. This will ensure minimal disturbance to otters using the moss. Otters lying-up in the moss may suffer some disturbance although this will be temporary. Mixed woodland planting will act as a screen from the road and otters are likely to become accustomed to the disturbance in the short - long term.	Minor (construction); Negligible (operation)
		Possible habitat loss due to hydrological changes and potential pollution of Auchlea Moss during operation may occur.	Moderate	Road drainage system will ensure that road runoff entering the burn complies with Environmental Quality Standards. Hydrological impacts are mitigated for in the road design.	Negligible
Red Squirrel	Gairnhill Wood, S43; Silverburn Wood, S41	Risk of direct mortality during clearance of woodland for construction works.	Major	Method statement will be followed including: phased tree clearance and implementation of exclusion zones around active dreys to avoid felling drey trees.	Negligible
		Disturbance due to construction and operation activities. Likely to force red squirrels to retreat deeper into the wood.	Moderate	Generic mitigation measures include erection of temporary fencing to define exclusion zones around active dreys, as per method statement, will minimise disturbance. Any disturbance will be temporary. Appropriate woodland management for red squirrels will help ameliorate impacts of disturbance by providing/red squirrel refuge habitat.	Minor during construction; Negligible during operation
		Risk of direct mortality through RTAs if red squirrels attempt to cross the carriageway.	Major	Sympathetic woodland management for red squirrels of Gairnhill Wood, Kingshill Wood and Silverburn Wood will provide refuge habitat. Squirrels less likely to attempt to cross road to forage and/or breed if already have access to high quality habitat, .however, the risk of mortality is still considered to be a Major adverse impact in Silverburn Wood.	Moderate (Gairnhill Wood); Major (Silverburn Wood)

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Ecological Receptor	Habitat Area	Impact	Impact Significance	Site-specific Mitigation	Residual Impact Significance
		Fragmentation and isolation of Gairnhill Wood from adjacent Silverburn Wood.	Moderate (Gairnhill Wood); Major (Silverburn Wood)	Habitat creation and sympathetic woodland management of Gairnhill Wood and Kingshill Wood for red squirrels (as per specific mitigation for habitat loss). Sympathetic woodland management for red squirrels in these woodland areas will indirectly help alleviate fragmentation impacts although it remains a Major impact at Silverburn Wood.	Minor (Gairnhill Wood); Major (Silverburn Wood)
Wintering Birds	Silverburn, S42	Potential pollution of Gairn Burn and field drains feeding the Upper Beanshill Burn due to accidental spills during construction and runoff during operation of the scheme.	Moderate	Generic mitigation including Best Practice PPG guidelines from SEPA and SUDS guidelines will prevent / mitigate for potential pollution events. Riparian scrub planting to the west of the proposed scheme in HA S42 at ch106520 will also help reduce the potential impacts of pollution.	Negligible
Section SL6					
Terrestrial Habitats	West Hatton Wood, S47	Habitat loss in both east and north sections of woodland. Fragmentation and severance of linear habitat and wildlife corridors. Potential pollution during construction and operation Combined impacts likely to result in loss of designated status of site.	Moderate	Generic mitigation reduces potential pollution impacts. Fragmentation would be reduced by roadside plantings connecting to Fairly Cloghill Wildlife Bridge in the north (ch109500) and detention ponds in the south (ch108600-108800). Loss of linearity reduces beneficial mitigation.	Minor
	Cloghill, S48	Direct loss of edge grassland and farmland habitat. Fragmentation of farmland, plantation woodland and linear wildlife corridor habitats Potential hydrological impacts upon acid grassland pockets. Pollution and disturbance impacts during construction and operation Combined impacts likely to result in loss of designated status of site.	Major	Generic mitigation reduces potential pollution and disturbance impacts. Roadside plantings directly north and south of the Habitat Area reduce fragmentation of the woodland habitat by connecting with value increased by connections to the DWS of S47. This planting also offsets woodland habitat loss. Planting of species-rich grassland (ch109500-109900) offsets grassland habitat loss. Loss and fragmentation of existing high value grassland reduces beneficial impacts.	Minor

