

Technical Appendix 8.6

EclA Scoping Rationale

1. Scoping Rationale

- 1.1.1 The following section provides the rationale for the scope of the assessment and comprises three tables:
- Table 8.6.1a describes and justifies the level of importance assigned to the ecological features identified during the data gathering exercise carried out to inform this assessment.
 - Table 8.6.1b provides an evaluation of the blanket bog resource within the Study Area with reference to JNCC SSSI site selection criteria.
 - Table 8.6.2 determines and justifies whether those ecological features require further assessment as they have either sufficient legal protection for a breach in legislation to occur, or are of sufficient importance that a significant effect may occur as a result of the Proposed Development.
- 1.1.2 Within Table 8.6.1a, consideration is given to both the importance of ecological features based on legislation and policy (refer to Sections 8.1.2 to 8.1.5 and Table 8.1 within **Chapter 8: Ecology**) and importance with regard to the Site (refer to Sections 8.1.6 to 8.1.7 within **Chapter 8: Ecology**). The justification provided for the decision to scope in or out each ecological feature is based on information on its status both with regard to the Proposed Development, and the local, county, regional, national or international context, where available.

Table 8.6.1 Importance of Ecological Features

Ecological Feature	Importance – Legislation & Policy	Importance – Site	Justification	Scoped Out of Assessment (Y/N)
Nature Conservation Sites				
Caithness & Sutherland Peatlands SAC <u>Qualifying Habitats:</u> Blanket bog; Wet heathland with cross-leaved heath; Acid peat-stained lakes and ponds; Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels; Depressions on peat substrates of the <i>Rhynchosporion</i> ; and Very wet 'quaking' mires <u>Qualifying Species:</u> Marsh saxifrage; and Otter	International	International	<ul style="list-style-type: none"> The Caithness and Sutherland Peatlands SAC contains a large proportion of the Caithness and Sutherland peatlands, which form the largest and most intact area of blanket bog in Britain. Blanket bog is rare in world terms and Britain has a significant proportion of the total world resource. The SAC is situated outside the Site and abuts the north eastern boundary of the Site and is approximately 30m from the nearest working area. Blanket bog and wet heath habitat are both widespread across the Study Area, although they do not share hydrological connectivity with the blanket bog and wet heath habitats within the SAC/Ramsar, which are which are in a different catchment. However, the Proposed Development may result in the displacement of deer, which could contribute to associated grazing and trampling impacts, and as such these features are considered for further assessment. Depressions on peat substrate feature can be associated with some habitats and NVC communities recorded (M2 mosaic with M17), however this habitat type was not recorded within the Study Area, and no connectivity with this feature within the SAC is predicted. The associated core NVC types for transition mire and quaking bog (M4, M5, M8, M9 and S27) also known as 'ladder fens' were not recorded within the Study Area, and no connectivity with these communities within the SAC is predicted. Pool systems and small lochans (including Loch Sgeireach and Loch an Rasal) present within the SAC are in a different catchment and no hydrologically connectivity is predicted. Marsh saxifrage is found in wet flushes within the blanket bog in two parts of the SAC¹; the colonies are within Shielton Peatlands SSSI, and near Loch Ruard on the boundary of Blar nam Faoileag SSSI and Coire na Beinne Mires SSSI, both >70km to the north west of the Site. Marsh saxifrage was not recorded within the Study Area and no connectivity within the SAC is predicted. Otter (<i>Lutra lutra</i>) is a European protected species (EPS) and an SBL Priority species; it is also an interest feature of the Caithness & Sutherland Peatlands SAC. The results of the 2020 field surveys indicate that otters utilise watercourses within the Study Area for foraging, commuting and resting purposes. A total of three resting places (two couches and one holt) were identified, with an additional three potential resting places (one potential couch and two potential holts) also recorded within the Study Area. The highest level of otter activity was located along the Allt an Ràsail watercourse, as highlighted by numerous spraints and presence of resting sites identified along the surveyed stretch of this watercourse. Otters were found to use the study 	N

¹ NatureScot (2020). Caithness and Sutherland Peatlands Special Area of Conservation – Conservation Advice Package.

Ecological Feature	Importance – Legislation & Policy	Importance – Site	Justification	Scoped Out of Assessment (Y/N)
			area watercourses, probably to hunt for fish/frogs and to traverse between the Loch Shin and River Cassley catchments. In light of the widespread status of otter in the Scottish Highlands and the extensive local habitat suitability in the wider area the Site is not considered to be of notable value to otters, however otter is scoped in for further assessment.	
Caithness and Sutherland Peatlands Ramsar <u>Qualifying Habitat</u> Blanket bog	International	International	The Ramsar site sits within the boundary of the SAC and is designated for blanket bog features only. The SAC/Ramsar blanket bog feature is scoped in for further assessment.	N
River Oykel SAC <u>Qualifying Species:</u> Atlantic salmon; and Freshwater pearl mussel	International	Local	<ul style="list-style-type: none"> As well as being an SAC interest feature of the SAC, freshwater pearl mussel (<i>Margaritifera margaritifera</i>) is protected under the Wildlife & Countryside Act (1981) (as amended in Scotland). It is also listed on Annexes II and V of the EC Habitats Directive (Council Directive 92/43/EEC) (as referenced in The Conservation (Natural Habitats, &c) Regulations, 1994 – annexes in the Habitats Directive are correct as at 31/12/2020; thereafter any changes would need to be made/ agreed by the Scottish Government) and Appendix III of the Bern Convention. The River Oykel is located approximately 2.5km south of the Site access point. The River Cassley, which forms part of the River Oykel catchment, is situated approximately 1.5km south-west of the Site. Watercourses that intersect the Site drain downgradient into the River Cassley, and therefore provide potential for hydrological connectivity with the SAC. For this reason, freshwater pearl mussel is scoped in for further assessment. As well as being an SAC interest feature of the SAC, Atlantic salmon (<i>Salmo salar</i>) is legally protected under the Schedule 3 of the Conservation (Natural Habitats, &c.) Regulations 1994 and is listed as a priority in the LBAP and SBL. No extensive areas of suitable spawning habitat for salmonids were recorded. Atlantic salmon (<i>Salmo salar</i>) was absent from all survey sites; the habitat quality of the survey sites was coherent in terms of supporting salmonid populations, however, the connectivity between the watercourses throughout the catchment was significantly affected by various barriers to salmon (and other migratory fish) migration. The most significant barrier, Falls of Foyers, was recorded 3.5km downstream of the Site. The Falls of Foyers is a 165 ft waterfall which prevents all upstream migration. Habitat connectivity is integral to survival of migratory salmonids, successful migration upstream and downstream is required to support populations of migratory fish species. For this reason, Atlantic salmon and is scoped in for further assessment. 	N

