

Spittal to Loch Buidhe to Beauly 400 kV
OHL Connection
Environmental Impact Assessment
Volume 5 | Technical Appendix

Appendix 10.1 | Schedule of Watercourse Crossings

July 2025





VOLUME 5: APPENDIX 10.1 - SCHEDULE OF WATERCOURSE CROSSINGS

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1. SCHEDULE OF WATERCOURSE CROSSINGS

1.1 Introduction

- 1.1.1 This technical appendix supplements Volume 2, Chapter 10: Water Environment of the Spittal to Loch Buidhe to Beauly 400 kV Overhead Line (OHL) Connection Environmental Impact Assessment (EIA) Report. It should be read in conjunction with Volume 2 of this EIA Report for full details of the Proposed Development, specifically Volume 2, Chapter 10: Water Environment, which outlines the assessment of potential effects of the Proposed Development on the water environment.
- 1.1.2 Scottish and Southern Electricity Networks (SSEN) Transmission, own, operate and develop the high voltage electricity transmission system in the north of Scotland and remote islands (the Applicant). Due to the growth in renewable electricity generation in the north and north-east of Scotland, upgrade of the transmission network is required to provide the necessary increase in transmission capacity.
- 1.1.3 Volume 2, Chapter 3: Description of the Proposed Development describes the elements required for the construction and operation of the Proposed Development. The Proposed Development is shown in Volume 3, Figure 3.1: The Proposed Development.

1.2 The Regulations

- 1.2.1 Principal legislation regarding the water environment is provided by the EU Water Framework Directive (WFD¹) which aims to protect and enhance the quality of surface freshwater (including lakes, rivers and streams), groundwater, Groundwater Dependent Terrestrial Ecosystems (GWDTEs), estuaries and coastal waters.
- 1.2.2 The key objectives of the WFD relevant to this assessment are:
 - To prevent deterioration and enhance aquatic ecosystems; and
 - To establish a framework for protection of surface freshwater and groundwater.
- 1.2.3 The WFD resulted in the Water Environment and Water Services (Scotland) Act 2003 (WEWS Act²), which gives Scottish Ministers power to introduce regulatory controls over water activities to protect, improve and promote sustainable use of Scotland's water environment. The Scottish Environment Protection Agency (SEPA) is the public body responsible for environment protection in Scotland under the Environment Act 1995 and the WEWS Act.
- 1.2.4 The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended)³ (CAR) provide a mechanism to deliver protection of the water environment. It details activities which are regulated by SEPA and the various levels of authorisation for activities likely to affect the water environment including:
 - Discharges to all wetlands, surface waters and groundwaters (replacing the Control of Pollution Act 1974);
 - Impoundments (dams and weirs) of rivers, lochs, wetlands, traditional waters; and
 - Undertaking of engineering works in inland waters and wetlands.

¹ European Commission (2024) Water Framework Directive [Online]. Available at: https://environment.ec.europa.eu/topics/water/water-framework-directive_en. Accessed: July 2025

² Water Environment and Water Services (Scotland) Act 2003 [Online]. Available at: https://www.legislation.gov.uk/asp/2003/3/contents. Accessed: July 2025.

³ UK Government (2011) The Water Environment (Controlled Activities) (Scotland) Regulations 2011 [online]. Available at: https://www.legislation.gov.uk/ssi/2011/209/contents/made. Accessed: July 2025.

1.2.5 Construction of the Proposed Development will require authorisation under CAR for access track watercourse crossings. Table 1 and Table 2 of this assessment details data for each watercourse crossing and whether CAR authorisation is required.

1.3 Methodology

- 1.3.1 The watercourse crossings of permanent and temporary access tracks have been identified from hydrology field surveys undertaken May 2024 and January 2025, and utilisation of the Ordnance Survey mapping, satellite imagery and the UK Centre for Ecology and Hydrology Flood Estimation Handbook Web Service (FEH Web Service⁴).
- 1.3.2 Field surveys were conducted by Environmental Resources Management Limited (ERM) on behalf of the Applicant to inform an assessment of the hydrological characteristics of the watercourses which would interact with the Proposed Development. Conditions at the time of the survey were mixed with periods of heavy rain and sunshine.
- 1.3.3 Geo-located survey points were collected, along with photographs and hydrological characteristics including width, depth, if bank erosion occurs and bed substrate information as detailed in **Table 2** and **3**.
- 1.3.4 A total of 180 watercourse crossing points have been identified as a part of the Proposed Development encompassing permanent and temporary access tracks. In the Northern Alignment, 116 watercourse crossing points have been identified; 33 of which are permanent access tracks and 83 of which are temporary access tracks (delineated in **Table 2**). In the Southern Alignment, 64 watercourse crossing points have been identified; 50 of which are permanent access tracks and 14 of which are temporary access tracks (delineated in **Table 3**).
- 1.3.5 The respective crossings are detailed in Volume 3, Figure 10.11: Watercourse Crossing Schedule.

1.4 Limitations and Assumptions

1.4.1 Surveying was carried out at the early stages of the design (starting in May 2024) and survey points were taken at the closest accessible location on the watercourses along the Proposed Development. Therefore, the surveyed points were not always located at the exact access track crossing points but located upstream or downstream, as detailed in **Table 2** and **Table 3**. The watercourse characteristics do not, however, vary significantly upstream and downstream of the surveyed point. The survey is not intended as a detailed survey of each specific watercourse crossing location, it is an inspection of the crossings in general to inform an assessment of the hydrological regime in the area. The results of the survey are, therefore, considered suitably representative of the reach of the watercourse and applicable to the Proposed Development.

1.5 Watercourse Buffers

1.5.1 Watercourse buffers detailed in SEPA's Recommended Riparian Corridor⁵, summarised below in **Table 1**, have been implemented around each watercourse along the Proposed Development as a design principle where feasible. Details of locations where this has not been achieved are provided in Volume **2**, **Chapter 10**: **Water Environment**.

