

FEARNA STORAGE

Fearna Pumped Storage Hydro Scheme EIA Report

Appendix 12.4 – Schedule of Water Crossings

February 2025



Quality Information

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Appendix 12.4: Schedule of Watercourse Crossings

Fearna Pumped Storage Hydro Project

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Basis of Report

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1.0 Introduction

This Appendix contains information relating to the existing and proposed new watercourse crossings at the Proposed Development.

This report presents photographs and dimensions for each crossing point. The report also details the likely form of the track crossing solution (e.g., culvert, arch culvert, or bridge). The final design of each crossing solution would be agreed with Scottish Environment Protection Agency (SEPA) prior to construction as part of the detailed site design.

A survey of the proposed watercourse crossings was undertaken in July and September 2024 by experienced SLR hydrologists.

The location of the watercourse crossings is shown in **Figure 12.1** of the EIAR Report.

1.1 Relevant Legislation

The Water Framework Directive (2000/60/EC) (WFD) has been transposed into Scottish legislation as the Water Environment and Water Services (Scotland) Act 2003 (or WEWS) and has given Scottish ministers powers to introduce regulatory controls over activities in order to protect and improve Scotland's water environment. The water environment includes wetlands, rivers, lochs, transitional waters (estuaries), coastal waters and groundwater. These regulatory controls, known as the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR) came into force in 2011 and have since been amended in 2013, 2017, and 2021.

With respect to watercourse crossings, CAR requires that all engineering works in inland surface waters and wetlands are subject to authorisation and allow for proportionate risk-based regulation which is outlined in the CAR Practical Guide. The authorisation process operates at three levels:

- General Binding Rules (GBR):
 - Minor crossings with no construction on bed or banks.
- Registration:
 - Bridges across rivers and lochs where no part of the structure encroaches on the bed (e.g., no piers or in-channel supports). In addition, the total length of the structures on both banks should not be more than 20 m. This category includes bottomless arch culverts; and
 - Closed culverts used for single-track tracks, footpaths and/or cycle routes, where the affected river is not more than 2 m wide.
- Licence (Simple/Complex):
 - All other bridges, fords or causeways; and
 - This category would include bridges affecting more than 20 m total bank lengths, bridges with in-stream supports or closed culverts for crossings not specified above.

SEPA provide authorisation for watercourse crossings shown on the 1:50,000 scale Ordnance Survey (OS) maps (Landranger Series). All other watercourses are classed as "minor watercourse" and are exempt under CAR.



2.0 Watercourse Crossing Details

The locations of new and existing watercourse crossings which may be upgraded as part of the Proposed Development are shown on **Figure 12.1** of the EIAR report. 14 new watercourse crossings (see Section 2.1) and 4 bridges (see Section 2.3) are required to facilitate the Proposed Development, details of which are included below. There are 33 existing crossings on the existing SAR and details of these are also presented (see Section 2.2).

2.1 Main PSH Site

Watercourse Crossing ID	WX01
Watercourse Crossing Details	Grid Reference: E 204989 / N 803798 Status: New Watercourse Width: 3 to 4 m Watercourse Depth: 0.3 m Notes: Incised in bedrock.
Photograph Looking Upstream	
Photograph Looking Downstream	
Potential Crossing Type Likely Required CAR Authorisation	Open span bridge or bottomless arch culvert Licence



Watercourse Crossing ID	WX02
Watercourse Crossing Details	Grid Reference: E 205033 / N 803756 Status: New Watercourse Width: 2 m Watercourse Depth: 0.3 to 0.5 m Notes: Incised in bedrock. Watercourse slightly narrower immediately downstream of crossing point.
Photograph Looking Upstream	 A photograph showing a watercourse flowing through a grassy, hilly landscape. The water is dark and appears to be flowing over a rocky bed. The surrounding vegetation is green and brown, typical of a moorland or upland area.
Photograph Looking Downstream	 A photograph showing a watercourse flowing through a grassy, hilly landscape. The water is dark and appears to be flowing over a rocky bed. The surrounding vegetation is green and brown, typical of a moorland or upland area.
Potential Crossing Type Likely Required CAR Authorisation	Open span bridge or bottomless arch culvert Licence