Ecological Feature	Importance – Legislation & Policy	Importance – Site	Justification	Scoped Out of Assessment (Y/N)
Grudie Peatlands SSSI: Blanket bog; Dunlin, golden plover and greenshank	National	Local	Grudie Peatlands SSSI, which is a component of the Caithness and Sutherland Peatlands SAC abuts the north eastern boundary of the Site and is approximately 30m from the nearest working area. This feature is scoped in alongside the SAC/Ramsar for further assessment. The ornithological interest features of the designation are considered within the Ornithology Chapter (Chapter 9).	N
Strath an Loin SSSI: Blanket bog	National	Negligible	Strath an Loin SSSI, which is a component of the Caithness and Sutherland Peatlands SAC is situated approximately 3km north of the nearest working area and is important for its bog habitat only. Given the distance between the Site and Strath an Loin SSSI and the known movement of deer based on the core foraging and shelter within the vicinity of the Site (along the River Cassley, see Technical Appendix 8.9 (Deer Management Plan) and Figure 8.9.2), there is predicted to be no connectivity between the Proposed Development and the blanket bog for which this site is designated. This feature has therefore been scoped out of further assessment.	Y
Kyle of Sutherland Marshes SSSI: Flood plain fen, wet woodland	National	Negligible	Kyle of Sutherland Marshes are located approximately 4km south-west of the Site access point. The distance from the Site boundary exceeds that at which effects could potentially be experienced. As a result of this distance there is no direct habitat connectivity and the potential effects on this Site have therefore been scoped out of further assessment.	Y
Ben Moore Assynt SSSI: Upland habitat assemblage	National	Negligible	Ben Moore Assynt SSSI is located approximately 10km north-west of the Site. The distance from the Site boundary exceeds that at which effects could potentially be experienced. As a result of this distance there is no direct habitat connectivity and the potential effects on this Site have therefore been scoped out of further assessment.	Y
Ancient Woodland Plantation	National	Negligible	Ancient woodland is present within Glen Cassley valley, located approximately 1.5m south-west of the Site. The distance from the Site boundary exceeds that at which effects could potentially be experienced. As a result of this distance there is no direct habitat connectivity and the potential effects on this Site have therefore been scoped out of further assessment.	Y
Habitats				
Wet heath communities (M15b/c/d)	International	Local	Wet dwarf shrub heath is listed under Annex I of the Council Directive 92/43/EEC on the conservation of natural habitats of wild fauna and flora (the Habitats Directive) as referenced in The Conservation (Natural Habitats, &c) Regulations, 1994 – annexes in the Habitats Directive are correct as at 31/12/2020; thereafter any changes would need to be made/ agreed by the Scottish Government). This habitat is also listed as an SBL priority habitat and Sutherland LBAP priority habitat. UK BAP wet dwarf shrub heath in favourable condition is defined as 'dominated by a	N

Ecological Feature	Importance – Legislation & Policy	Importance – Site	Justification	Scoped Out of Assessment (Y/N)
			mixture of cross-leaved heath, deergrass, ling heather and purple moor-grass over an understory of bog-moss' (Maddock, 2008). The Study Area was characterised by wet heath, mostly NVC community M15c, on the upland hillslopes of Càrn nam Bò Maola and Beinn Sgeireach. Upland heathland habitat is estimated to cover between 1,700,000 and 2,500,000 hectares (Ha) in Scotland (UK BAP 2008). Wet dwarf shrub heath comprises 49% of the Site, which is only 926 ha (9.26 km ²), which is 0.04 – 0.05% of the Scottish total. Both categories of wet heath communities (NVC communities M15a and M15b) defined by SEPA as GWDTE are widespread in Scotland. Within the Site, wet dwarf shrub heath was considered to be approaching favourable condition in places, however the majority of this habitat was considered to be modified through grazing and possibly other historic management practices. On this basis, given the widespread nature of this habitat and the modified nature across much of the Site, the Site has been evaluated as being of Local importance for wet heath.	
Dry heath communities (H10a, H14, H22)	International	Local	Dry dwarf shrub heath is listed under Annex I of the Council Directive 92/43/EEC on the conservation of natural habitats of wild fauna and flora (the Habitats Directive) as referenced in The Conservation (Natural Habitats, &c) Regulations, 1994 – annexes in the Habitats Directive are correct as at 31/12/2020; thereafter any changes would need to be made/ agreed by the Scottish Government). This habitat is also listed as an SBL priority habitat and Sutherland LBAP priority habitat. The SBL definition of dry dwarf shrub heath (within the upland heath UK BAP habitat definition) in favourable condition is defined as being 'dominated by dwarf shrubs such as ling heather, bilberry, crowberry and bell heather' (Maddock, 2011). Dry heath includes dwarf shrub dominated vegetation with ling heather, bilberry and bell heather (JNCC, 2011). There is 608,000Ha (608 km ²) of dry dwarf shrub heath in the UK (JNCC, 2011). There was 31.35 ha (0.31 km ²) of H10/H14/H22 communities within the NVC survey area which is much less than 1% of the UK total (0.008%). Within the Site, dry heath was found on steep slopes (usually H10a), although a small patch of H22 was located on the steep slopes of Càrn nam Bò Maola. The dry heath was often accompanied by acid grassland (U4a or U5b). Montane heath H14 characterised the peaks of Càrn nam Bò Maola and Beinn Sgeireach. Based on the limited extent of this habitat within the Site, the Site has been evaluated as being of Local importance for dry heath.	N
Blanket bog and bog pool communities (M2a, M3, M17a/b/c, M18, M19, M20)	International	Regional	Refer to blanket bog evaluation in Section 1.1.4 below.	N
Acid flush communities (M6a/c)	National	Local	Acid flush is an SBL Priority habitat (Upland Flushes, Fens and Swamps). Acid flushes are occasional within the Study Area along linear soakways, drains and the sides of watercourses, often in fragmentary small amounts. These habitats are common throughout Scotland, although usually of	N

