

APPENDIX 11 - CONSTRUCTION PHASE IMPACT ASSESSMENT – CULVERTS

Table 1 Section 1 - Construction Phase Impact Assessment (Culverts)

Culvert Ref.	Chainage	Location Note	Type	Length (m)	H x W or Ø (m)	Fish Bearing?	NRA (2009) Quality	Potential Impact Significance (without mitigation)	Construction Phase Mitigation
S1-CUL.01	1+300	Trib of Burn Daurnett (W1-02)	Box	51.80	3.2 x 2	Yes (trout)	D	Potential temporary, significant negative direct and indirect effects on salmonids and aquatic habitat (including Burn Daurnett nearby) related to instream works and pollutant loss effects. Potential for fish mortality in temporary works area.	<u>Timing restriction:</u> In-stream works will be carried out during the period 1 May - 30 September of any year. ¹ Section 47 (instream work) and Section 70 (fish removal) permits required from Loughs Agency. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. Careful implementation of pollutant loss controls.
S1-CUL.02	0+600	Minor drain (Cappry area)	Pipe	34.10	1.2Ø	No	E	Not significant direct negative; Low potential for indirect temporary significant negative effects relating to pollutant loss effects on Burn Daurnett downstream.	General pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restrictions.
S1-CUL.03	0+455	Minor drain (Cappry area)	Pipe	30.50	1.2Ø	No	E	Not significant direct negative; Low potential for indirect temporary significant negative effects relating to pollutant loss effects on Burn Daurnett downstream.	

¹ Section 47 and Section 70 of Foyle Fisheries Act 1952

Culvert Ref.	Chainage	Location Note	Type	Length (m)	H x W or Ø (m)	Fish Bearing?	NRA (2009) Quality	Potential Impact Significance (without mitigation)	Construction Phase Mitigation
S1-CUL.04	0+550	Minor drain (Cappry area)	Pipe	9.00	1.2Ø	No	E	Not significant direct negative; Low potential for indirect temporary significant negative effects relating to pollutant loss effects on Burn Daurnett downstream.	
S1-CUL.05	0+530	Minor drain (Cappry area)	Pipe	9.00	1.2Ø	No	E	Not significant direct negative; Low potential for indirect temporary significant negative effects relating to pollutant loss effects on Burn Daurnett downstream.	General pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.
S1-CUL.06	0+105	Minor drain (Cappry area)	Pipe	21.80	1.5Ø	No	E	Not significant direct negative; Low potential for indirect temporary significant negative effects relating to pollutant loss effects on Burn Daurnett downstream.	
S1-CUL.07	0+270	Minor drain (Cappry area)	Pipe	15.20	1.5Ø	No	E	Not significant direct negative; Low potential for indirect temporary significant negative effects relating to pollutant loss effects on Burn Daurnett downstream.	
S1-CUL.08	0+355	Cappry (W1-03)	Box	27.90	2.5 x 2.2	No	E	Not significant direct negative; Low potential for indirect temporary significant negative effects relating to pollutant loss effects on Burn Daurnett downstream.	

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S1-CUL.09	0+220	Cappry (W1-04)	Pipe	37.40	1.8Ø	No	E	Not significant direct negative; Low potential for indirect temporary significant negative effects relating to pollutant loss effects on Burn Daurnett downstream.	
S1-CUL.10	0+208	Cappry (W1-05)	Box	34.80	2.5 x 2.5	No	E	Not significant direct negative; Low potential for indirect temporary significant negative effects relating to pollutant loss effects on Burn Daurnett downstream.	
S1-CUL.11	0+200	Cappry (W1-05)	Box	6.90	2.75 x 2.25	No	E	Not significant direct negative; Low potential for indirect temporary significant negative effects relating to pollutant loss effects on Burn Daurnett downstream.	General pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.
S1-CUL.12	0+060	Dromboe Lower (W1-07)	Box	18.30	1.8 x 1.8	Yes (salmonid)	E	Short-term significant negative direct and indirect effects on salmonids and aquatic habitat (including R. Finn nearby) owing to instream works: pollutant loss effects (sediment, HC, concrete). Potential for fish mortality in temporary works area.	<u>Timing restriction:</u> In-stream works will be carried out during the period 1 May - 30 September of any year. Section 47 (instream work) and Section 70 (fish removal) permits required from Loughs Agency. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. Careful implementation of pollutant loss controls (sediment, HC, concrete)