⁴ UK Centre for Ecology and Hydrology (2024) Flood Estimation Handbook Web Service [Online]. Available at: https://fehweb.ceh.ac.uk/Map. Accessed: July 2025

⁵ SEPA (2024) Recommended Riparian Corridor [Online]. Available at: https://www.sepa.org.uk/environment/environmental-data/. Accessed: July 2025



Table 1: SEPA Recommended Riparian Corridor

Channel Width	Width of Buffer Strip (either side)
Less than 2 m	10 m
2-15 m	15 m
More than 15 m	30 m

1.6 Watercourse Crossings

1.6.1 The watercourse crossings are detailed in **Tables 2** and **3** below.



Table 2: Watercourse Crossings: Northern Alignment

ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
Perm	unnamed Field Drain	ks - Northern Alig	956281	0.2	Earth	Gentle	Not observed	Proposed	Slow rate of flow. Average depth of 0.1 m. Bank side composed of grasses.	Yes	No	Not available
2	Unnamed field drain	318974	953965	Not observed	Not observed	Gentle	Not observed	Proposed	Pastureland. Dry with no visible signs of flowing water.	Yes	No	



1	D	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
3	3	Unnamed	319076	953660	Not observed	Not observed	Gentle	Not observed	Proposed	No visible sign of watercourse. Coniferous forestry. Dry.	Yes	No	



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
4	Unnamed	319223	953111	Not observed	Not observed	Gentle	Not observed	Proposed	Not observed. Located in dense coniferous forestry.	Yes	No	



•	D	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
Ę	5	Halsary Burn	319265	950201	1-1.5	Peat/silt	Gentle	Not observed	Proposed	Depth approximately 0.5 m. Moderate rate of flow. Banks composed of peat and are vegetated. Meandering channel.	No	Yes	



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
6	Unnamed tributary of Allt Caol	318017	948761	<0.1	Peat	Gentle	Not observed	Proposed	Field drain. Zero flow. Overhanging vegetation. Depth ~ 0.05 m. Stable environment.	No	Yes	
7	Unnamed	318063	943762	Not observed	Not observed	Gentle	Not observed	Proposed	Not observed	Yes	No	Not available
8	Unnamed tributary of the Burn of Braehungie	318811	939179	0.3 – 1	Mud	Gentle	No	Proposed	Overland flow. Gentle flow of water. Mossy grass wetland environment. 0.3 m deep in places. No clearly defined channel.	Yes	No	



ID	•	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
9	Unnamed tributary of the Burn of Braehungie	318753	938941	0.5-1	Silt	Moderate	Not observed	Proposed	Moderate rate of flow. Bank height approximately 0.2-0.3 m. Sparse aquatic vegetation in channel. Stable environment.	No	Yes	



I	D	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
1	10	Burn of Houstry	315417	932813	2.0-3.0	Silt	Gentle	Not observed	Proposed	Moderate flow. Shallow bank height. Depth up to 0.5 m.	No	Yes	
1	11	Unnamed drain	313196	929391	0.3	Peat	Gentle	Not observed	Proposed	Peat drain located in blanket bog. Very slow rate of flow. Depth approximately 0.1 m. Bank composed of heather, cotton grass and moss.	Yes	No	



II	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
1	Unnamed tributary of Allt Tarsuinn	313166	929262	0.5	Peat	Gentle	Not observed	Proposed	Depth approximately 0.2 m. Bank side composed of heather and moss.	Yes	No	Not available
1	Unnamed tributary of Allt Tarsuinn	313088	928953	0.3	Peat	Gentle	Not observed	Proposed	Depth approximately 0.1 m. Very slow rate of flow. Low volume of water flow that drains to the Allt Tarsuinn. Bank side composed of heather and moss.	Yes	No	



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
14	Unnamed tributary of Allt Tarsuinn	313091	928945	0.3	Peat	Gentle	Not observed	Proposed	Depth approximately 0.1 m. Very slow rate of flow. Low volume of water flow that drains to the Allt Tarsuinn. Bank side composed of heather and moss.	Yes	No	
15	Unnamed tributary of Langwell Water	309100	922229	Not observed	Not observed	Moderate	Not observed	Proposed	Not observed	No	Yes	Not available
16	Unnamed drain	301614	917779	Not observed	Not observed	Gentle	Not observed	Proposed	Not observed	Yes	No	Not availabe
17	Unnamed drain	301741	917796	Not observed	Not observed	Gentle	Not observed	Proposed	Not observed	Yes	No	Not availabe
18	Unnamed drain	301820	917801	Not observed	Not observed	Gentle	Not observed	Proposed	Not observed	Yes	No	Not availabe
19	Unnamed tributary of the River Helmsdale	301926	917716	Not observed	Not observed	Steep	Not observed	Proposed	Not observed	No	Yes	Not available



1	D	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
2	0	Loth Burn	294290	916352	3.0-4.0	Gravel with boulders	Gentle	Bank erosion	Proposed	Fast rate of flow eroding the banks. Bank composition consisting of clay/mud. Depth 0.3-0.5 m.	No	Yes	
2		Unnamed tributary of Loth Burn	293481	913139	Not observed	Not observed	Moderate	Not observed	Proposed	Vegetated flushes. No sign of water flow.	Yes	No	Not available
2	2	Kintradwell Burn	290562	910498	0.5-1.5	Rock and large boulders	Moderate	Not observed	Proposed	A narrow fast flowing watercourse within ravine. Channel depth 0.2-0.4 m. Aquatic plants growing in channel - mosses.	No	Yes	
2	3	Kintradwell Burn	291176	909853	2.5	Gravel and rock	Moderate	Not observed	Proposed	Moderate rate of flow. Depth approximately 0.5 m.	No	Yes	Not available



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
									Vegetated banks.			
24	Unnamed tributary of the River Brora	285647	907031	Not observed	Mud	Moderate	Not observed	Proposed	No sign of waterflow, densely covered with grass.	Yes	No	Not available
25	Carrol Burn	284607	907149	2	Gravels, cobbles and large boulders	Moderate	No	Proposed	Moderate rate of flow. Average depth of 0.5 m. Large boulders within the channel. Bridge crossing infrastructure present downstream.	No	Yes	



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
26	Unnamed	280363	905351	N/A	Mud	Moderate	No	Proposed	Flush that's frozen over. Not defined channel. Heather surrounded with mosses within channel.	Yes	No	