Watercourse Crossing ID	WX03
Watercourse Crossing Details	Grid Reference: E 205065 / N 803727 Status: New Watercourse Width: 0.5 to 1 m Watercourse Depth: 0.3 m Notes: Cobbles to boulders noted within the channel.
Photograph Looking Upstream	
Photograph Looking Downstream	
Potential Crossing Type Likely Required CAR Authorisation	Culvert Registration



Watercourse Crossing ID	WX04
Watercourse Crossing Details	Grid Reference: E 204956 / N 803681 Status: New Watercourse Width: 2.5 m Watercourse Depth: 0.2 m Notes: Watercourse located within a smaller channel which is up to 0.8 m deep. Boulders noted within channel. Crossing noted immediately downstream of confluence of two watercourses.
Photograph Looking Upstream	 A photograph showing a rocky watercourse flowing upstream. The water is white and turbulent as it flows over dark, jagged rocks. The surrounding landscape is hilly and covered in green grass and some low-lying vegetation. A red surveying pole is visible on the right bank.
Photograph Looking Downstream	 A photograph showing a rocky watercourse flowing downstream. The water is white and turbulent as it flows over dark, jagged rocks. The surrounding landscape is hilly and covered in green grass and some low-lying vegetation. A person is visible on the left bank, standing near the water.
Potential Crossing Type Likely Required CAR Authorisation	Open span bridge or bottomless arch culvert Licence



Watercourse Crossing ID	WX05
Watercourse Crossing Details	Grid Reference: E 204970 / N 803670 Status: New Watercourse Width: 1.3 m Watercourse Depth: 0.5 m Notes: None.
Photograph Looking Upstream	
Photograph Looking Downstream	
Potential Crossing Type Likely Required CAR Authorisation	Culvert Registration



Watercourse Crossing ID	WX06
Watercourse Crossing Details	Grid Reference: E 204941 / N 803671 Status: New Watercourse Width: 4 to 5 m Watercourse Depth: 0.2 m Notes: Incised in bedrock with large boulders in the channel and several small waterfalls.
Photograph Looking Upstream	
Photograph Looking Downstream	
Potential Crossing Type Likely Required CAR Authorisation	Open span bridge or bottomless arch culvert Licence



Watercourse Crossing ID	WX07
Watercourse Crossing Details	Grid Reference: E 204322 / N 803858 Status: New Watercourse Width: 0.5 m Watercourse Depth: 0.5 m Notes: Located within an incised channel up to 1.3m deep which is incised in peat.
Photograph Looking Upstream	
Photograph Looking Downstream	
Potential Crossing Type Likely Required CAR Authorisation	Culvert Registration



Watercourse Crossing ID	WX08
Watercourse Crossing Details	Grid Reference: E 204743 / N 803372 Status: New Watercourse Width: 3 m Watercourse Depth: 0.8 m Notes: Incised in bedrock with large boulders in the channel and several small waterfalls.
Photograph Looking Upstream	
Photograph Looking Downstream	
Potential Crossing Type Likely Required CAR Authorisation	Open span bridge or bottomless arch culvert Licence



Watercourse Crossing ID	WX09
Watercourse Crossing Details	Grid Reference: E 204722 / N 803096 Status: New Watercourse Width: 0.4 m Watercourse Depth: 0.3 m Notes: Small watercourse with grasses.
Photograph Looking Upstream	
Photograph Looking Downstream	
Potential Crossing Type Likely Required CAR Authorisation	Culvert Registration



Watercourse Crossing ID	WX10
Watercourse Crossing Details	Grid Reference: E 205266 / N 802901 Status: New Watercourse Width: 2 m Watercourse Depth: 0.2 m Notes: Incised in bedrock and large boulders noted in channel.
Photograph Looking Upstream	
Photograph Looking Downstream	
Potential Crossing Type Likely Required CAR Authorisation	Open span bridge or bottomless arch culvert Licence



Watercourse Crossing ID	WX11
Watercourse Crossing Details	Grid Reference: E 204942 / N 802437 Status: New Watercourse Width: 3 to 5 m Watercourse Depth: 0.5 m Notes: Incised in bedrock.
Photograph Looking Upstream	
Photograph Looking Downstream	
Potential Crossing Type Likely Required CAR Authorisation	Open span bridge or bottomless arch culvert Licence