Ecological Feature	Importance – Legislation & Policy	Importance – Site	Justification	Scoped Out of Assessment (Y/N)
			low diversity and composed of a few very common species. The Site is assessed as being of Local importance for acid flush habitats.	
Marshy grassland communities (M23a/b & M25a/b)	National	Local	Certain types of marshy grassland are listed within the SBL as being of principal importance for biodiversity conservation (e.g. purple moor grass and rush pasture). M23 is a rush pasture common throughout Scotland on circum-neutral damp ground, with variable species diversity and botanical value. M23 can be rich but occurrences in the Study Area generally consist of a handful of common species. M25 is common throughout large parts of Scotland. It is dominated by purple moor-grass, dense with dead litter, with associates including tormentil, bog asphodel, and marsh violet. It is generally regarded as low botanical value except where it is fed by base-enriched waters or is wet enough to be transitional to swamp, neither of which are present at the site. On this basis, the Site has been evaluated as being of Local importance for marshy grassland habitats.	N
Poor semi-improved acid grassland (U4a)	Local	Negligible	Poor semi-improved acid grassland is of limited conservation interest, due to its relatively low species diversity. As this habitat consists of such small areas within the developable area, any direct or indirect effects on the habitat are considered to be minor. This habitat feature has therefore been scoped out of further assessment.	Y
Unimproved acid grassland (U5b)	Local	Negligible	As this habitat consists of such small areas within the developable area, any direct or indirect effects on the habitat are considered to be minor. This habitat feature has therefore been scoped out of further assessment.	Y
Native mixed woodland plantation	Local	Negligible	A recently planted native woodland is present to the north-west of the Site. As the boundary of this plantation is clearly defined by deer fencing, and lies outside the Site, the potential effects on this habitat have been scoped out of further assessment.	Y
Planted coniferous woodland	Local	Negligible	Coniferous plantation woodland is present within 250m of the Site access track. While maturing coniferous plantation is generally considered to have limited ecological value, it may potentially provide shelter to protected species such as red squirrel. However, given that no significant land/habitat loss is proposed, planted coniferous woodland has been scoped out of the assessment.	Y
Waterbodies/Running Water	National	Local	All watercourses/waterbodies within the Site are situated within the River Cassley catchment and are considered in respect to the River Oykel SAC.	Y
Protected and notable species				
Bats (Roosting)	International	Negligible	All bats in Scotland are classified as European Protected Species and receive legal protection under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended). They are also listed within	Y

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			the SBL as a species of principal importance for nature conservation. Certain bat species [e.g. Daubentons (<i>Myotis daubentonii</i>), Soprano pipistrelle (<i>Pipistrellus pygmaeus</i>), noctule (<i>Nyctalus noctule</i>) and brown long eared bat (<i>Plecotus auratus</i>)] are also listed as priority species in the Sutherland LBAP. Due to the nature of habitats within the Site (open upland habitat with very little tree cover and no built structures), the Site is considered to support negligible potential for roosting bats. While woodland in the form of coniferous plantation is present on either side of the proposed wind farm access route, the lack of proposed habitat loss/ land take along the access route means that roosting bats can therefore be scoped out of further assessment.	
Bats (Commuting and foraging)	International	Local	Most of the Site comprises open/upland heathland or blanket bog habitats which are sub-optimal as a bat foraging resource. Watercourses that intersect the Site may serve as linear commuting pathways and provide opportunities for foraging bats. They may also provide habitat connectivity downgradient into the Glencassley valley, where stands of ancient woodland and built structures that are likely to support commuting and foraging bats are present. Based on these observations, the Site was classified as supporting 'moderate' potential for commuting and foraging bats. Bat activity surveys identified at least four species of bat (including common pipistrelle, soprano pipistrelle, <i>Myotis</i> bat species, and brown long-eared bat) utilising the Site. The Site is therefore considered to be of local importance for commuting/ foraging bats of these species.	N
Water vole	National	Local	The water vole (<i>Arvicola amphibius</i>) receives partial protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended in Scotland). It is listed within the SBL as a species of principal importance for biodiversity conservation and is also listed on the Highlands LBAP. Although the current UK population (132,000) is believed to have declined by 50% since 1998, and the species are in decline in both England and Wales, the Scottish population, which is largely genetically and phenotypically distinct, is in fact increasing in size with a stable range ² . The species is listed on the IUCN Red list and 'near threatened' in Scotland, but 'endangered' elsewhere in the UK. Water vole presence was recorded during surveys in 2020 adjacent to the Allt an Räsail watercourse and associated tributaries, and within the upper reaches of the Allt Bad na t-Sagairt. Known water vole colonies are also present along watercourses positioned adjacent to the Site access track within the existing Achany Wind Farm site. Water vole is a relatively widespread and common Highland species (HBRC, 2011) ³ and the Site has therefore been evaluated as being of Local importance for water vole.	N
Badger	National	Local	Badger (<i>Meles meles</i>) is legally protected by the Protection of Badgers Act 1992 (as amended). Badger is a common and widespread species whose protection is owing to past persecution rather	N

² Harris, S. & Yalden, D. W. eds. (2008). Mammals of the British Isles: Handbook, 4th Edition.

³ Highland Biological Records Centre. (2011) Atlas of Highland Land Mammals.

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			than current rarity. Although still widespread within the Scottish Highlands, populations are understood to be less dense than other parts of the country, largely due to the prevalence of upland and peatland habitats the species least favoured habitat. The species is listed on the IUCN Red list as of 'Least Concern' in mainland UK. During field surveys undertaken in 2011 (in support of the Glencassely Wind Farm), three badger setts were found outside the Site boundary (which comprised a more extensive area than the current proposed Site). Individual badgers were also occasionally recorded on camera traps, the nearest being ca. 2.5km away from the Site. During field surveys in 2020, no setts or other badger evidence was recorded within the Site or wider Study Area. This species is highly mobile, setting habitat is available on drier ground to the west of the Site and within plantation woodland alongside the access track to the south of the Site and foraging resource within the Site is considered sub-optimal. Given the nature of habitats on-site (primarily wet heath and blanket bog), the Site is considered to provide limited value for this species. The Site has therefore been assessed as local importance for badger.	
Red squirrel	National	Negligible	Red squirrels (<i>Sciurus vulgaris</i>) and their resting places (dreys) receive full protection under Schedules 5 and 6 of the Wildlife and Countryside Act 1981 (as amended in Scotland). The red squirrel is also listed as an SBL priority species. The Scottish population is estimated as 120,000, approximately 75% of the UK population. The Site is comprised primarily of open upland habitat with, little/ no tree cover and no tree felling proposed. It is therefore highly unlikely that red squirrel is present within the Site, and the Site has therefore been evaluated as being of negligible importance for red squirrel.	Y
Pine marten	National	Local	Pine marten (<i>Martes martes</i>) is legally protected under the Wildlife and Countryside Act 1981 (as Amended in Scotland). Pine marten is also a priority species in the SBL. Although the status of the species in England and Wales is poor, in Scotland the status of the species is favourable and can now be found in all regions of Scotland with the exception of the central belt and the south-east coast ⁴ . The species is listed on the IUCN Red list and 'Least Concern' in Scotland, but 'Critically Endangered' elsewhere in the mainland UK ³ . Scotland's population is estimated at 3,700 adult pine martens, which represent approximately 99% of the known UK population ⁵ . A single pine marten was photographed in the study area at NC 393 160 on three occasions ca. 2.5km away from the Site boundary. Pine marten scats were also recorded in riparian pinewoods in the lower reaches of the Allt Bad an t-Sagairt. Although it is acknowledged that the species can occasionally utilise	N

⁴ Mathews F, Kubasiewicz LM, Gurnell J, Harrower CA, McDonald RA, Shore RF. (2018) A Review of the Population and Conservation Status of British Mammals: Technical Summary. A report by the Mammal Society under contract to Natural England, Natural Resources Wales and NatureScot. Natural England, Peterborough.