1	D	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
	27	Golspie Burn	278996	904828	0.5	Peat and rock	Gentle	No	Proposed	Fast rate of flow. Depth approximately 0.3 m. Bank side composed of grasses and rushes. Pictures taken upstream from point of watercourse crossing in a safe, accessible area.	No	Yes	



D	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
	Unnamed tributary of Allt nan Sgeith	278922	904664	0.2	Mud	Gentle	Not observed	Proposed	Very slow flow, stagnant in areas. Potential drainage channel. Shallow, vegetated banks. Depth approximately 0.2 m.	No	Yes	



ID	Na	ame	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
29		Ilt Cnoc na	279049	903963	0.5 - 1	Rocks, gravels and boulders	Moderate	Yes – Undercutting banks	Proposed - located where existing track is	Steep undercutting banks 0.5 m. Slow flow apart from at waterfalls. 0.4 m deep. Mud and rock bank composition	No	Yes	



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
30	Allt bad a' Chrasgaidh	275105	901742	0.5	Rock	Gentle	Not observed	Proposed	Heavily vegetated, overhanging grassy bank. Large boulders within channel with sparse mosses. Located adjacent to 30x30 m pond. Average depth of 0.2 m.	No	Yes	
31	Unnamed tributary of Allt bad a' Chrasgaidh	274819	901851	Not observed	Not observed	Gentle	Not observed	Proposed	Standing water at confluence downstream of access track.	No	Yes	



898622 Unnamed 272220 Not observed Mud Gentle Not observed Proposed No clearly No defined channel. Very slow rate of flow, stagnant in areas. Abundant vegetation detritus. Ground is highly saturated. 272175 898454 5 Rocks and 33 Abhainn an t-Gentle No Proposed Major No Yes boulders Stratha waterbody. Charnaig Dense trees in



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
									riparian area. Moderate flow. Signs of deposited gravels on bankside. Bank composition mud/silt.			
Temp	orary Access Tracl	cs - Northern Aligr	ment									
34	Unnamed	316797	956140	Not observed	Not observed	Moderate	Not observed	Proposed	No visible sign of watercourse. Densely vegetated with rushes and long grass.	Yes	No	Not available
35	Unnamed	316874	956024	0.1	Mud	Moderate	Not observed	Proposed	Moderate rate of flow. Densely vegetated. Bank side composed of rushes, long	Yes	No	Not available



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
									grass and moss.			
36	Unnamed	316906	955993	Not observed	Not observed	Moderate	Not observed	Proposed	Not observed	Yes	No	Not available
37	Unnamed	317047	955939	0.5	Mud	Moderate	Not observed	Proposed	Moderate rate of flow. Bank side composed of grass and moss.	Yes	No	Not available
38	Unnamed drain	317839	955511	Not observed	Not observed	Moderate	Not observed	Proposed	Not observed. Artificial watercourse/dra in.	Yes	No	Not available
39	Unnamed	318440	955112	Not observed	Not observed	Gentle	Not observed	Proposed	Not observed	Yes	No	Not available
40	Unnamed	318600	955087	Not observed	Not observed	Gentle	Not observed	Proposed	Not observed	Yes	No	Not available
41	Unnamed	318661	954981	Not observed	Not observed	Gentle	Not observed	Proposed	Not observed	Yes	No	



D	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
42	Unnamed	318622	954952	Not observed	Not observed	Gentle	Not observed	Proposed	No sign of visible watercourse	Yes	No	
43	Unnamed tributary of Halsary Burn	318849	949624	Not observed	Mud	Gentle	Not observed	Proposed	Wide, low ditch, fully vegetated. Within Marshland	Yes	No	Not available
14	Unnamed tributary of Allt Caol	318221	948924	Not observed	Soil	Gentle	Not observed	Proposed	No open water, vegetated with rushes.	Yes	No	Not available
45	Burn of Badachraskach	317871	945314	0.4-0.7	Rocks, gravels and boulders	Moderate	Not observed	Proposed	Depth: 0.2 m. Moderate rate of flow. Bank composition: grasses and mud.	Yes	No	



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
46	Unnamed drain	317886	944846	Not observed	Not observed	Gentle	Not observed	Proposed	Moss filled drain.	Yes	No	Not available
47	Unnamed	318175	943166	Not observed	Mud/ Peat	Gentle	Not observed	Proposed	Overland flow path. Rushes dominant. No defined channel.	Yes	No	



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
48	Unnamed	318174	942997	Not observed	Not observed	Moderate	No	Proposed	No defined channel. Boggy environment. Wetland/flushes .	Yes	No	
49	Unnamed	318184	942976	Not observed	Peat	Gentle	Moderate	Proposed	Wetland/flushes . No defined channel.	Yes	No	



1	D	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
E		Unnamed Field Drain	318218	942482	0.4	Peat	Gentle	No	Proposed	Very slow rate of flow. Bank side is low and densely vegetated.	Yes	No	
5		Unnamed Field Drain	318222	942463	0.4	Peat	Gentle	Not observed	Proposed	Very slow rate of flow. Bank side is low and densely vegetated.	Yes	No	



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
52	Unnamed tributary of the Burn of Aultachlevan	318242	942343	0.25-0.4	Peat	Gentle	Not observed	Proposed	Very slow rate of flow. Overhanging grassy banks. Heavily vegetated. Average depth from 0.1 m to 0.25 m.	yes	No	
53	Burn of Aultachlevan	318254	942031	1.0-3.0	Gravels and large gravels	Gentle	Not observed	Proposed	Moderate flow with faster/flashy flow in narrow regions. Channel depth up to 0.5 m. Shallow bank with flat floodplain.	No	Yes	



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
54	Burn of Lochend	318516	940726	Not observed	Not observed	Gentle	Not observed	Proposed	Slow rate of flow.	No	Yes	
55	Unnamed	318714	938531	Not observed	Not observed	Gentle	No	Proposed	Overland flow. Landscape consisting of moss, rushes and grass.	Yes	No	
56	Unnamed tributary of the Burn of Braehungie	318679	938260	0.5	Large rocks and boulders	Gentle	No	Proposed	Moderate to fast rate of flow. Depth approximately 0.05 m.	No	Yes	