Culvert Ref.	Chainage	Location Note	Type	Length (m)	H x W or Ø (m)	Fish Bearing?	NRA (2009) Quality	Potential Impact Significance (without mitigation)	Construction Phase Mitigation
S1-CUL.13	0+155	Dromboe Lower (W1-07)	Box	26.70	2.5 x 1.8	Yes (salmonid)	E	Short term significant negative direct and indirect effects on salmonids and aquatic habitat (including R. Finn nearby) owing to instream works: pollutant loss effects (sediment, HC, concrete). Potential for fish mortality in temporary works area.	<u>Timing restriction:</u> In-stream works will be carried out during the period 1 May - 30 September of any year. Section 47 (instream work) and Section 70 (fish removal) permits required from Loughs Agency. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. Careful implementation of pollutant loss controls (sediment, HC, concrete)
S1-CUL.14	0+335	Backlees (u/s W1-08)	Box	8.50	6.0 x 2.5	Yes (trout)	D	Temporary, significant negative direct and indirect effects on small numbers of trout and aquatic habitat owing to instream works relating to pollutant loss effects (sediment, HC, concrete). Potential for fish mortality in temporary works area. Low potential for indirect effects of pollutant loss on R. Finn downstream.	<u>Timing restriction:</u> In-stream works will be carried out during the period 1 May - 30 September of any year. Section 47 (instream work) and Section 70 (fish removal) permits required from Loughs Agency. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. Careful implementation of pollutant loss controls (sediment, HC, concrete)
S1-CUL.15	4+800	Greenhills (W1-10)	Pipe	110.50	1.2 Ø	No	E	Temporary, not significant direct negative. Low potential for indirect temporary significant negative effects on fish and aquatic habitats relating to pollutant loss to downstream Backlees and River Finn (including SAC).	General pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.

Culvert Ref.	Chainage	Location Note	Type	Length (m)	H x W or Ø (m)	Fish Bearing?	NRA (2009) Quality	Potential Impact Significance (without mitigation)	Construction Phase Mitigation
S1-CUL.16	4+830	Greenhills (W1-10)	Pipe	81.90	1.2Ø	No	E	Temporary, not significant direct negative. Low potential for indirect temporary significant negative effects on fish and aquatic habitats relating to pollutant loss to downstream Backlees and River Finn (including SAC).	
S1-CUL.17	0+895	Greenhills (d/s W1-10)	Pipe	13.90	1.2Ø	No	E	Temporary, not significant direct negative. Low potential for indirect temporary significant negative effects on fish and aquatic habitats relating to pollutant loss to downstream Backlees and River Finn (including SAC).	General pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restrictions.
S1-CUL.18	0+680	Minor drain (upper Tircallan)	Pipe	33.10	1.5Ø	No	E	Temporary, not significant direct negative. Low potential for indirect temporary significant negative effects on fish and aquatic habitats relating to pollutant loss to downstream Tircallan and Mullaghagarry.	
S1-CUL.19	0+680	Tircallan (u/s W1-16)	Box	25.10	2.8 x 2.1	Yes (trout)	D	Potential temporary to short term significant negative direct and indirect effects on salmonids and aquatic habitat (including culvert + stream diversion) related to instream works and pollutant loss effects. Potential for fish mortality in temporary works area.	<u>Timing restriction:</u> In-stream works will be carried out during the period 1 May - 30 September of any year. Section 47 (instream work) and Section 70 (fish removal) permits required from Loughs Agency. Ensure dry working conditions (diversion, pump-over) to prevent pollutant

Culvert Ref.	Chainage	Location Note	Type	Length (m)	H x W or Ø (m)	Fish Bearing?	NRA (2009) Quality	Potential Impact Significance (without mitigation)	Construction Phase Mitigation
									export. Careful implementation of pollutant loss controls (sediment, HC, concrete)
S1-CUL.20	0+470	Tircallan (u/s W1-16)	Box	12.30	2.8 x 2.1	Yes (trout)	D	Potential temporary to short term, significant negative direct and indirect effects on trout and aquatic habitat related to instream works and pollutant loss effects to downstream Tircallan / Mullaghagarry. Potential for fish mortality in temporary works area.	<u>Timing restriction:</u> In-stream works will be carried out during the period 1 May - 30 September of any year. Section 47 (instream work) and Section 70 (fish removal) permits required from Loughs Agency. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. Careful implementation of pollutant loss controls (sediment, HC, concrete)
S1-CUL.21	1+610	Tircallan (W1-16)	Box	56.70	3.5 x 2.1	Yes (trout)	D	Potential temporary to short term, significant negative direct and indirect effects on trout and aquatic habitat related to instream works and pollutant loss effects to Tircallan / Mullaghagarry. Potential for fish mortality in temporary works area.	<u>Timing restriction:</u> In-stream works will be carried out during the period 1 May - 30 September of any year. Section 47 (instream work) and Section 70 (fish removal) permits required from Loughs Agency. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. Careful implementation of pollutant loss controls (sediment, HC, concrete)