Watercourse Crossing ID	WX12
Watercourse Crossing Details	Grid Reference: E 205226 / N 802248 Status: New Watercourse Width: 0.5 m Watercourse Depth: 0.2 m Notes: None.
Photograph Looking Upstream	
Photograph Looking Downstream	
Potential Crossing Type Likely Required CAR Authorisation	Culvert Registration



Watercourse Crossing ID	WX13
Watercourse Crossing Details	Grid Reference: E 205449 / N 802079 Status: New Watercourse Width: 0.2 m Watercourse Depth: 0.1 m Notes: Small watercourse which was heavily vegetated during the survey.
Photograph Looking Upstream	
Photograph Looking Downstream	
Potential Crossing Type Likely Required CAR Authorisation	Culvert Registration



Watercourse Crossing ID	WX14
Watercourse Crossing Details	Grid Reference: E 205576 / N 802000 Status: New Watercourse Width: 0.4 m Watercourse Depth: 0.1 m Notes: Small watercourse which was heavily vegetated during the survey.
Photograph Looking Upstream	
Photograph Looking Downstream	
Potential Crossing Type Likely Required CAR Authorisation	Culvert Registration



2.2 Southern Access Route (SAR)

Watercourse Crossing ID	WX15
Watercourse Crossing Details	Grid Reference: E 206247/ N 802145 Status: Existing Crossing Type: Stone bridge Crossing Size: up to 3 m wide Watercourse Width: 1.2 m Watercourse Depth: 0.1 m Notes: None.
Photograph Looking Upstream	
Photograph Looking Downstream	



Watercourse Crossing ID	WX16
Watercourse Crossing Details	Grid Reference: E 206283 / N 802201 Status: Existing Crossing Type: Circular culvert Crossing Size: 0.3 m diameter Watercourse Width: 0.3 m Watercourse Depth: 0.3 m Notes: Culvert entrance reinforced with concrete headwall. Small watercourse which was heavily vegetated during survey.
Photograph of Culvert Entrance from Upstream	 A photograph showing the upstream entrance of a circular culvert. The entrance is a dark, rectangular opening in a grassy bank, reinforced with a concrete headwall. The surrounding area is covered in tall, green grass and some brown, dry vegetation.
Photograph of Culvert Exit from Downstream	 A photograph showing the downstream exit of a circular culvert. The exit is a dark, rectangular opening in a grassy bank, reinforced with a concrete headwall. The surrounding area is covered in tall, green grass and some brown, dry vegetation.



Watercourse Crossing ID	WX17
Watercourse Crossing Details	Grid Reference: E 206316 / N 802219 Status: Existing Crossing Type: Circular culvert Crossing Size: 0.3 m diameter Watercourse Width: 0.4 m Watercourse Depth: 0.1 m Notes: Culvert entrance and exit reinforced with concrete headwall.
Photograph of Culvert Entrance from Upstream	 A photograph showing the upstream entrance of a circular culvert. The entrance is a dark, circular opening in a concrete headwall, surrounded by tall grass and some low-lying vegetation. The headwall appears to be made of rough, weathered concrete or stone.
Photograph of Culvert Exit from Downstream	 A photograph showing the downstream exit of a circular culvert. The exit is a dark, circular opening in a concrete headwall, surrounded by tall grass and some low-lying vegetation. The headwall appears to be made of rough, weathered concrete or stone.



Watercourse Crossing ID	WX18
Watercourse Crossing Details	Grid Reference: E 206422 / N 802269 Status: Existing Crossing Type: Circular culvert Crossing Size: 0.3 m diameter Watercourse Width: 0.1 m Watercourse Depth: 0.3 m Notes: Culvert exit and watercourse downstream of road heavily vegetated with bracken. Culvert entrance reinforced with concrete headwall.
Photograph of Culvert Entrance from Upstream	 A photograph showing the upstream entrance of a circular culvert. The entrance is a dark, arched opening in a concrete headwall, partially obscured by dense, dark brown moss and green vegetation. The surrounding area is a mix of grass, rocks, and more moss.
Photograph of Culvert Exit from Downstream	 A photograph showing the downstream exit of the culvert. The water is flowing through a narrow channel, heavily overgrown with dense, bright green bracken ferns that line both banks.