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
57	Unnamed Field Drain	318055	937410	Not observed	Not observed	Gentle	Not observed	Proposed	Not observed	Yes	No	Not available
58	Burn of Braehungie	318005	937281	0.6-1	Gravel	Gentle	No	Proposed	Moderate rate of flow. Channel depth approximately 0.5 m at max depth and shallower in regions along the watercourse. Bank height approximately 0.2 m.	No	Yes	
59	Unnamed Field Drain	318022	937221	Not observed	Not observed	Gentle	Not observed	Proposed	Not observed	Yes	No	Not available



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
60	Unnamed Field Drain	318021	937178	Not observed	Not observed	Gentle	Not observed	Proposed	Not observed	Yes	No	Not available
61	Unnamed tributary of the Burn of Latheronwheel	317396	936006	0.2-0.3	Mud/silt	Moderate	Not observed	Proposed	Moderate rate of flow. Overgrowing vegetation with very little flowing water. Liable to flooding. Ground highly saturated. Steep channel valley. Evidence of flooding.	No	Yes	
62	Unnamed tributary of the Burn of Latheronwheel	317259	935652	0.3-0.5	Mud/silt	Moderate	Not observed	Proposed	Densely vegetated with stream flowing underneath. Very slow rate of flow. Aquatic plants growing in the channel. Depth 0.1-0.2 m. Bankside dominated by rushes. Evidence of flooding.	No	Yes	



IC)	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
6:2		Allt an Learanaich	314516	932033	2-3	Rocks and boulders	Gentle	Not observed	Proposed	Photo taken from closest spot due to fencing. Clearer photos taken downstream also included. Fast flowing channel. Unknown depth, unknown bank composition. Bankside composition is shrubs and grasses. Uniform channel.	No	Yes	



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
64	Unnamed tributary of Achorn Burn	313816	931025	Not observed	Not observed	Gentle	Not observed	Proposed	Inaccessible due to deer fencing	No	Yes	No access available due to deer fence
65	Unnamed tributary of Achorn Burn	313803	931007	Not observed	Not observed	Gentle	Not observed	Proposed	Not observed	Yes	No	Not available
66	Unnamed Field Drain	313708	930864	Not observed	Not observed	Gentle	Not observed	Proposed	Stagnant drain.	Yes	No	
67	Unnamed	313658	930774	Not observed	Not observed	Moderate	Not observed	Proposed	Not available	Yes	No	Not available
68	Allt na Buaidhe	312746	927674	Not observed	Peat	Gentle	Not observed	Proposed	Inaccessible due to deer fencing. Saturated, marshy ground	no	yes	No access available due to deer fence
69	Unnamed tributary of Allt na Buaidhe	312747	927653	Not observed	Peat	Gentle	Not observed	Proposed	Inaccessible due to deer fencing. Saturated, marshy ground	Yes	No	No access available due to deer fence



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
70	Allt na Buaidhe	312451	927144	≤5	Gravel	Gentle	Bank erosion	Proposed	Moderate rate of flow. Depth: 0.1 m. Steep banks up to 1 m. Bank side composition consisting of grasses, mosses, rock and peat.	No	Yes	
71	Allt na Buaidhe	312780	927062	1	Rock	Gentle	Not observed	Proposed	Slow rate of flow. Depth approximately 0.15 m. Low sloped banks consisting of stone and vegetation.	No	Yes	Not available
72	Unnamed tributary of Allt Sleibhtean	308462	920805	0.3-0.5	Soil	Gentle	Not observed	Proposed	Very slow rate of flow. Depth 0.1-0.25 m	Yes	No	Not available
73	Allt Sleibhtean	308403	920799	0.2-0.4	Peat	Gentle	Not observed	Proposed	Very slow rate of flow. Average depth of 0.2 m.	No	Yes	Not available



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
74	Unnamed tributary of Ousdale Burn	305823	920259	0.5	Mud	Gentle	Not observed	Proposed	Heavily vegetated banks with rushes. Overhanging grassy banks that cover most of channel. Depth 0.2 m. Slow flow. Mud/ silt bank composition.	No	Yes	
75	Allt an Dubh- bhaid	302981	918980	0.35	Peat and Gravel	Steep	Bank erosion	Proposed	Slow rate of flow. Heavily vegetated, eroding overhanging banks. Average depth of 0.1 m.	No	Yes	Inaccessible due to bracken overgrowth
76	Unnamed tributary of Allt Bad na Muislich	302388	918722	0.4	Peat	Steep	Not observed	Proposed	Slow rate of flow. Low, vegetated banks. Average depth of 0.15 m.	No	Yes	No access available due to deer fence
77	Unnamed tributary of Allt Bad na Muislich	302294	918670	Not observed	Peat	Moderate	Not observed	Proposed	Inaccessible due to Bracken overgrowth.	Yes	No	No access available due to deer fence



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
78	Unnamed tributary of Allt Bad na Muislich	302288	918647	Not observed	Peat	Moderate	Not observed	Proposed	Inaccessible due to Bracken overgrowth.	Yes	No	No access available due to deer fence
79	Unnamed tributary of Caen Burn	301977	918568	0.5	Peat	Moderate	Not observed	Proposed	Dry watercourse with small, dispersed pools. Narrow vegetated banks. No signs of flow. Average water depth in wet areas very shallow at 0.05 m.	No	Yes	Not available
80	Unnamed tributary of Caen Burn	301925	918516	0.5	Peat	Moderate	Not observed	Proposed	Dry watercourse with small, dispersed pools. Narrow vegetated banks. No signs of flow. Average water depth in wet areas very shallow at 0.05 m.	No	Yes	Not available
81	Unnamed tributary of Caen Burn	301920	918504	0.5	Peat	Moderate	Not observed	Proposed	Average depth of 0.05 m. Zero flow. Low, vegetated banks. Small occasional pooling.	No	Yes	Not available
82	Allt Sgealbach	300940	916624	0.2	Mud and Rock	Moderate	Not observed	Proposed	Average water depth of 0.5 m. Slow flow. Narrow watercourse with steep overhanging banks. Dense bracken cover.	No	Yes	Not available
83	Eldrable Burn	297529	916231	0.3	Not observed	Steep	Not observed	Proposed	Moderate rate of flow. Average depth of 0.2 m.	No	Yes	Not available