⁵ Croose, E., Birks, J.D.S. & Schofield, H.W. 2013. Expansion zone survey of pine marten (*Martes martes*) distribution in Scotland. Scottish Natural Heritage Commissioned Report No. 520.

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			peatland habitats in northern Scotland, the Site has been evaluated as being of local importance for pine marten.	
Wildcat	National		Wildcat (<i>Felis silvestris</i>) is an EPS and SBL Priority species listed in the Species Action Framework (SAF) for Scotland ⁶ . The wildcat is an extremely rare species, with an estimated steadily declining population ranging between 30 to 430 individuals, principally as a result of hybridisation with domestic cats ³ . The species is listed on the IUCN Red list and 'Critical Endangered' in Scotland, but 'extinct' elsewhere in the UK ³ . The Site lies within the known range of the species ³ and historical records of Scottish wildcat, identified during the desk study, suggest that the species may be present in the wider environment, potentially occurring where more extensive areas of suitable habitat exist. Targeted surveys for the evidence of wildcat were undertaken in 2011 using camera traps failed to find any evidence of wildcat in the study area. The majority of the Site was considered to be of very low value to wildcat for foraging, commuting and denning due to the dominance of wet bog and moorland landscape and absence of any woodland. To the south of the Site, along the Achany existing access track and further to the west on lower ground towards Glencassley, is more suitable for the species with the presence of coniferous plantation and scattered, broadleaved trees and riparian habitats. On this basis, the Site has been evaluated as being of local importance for wildcat.	N
Mountain hare	National	Negligible	Mountain hare (<i>Lepus timidus</i>) is listed as a priority conservation species in the UK post-2010 Biodiversity Framework and an SBL Priority species listed in the Species Action Framework (SAF) for Scotland and is also listed on the Highlands LBAP. Mountain hares were present but very rarely recorded during surveys in 2011 e.g. they were only recorded once (near the summit of Beinn Sgeireach) during targeted protected mammal surveys and only very occasionally during other surveys (e.g. bird surveys) in the study area. No mountain hare were recorded during the survey programme in 2020. Mountain hare are very uncommon-rare on the Site and on this basis the Site has been evaluated of negligible importance for mountain hare and scoped out of further assessment.	Y
Red deer	Local	Local	Deer are not a protected species (in terms of conservation legislation); however, they are protected from certain forms of killing by the Deer (Scotland) Act 1996. Red deer are abundant across much of Scotland, and the wider UK, with an estimate population of 346,000. They are increasing in their range; population size and their habitats remain in a stable status ³ . Red deer (<i>Cervus elaphus</i>) is the main open hill species on the Site and the two landowners, Glencassley Estate and Glenrossall Estates manage their red deer numbers (to achieve viable sporting populations). Much of the Site is suitable for deer grazing, and this is likely to have at	N

⁶ SNH, 2007. A Five-Year Species Action Framework: Making a difference for Scotland's species. Scottish Natural Heritage. Redgorton, Perth.

Ecological Feature	Importance – Legislation & Policy	Importance – Site	Justification	Scoped Out of Assessment (Y/N)
			least in part led to the modification and in places degradation of peatland habitats. Deer are common and widespread and have the potential to be detrimental to peatland habitats within the Site and within adjacent designated sites (Caithness & Sutherland SAC/Grudie Peatlands SSSI). Red deer are common and widespread and are considered of local importance and scoped out as a potential IEF. However, due to their influence on other potential IEFs they will be considered further and will be considered within Chapter 8: Ecology , as well as within a Deer Management Plan (Technical Appendix 8.9) and Outline Habitat Management Plan (Technical Appendix 8.10).	
Common lizard	National	Local	Common lizard (<i>Zootoca vivipara</i>), adder (<i>Vipera berus</i>), and slow worm (<i>Anguis fragilis</i>) are afforded legal protection from intentional or reckless killing/ injury under the Wildlife and Countryside Act 1981 (as amended in Scotland). All three species are also listed within the SBL as species of principal importance for biodiversity conservation; and adder and common lizard are Highlands LBAP species. The reptile populations within the study area were widespread and common Highland species. The Site has therefore been evaluated as being of local importance for common lizard, adder and slow worm.	N
Adder	National	Local		N
Slow worm	National	Local		N
Common toad	National	Negligible	Common toad (<i>Bufo bufo</i>) is listed on the SBL and is a Highland LBAP species. Amphibian populations within the wider study area are widespread and common Highland species. The Site has been evaluated as being of negligible importance for common toad, common frog (<i>Rana temporaria</i>) and palmate newt (<i>Lissotriton helveticus</i>).	Y
Common frog	Local	Negligible		Y
Palmate newt	Local	Negligible		Y
Freshwater fish	National	Negligible	Fish species are afforded protection under one or more of the following conservation legislative frameworks; Conservation (Habitats, &c.) Regulations 1994 (as amended), Salmon and Freshwater Fisheries Act (Consolidation) (Scotland) 2003, Aquaculture and Fisheries (Scotland) Act 2007, and Surface Waters (Fishlife) (Classification) (Scotland) Amendment Regulations 2007. A freshwater fish habitat survey to identify the distribution and quality of fish habitat and fish species was undertaken in August 2011. The survey method comprised a walkover of watercourses to characterise in stream habitats according to depth, substrate, flow, and overall suitability for different age classes of Atlantic salmon and sea trout (<i>Salmo trutta</i>). Based on results of the survey, watercourses within the Site were considered unlikely to contain salmon or migratory sea trout due to the presence of barriers to migration such as bedrock ledges and waterfalls. All watercourses were however considered likely to support populations of resident brown trout (<i>Salmo trutta</i>). No suitable eel habitat was present due to obstructions to eel migration. Lamprey habitat was also lacking in accessible reaches of all streams, except for within the lower sections of Allt Langwell, where suitable larval and spawning habitat was available. Conditions within the Site itself are considered to remain relatively unchanged from the baseline and the Site has therefore	Y

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			been evaluated as being of negligible importance for migratory fish, but considered to be of local importance for brown trout.	
Brown trout	Local	Local	See discourse above under "Freshwater Fish"	N