Watercourse Crossing ID	WX19
Watercourse Crossing Details	Grid Reference: E 206573 / N 802362 Status: Existing Crossing Type: Unknown Crossing Size: Unknown Watercourse Width: 0.3 m Watercourse Depth: 0.1 m Notes: Watercourse heavily vegetated so unable to access.
Photograph of Culvert Entrance from Upstream	 A photograph showing the entrance of a culvert from an upstream perspective. The culvert is a dark, rectangular opening in a grassy bank. The surrounding area is covered in dense, low-lying vegetation and grass. The water level is visible just inside the entrance.
Photograph of Culvert Exit from Downstream	 A photograph showing the exit of a culvert from a downstream perspective. The culvert is a dark, rectangular opening in a grassy bank. The surrounding area is covered in dense, low-lying vegetation and grass. The water level is visible just inside the entrance.



Watercourse Crossing ID	WX20
Watercourse Crossing Details	Grid Reference: E 206651 / N 802403 Status: Existing Crossing Type: Unknown Crossing Size: Unknown Watercourse Width: 0.5 m Watercourse Depth: 0.1 m Notes: Watercourse heavily vegetated so unable to survey existing crossing in detail.
Photograph Looking Upstream	
Photograph Looking Downstream	



Watercourse Crossing ID	WX21
Watercourse Crossing Details	Grid Reference: E 206675 / N 802403 Status: Existing Crossing Type: Circular culvert Crossing Size: 0.5 m Watercourse Width: 0.5 m Watercourse Depth: 0.1 m Notes: Culvert exit heavily vegetated.
Photograph Looking Upstream	
Photograph Looking Downstream	



Watercourse Crossing ID	WX22
Watercourse Crossing Details	Grid Reference: E 206761 / N 802403 Status: Existing Crossing Type: Circular culvert Crossing Size: 0.4 m Watercourse Width: 0.2 m Watercourse Depth: 0.1 m Notes: Culvert exit heavily vegetated. Culvert entrance partially blocked.
Photograph of Culvert Entrance from Upstream	 A photograph showing the upstream entrance of a culvert. The entrance is a dark, narrow opening in a rocky bank, partially obscured by dense green vegetation and grass. A red surveying pole is visible on the left side of the frame, leaning against the bank.
Photograph Looking Downstream	 A photograph looking downstream from the culvert exit. The view is dominated by dense, lush green vegetation, including ferns and moss, which appears to be growing over and around the culvert structure. A red surveying pole is visible on the right side of the frame.



Watercourse Crossing ID	WX23
Watercourse Crossing Details	Grid Reference: E 206793 / N 802400 Status: Existing Crossing Type: Open span rectangular culvert Crossing Size: 0.5 m width Watercourse Width: 0.5 to 2 m Watercourse Depth: 0.5 m Notes: Culvert entrance partially blocked.
Photograph Looking Upstream	
Photograph of Culvert Exit from Downstream	



Watercourse Crossing ID	WX24
Watercourse Crossing Details	Grid Reference: E 207058 / N 802481 Status: Existing Crossing Type: Twin open box culverts Crossing Size: 3 m wide each Watercourse Width: 1 m Watercourse Depth: 0.1 m Notes: Watercourse incised in bedrock and is located within a wider channel which is approximately 7 m wide. Channel affected by historic rockfall.
Photograph of Culvert Entrance from Upstream	
Photograph Looking Downstream	