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
									Rocky bankside composition. Bracken dominant on riparian land. Many deeper and wider pools along the watercourse.			
84	Oulmsdale Burn	296714	916604	0.3	Gravel, cobbles, pebbles and boulders.	Steep	Not observed	Proposed	Moderate to fast rate of flow. Average depth of 0.3 m. Narrow Burn. Bank side composed of bracken, grass, heather and scattered trees.	No	Yes	Not available
85	Unnamed tributary of Oulmsdale Burn	296589	916605	1	Pebbles, cobbles and boulders	Steep	Not observed	Proposed	Moderate rate of flow. Narrow Burn. Average depth of 0.1 m. Bank side composed of bracken, grass, heather and scattered trees.	No	Yes	Not available
86	Unnamed tributary of the River Helmsdale	295615	916590	0.2	Sparse gravel, pebbles, cobbles and boulders.	Steep	Not observed	Proposed	Slow rate of flow. Exposed sections of peat. Depth up to 0.3 m. Bracken dominant. Some deeper pools with faster flowing water.	No	Yes	Not available



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
87	Unnamed tributary of the River Helmsdale	295579	916445	0.2	Sparse gravel, pebbles, cobbles and boulders.	Steep	Not observed	Proposed	Slow rate of flow. Exposed sections of peat. Depth up to 0.3 m.	No	Yes	
88	Gable Burn	294565	915515	1.0-2.0	Gravels with boulders	Moderate	Bank erosion	Proposed	Fast rate of flow. Depth highly variable up to 0.5 m. Gully in a steep valley. Aquatic plants sparse in channel.	No	Yes	



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
89	Loth Burn	293898	915501	2	Rock	Gentle	Bank undercutting	Proposed	Moderate rate of flow. Shallow, rocky, heather banks. Average depth of 0.35 m. Narrow and meandering watercourse.	No	Yes	
90	Gable Burn	294293	915206	2	Rock	Gentle	No	Proposed	Moderate rate of flow. Variable, rocky and vegetated bank with heather. Average water depth of 0.4 m.	No	Yes	



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
91	Loth Burn	293500	913570	4	Rock and large boulders	Gentle	Not observed	Proposed	Fast rate of flow. Bank height approximately 0.4 m.	No	Yes	
92	Allt a' Bhuic	291912	911855	0.5	Silt and rock	Moderate	Not observed	Proposed	Slow rate of flow. Average depth of 0.25 m. Banks composed of peat and rock.	No	Yes	



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
93	Unnamed	288408	908161	0.5-4	Mud/silt	Gentle	Not observed	Proposed	Saturated, boggy wetland with aquatic vegetation i.e. mosses.	No	Yes	
94	Unnamed tributary of An Dubh - lochan	287903	908094	0.4	Peat and stones	Gentle	Not observed	Proposed	Low to moderate flow. Straight cut banks. Moss growing in channel. 0.75 m deep.	No	Yes	



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
95	Allt Horn	280149	905169	0.7	Rock	Moderate	Not observed	Proposed	Gully. Narrow, meandering channel with a steep valley. Bank height approximately 0.3 m. Depth approximately 0.2 m. Moderate rate of flow.	No	Yes	



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
96	Allt nan Sgeith	279496	904424	0.7-1	Rocks and boulders	Moderate	Not observed	Proposed	Moderate rate of flow. Depth approximately 0.1 m. Steps in river. Bank height approximately 0.2 m, composed of silt/mud and vegetation.	No	Yes	
97	Allt Cnoc na Gamhna	278412	903396	1	Peat	Moderate	Not observed	Proposed	Moderate rate of flow. Riparian rushes. Average depth of 1 m.	No	Yes	Inaccessible due to deer fencing
98	Allt Cnoc na Gamhna	278269	903136	1	Peat	Moderate	Not observed	Proposed	Moderate rate of flow. Average depth of 1 m.	No	Yes	Inaccessible due to deer fencing



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
99	Unnamed tributary of Morvich Burn	276531	901981	Not observed	Not observed	Gentle	Not observed	Proposed	Not observed	No	Yes	Not available
100	Morvich Burn	275993	902199	0.3-0.5	Mud/Silt and Gravel	Gentle	Not observed	Proposed	Shallow burn opens in small area. Vegetation cover on banks. Old stone structure that runs over burn - closest accessible location.	No	Yes	
101	Morvich Burn	275813	902150	1.0-2.0	Gravels, rocks and large boulders	Moderate	Not observed	Proposed	Photo taken downstream, closest point of data collection. Moderate rate of flow, rocky banks with aquatic vegetation including mosses.	No	Yes	
102	Unnamed tributary of Morvich Burn	275658	902175	0.5	Rocks and silt	Gentle slope	Not observed	Proposed	Sandy rocky bed. Low flow. 0.4 m deep. Vegetated banks.	No	Yes	



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
103	Allt Loch Ruagaidh	273388	899931	0.4	Mud	Gentle	Not observed	Proposed	Slow glow. No defined channel/ Vegetative banks that are overflowing. 0.5 m deep. Head of watercourse with more defined channel downstream. Meandering. Grasses on bankside.	No	Yes	



Crossing Type Field Notes CAR Width (m) Name Easting Northing Sediment Slope **Erosion** Minor Photo /Comments Watercourse Engineering Authorisation (yes/no) Required (yes/no) 2 104 272594 899154 Rocks and Photo taken Yes Allt na-h-Innse Gentle Signs of Proposed Aonair boulders undercutting upstream of banks crossing due to terrain. Fast rate of flow. Large riparian debris in the channel. Bank composition mud and rocks. Bankside composition grasses and trees.