Culvert Ref.	Chainage	Location Note	Type	Length (m)	H x W or Ø (m)	Fish Bearing?	NRA (2009) Quality	Potential Impact Significance (without mitigation)	Construction Phase Mitigation
S1-CUL.22	1+765	Tircallan (W1-16)	Box	56.50	4.5 x 2.2	Yes (trout)	D	Potential temporary to short term, significant negative direct and indirect effects on trout and aquatic habitat related to instream works and pollutant loss effects to Tircallan / Mullaghagarry. Potential for fish mortality in temporary works area.	<u>Timing restriction:</u> In-stream works will be carried out during the period 1 May - 30 September of any year. Section 47 (instream work) and Section 70 (fish removal) permits required from Loughs Agency. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. Careful implementation of pollutant loss controls (sediment, HC, concrete)
S1-CUL.23	2+195	Minor drain (Trib of Mullaghagarry)	Pipe	84.40	1.2Ø	No	E	Not significant direct negative; Low potential for indirect temporary slight-mod negative effects on fish and aquatic habitats relating to pollutant loss to Mullaghagarry and R. Finn downstream.	General pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restrictions.
S1-CUL.23A	1+650	Minor drain (Trib of Mullaghagarry)	Pipe	78.90	1.2Ø	No	E	Not significant direct negative; Low potential for indirect temporary slight-mod negative effects on fish and aquatic habitats relating to pollutant loss to Mullaghagarry and R. Finn (SAC) downstream.	
S1-CUL.24	2+445	Minor drain	Pipe	86.90	1.2Ø	No	E	Not significant direct negative; Low potential for indirect temporary slight-mod negative effects on fish and aquatic habitats relating to pollutant loss to	

Culvert Ref.	Chainage	Location Note	Type	Length (m)	H x W or Ø (m)	Fish Bearing?	NRA (2009) Quality	Potential Impact Significance (without mitigation)	Construction Phase Mitigation
								Mullaghagarry and R. Finn (SAC) downstream.	
S1-CUL.25	0+375	Mullaghagarry (W1-17)	Box	76.60	5.0 x 4.5	Yes (trout, potentially salmon)	D	Potential temporary to short term significant negative, significant negative direct and indirect effects on trout and aquatic habitat related to instream works and pollutant loss locally and to R. Finn (SAC) downstream. Potential for fish mortality in temporary works area.	<u>Timing restriction:</u> In-stream works will be carried out during the period 1 May - 30 September of any year. Section 47 (instream work) and Section 70 (fish removal) permits required from Loughs Agency. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. Careful implementation of pollutant loss controls (sediment, HC, concrete)
S1-CUL.26	0+250	Minor drain (just west of Mullaghagarry)	Pipe	7.80	1.5Ø	No	E	Not significant direct negative; Low potential for indirect temporary slight-mod negative effects on fish and aquatic habitats relating to pollutant loss to Mullaghagarry and R. Finn (SAC) downstream.	General pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restrictions.
S1-CUL.27	3+175	Treanamullin (W1-19)	Pipe	32.00	1.5Ø	No	E	Not significant direct negative; Low potential for indirect temporary slight-mod negative effects on fish and aquatic habitats relating to pollutant loss to Mullaghagarry and R. Finn (SAC) downstream.	

Culvert Ref.	Chainage	Location Note	Type	Length (m)	H x W or Ø (m)	Fish Bearing?	NRA (2009) Quality	Potential Impact Significance (without mitigation)	Construction Phase Mitigation
S1-CUL.28	0+155	Mullaghagarry (W1-20)	Twin Box	34.00	2.3 x 2.7 each	Yes (trout, potentially salmon)	D	Potential temporary to short term significant negative, significant negative direct and indirect effects on salmonids and aquatic habitat related to instream works and pollutant loss locally and to R. Finn (SAC) downstream. Potential for fish mortality in temporary works area.	<u>Timing restriction:</u> In-stream works will be carried out during the period 1 May - 30 September of any year. Section 47 (instream work) and Section 70 (fish removal) permits required from Loughs Agency. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. Careful implementation of pollutant loss controls (sediment, HC, concrete)
S1-CUL.29	7+920	Minor drain (near Lisnaree)	Pipe	73.50	1.5Ø	No	E	Not significant direct negative; Low potential for indirect temporary slight-mod negative effects on fish and aquatic habitats relating to pollutant loss locally and to Cloghroe River downstream.	General pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.
S1-CUL.30	0+505	Minor drain (+ Lisnaree diversion)	Box	87.20	2.4 X 2.1	No	E	Not significant direct negative; Low potential for indirect temporary slight-mod negative effects on fish and aquatic habitats relating to pollutant loss locally and to Cloghroe River downstream.	General pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.

Culvert Ref.	Chainage	Location Note	Type	Length (m)	H x W or Ø (m)	Fish Bearing?	NRA (2009) Quality	Potential Impact Significance (without mitigation)	Construction Phase Mitigation
S1-CUL.31	0+025	Lisnaree + Maghercorran diversion	Box	45.40	4.5 x 2.2	Yes (trout)	D	Potential temporary to short term significant negative direct and indirect effects on trout and aquatic habitat related to instream works and pollutant loss locally and to Cloghroe River downstream. Potential for fish mortality in temporary works area.	<u>Timing restriction:</u> In-stream works will be carried out during the period 1 May - 30 September of any year. Section 47 (instream work) and Section 70 (fish removal) permits required from Loughs Agency. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. Careful implementation of pollutant loss controls (sediment, HC, concrete)
S1-CUL.32	0+410	Lisnaree	Pipe	22.50	1.8Ø	No	E	Not significant direct negative; Low potential for indirect temporary slight-mod negative effects on fish and aquatic habitats relating to pollutant loss locally and to Cloghroe River downstream.	Pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.
S1-CUL.33	0+615	Lisnaree (diversion)	Box	46.20	2.0 x 2.0	No	E	Not significant direct negative; Low potential for indirect temporary slight-mod negative effects on fish and aquatic habitats relating to pollutant loss locally and to Cloghroe River downstream.	General pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.