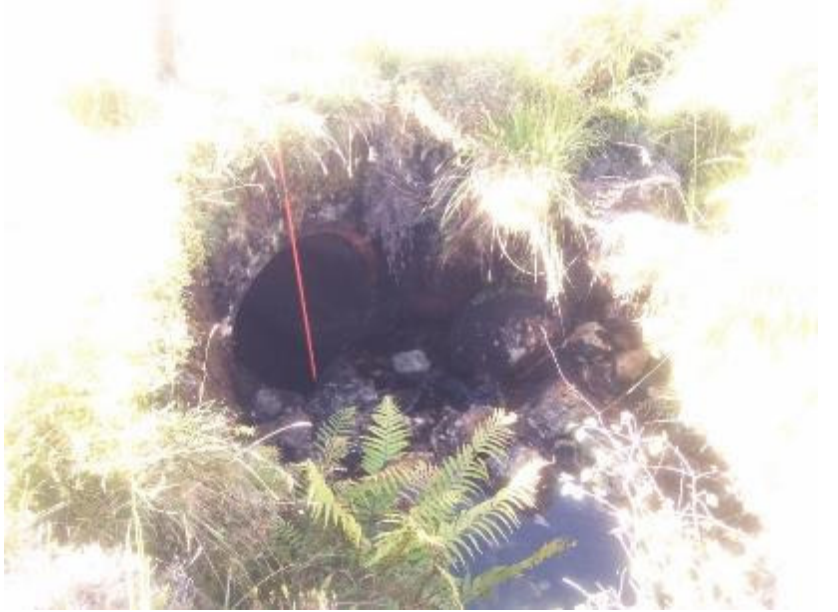


Watercourse Crossing ID	WX25
Watercourse Crossing Details	Grid Reference: E 207216 / N 802508 Status: Existing Crossing Type: Circular culvert Crossing Size: 0.5 m diameter Watercourse Width: 1.5 m Watercourse Depth: 0.2 m Notes: Watercourse slightly narrower upstream of crossing compared to downstream. Culvert exit reinforced with concrete headwall.
Photograph Looking Upstream	
Photograph of Culvert Exit from Downstream	



Watercourse Crossing ID	WX26
Watercourse Crossing Details	Grid Reference: E 207342 / N 802495 Status: Existing Crossing Type: Unknown Crossing Size: Unknown Watercourse Width: 0.5 m Watercourse Depth: 0.5 m Notes: Culvert heavily vegetated so unable to access.
Photograph Looking Upstream	
Photograph Looking Downstream	



Watercourse Crossing ID	WX27
Watercourse Crossing Details	Grid Reference: E 207414 / N 802473 Status: Existing Crossing Type: Circular culvert Crossing Size: 0.7 m diameter Watercourse Width: 1.3 m Watercourse Depth: 0.2 m Notes: None.
Photograph of Culvert Entrance from Upstream	 A photograph showing the entrance of a circular culvert into a stream. The entrance is partially obscured by dense green vegetation, including ferns and grasses. A red laser line is visible, pointing towards the center of the culvert opening.
Photograph of Culvert Exit from Downstream	 A photograph showing the exit of a culvert into a stream. The water is flowing over a rocky bed. The surrounding area is covered with green ferns and moss. A person's shadow is visible on the right side of the frame, indicating the photo was taken from a low angle near the water.



Watercourse Crossing ID	WX28
Watercourse Crossing Details	Grid Reference: E 207625 / N 802347 Status: Existing Crossing Type: Open span box culvert Crossing Size: 0.5 m wide Watercourse Width: 1.1 m Watercourse Depth: 0.2 m Notes: None.
Photograph at Culvert Entrance from Upstream	
Photograph Looking Downstream	



Watercourse Crossing ID	WX29
Watercourse Crossing Details	Grid Reference: E 207738 / N 802285 Status: Existing Crossing Type: Circular culvert Crossing Size: 0.4 m diameter Watercourse Width: 0.6 m Watercourse Depth: 0.1 m Notes: Culvert entrance heavily vegetated.
Photograph of Culvert Entrance from Upstream	 A photograph showing the entrance of a circular culvert from an upstream perspective. The entrance is heavily overgrown with dense vegetation, including tall grasses and various ferns. A red survey pole is visible in the background, partially obscured by the foliage.
Photograph of Culvert Exit from Downstream	 A photograph showing the exit of a circular culvert from a downstream perspective. The culvert is surrounded by dense vegetation, including large green ferns and grasses. The background shows a grassy hillside under a clear sky.



Watercourse Crossing ID	WX30
Watercourse Crossing Details	Grid Reference: E 207853 / N 802235 Status: New Watercourse Width: 5 m Watercourse Depth: 0.6 m Notes: Watercourse incised in bedrock and is located within a wider channel which is approximately 2 m deep. Upstream crossing on existing road is an open span bridge approximately 20 m upstream.
Photograph Looking Upstream	
Photograph Looking Downstream	
Potential Crossing Type Likely Required CAR Authorisation	Open span bridge or culvert Licence