Crossing Type Field Notes CAR Width (m) Name Easting Northing Sediment Slope **Erosion** Minor Photo /Comments Watercourse Engineering Authorisation (yes/no) Required (yes/no) 105 272371 0.3 No Unnamed 898947 Gravels, rocks Moderate Signs of Proposed Moderate flow. Yes and boulders Depth 0.3 m. tributary of Allt undercutting na-h Innse banks Bank height 0.3 Aonair m. Bankside composed of grasses and shrubs.



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
106	Unnamed tributary of Abhainn an t- Stratha Charnaig	272224	898554	No clear defined channel	Mud	Gentle	Not observed	Proposed	No clearly defined channel. Slow to zero flow. Plant debris in watercourse. Ground highly saturated.	No	Yes	



ID) N	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
10		Allt Lochan Maolanaidh	271659	898176	0.4	Peat	Gentle	Not observed	Proposed	Fast rate of flow, average depth of 0.2 m. Photo taken downstream.	No	Yes	
10	08 (Garskelly Burn	271568	898147	1	Rocks	Gentle	Not observed	Proposed	Moderate flow. Grassy banks with ferns. Average depth of 0.4 m. Photo taken downstream.	No	Yes	



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
109	Unnamed tributary of Abhainn an t- Stratha Charnaig	271326	898156	0.5	Mud	Gentle	Not observed	Proposed	Low flow/present watercourse. 1 m high valley. Vegetated channel.	No	Yes	
110	Unnamed tributary of Abhainn an t- Stratha Carnaig	270291	898194	0.6	Peat	Moderate	Not observed	Proposed	No visible signs of watercourse, likely redundant channel from adjacent burn. Vegetated banks.	No	Yes	Not available
111	Unnamed tributary of Abhainn an t- Stratha Carnaig	270275	898229	0.5	Peat	Moderate	Not observed	Proposed	Slow rate of flow. Depth approximately 0.2 m. Shallow, vegetated banks, consisting of grasses, rushes and mosses.	Yes	No	Not available
112	Allt Loch na Feannaig	268643	898176	1	Rocks	Gentle	Not observed	Proposed	Moderate rate of flow. Steep sided banks with birch, rowan, grass, rushes, bracken and mosses. Average depth of 0.4 m.	No	Yes	



IC		Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
1:	13	Alltan Riabhach	267398	898046	Not defined channel	Mud	Gentle	Not observed	Proposed	Photo taken downstream of point. No defined channel upstream of road. Defined channel after road.	No	yes	



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes /Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
114	Unnamed tributary of Loch Buidhe	267288	898034	Not observed	Not observed	Moderate	Not observed	Proposed	Not observed	No	Yes	Not available
115	Unnamed tributary of Loch Buidhe	267223	898028	0.5	Rocks	Gentle	Not observed	Proposed	0.5 m deep. Vegetated shallow banks.	Yes	no	



Crossing Type Field Notes CAR Name Easting Northing Width (m) Sediment Slope **Erosion** Minor Photo Engineering /Comments Watercourse Authorisation (yes/no) Required (yes/no) 116 898000 0.3 Allt Clach-266958 Peat and rocks Yes Gentle Not observed Proposed Slow to bhuaile moderate rate of flow. Bank side composition consisting of grasses, rushes and sparse bracken. Average depth of 0.5 m.



Table 3: Watercourse Crossings: Southern Alignment

ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes/ Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
Permar 117	Unnamed tributary of Allt Loch Leigein	262065	ment 897851	Not observed	Not observed	Gentle	Not observed	Proposed	Not observed	Yes	No	Not available
118	Unnamed Tributary of Allt Loch Leisgein	261385	897830	0.1	Peat	Moderate	Not observed	Proposed	Vegetated bankside composition. Very Slow flow.	Yes	No	Not available
119	Unnamed Tributary of Henman's Burn	257957	896840	Not observed	Not observed	Gentle	Not observed	Proposed	Not observed.	No	Yes	Not available
120	Culeave Burn	255599	892285	0.3-0.5	Peat	Gentle	Not observed	Proposed	Average water depth: 1.5 m. Width varies greatly along the burn, reaching up to 10 m in pooling areas to the northwest of the crossing.	No	Yes	



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes/ Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
121	Allt Srath nan Seasgach	255613	888135	1	Peat	Gentle	Not observed	Proposed	River. Slow rate of flow. Average water depth: 0.5 m. Exposed peat banks with grasses and rushes.	No	Yes	
122	Allt Eiteachan	255594	887834	Not observed	Not observed	Gentle	Not observed	Proposed	Main River.	No	Yes	Not available
123	Sruthan an Tairbh	256769	885300	Not observed	Not observed	Moderate	Not observed	Proposed	Small watercourse in boggy environment.	No	Yes	Not available
124	Unnamed Flush	257330	884682	0	Peat	Gentle	Not observed	Proposed	Flush - no sign of running water.	No	Yes	Not available
125	Allt Coire Bhenneit	257276	883858	3	Rock	Gentle	Not observed	Proposed	Main River. Moderate rate of flow. Average water depth: 0.7 m. Visible fish species present.	No	Yes	Not available



Northing **Crossing Type** CAR Name Easting Width (m) Sediment Slope **Erosion** Field Notes/ Photo Comments Watercourse Engineering (yes/no) Authorisation Required (yes/no) 256486 881181 0 Mud 126 Unnamed Gentle Not observed Proposed Overland flow Yes No tributary of Allt perpendicular to the Alt a' Choire a' Choire Dhuibh Dhuibh. 127 Unnamed 256396 880977 Not observed Not observed Moderate Not observed Proposed Habitat of Yes No Not available tributary of Alt a' Juniperus Choire Dhuibh vegetation. 128 Allt Loch Bad a' 255382 878853 0.6-2 Rock Gentle Proposed River. Bank No Yes Not observed Bhathaich Side Composition: grasses, rushes and felled forestry.



Width (m) Northing Sediment Erosion **Crossing Type** Field Notes/ CAR Photo Name Easting Slope Comments Watercourse Engineering (yes/no) Authorisation Required (yes/no) 876725 0.1-0.3 Mud 129 Unnamed 254799 Gentle Not observed Proposed Overland flow. Yes No Overland Flow Path 130 Allt a' Mhuilinn 256106 873880 0.2 Mud Gentle Not observed Proposed Closest access Yes point due to fencing. Bank height 0.2 m. Slow flow. Gentles slope. Bankside grasses. Narrow channel within a larger valley. Mud bank composition.