Culvert Ref.	Chainage	Location Note	Type	Length (m)	H x W or Ø (m)	Fish Bearing?	NRA (2009) Quality	Potential Impact Significance (without mitigation)	Construction Phase Mitigation
S1-CUL.34	0+310	Maghercorran (W1-11 to W1-13)	Box	42.20	3.5 x 2	Yes (trout, brook lamprey)	D	Potential temporary to short-term, significant negative direct and indirect effects on trout and aquatic habitat related to instream works and pollutant loss locally and to Cloghroe River downstream. Potential for fish mortality in temporary works area.	<u>Timing restriction:</u> In-stream works will be carried out during the period 1 May - 30 September of any year. Section 47 (instream work) and Section 70 (fish removal) permits required from Loughs Agency. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. Careful implementation of pollutant loss controls (sediment, HC, concrete)
S1-CUL.35	n/a	Maghercorran (W1-11 to W1-13)	Box	26.90	3.5 x 2	Yes (trout, brook lamprey)	D	Not significant direct negative; Low potential for indirect temporary slight-mod negative effects on fish and aquatic habitats relating to pollutant loss locally and to Cloghroe River downstream.	<u>Timing restriction:</u> In-stream works will be carried out during the period 1 May - 30 September of any year. Section 47 (instream work) and Section 70 (fish removal) permits required from Loughs Agency. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. Careful implementation of pollutant loss controls (sediment, HC, concrete)
S1-CUL.36	8+500	Maghercorran (W1-11 to W1-13)	Box	30.70	3.5 x 2	Yes (trout, brook lamprey)	D	Potential temporary, significant negative direct and indirect effects on trout and aquatic habitat related to instream works and pollutant loss locally and to Cloghroe River downstream. Potential for fish mortality in temporary works area.	<u>Timing restriction:</u> In-stream works will be carried out during the period 1 May - 30 September of any year. Section 47 (instream work) and Section 70 (fish removal) permits required from Loughs Agency. Ensure dry working conditions (diversion, pump-over) to prevent pollutant

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									export. Careful implementation of pollutant loss controls (sediment, HC, concrete)
S1-CUL.37	0+040	Minor drain (tenuous connectivity to Maghercorran)	Pipe	6.9	1.5Ø	No	E	Not significant direct negative; Low potential for indirect temporary slight negative effects on downstream Maghercorran and Cloghroe (construction run-off)	General pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restrictions.
S1-CUL.38	0+095	Minor drain (tenuous connectivity to Maghercorran)	Pipe	20	1.5Ø	No	E	Not significant direct negative; Low potential for indirect temporary slight negative effects on downstream Maghercorran and Cloghroe (construction run-off)	

Table 2 Section 2 - Construction Phase Impact Assessment (Culverts)

Culvert Ref.	Chainage	Location Note (Relevant Aquatic Site Code)	Type	Length (m)	H x W or \varnothing (m)	Fish Bearing?	NRA (2009) Quality	Potential Construction Phase Impact (without mitigation)	Construction Phase Mitigation
S2-CUL.01	0+166	Listellian drains (W2-26)	Pipe	26.300	1.20	No	E	Not significant direct negative; Low potential for indirect temporary significant negative effects relating to pollutant loss effects on Dooballagh Burn (d/s).	Pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.
S2-CUL.02	0+515	Listellian drains (W2-26)	Pipe	8.047	1.20	No	E	Not significant direct negative; Low potential for indirect temporary significant negative effects relating to pollutant loss effects on Dooballagh Burn (d/s).	Pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.
S2-CUL.03	0+540	Listellian drains (W2-26)	Pipe	40.840	1.20	No	E	Not significant direct negative; Low potential for indirect temporary significant negative effects relating to pollutant loss effects on Dooballagh Burn (d/s).	Pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.
S2-CUL.04	0+558	Listellian drains (W2-26)	Pipe	8.324	1.20	No	E	Not significant direct negative; Low potential for indirect temporary significant negative effects relating to pollutant loss effects on Dooballagh Burn (d/s).	Pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.
S2-CUL.05	0+677	Listellian drains (W2-26)	Pipe	20.086	1.20	No	E	Not significant direct negative; Low potential for indirect temporary significant negative effects relating to pollutant loss	Pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.

Culvert Ref.	Chainage	Location Note (Relevant Aquatic Site Code)	Type	Length (m)	H x W or \varnothing (m)	Fish Bearing?	NRA (2009) Quality	Potential Construction Phase Impact (without mitigation)	Construction Phase Mitigation
								effects on Dooballagh Burn (d/s).	
S2-CUL.06	0+904	Listellian drains (W2-26)	Pipe	55.443	1.20	No	E	Not significant direct negative; Low potential for indirect temporary significant negative effects relating to pollutant loss effects on Dooballagh Burn (d/s).	Pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.
S2-CUL.07	0+235	Corranagh drains (W2-25)	Pipe	20.371	1.20	No	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant loss effects (sediment, HC, concrete) on Corranagh Burn (d/s).	Pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.
S2-CUL.08	0+129	Corranagh drains (W2-25)	Pipe	20.191	1.20	No	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant loss effects (sediment, HC, concrete) on Corranagh Burn (d/s).	Pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.
S2-CUL.09	0+024	Corranagh drains (W2-25)	Pipe	32.717	1.20	No	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant loss effects (sediment, HC, concrete) on Corranagh Burn (d/s).	Pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.