Watercourse Crossing ID	WX32
Watercourse Crossing Details	Grid Reference: E 208105 / N 801877 Status: New Watercourse Width: 0.6 m Watercourse Depth: 0.1 m Notes: Small watercourse in grasses.
Photograph Looking Upstream	
Photograph Looking Downstream	
Potential Crossing Type Likely Required CAR Authorisation	Culvert Registration



Watercourse Crossing ID	WX33
Watercourse Crossing Details	Grid Reference: E 208463 / N 801723 Status: New Watercourse Width: 1.1 m Watercourse Depth: 0.1 m Notes: Watercourse incised in bedrock.
Photograph Looking Upstream	
Photograph Looking Downstream	
Potential Crossing Type Likely Required CAR Authorisation	Open span bottomless arch culvert Registration



Watercourse Crossing ID	WX34
Watercourse Crossing Details	Grid Reference: E 208538 / N 801652 Status: New Watercourse Width: N/A Watercourse Depth: N/A Notes: No active channel evident during site visit.
Photograph Looking Upstream	
Photograph Looking Downstream	
Potential Crossing Type Likely Required CAR Authorisation	Culvert Registration



Watercourse Crossing ID	WX35
Watercourse Crossing Details	Grid Reference: E 208577 / N 801594 Status: New Watercourse Width: 0.4 m Watercourse Depth: 0.1 m Notes: Watercourse located in a channel which is 0.3 m deep.
Photograph Looking Upstream	
Photograph Looking Downstream	
Potential Crossing Type Likely Required CAR Authorisation	Culvert Registration



Watercourse Crossing ID	WX36
Watercourse Crossing Details	Grid Reference: E 208632 / N 801550 Status: New Watercourse Width: 0.6 m Watercourse Depth: 0.1 m Notes: Low flow / stagnant water present at crossing point during survey.
Photograph Looking Upstream	
Photograph Looking Downstream	
Potential Crossing Type Likely Required CAR Authorisation	Culvert Registration



Watercourse Crossing ID	WX37
Watercourse Crossing Details	Grid Reference: E 208856 / N 801345 Status: New Watercourse Width: 0.7 m Watercourse Depth: 0.1 m Notes: Watercourse located in a channel which is 0.6 m deep.
Photograph Looking Upstream	
Photograph Looking Downstream	
Potential Crossing Type Likely Required CAR Authorisation	Culvert Registration



Watercourse Crossing ID	WX38
Watercourse Crossing Details	Grid Reference: E 209162 / N 800987 Status: New Watercourse Width: 0.3 to 0.7 m Watercourse Depth: 0.1 m Notes: Watercourse located in a channel which is 0.5 m deep.
Photograph Looking Upstream	
Photograph Looking Downstream	
Potential Crossing Type Likely Required CAR Authorisation	Culvert Registration



Watercourse Crossing ID	WX39
Watercourse Crossing Details	Grid Reference: E 209030 / N 800152 Status: New Watercourse Width: 0.7 m Watercourse Depth: 0.2 m Notes: None.
Photograph Looking Upstream	
Photograph Looking Downstream	
Potential Crossing Type Likely Required CAR Authorisation	Culvert Registration



Watercourse Crossing ID	WX40
Watercourse Crossing Details	Grid Reference: E 209017 / N 800100 Status: New Watercourse Width: N/A Watercourse Depth: N/A Notes: No obvious watercourse channel or flowing water. Area has been altered by drainage for the forestry. Stagnant water noted up to 0.5 m wide.
Photograph Looking Upstream	
Photograph Looking Downstream	
Potential Crossing Type Likely Required CAR Authorisation	Culvert Registration



Watercourse Crossing ID	WX41
Watercourse Crossing Details	Grid Reference: E 209024 / N 800071 Status: New Watercourse Width: 1.2 m Watercourse Depth: 0.2 m Notes: Watercourse is located within a wider meandering channel which is approximately 0.7 m deep and 1.7 m wide.
Photograph Looking Upstream	
Photograph Looking Downstream	
Potential Crossing Type Likely Required CAR Authorisation	Open span bottomless arch culvert Registration



Watercourse Crossing ID	WX43
Watercourse Crossing Details	Grid Reference: E 209679 / N 800013 Status: Existing Crossing Type: Culvert Crossing Size: Unknown but small Watercourse Width: 0.3 m Watercourse Depth: 0.2 m Notes: Minor culvert difficult to access during survey.
Photograph Looking Upstream	
Photograph Looking Downstream	