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes/ Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
131	Unnamed	253570	864623	0.3	Mud and gravel	Moderate	Bank erosion	Proposed	Vegetation detritus present and large trees toppled onto channel. Ravine/steep banks in areas.	No	Yes	
132	Unnamed tributary of River Sgitheach	253141	864370	0.2	Mud and rock	Moderate	Not observed	Proposed	Areas of overland flow with parts that are more channelised. Channel is 0.2 m deep. Slow flow. Bankside composition is grasses. Sheep bucket in water.	Yes	No	



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes/ Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
133	Unnamed tributary of River Sgitheach	253030	864291	Not clear channel	Mud	Moderate	Not observed	Proposed	No clear channel, wet underfoot. Some signs of flow but mostly no flow. Within 3 m gully. Grasses on side and covered by pools of water.	Yes	No	



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes/ Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
134	Unnamed tributary of River Sgitheach	252904	864211	0.2	Mud	Moderate	Not observed	Proposed	Surface flow that goes sub surface for a short distance and then returns. Slow flow.	Yes	No	
135	Unnamed tributary of River Sgitheach	252868	864190	<0.1-0.5	Mud/silt	Gentle	Not observed	Proposed	Submerged channel by overhanging grassy banks.	Yes	No	



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes/ Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
136	Unnamed tributary of River Sgitheach	252816	864158	<0.1-0.5	Mud/silt	Gentle	Not observed	Proposed	Submerged channel by overhanging grassy banks.	No	Yes	
137	Unnamed tributary of River Sgitheach	252633	864048	Not clear channel	Mud	Gentle/ moderate	Not observed	Proposed	Overland flow. Gentle to moderate slope. Slow to no flow. No clearly defined channel. Pooling in some areas.	Yes	No	



Crossing Type Northing Erosion Field Notes/ CAR Photo Name Easting Width (m) Sediment Slope Comments Watercourse Engineering (yes/no) Authorisation Required (yes/no) 138 Unnamed 252571 864010 0.1-0.4 Mud with Gentle Not observed Proposed Overland flow. yes Overland Flow Slightly boulders Path submerged watercourse. Moderate flow rate with a low water level. Overhanging banks.



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes/ Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
139	Unnamed tributary of River Sgitheach	252467	863945	Not clear channel	Mud	Moderate	not observed	Proposed	Sub surface through flow/ overland flow. No clear width of channel. Moderate slope. Mud substrate.	Yes	No	
140	Unnamed tributary of River Sgitheach	252303	863,841	0.5-0.8	Gravel with boulders	Moderate	Bank erosion	Proposed	River. Heavily saturated ground, low to moderate flow, steep banks in areas with tress in channel. Bank Side Composition: grasses. 0.1-0.2 m water depth.	Yes	No	



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes/ Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
14	1 Unnamed tributary of River Sgither	252211 ch	863780	0.5-0.8	Gravel with boulders	Moderate	Bank erosion	Proposed	River. Heavily saturated ground, low to moderate flow, steep banks in areas with tress in channel. 0.1-0.2 m water depth.	Yes	No	
14	2 Unnamed Overland Flo Path	252053 N	863682	0.1-0.4	Silt/mud	Gentle	Not observed	Proposed	Meandering overland flow route, saturated muddy and grassy riparian corridor.	No	Yes	



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes/ Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
143	Unnamed tributary of River Sgitheach	251856	863540	0.1-0.5	Gravel with large boulders	Gentle	Bank erosion	Proposed	Very slow, low- level flow, width and depth vary and undulate.	No	Yes	
144	Allt na Criche	251472	863311	0.3-0.7	Gravel with small boulders	Gentle	Not observed	Proposed - perpendicular to existing track	Low flow, narrow channel that deepens towards river ford. Upstream banks slightly overhung.	No	Yes	
145	Allt na Raichean	251192	863142	0.1	Peat	Moderate	Not observed	Proposed	River. Moderate rate of flow. Average water depth: 0.3 m.	No	Yes	Not available
146	Unnamed tributary of Abhainn Sgitheach	250654	862799	Not observed	Not observed	Moderate	Not observed	Proposed	Not observed	Yes	No	Not available
147	Unnamed tributary of Abhainn Sgitheach	250330	862595	Not observed	Not observed	Moderate	Not observed	Proposed	Inaccessible	Yes	No	Not available
148	Unnamed tributary of Abhainn Sgitheach	250266	862557	Not observed	Not observed	Moderate	Not observed	Proposed	Inaccessible	Yes	No	Not available
149	Unnamed Tributary of Abhainn Sgitheach	250159	862845	0.5	Silt	Gentle	Not observed	Proposed	Slow rate of flow. Depth approximately 0.25 m.	No	Yes	Not available



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes/ Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
									Vegetated, low banks.			
150	Allt Bad na h- Achlaise	249702	862806	Not observed	Gravel and rock	Moderate	Not observed	Proposed	Bank Side Composition: grasses.	No	Yes	Not available
151	Unnamed tributary of Abhainn Sgitheach	249809	862330	Not observed	Gravel and rock	Gentle	Not observed	Proposed	Bank Side Composition: grasses.	Yes	No	Not available
152	Allt Bad na h- Achlaise	249745	862287	Not observed	Gravel and rock	Moderate	Not observed	Proposed	Bank Side Composition: grasses.	No	Yes	Not available
153	Tiadh Allt	247971	861159	0.5	Peat	Gentle	Not observed	Proposed	River. Slow rate of flow. Shallow, vegetated banks. Average water depth: 0.5 m.	No	Yes	Not available
154	Unnamed tributary of Peffery Burn	247513	860578	0.25	Rock	Moderate	Not observed	Proposed	Very slow rate of flow. Bank Side Composition: vegetated. Average water depth: 0.15 m.	Yes	No	Not available