Culvert Ref.	Chainage	Location Note (Relevant Aquatic Site Code)	Type	Length (m)	H x W or \varnothing (m)	Fish Bearing?	NRA (2009) Quality	Potential Construction Phase Impact (without mitigation)	Construction Phase Mitigation
S2-CUL.10	0+190	Coaghmill (W2-19)	Pipe	10.144	1.20	No	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant loss effects on Corranagh Burn (d/s).	Pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.
S2-CUL.11	0+160	Coaghmill (W2-19)	Pipe	21.152	1.20	No	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant loss effects on Corranagh Burn (d/s).	Pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.
S2-CUL.12	0+400	Drumany drains (W2-01 / W2-02)	Pipe	28.139	1.20	No	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant loss effects (sediment, HC, concrete) on Lough Swilly (d/s).	Pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.
S2-CUL.13	1+411	Drumany drains (W2-01 / W2-02)	Pipe	45.669	1.50	No	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant loss effects on Lough Swilly (d/s).	Pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.
S2-CUL.14	1+680	Drumany drains (W2-01 / W2-02)	Pipe	45.915	1.20	No	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant loss effects on Lough Swilly (d/s).	Pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.

Culvert Ref.	Chainage	Location Note (Relevant Aquatic Site Code)	Type	Length (m)	H x W or \varnothing (m)	Fish Bearing?	NRA (2009) Quality	Potential Construction Phase Impact (without mitigation)	Construction Phase Mitigation
S2-CUL.15	1+687	Drumany drains (W2-01 / W2-02)	Pipe	10.000	1.20	No	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant loss effects on Lough Swilly (d/s).	Pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.
S2-CUL.16	0+130	Dromore (W2-04)	Box	52.600	1.25 x 1.75	No	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant loss effects on Lough Swilly (d/s).	Pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.
S2-CUL.16A	0+625	Dromore (W2-04)	Box	59.100	1.75 x 1.75	No	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant loss effects on Lough Swilly (d/s).	Pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.
S2-CUL.17	n/a	Bunnagee Drain	Box	8.960	2.5 x 2.0	Eel (possible)	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant loss effects on Lough Swilly (d/s).	Pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction, but eel rescue /relocation (precautionary) required from 'dry' working area during culvert installation.

Culvert Ref.	Chainage	Location Note (Relevant Aquatic Site Code)	Type	Length (m)	H x W or \varnothing (m)	Fish Bearing?	NRA (2009) Quality	Potential Construction Phase Impact (without mitigation)	Construction Phase Mitigation
S2-CUL.18	1+630	Bunnagee Drain	Box	83.070	2.9 x 2.10	Eel (possible)	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant loss effects on Lough Swilly (d/s).	Pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction, but eel rescue /relocation (precautionary) required from 'dry' working area during culvert installation.
S2-CUL.19	0+550	Bunnagee Drain	Box	34.500	2.9 x 2.5	Eel (possible)	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant loss effects on Lough Swilly (d/s).	Pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction, but eel rescue /relocation (precautionary) required from 'dry' working area during culvert installation.
S2-CUL.20	0+150	Bunnagee Drain	Box	65.032	2.9 x 3.3	Eel (possible)	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant loss effects on Lough Swilly (d/s).	Pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction, but eel rescue /relocation (precautionary) required from 'dry' working area during culvert installation.
S2-CUL.21	0+200	Bunnagee Drain	Box	48.406	2 x 3.2	Eel (possible)	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant loss effects on Lough Swilly (d/s).	Pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction, but eel rescue /relocation (precautionary) required from 'dry' working area during culvert installation.

Culvert Ref.	Chainage	Location Note (Relevant Aquatic Site Code)	Type	Length (m)	H x W or \varnothing (m)	Fish Bearing?	NRA (2009) Quality	Potential Construction Phase Impact (without mitigation)	Construction Phase Mitigation
									required from 'dry' working area during culvert installation.
S2-CUL.22	0+238	Bunnagee Drain	Box	25.419	2.5 x 3.4	Eel (possible)	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant loss effects on Lough Swilly (d/s).	Pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction, but eel rescue /relocation (precautionary) required from 'dry' working area during culvert installation.
S2-CUL.23	1+218	Bunnagee Drain	Box	71.011	3.3 x 3.5	Eel (possible)	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant loss effects on Lough Swilly (d/s).	Pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction, but eel rescue /relocation (precautionary) required from 'dry' working area during culvert installation.
S2-CUL.24	0+942	Milk Isle Drain (W2-16)	Box	67.670	1.25 x 1.35	Eel (possible)	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant loss effects on Lough Swilly (d/s).	Pollutant loss controls. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction, but eel rescue /relocation (precautionary) required from 'dry' working area during culvert installation.