Watercourse Crossing ID	WX44
Watercourse Crossing Details	Grid Reference: E 209933 / N 800061 Status: Existing Crossing Type: Culvert Crossing Size: Unknown but small Watercourse Width: 0.4 m Watercourse Depth: 0.3 m Notes: Minor culvert difficult to access during survey.
Photograph Looking Upstream	
Photograph Looking Downstream	



Watercourse Crossing ID	WX45
Watercourse Crossing Details	Grid Reference: E 210682 / N 800105 Status: Existing Crossing Type: Plastic circular culvert Crossing Size: 1.5 m diameter Watercourse Width: 1.5 m Watercourse Depth: 0.6 m Notes: None.
Photograph Looking Upstream	
Photograph Looking Downstream	



Watercourse Crossing ID	WX46
Watercourse Crossing Details	Grid Reference: E 211492 / N 799968 Status: Existing Crossing Type: Unknown Crossing Size: Unknown Watercourse Width: 0.3 m Watercourse Depth: 0.2 m Notes: Heavily vegetated so unable to survey the existing crossing however it is expected to be a small culvert.
Photograph Looking Upstream	
Photograph Looking Downstream	



Watercourse Crossing ID	WX47
Watercourse Crossing Details	Grid Reference: E 212798 / N 799984 Status: Existing Crossing Type: Open span bridge Crossing Size: 15 m long, 4 m wide Watercourse Width: 10 to 15 m Watercourse Depth: 0.5 m Notes: Watercourse noted wider downstream of existing crossing.
Photograph Looking Upstream	
Photograph Looking Downstream	



Watercourse Crossing ID	WX48
Watercourse Crossing Details	Grid Reference: E 212863 / N 799879 Status: Existing Crossing Type: Unknown Crossing Size: Unknown Watercourse Width: N/A Watercourse Depth: N/A Notes: No watercourse or crossing found during the survey.
Photograph Looking Upstream	N/A
Photograph Looking Downstream	N/A



Watercourse Crossing ID	WX49
Watercourse Crossing Details	Grid Reference: E 212959 / N 799587 Status: Existing Crossing Type: Unknown Crossing Size: Unknown Watercourse Width: 1 to 1.5 m Watercourse Depth: 0.1 to 0.3 m Notes: Culvert entrance and exit heavily vegetated so unable to survey. Expected to be similar to watercourse dimensions.
Photograph Looking Upstream	
Photograph Looking Downstream	



2.3 Proposed Bridges

4 bridges are proposed (3 new and 1 replacement). Details of the proposed crossing points are shown below and in **Chapter 2: The Proposed Development**.

Watercourse Crossing ID	WX31 (Gear Garry)
Watercourse Crossing Details	Grid Reference: E 208069 / N 802235 Status: New bridge Watercourse Width: Approximately 20 m Watercourse Depth: 1.5 m Notes: Large watercourse with silty bed.
Photograph Looking Upstream	
Photograph Looking Downstream	



Watercourse Crossing ID	WX42 (River Kingie)
Watercourse Crossing Details	Grid Reference: E 209055 / N 799820 Status: New bridge Watercourse Width: Approximately 25 m Watercourse Depth: 1.5 m Notes: Large meandering watercourse with rocky bed with islands and small rapids.
Photograph Looking Upstream	
Photograph Looking Downstream	



Watercourse Crossing ID	WX50 (Allt Ladaidh)
Watercourse Crossing Details	Grid Reference: E 222983 / N 800256 Status: Existing bridge to be upgraded Crossing Type: Open span bridge Crossing Size: 10 m length, 4 m wide Watercourse Width: Approximately 5 m Watercourse Depth: 0.5 m Notes: None
Photograph Looking Upstream	Not surveyed
Photograph Looking Downstream	Not surveyed



Watercourse Crossing ID	WX51 (River Garry)
Watercourse Crossing Details	Grid Reference: E 228364 / N 801353 Status: Existing bridge to be upgraded Crossing Type: Open span concrete bridge Crossing Size: 20 m long, 3.5m wide Watercourse Width: Approximately 10 m Watercourse Depth: 1.5 m Notes: None.
Photograph Looking at Bridge from Upstream	
Photograph Looking at Bridge from Downstream	





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