Evaluation of the Blanket Bog Resource within the Study Area

- 1.1.3 Based on the evaluation presented within Table 8.6.1, where the blanket bog is within the SSSI/SAC or Ramsar site it is considered to be of national and international importance. However, when evaluating the blanket bog in the Study Area, outwith the SSSI/SAC and Ramsar designations there are a variety of factors to consider.
- 1.1.4 For instance, it is notable that the Study Area was not included in the great extent of the Caithness and Sutherland Peatlands SAC and Ramsar site (which includes the Grudie Peatlands SSSI) even though its peatlands were adjacent to these designated sites. The blanket bog in the main Study Area would have likely been historically surveyed for potential inclusion in the SSSI, SAC and/or SPA designation process (as part of the 1980-1990s Caithness and Sutherland 'Flow Country' surveys). Clearly, it failed to meet the qualifying criteria when it was originally assessed and so it is likely that it did not meet the objective selection criteria for national or international importance and so was not included within the designated site area(s). Further to which, according to the JNCC SSSI Guidelines⁷, "SSSI site boundaries must be chosen to include all land judged necessary to provide and maintain the hydrological functions needed to conserve the special features of the site". This provides additional evidence that the Site and wider Study Area are not hydrologically linked to the SSSI.
- 1.1.5 According to the Grudie Peatlands SSSI citation⁸: *The site occupies the southern part of the extensive watershed between Glen Cassley and Loch Shin. The main peatland expanse occurs at 250-350m altitude. The site contains a number of different blanket bog types, including valley-side, terrace and saddle mires. These various bog types have developed on summits, slopes and in hollows and combine to form an extensive peatland habitat. Bog pools and small lochans add to the diversity of the site. The dominant species throughout the blanket bog are deer sedge *Trichophorum cespitosum*, heather *Calluna vulgaris*, hare's-tail cotton grass *Eriophorum vaginatum* and, more variably, cross-leaved heath *Erica tetralix*. In the least disturbed areas, bog moss *Sphagnum* species are abundant whereas *Cladonia* lichens are more frequent in those areas most affected by burning and drainage. The site is notable for the relative abundance of the nationally scarce dwarf birch *Betula nana* and a diverse range of less common bog sphagnum species, such as; golden bog-moss *Sphagnum pulchrum*, rusty bog-moss *S. fuscum*, imbricate bog-moss *S. imbricatum* and magellanic bog-moss *S. magellanicum*.*
- 1.1.6 Parts of the SSSI citation descriptions are in keeping with habitats within the Study Area, including the presence of abundant heather, deergrass and cotton-grasses and bog-mosses were present in the least disturbed areas, and reference to *Cladonia* lichens which were found on shallower peatland and more disturbed areas. Bog pools were considered occasional features of the blanket bog within the Study Area, with smaller bog pool complexes in smaller areas of M18 on the eastern edge of the Study Area. However, on inspection of OS maps and online aerial imagery (e.g. Google Earth) reveal the widespread nature of the bog pools within the SSSI, which is quite different in character to the Main Study Area. The aerial imagery revealed that the widespread bog pools in the SSSI are situated on flatter, lower lying ground between Loch Sgeireach to the north and Cnoc nan Imrichean to the east and appear spread over approximately 1km². This area comprises pool complexes and surface patterns more readily associated with the SAC/SSSI quality blanket bog.

⁷ <https://data.jncc.gov.uk/data/20534790-bb45-4f33-9a6c-2fe795fb48ce/SSSIs-Chapter08.pdf>

⁸ <https://sitelink.nature.scot/site/750>

- 1.1.7 The following Table 8.6.1b presents an evaluation of the blanket bog habitat resource within the Study Area, based on JNCC SSSI guidelines for the selection of biological SSIs, with reference to criteria outlined in Chapter 8 (Blanket bogs)⁷ and Chapter 9 (Upland habitats)⁹, but also with cognisance of NatureScot (2020) guidance¹⁰.
- 1.1.8 It is considered that the commentary provided in Table 8.6.1b when considered alongside the Phase 1 Habitat, NVC and PCA maps and respective technical appendices will provide statutory consultees with appropriate information to determine the value of the blanket bog resource within the Study Area.

Table 8.6.1b - Habitat evaluation of Blanket bog within the Study Area with reference to JNCC SSSI site selection criteria

SSSI selection criteria for blanket bog and upland habitats (based on JNCC SSSI guidelines for the selection of biological SSIs)	Commentary
Raised bog present supporting typical vegetation	Based on the evidence provided within Technical Appendix 8.2A , raised bog was not recorded within the Study Area.
Montane bog present supporting typical bog vegetation	Based on the evidence provided within Technical Appendix 8.2A , the blanket bog was not considered indicative montane blanket bog with no regularly occurring alpine vegetation recorded within the Study Area.
Within a continuous unit of blanket bog (>25ha)	Based on the evidence provided within Technical Appendix 8.2A , a contiguous area of blanket bog is present within the central/eastern section of the Study Area. However, as illustrated within the PCA, the great extent of this contiguous area was identified under the categories 'Modified/Drained/Actively eroding' or 'Modified', with only limited extents comprising higher value categories 'Near natural' or 'Modified (Near Natural)'.
Blanket bog support vegetation capable of peat forming	<p>Using the evidence provided within Technical Appendix 8.2A, much of the blanket bog across the Study Area has been judged to have stopped being active and so is likely to be a carbon source, rather than a carbon sink. However, given the northern location of the Study Area, and the reasonable quality of at least some of the blanket bog, there is a degree of uncertainty to the activity level. It is therefore considered that the blanket bog in the Study Area is likely to have areas that are active or partially active (e.g. the M18 and some areas of M17a).</p> <p>Using further evidence from the vegetation survey of turbine locations, given the lack of surface water-logging features, bog-mosses and hummock and hollows, it was considered that the blanket bog was likely to be largely inactive and in intermediate condition. However, this does not preclude that limited peat formation may occur at some locations under some circumstances – where this was considered possible it has been highlighted within Technical Appendix 8.2A and 8.2B. Three turbine locations were identified where peat formation was possible (T7, T9 and T16) and a fourth (T20) where peat forming was considered likely; however, these sites have since been further micro-sited away from more sensitive habitats and deeper peat.</p>
Low frequency of drains/peat-cutting?	Based on evidence provided within the PCA (Technical Appendix 8.2A), there were extensive areas of 'hagging' and gulleys within the central/eastern section of the Site and in smaller areas to the north of the Study Area (these areas correspond with the 'Modified/Drained/actively Eroding' categories as illustrated on Figure 8.2.3a. These areas illustrate where erosion and deer grazing pressure have combined to contribute to drying of the peat surface.