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes/ Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
155	Unnamed tributary of Peffery Burn	247429	860680	0.4	Mud/silt	Moderate	Not observed	Proposed	Slow rate of flow. Bank Side Composition: vegetated with brambles and debris. Average water depth: 0.15 m. Survey point taken upstream in the only safe, accessible area.	No	Yes	
156	Unnamed Tributary of Peffery Burn	247399	860391	0.3	Mud	Gentle	Not observed	Proposed	Vegetated banks.	No	Yes	Not available
157	Peffery Burn	247273	860369	3	Rock	Gentle	Not observed	Proposed	Bank has varying heights, is rocky and vegetated	No	Yes	Not available



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes/ Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
158	Unnamed Overland Flow Path	246324	858572	0.1-0.3	Mud	Gentle	Not observed	Proposed	Overland flow path. Slow flow, shallow narrow channel - depth max 0.1 m. Grassy banks. Shallow marshy conditions.	Yes	No	
159	Allt Loch nam Bonnach	248229	848509	0.5	Rock	Gentle	Not observed	Proposed	River. Fast rate of flow. Average water depth: 0.2 m. Bankside: Heather, Rock and peat.	No	Yes	
160	Unnamed Tributary of	247343	847749	Not observed	Peat	Gentle	Not observed	Proposed	Fast rate of flow. Exposed peat with	No	Yes	Not available



Breakachy Burn

163

Unnamed

tributary of Breakachy Burn 245232

845289

Not observed

Not observed

Gentle

Not observed

Proposed

Field Notes/ Northing **Crossing Type** CAR Name Easting Width (m) Sediment Slope **Erosion** Photo Comments Watercourse Engineering Authorisation (yes/no) Required (yes/no) Loch Nam overhang of Bonnach vegetation. 846586 161 246365 Not observed Soil Proposed Slow rate of No Unnamed Moderate Not observed Yes Not available flow. Bank side tributary of Loch nan Dubh composition: Heather and Lochan moss. 247530 844961 0.5-1 162 Unnamed Pebbles and Gentle Not observed Proposed Stream. No Yes tributary of rocks Moderate rate

of flow. Bank side composition: grass, heather and moss.

Not observed

No

Yes

Not available



Northing **Crossing Type** Field Notes/ CAR Photo Name Easting Width (m) Sediment Slope **Erosion** Comments Watercourse Engineering (yes/no) Authorisation Required (yes/no) Breakachy Burn 245223 845260 2 Proposed Yes Gravel, pebbles Moderate Not observed Main River. No and rocks and Moderate rate boulders of flow. Bank side composition: Grass, bog myrtle and moss. Small fish species visible. Allt na h-Athain 245323 843852 1.5 Gravels, rocks Moderate Bank erosion Proposed Fast rate of Yes and boulders flow. Depth approximately 0.3 m. Rocky channel with steep sides. Bank side composed of rock, heather, gorse and bog myrtle.



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes/ Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
		045040	0.10.400						División de la constante de la	No	V.	Not available
166	Caochan Buidhe	245849	843189	0.4	Peat and stones	Gentle	Not observed	Proposed	River. Fast rate of flow. Average water depth: 0.4 m. Bank side composition: grasses,	No	Yes	ivot avaliable
									mosses and heather.			
	•			•			Temporary Acc	ess Tracks - Sout	hern Alignment			
167	Unnamed tributary of Allt na Ciste Duibhe	259229	897619	1.5	Mud	Gentle	Not observed	Proposed	Overland flow route. Various depths of 0.1-0.4 m. Gentle slope. Muddy base. No erosion. Heavily vegetated bankside. Discharging into a bog.	Yes	No	



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes/ Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
168	Unnamed Tributary of the River Shin	257488	896848	Not observed	Not observed	Gentle	Not observed	Proposed	Not observed	Yes	No	Not available
169	Henman's Burn	257573	896166	1	Rock and gravel	Gentle	Not observed	Proposed	Depth approximately 0.1 m. Very slow rate of flow. Low lying drain. Vegetated, homogenous bank levels. Located within proximity of hardstanding.	No	Yes	Not available
170	Unnamed Tributary of the Kyle of Sutherland	257792	895704	Not observed	Not observed	Gentle	Not observed	Proposed	Not observed	Yes	No	Not available
171	Unnamed Tributary of the River Carron	256591	890232	Not observed	Not observed	Gentle	Not observed	Proposed	Not observed	Yes	No	Not available
172	Unnamed tributary of Allt Coire Bhenneit	256989	882841	Not observed	Peat	Gentle	Not observed	Proposed	Peat Gully.	Yes	No	Not available



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes/ Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
173	Allt na Ghlinne	255965	869053	0.3-0.7	Rock and boulders	Gentle	Signs of erosion downstream of survey point.	Proposed	Moderate rate of flow. Bank composed of mud and rocks. Both sides of river fenced off.	No	Yes	
174	Unnamed tributary of the River Sgitheach	254447	865240	Not defined channel	Mud	Gentle	Not observed	Proposed	No water present 100 m upstream.	No	Yes	Not available



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes/ Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
17	Unnamed tributary of Peffery Burn	247682	860848	Not observed	Not observed	Moderate	Not observed	Proposed	No visible sign of watercourse	Yes	No	Not available



ID	Name	Easting	Northing	Width (m)	Sediment	Slope	Erosion	Crossing Type	Field Notes/ Comments	Minor Watercourse (yes/no)	CAR Engineering Authorisation Required (yes/no)	Photo
176	Unnamed tributary of Peffery Burn	247493	860901	0.4	Mud/silt	Moderate	Not observed	Proposed	Outlet obscured by vegetation.	No	Yes	
177	Unnamed Surface Water Flow	246569	857203	Not observed	Not observed	Moderate	Not observed	Proposed	Not observed	Yes	No	Not available
178	Unnamed Drain	245004	853763	Not observed	Not observed	Gentle	Not observed	Proposed	Drains towards the River Canon.	Yes	No	Not available
179	Unnamed Tributary of Breakachy Burn	246932	844830	Not observed	Not observed	Gentle	Not observed	Proposed	Not observed	Yes	No	Not available
180	Breakachy Burn	246931	844823	Not observed	Not observed	Gentle	Not observed	Proposed	Not observed	No	Yes	Not available