Culvert Ref.	Chainage	Location Note (Relevant Aquatic Site Code)	Type	Length (m)	H x W or \varnothing (m)	Fish Bearing?	NRA (2009) Quality	Potential Construction Phase Impact (without mitigation)	Construction Phase Mitigation
S2-CUL.25	0+750	Milk Isle Drain (W2-17)	Box	95.214	2.0 x 2.5	Eel (possible)	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant loss effects on Lough Swilly (d/s).	Pollutant loss controls (sediment, HC, concrete). Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction, but eel rescue /relocation (precautionary) required from 'dry' working area during culvert installation.
S2-CUL.26	0+056	Bunnagee Drain (W2-07)	Box	41.017	1.5 x 2.6	Eel (possible)	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant loss effects on Lough Swilly (d/s).	Pollutant loss controls (sediment, HC, concrete). Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction, but eel rescue /relocation (precautionary) required from 'dry' working area during culvert installation.
S2-CUL.27	0+325	Dromore Drain (W2-23)	Pipe	31.335	1.20	Eel (possible)	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant loss effects on Lough Swilly (d/s).	Pollutant loss controls (sediment, HC, concrete). Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction, but eel rescue /relocation (precautionary) required from 'dry' working area during culvert installation.

Culvert Ref.	Chainage	Location Note (Relevant Aquatic Site Code)	Type	Length (m)	H x W or \varnothing (m)	Fish Bearing?	NRA (2009) Quality	Potential Construction Phase Impact (without mitigation)	Construction Phase Mitigation
S2-CUL.27A	0+458 m	Dromore Drain (W2-23)	Pipe	13.490	1.20	Eel (possible)	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant loss effects on Lough Swilly (d/s).	Pollutant loss controls (sediment, HC, concrete). Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction, but eel rescue /relocation (precautionary) required from 'dry' working area during culvert installation.
S2-CUL.27B	0+390 m	Dromore Drain (W2-23)	Pipe	20.400	1.20	Eel (possible)	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant loss effects on Lough Swilly (d/s).	Pollutant loss controls (sediment, HC, concrete). Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction, but eel rescue /relocation (precautionary) required from 'dry' working area during culvert installation.
S2-CUL.28	0+694	Dromore Lower drain (W2-08)	Pipe	35.500	1.50	No	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant loss effects on Lough Swilly (d/s).	Pollutant loss controls (sediment, HC, concrete). Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.
S2-CUL.29	0+151	Farsetmore (W2-10)	Box	26.553	3.5 x 2.0	No	E	Not significant direct negative; Potential for indirect temporary to short term significant negative effects relating to pollutant loss effects (sediment, HC, concrete) on lower	Timing restriction: Instream works will be carried out during the period 1st May to 30th September of any year. Agree construction methods with IFI. Ensure dry working conditions (diversion, pump-over) to prevent pollutant

Culvert Ref.	Chainage	Location Note (Relevant Aquatic Site Code)	Type	Length (m)	H x W or ø (m)	Fish Bearing?	NRA (2009) Quality	Potential Construction Phase Impact (without mitigation)	Construction Phase Mitigation
								Farsetmore and Lough Swilly downstream.	export. Careful implementation of pollutant loss controls
S2-CUL.30	0+120	Farsetmore (W2-11)	Box	37.919	3.5 x 2.0	Trout possible	D	Short term significant negative direct and indirect effects on potential trout and brook lamprey habitat owing to instream works. Indirect pollutant loss effects on Lough Swilly d/s. Low potential for fish mortality in temporary works area.	Timing restriction: Instream works will be carried out during the period 1st May to 30th September of any year. Agree final construction method with IFI. Fish removal (precautionary measure) required under Section 14 Authorisation from DCEE during temporary works. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. Careful implementation of pollutant loss controls
S2-CUL.31	0+048	Farsetmore (W2-11)	Box	66.879	3.5 x 2.0	Trout possible	D	Short term significant negative direct and indirect effects on potential trout and brook lamprey habitat owing to instream works. Indirect pollutant loss effects on Lough Swilly d/s. Low potential for fish mortality in temporary works area.	Timing restriction: Instream works will be carried out during the period 1st May to 30th September of any year. Agree final construction method with IFI. Fish removal (precautionary measure) required under Section 14 Authorisation from DCEE. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. Careful implementation of pollutant loss controls