⁹ <https://data.jncc.gov.uk/data/c1773745-b067-4f74-bbc4-83e942807247/SSSIs-Chapter09.pdf>

¹⁰ NatureScot (2020a). Advising on carbon-rich soils, deep peat and priority peatland habitat in development management. External NatureScot document, [https:// www.nature.scot/advising-carbon-rich-soils-deep-peat-and-priority-peatlandhabitat-development-management](https://www.nature.scot/advising-carbon-rich-soils-deep-peat-and-priority-peatlandhabitat-development-management)

SSSI selection criteria for blanket bog and upland habitats (based on JNCC SSSI guidelines for the selection of biological SSSIs)	Commentary
	To the south of the Study Area there was greater evidence of historical drainage ditches, as illustrated by the 'Modified/Drained' category within Figure 8.2.3b .
Peat forming spp./low disturbance?	<p>Areas of blanket bog typified by dominant peat-forming bog-mosses and little or no grazing pressure were recorded in small, isolated patches of M18 and parts of the M17a (as illustrated by the Near Natural and Modified Near Natural categories in Figure 8.2.3a).</p> <p>Outside these areas, erosion and grazing pressures were evident across the Study Area.</p>
Natural surface pattern?	<p>Small, isolated patches of M18 and parts of the M17a (illustrated by the Near Natural and Modified Near Natural categories in Figure 8.2.3a) where there were multiple surface water pools, hummocks and a degree of natural surface pattern. However, there was generally a lack of surface water-logging features, bog-mosses and hummock and hollows recorded across the Study Area.</p> <p>As discussed above, the relative proportion of pools on the bog surface was generally low outside the smaller areas of M18 (Near Natural) and some areas of M17a (Modified Near Natural), and when compared to the widespread bog pools present within the SSSI (as discussed above) are clearly of a different character.</p>
Absence of invasion by woodland/scrub?	<p>There was an absence of invasion of woodland/scrub, although deer grazing pressure would be expected to influence this criterion.</p> <p>There were a few scattered trees recorded along the steep side of the Allt Bad na t-Sagairt. These included downy birch (<i>Betula pubescens</i>), rowan (<i>Sorbus aucuparia</i>) and rarely aspen (<i>Populus tremula</i>). They were generally quite small, approximately 5-10m in height.</p>
An abundance of Sphagnum-rich ridges	There were small, isolated patches of M18 and parts of the M17a (which correspond to the Near Natural and Modified Near Natural categories) showing a natural surface pattern of hummocks and hollows, but other than these areas, the presence of sphagnum-rich ridges was limited.
Ridges of Sphagnum - <i>Betula nana</i>	Dwarf birch was recorded infrequently and localised; however, the key feature of extensive hummock and hollow relief of bog pools and hummocks of these bog-moss species were not present within the Study Area
Bryophyte hummocks of <i>Sphagnum fuscum</i> or <i>S. austinii</i>	Neither of the two sphagnum species were recorded during field surveys. However, an extensive bryophyte survey was not conducted and an NVC survey does not constitute a full lower plant survey, therefore their presence cannot be completely discounted. However, neither species was a characteristic feature of the habitats within the Study Area. The key feature of extensive hummock and hollow relief of bog pools and hummocks of these bog-moss species were not present within the Study Area.
Peat mounds	This feature was not recorded within the Study Area.
<i>Rhynchospora fusca</i> hollows	<i>Rhynchospora fusca</i> was not recorded within the Study Area and there is no evidence of its presence within the Grudie Peatlands SSSI.

- 1.1.9 Active, peat forming blanket bog is listed under Annex I of the Council Directive 92/43/EEC on the conservation of natural habitats of wild fauna and flora (the Habitats Directive) as referenced in The Conservation (Natural Habitats, &c) Regulations, 1994 – annexes in the Habitats Directive are correct as at 31/12/2020; thereafter any changes would need to be made/ agreed by the Scottish Government). This habitat is also listed as an SBL priority habitat and Sutherland LBAP priority habitat.
- 1.1.10 Blanket bog communities cover approximately 323 Ha of the Study Area. Most of the blanket bog within the Study Area was considered to be Modified (298 Ha of the blanket bog resource) through grazing and possibly other historic management practices such as burning. This included much of the M17a, and the M17b and, M19 and M20. Multiple drainage ditches are present particularly in the southern part of the Study Area, some of which appeared to be effectively draining the bog (27ha of the blanket bog resource). Some of the blanket bog (particularly degraded areas of M17b and M3 within the central section of the Site) was also considered likely to be Actively Eroding and Drained from erosion features. The least modified area of blanket bog which was considered closest to 'Near-Natural' was the M18 which contained a complex of bog pools and some bog-moss hummocks. Some of the M17a was also placed within this Near-Natural category due to the hummock and hollow structure and the surface water present. These least modified areas comprise ~ 25ha (7.7%) of the blanket bog resource.
- 1.1.11 The blanket bog in the Study Area was considered mostly to be of intermediate condition, with areas of 'bad quality' where the erosion was most pronounced (M3 and eroding areas of blanket bog, particularly M17b) and small areas of 'good quality' where there were multiple surface water pools, hummocks and a degree of natural surface pattern. Using the evidence provided within the Peatland Condition Assessment (**Technical Appendix 8.2**), much of the blanket bog is judged to have stopped being active; however, there are still likely to be areas that are active or partially active (e.g. the M18 and some areas of M17a). There is 21,952 km² of blanket bog in the UK (JNCC, 2011) and 17,590 km² in Scotland (BARS, 2010). There is 3.23 km² of blanket bog habitat in the study area, of which 7.7% is considered natural or 'modified near natural'.
- 1.1.12 In summary, much of the blanket bog within the Study Area is considered likely to be inactive, and not equivalent to Annex 1 priority habitat definitions or comparable to the Caithness and Sutherland SAC / Grudie Peatlands SSSI. Based on the commentary provided in Table 8.6.1b, the blanket bog resource within the Study Area does not satisfy the quality criteria for being a Site of Special Scientific Interest and is therefore not considered of 'National Interest'. It is however considered to be meeting UK BAP and so SBL definitions for blanket bog. The Study Area is considered to be widely modified and/or or actively eroding. Blanket bog is a widespread and very common habitat across the region, and is adjacent to a triple designated site, with blanket bog as a designating feature. Following due consideration of these factors, the blanket bog within the Study Area was considered to be of Regional resource.

1.1.13

For those ecological features that remain scoped-in to the assessment, following the process described in Table 8.6.1, the following are provided in Table 8.6.2:

- A description of the potential environmental change and associated effect (refer to Section 8.1.8);
- A description of the zone of influence for each ecological feature (refer to Section 8.7.8 – 8.7.12; and Table 8.8 (**Chapter 8: Ecology**);
- Justification of the decision to scope in or out each ecological feature based on the likely scale of the potential effect, general working measures (i.e. those covered within the Construction Environment Management Plan (CEMP), Table 8.9, **Chapter 8: Ecology**) that negate the effect and relevant information on the features status within the local, county, regional, national or international context where that is available.