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Ecological Receptor	Habitat Area	Impact	Impact Significance	Site-specific Mitigation	Residual Impact Significance
Badger	Cloghill Group R, N2	Risk of direct mortality due to RTAs, particularly where the scheme crosses actual and probable badger paths at ch109550 and ch110790.	Moderate	The installation of badger-proof fencing at ch107600 – North Kingswells Junction and around the perimeter of the A944 Junction and side roads will prevent badgers finding their way onto the carriageway while the provision of crossing structures will allow badgers to cross the scheme safely.	Negligible
		Fragmentation, severance and disturbance of foraging habitat and territory leading to increased territorial conflict with neighbouring social groups (Brimmond Hill Group).	Moderate	Severance will be minimised through the provision of three crossing points within the Group's territory.	Negligible
Bats	Woodland at Fairley Home Farm and Derbeth Farm (N3)	Potential for direct mortality due to tree roosts being felled in the tree lines north of Fairley Home Farm during construction of the scheme.	Major	Generic mitigation will reduce the risk of direct mortality, including pre-construction surveys. Any roost exclusion will be carried out under licence from the Scottish Executive Environment and Rural Affairs Department (SEERAD).	Minor
		Habitat loss due to tree roosts being felled in the tree lines north of Fairley Home Farm	Major	Habitat creation detailed in the terrestrial habitats section above will help mitigate for loss of habitat. Bat boxes will be erected and buildings enhanced to provide roosting potential for bats (locations to be determined).	Minor
		Reduced suitability and viability of existing roosts and particular, tree roosts within 50m of the alignment near Fairly Home Farm and in shelterbelts towards Dykeside due to loss of connecting habitat and proposed lighting at North Kingswell Junction during the operation of the scheme.	Moderate	Habitat creation detailed above will reduce and offset fragmentation and disturbance impacts.	Minor
	Agricultural fields to the north of A944, West Hatton Wood, agricultural land around Fairley Home Farm and Derbeth Farm, S46, S47, N4.	Disturbance during the felling of West Hatton Wood, Fairley Home Farm Wood and tree lines near Dykeside during construction of the scheme.	Moderate	Generic mitigation will reduce disturbance. This will include implementation of a 30m buffer around identified roost sites and timing construction activities to avoid sensitive periods (i.e. summer and winter) and avoiding night time working where practicable.	Minor
	Agricultural fields to the north of the A944 and woodland at Fairly Home Farm and Derbeth Farm, S46, N3.	Severance of important linear connecting habitat restricting accessibility to foraging resources and fragmenting an already small area of optimal foraging and roosting habitat. Therefore reducing viability of supporting	Moderate (N3); Major (S46)	Generic mitigation measures will reduce construction impacts, including erecting temporary fencing to define area of works. Any fragmentation would be temporary.	Minor

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		foraging and roosting bats in the long term during the construction of the scheme.			
		Risk of direct mortality due to RTAs where the carriageway severs West Hatton Woods and commuting routes near Cloghill, Fairley Home Farm and tree lines toward Brimmond Hill during the operation of the scheme.	Major	Ecology and landscape planting detailed above will reduce the risk of direct mortality by providing safe commuting/foraging areas.	Minor
		During the operation of the scheme there is potential habitat loss and severance of important linear connecting habitat restricting accessibility to foraging resources and fragmenting an already small area of optimal foraging and roosting habitat. Therefore reducing the viability of supporting foraging and roosting bats in the long-term.	Moderate (N3); Major (S46)	Habitat creation detailed in the terrestrial habitats section above will reduce and offset fragmentation impacts.	Minor
Breeding Birds	Agricultural fields North of the A944 and Cloghill, S46, S48.	Potential pollution due to accidental spills during construction of the scheme.	Moderate	Generic mitigation including Best Practice PPG guidelines from SEPA and SUDS guidelines will prevent / mitigate for potential pollution events.	Minor to Negligible
Wintering Birds	Cloghill, S46	Risk of direct mortality due to RTAs,	Moderate	Direct mortality will be reduced by provision of planting as per terrestrial habitats above.	Minor
		Permanent loss of grassland and scrub habitats, fragmentation and disturbance.		Habitat loss and fragmentation will be offset by planting as per terrestrial habitats above.	Minor
		Potential pollution to Westholme Burn during construction and operation		Generic mitigation including Best Practice PPG guidelines from SEPA and SUDS guidelines will prevent / mitigate for potential pollution events.	Negligible
Red Squirrel	Hillhead of Derbeth, N6, N7	Risk of direct mortality during clearance of woodland for construction works and through RTAs if red squirrels attempt to cross the carriageway.	Moderate	Generic mitigation as per method statement including phased tree clearance and implementation of exclusion zones around active dreys will reduce the risk of mortality during construction. Installation of wildlife bridge will help reduce the risk of direct mortality by providing a safe crossing point. However, it may take some time for red squirrels to become	Negligible (construction); Minor (operation)

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				accustomed to using the overbridge.	
		Disturbance due to construction activities.	Moderate	Generic mitigation measures including erection of temporary fencing to define exclusion zones around active dreys, as per method statement, will minimise disturbance.	Minor
		Fragmentation and disturbance due to severance of woodland area.	Moderate	Installation of wildlife bridge will help mitigate for habitat fragmentation although it may take some time for red squirrels to become accustomed to using the overbridge. Habitat creation as per terrestrial habitats above will reduce fragmentation effects.	Minor