Culvert Ref.	Chainage	Location Note (Relevant Aquatic Site Code)	Type	Length (m)	H x W or ϕ (m)	Fish Bearing?	NRA (2009) Quality	Potential Construction Phase Impact (without mitigation)	Construction Phase Mitigation
S2-CUL.32	0+128	Farsetmore (W2-12)	Box	79.190	3.5 x 4.0	Trout possible	D	Short term significant negative direct and indirect effects on potential trout and brook lamprey habitat owing to instream works. Indirect pollutant loss effects on Lough Swilly d/s. Some potential for fish mortality in temporary works area.	Timing restriction: Instream works will be carried out during the period 1st May to 30th September of any year. Agree construction methods with IFI. Agree final construction method with IFI. Fish removal (precautionary measure) required under Section 14 Authorisation from DCEE. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. Careful implementation of pollutant loss controls
S2-CUL.33	0+400	Trimragh (W2-13)	Pipe	89.350	1.20	No	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant loss effects (sediment, HC, concrete) on Isle Burn/ Lough Swilly (d/s).	Pollutant loss controls (sediment, HC, concrete). Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.
S2-CUL.34	0+625	Magheramore (W2-14)	Pipe	75.700	1.80	No	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant loss effects (sediment, HC, concrete) on Isle Burn/ Lough Swilly (d/s).	Pollutant loss controls (sediment, HC, concrete). Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.

Table 3 Section 3 - Construction Phase Impact Assessment (Culverts)

Culvert Ref.	Chainage	Location Note	Type	Length (m)	W x H or Ø (m)	Fish Bearing?	NRA (2009) Quality	Potential Impact Significance (without mitigation)	Construction Phase Mitigation
S3-CUL.01	0+272 Access Road 3.03	Tributary of Leslie Hill Stream (W3-01)	Box	25.8	4.0 x 3.0	No	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant effects downstream.	Pollutant controls (sediment, HC, concrete). Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.
S3-CUL.02	0+535 Mainline	Tributary of Leslie Hill Stream (W3-01)	Box	52.7	4.0 x 3.2	No	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant effects downstream.	Pollutant controls (sediment, HC, concrete). Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.
S3-CUL.03	0+500 LX 3014 Link South	Tributary of Leslie Hill Stream (W3-01)	Box	66.8	4.0 x 4.0	No	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant effects downstream.	Pollutant controls (sediment, HC, concrete). Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.
S3-CUL.04	0+722 Mainline	Leslie Hill Stream (W3-02)	Box	60.0	8.0 x 3.8	Yes	D	Short term significant negative direct and indirect effects on fish habitat owing to instream works. Indirect pollutant effects locally and downstream. Potential for fish mortality in temporary works area.	Timing restriction: Instream works will be carried out during the period 1st May to 30th September of any year. Agree final construction method with IFI. Fish removal (precautionary measure) required under Section 14 Authorisation from DCEE. Ensure dry working conditions (diversion, pump-over) to

Culvert Ref.	Chainage	Location Note	Type	Length (m)	W x H or Ø (m)	Fish Bearing?	NRA (2009) Quality	Potential Impact Significance (without mitigation)	Construction Phase Mitigation
									prevent pollutant export. Careful implementation of pollutant loss controls
S3-CUL.05	0+670 Existing N14	Leslie Hill Stream (W3-02)	Box	58.0	8.0 x 3.6	Yes	D	Short term significant negative direct and indirect effects on fish habitat owing to instream works. Indirect pollutant effects locally and downstream. Potential for fish mortality in temporary works area.	Timing restriction: Instream works will be carried out during the period 1st May to 30th September of any year. Agree final construction method with IFI. Fish removal (precautionary measure) required under Section 14 Authorisation from DCEE. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. Careful implementation of pollutant loss controls
S3-CUL.06	1+100 Mainline	Leslie Hill Stream (W3-03)	Box	60.0	12.0 x 3.2	Yes	D	Short term significant negative direct and indirect effects on fish habitat owing to instream works. Indirect pollutant effects locally and downstream. Potential for fish mortality in temporary works area.	Timing restriction: Instream works will be carried out during the period 1st May to 30th September of any year. Agree final construction method with IFI. Fish removal (precautionary measure) required under Section 14 Authorisation from DCEE. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. Careful implementation of pollutant loss controls

Culvert Ref.	Chainage	Location Note	Type	Length (m)	W x H or Ø (m)	Fish Bearing?	NRA (2009) Quality	Potential Impact Significance (without mitigation)	Construction Phase Mitigation
S3-CUL.07	2+035 Mainline	W3-04	Box	69.5	4.2 x 3.5	Yes	D	Short term significant negative direct and indirect effects on fish habitat owing to instream works. Indirect pollutant effects locally and downstream. Potential for fish mortality in temporary works area.	Timing restriction: Instream works will be carried out during the period 1st May to 30th September of any year. Agree final construction method with IFI. Fish removal (precautionary measure) required under Section 14 Authorisation from DCEE. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export.
S3-CUL.08	0+401 LX3014 Drumoghill	W3-05	Box	24.5	1.8 x 1.4	Yes	D	Short term significant negative direct, indirect & cumulative effects on fish habitat owing to instream works. Indirect pollutant effects locally and downstream. Potential for fish mortality in temporary works areas.	Timing restriction: Instream works will be carried out during the period 1st May to 30th September of any year. Agree final construction method with IFI. Fish removal (precautionary measure) required under Section 14 Authorisation from DCEE. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. Careful implementation of pollutant loss controls
S3-CUL.09	2+663 Mainline	W3-05	Box	60.0	1.8 x 1.4	Yes	D		
S3-CUL.10	0+100 LX3014 Drumoghill	W3-05	Box	53.5	2.0 x 1.8	Yes	D		
S3-CUL.11	0+021 Access Road 3.12	W3-05	Box	19.0	2.0 x 1.7	Yes	D		