Table 8.6.2 Scoping of Ecological Features of Local or Above Importance and those Receiving Legal Protection

Ecological Feature	Environmental Change and potential effect	Zone of Influence	Scoped Out (Y/N)	Justification
Caithness and Sutherland Peatlands SAC/Ramsar: [Grudie Peatlands Site of Special Scientific Interest (SSSI) component] Blanket bog; and Wet heathland with cross-leaved heath;	Direct loss and temporary damage to terrestrial habitats (construction)	Within construction/ maintenance areas	Y	The Grudie Peatlands SSSI component of the Caithness and Sutherland Peatlands SAC/Ramsar abuts the Site along its northern boundary and is approximately 30m from the nearest working area. The Site is designated for its blanket bog communities. Given the proximity of the Site to the Proposed Development there are potential effect pathways associated with hydrological connectivity and displacement of deer during construction phase, which could lead to reduction in habitat quality of the SSSI blanket bog feature.
	Reduction in habitat quality as a result of hydrological connectivity and pollution incidents	Loch Shin catchment that intersects the Site	N	
	Degradation of plant communities resulting from displacement of local deer population (construction)	Within 2km of the Site	N	
	Direct loss and temporary damage to terrestrial habitats (operation and decommissioning)	Within construction/ maintenance areas	Y	
Caithness and Sutherland Peatlands SAC: Otter	Population level effect within SAC relating to disturbance and displacement effects within the Proposed Development.	Within construction/ maintenance areas	N	The Proposed Development footprint is outwith all areas specifically designated for otter populations; however, the Site is within the home range (up to 32km) of otters from this designated site and therefore construction activity may give rise to the disturbance of otters and there may be impacts to their prey species – either from the placement of infrastructure or due to indirect effects such as noise. Two confirmed and three potential resting sites were identified within the Study Area. None were recorded within a potential disturbance threshold (within 30m of proposed works areas). Should works be required within 30m of a resting site, an EPS licence would be required prior to works commencing.
	Direct damage to resting sites and disturbance to individuals using resting sites due to elevated levels of disturbance (such as increased noise, lighting, and human	Non-breeding resting sites: 30m from the proposed construction/ maintenance/ decommissioning area (based on NatureScot protected species advice)	N	
		<u>Breeding resting sites</u> : 200m from the proposed construction/ maintenance/ decommissioning	Y	

Ecological Feature	Environmental Change and potential effect	Zone of Influence	Scoped Out (Y/N)	Justification
	presence) during construction/ operation and decommissioning related works.	area (based on NatureScot protected species advice)		No evidence of breeding was recorded; nonetheless, pre-construction surveys have the potential to identify a breeding site, which would require appropriate measures to avoid contravention of legislation.
	Temporary severance of otter habitat and commuting routes	Within the construction/ maintenance/ decommissioning area	N	Evidence of otter activity was recorded along a number of watercourses and waterbodies within the Study Area, in the form of spraints, paths, prints, feeding remains, and resting sites. The Proposed Development could therefore lead to temporary habitat severance and fragmentation of territories during construction or decommissioning phases, particularly during the construction of water crossings.
	Direct mortality due to construction related activities	Within the construction/ maintenance/ decommissioning area	N	
	Reduction in habitat quality due to severance of habitat connectivity, diffuse pollution, and impacts on prey availability	River catchments that intersect the Site.	N	The Proposed Development could lead to an increase in mortality as a result of traffic collision during construction or decommissioning phases. Otters are therefore scoped in for further assessment.
River Oykel SAC: Atlantic salmon	Deterioration in fish populations due to: loss of, or damage to, degradation of fish habitats due to pollution/siltation during construction.	River catchments (River Cassley) that intersect the site	N	This species was not recorded within the Site during the fish survey however the River Cassley supports this species further downstream. The Proposed Development includes a number of watercourse crossings. Works on these crossings during the construction and decommissioning phases have the potential to disturb instream habitats and have associated risks of silt/pollutant discharges to watercourses. The operational development is likely to have limited pollution risk.
River Oykel SAC: Fresh water pearl mussel	Indirect effects due to effects on host fish species (salmonids) as set out above; and degradation of habitats due to pollution/siltation.	River catchments (River Cassley) that intersect the site	N	This species has not been recorded within the Site, however records provided by NatureScot indicate that they are present further downstream the River Cassley. Works on watercourse crossings during the construction and decommissioning phases will disturb river habitats/substrates and have associated risks of silt/pollutant discharges to watercourses. The operational development is also likely to have limited pollution risk. The effects on salmonids outlined above could also have adverse effects on freshwater pearl mussels indirectly

Ecological Feature	Environmental Change and potential effect	Zone of Influence	Scoped Out (Y/N)	Justification
				because salmonids are host vectors of juvenile mussels and have an important role in mussel reproduction/ recruitment.
Wet dwarf shrub heath communities (M15b/c/d)	Direct loss and temporary damage to terrestrial habitats	Within construction/ maintenance areas	Y	The NVC community M15 is classified as potentially moderately groundwater dependant, dependent on its hydrogeological setting, and may therefore be sensitive to damage during construction works within a 250m Zol. However, based on the assessment provided in Chapter 10: Hydrology and Hydrogeology Assessment , no wet heath communities within the Site were identified as actually being groundwater dependent. Construction and operational habitat losses will cause a direct adverse impact, but insufficient to affect the integrity of wet dwarf shrub heath communities. The magnitude of construction and operational impacts on habitats are therefore assessed as likely to be Low for wet heath, which is the most widespread habitat likely to be affected and consequently no significant effects would be predicted. This feature is therefore scoped out of further assessment.
	Indirect disturbance and changes to composition of plant communities resulting from hydrological change	250m beyond construction/ maintenance areas	Y	
Dry dwarf shrub heath communities (H10a, H14, H22)	Direct loss and temporary damage to terrestrial habitats	Within construction/ maintenance areas	Y	Dry dwarf shrub heath is listed as an Annex I habitat (as referenced in The Conservation (Natural Habitats, &c) Regulations, 1994 – annexes in the Habitats Directive are correct as at 31/12/2020; thereafter any changes would need to be made/ agreed by the Scottish Government). It is also listed within the SBL and Sutherland LBAP. As such, it is considered a habitat of principal importance for biodiversity conservation. Dry dwarf shrub heath exists in patches throughout the Study Area. Communities were comprised of heather dominated H10a on dry ground, hillocks, and hillslopes, with montane heath H14 on hill summits at higher altitude. Construction and operational habitat losses will cause a direct adverse impact of very small areas of this habitat, and therefore insufficient to affect the integrity of dry dwarf shrub heath communities. The magnitude of construction and operational impacts on habitats are therefore assessed as likely to be Low for dry heath, and consequently not significant.
	Indirect disturbance and changes to composition of plant communities resulting from hydrological change	10m beyond construction/ maintenance areas	Y	

Ecological Feature	Environmental Change and potential effect	Zone of Influence	Scoped Out (Y/N)	Justification
				effects would be predicted. This feature is therefore scoped out of further assessment.
Blanket bog communities (M2a, M3, M17a/b/c, M18, M19, M20)	Direct loss and temporary damage to terrestrial habitats	Within construction/ maintenance areas	N	Blanket bog is listed as an Annex I habitat (as referenced in The Conservation (Natural Habitats, &c) Regulations, 1994 – annexes in the Habitats Directive are correct as at 31/12/2020; thereafter any changes would need to be made/ agreed by the Scottish Government). It is also listed within the SBL and Sutherland LBAP. As such, it is considered a habitat of principal importance for biodiversity conservation. Approximately 27% of the Study Area is comprised of blanket bog, formed of M17, M18, M19 and M20 communities. Bog pools (M2 and M3) were also recorded within blanket bog habitat throughout the Study Area. The Site is considered to support a blanket bog resource of Regional importance. Land take and land use during construction may lead to the loss or disturbance of this habitat within a 10m Zone of Influence (ZoI) of the construction zone. This habitat has therefore been considered for further assessment.
	Indirect disturbance and changes to composition of plant communities resulting from hydrological change	10m beyond construction/ maintenance areas	N	
	Indirect disturbance/ displacement of local deer population during construction works, and resultant impacts to blanket bog communities	Within the Site	N	
Acid flush communities (M6a/c)	Direct loss and temporary damage to terrestrial habitats	Within construction/ maintenance areas	Y	NVC communities (M6 and M10) are classified as potentially highly groundwater dependent, which may be sensitive to damage during construction works within a 250m ZoI. Any potential temporary changes to the local hydrology regime would be mitigated by the adoption of good practice mitigation measures during construction (see Table 8.9 of Chapter 8: Ecology) and it is considered that any potential change in the composition of the vegetation would not have a significant effect on the conservation status of these communities. Potential effects on M6 and M10 acid flush have therefore been scoped out of further assessment. Please see Chapter 10: Hydrology and Hydrogeology for an assessment of the impacts of the development on groundwater.
	Indirect disturbance and changes to composition of plant communities resulting from hydrological change	250m beyond construction/ maintenance areas	Y	

Ecological Feature	Environmental Change and potential effect	Zone of Influence	Scoped Out (Y/N)	Justification
Marshy grassland communities (M23a/b & M25a/b)	Direct loss and temporary damage to terrestrial habitats	Within construction/ maintenance areas	Y	NVC communities M23 and M25 are classified as potentially high and moderately groundwater dependant respectively, depending on the hydrogeological setting, and may therefore be sensitive to damage during construction works within a 250m ZoI. However, based on the assessment provided in Chapter 10: Hydrology and Hydrogeology Assessment , no marshy grassland communities within the Site were identified as actually being groundwater dependent. Any potential temporary changes to the local hydrology regime may cause some change in the composition of vegetation but this would not have a significant effect on the conservation status of these communities. Potential effects on M23/ M25 marshy grassland plant communities have therefore been scoped out of further assessment.
	Indirect disturbance and changes to composition of plant communities resulting from hydrological change	250m beyond construction/ maintenance areas	Y	
Badger	Direct damage to setts and increased disturbance to due to elevated levels of noise, lighting, and human presence during construction/ operation related works.	Sett ~30m from construction/maintenance area	Y	While this species is highly mobile and setting habitat is available, the foraging resource within the Site is considered sub-optimal. Inclusion of good practice protection measures (See Table 8.9, Chapter 8: Ecology) will cover the potential for future presence. Though there is potential for their presence in the future, based on the survey results and habitat assessment, badger has been scoped out of further assessment.
Wildcat	Direct mortality as a result of construction related activities	Within construction/ maintenance areas	Y	Though there is potential for their presence in the future, based on the survey results and habitat assessment, both species are scoped out of further assessment.
Pine marten			Y	
Bats (commuting and foraging)	Loss or damage to commuting and foraging habitat	Within the turbine envelope	N	Bat activity surveys carried out during 2020 identified at least four species of bat (including common pipistrelle, soprano pipistrelle, <i>Myotis</i> bat species, and brown long-eared bat) that utilise the Site. The highest levels of activity were recorded at static detector units positioned close to watercourses within the Site.
	Direct effect in the form of injury/ mortality from collision with turbines during the operational phase.	Within the turbine envelope	N	Based on levels of activity recorded, the Site is considered to support a locally important population of bat species. Ecobat output data indicated that the Site may pose a moderate to

Ecological Feature	Environmental Change and potential effect	Zone of Influence	Scoped Out (Y/N)	Justification
				high collision risk for common pipistrelle and a low to moderate collision risk for soprano pipistrelle bats.
Water vole	Direct mortality due to construction related activities	Within construction/ maintenance areas	N	Water vole field signs were identified adjacent to the Allt an Rásail watercourse and associated tributaries, and within the upper reaches of the Allt Bad na t-Sagairt. Whilst no colonies were recorded within the development footprint, water vole populations are highly dynamic with the potential for individual water voles to establish or abandon territories in relatively short spaces of time. Water vole are therefore scoped in for further assessment.
	Disturbance/ displacement of water vole during construction and operation		N	
	Temporary and/or permanent severance of water vole habitat and commuting routes		N	
	Reduction in habitat quality due to diffuse pollution during construction	River catchments that intersect the Site.	N	
Reptiles (Common lizard, adder, slow worm)	Direct injury/ mortality as a result of construction related activities	Within construction/ maintenance areas	Y	Given the widespread presence of heath habitat throughout the Site (which may serve as suitable reptile habitat) it is considered that populations of adder, slow worm and common lizard could occur within working areas. Inclusion of good practice protection measures (See Table 8.9, Chapter 8: Ecology) will ensure avoidance of any significant impacts to these species. Reptiles are therefore scoped out of further assessment.
	Disturbance/ displacement during construction		Y	
Brown trout	Deterioration in fish populations due to: loss of, or damage to, degradation of fish habitats due to pollution/siltation during construction.	River catchments that intersect the Site	Y	No migratory salmonids (sea trout or Atlantic salmon) are known to be present within the Site. However, brown trout (non-migratory salmonids) are likely to be present in all watercourses. Given that brown trout are widespread and are not currently considered to be in decline throughout much of their normal range, this species has been scoped out of further assessment.