Culvert Ref.	Chainage	Location Note	Type	Length (m)	W x H or Ø (m)	Fish Bearing?	NRA (2009) Quality	Potential Impact Significance (without mitigation)	Construction Phase Mitigation
S3-CUL.12	4+100 Mainline	W3-07	Pipe	62.0	1.2	No	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant effects downstream.	Pollutant controls (sediment, HC, concrete). Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.
S3-CUL.13	0+288 LX3014 Doorable	W3-07	Pipe	31.8	1.2	No	E		
S3-CUL.14	0+500 LX3014 Doorable	W3-08	Box	23.2	4.2 x 1.9	Yes	D	Short term significant negative direct and indirect effects on fish habitat owing to instream works. Indirect pollutant effects locally and downstream. Potential for fish mortality in temporary works area.	<u>Timing restriction:</u> Instream works will be carried out during the period 1st May to 30th September of any year. Agree final construction method with IFI. Fish removal (precautionary measure) required under Section 14 Authorisation from DCEE. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. Careful implementation of pollutant loss controls
S3-CUL.15	4+477 Mainline	W3-08	Box	60.0	3.7 x 2.2	Yes	D		
S3-CUL.16	0+097 Access Road 3.22	W3-08	Box	22.7	3.7 x 2.3	Yes	D		
S3-CUL.17	5+715 Mainline	W3-09	Pipe	49.8	1.2	No	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant effects downstream.	Pollutant controls (sediment, HC, concrete). Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.

Culvert Ref.	Chainage	Location Note	Type	Length (m)	W x H or Ø (m)	Fish Bearing?	NRA (2009) Quality	Potential Impact Significance (without mitigation)	Construction Phase Mitigation
S3-CUL.18	6+550 Mainline Sheskinopoll	W3-10	Box	48.4	2.0 x 1.8	Yes (potential)	D	Short term significant negative direct and indirect effects on fish habitat owing to instream works. Indirect pollutant effects locally and downstream. Potential for fish mortality in temporary works area.	<u>Timing restriction:</u> In-stream works will be carried out during the period 1 May - 30 September of any year. ² Section 47 (instream work) and Section 70 (fish removal) permits required from Loughs Agency. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. Careful implementation of pollutant loss controls.
S3-CUL.19	0+683 LX3014 Sheskinopoll	W3-10	Box	36.0	2.0 x 1.8	Yes (potential)	D		
S3-CUL.20	7+418 Mainline	W3-11	Box	60.0	3.2 x 1.9	Yes	D	Short term significant negative direct and indirect effects on fish habitat owing to instream works. Indirect pollutant effects locally and downstream. Potential for fish mortality in temporary works area.	<u>Timing restriction:</u> In-stream works will be carried out during the period 1 May - 30 September of any year. Section 47 (instream work) and Section 70 (fish removal) permits required from Loughs Agency. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. Careful implementation of pollutant loss controls.

² Section 47 and Section 70 of Foyle Fisheries Act 1952

Culvert Ref.	Chainage	Location Note	Type	Length (m)	W x H or Ø (m)	Fish Bearing?	NRA (2009) Quality	Potential Impact Significance (without mitigation)	Construction Phase Mitigation
S3-CUL.20A	0+080 Ballinalecky Junction Link North	W3-11	Box	25.0	3.2 x 1.9	Yes	D	Short term significant negative direct and indirect effects on fish habitat owing to instream works. Indirect pollutant effects locally and downstream. Potential for fish mortality in temporary works area.	<u>Timing restriction:</u> In-stream works will be carried out during the period 1 May - 30 September of any year. Section 47 (instream work) and Section 70 (fish removal) permits required from Loughs Agency. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. Careful implementation of pollutant loss controls.
S3-CUL.21	0+271 Access Road 3.32	W3-12A	Box	16.5	2.8 x 1.4	Yes	D	Short term significant negative direct and indirect effects on fish habitat owing to instream works. Indirect pollutant effects locally and downstream. Potential for fish mortality in temporary works area.	<u>Timing restriction:</u> In-stream works will be carried out during the period 1 May - 30 September of any year. Section 47 (instream work) and Section 70 (fish removal) permits required from Loughs Agency. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. Careful implementation of pollutant loss controls.
S3-CUL.22	8+185 Mainline	W3-12A	Box	34.6	2.8 x 1.5	Yes	D		
S3-CUL.23	0+457 R236 LX3014 Link South	W3-12A	Box	23.6	2.2 x 1.5	Yes	D		
S3-CUL.24	0+032 L2374 Whitescross	W3-12	Box	23.0	6.0 x 2.5	Yes	D	Short term significant negative direct and indirect effects on fish habitat owing to instream works. Indirect pollutant effects locally and downstream.	<u>Timing restriction:</u> In-stream works will be carried out during the period 1 May - 30 September of any year. Section 47 (instream work) and Section 70 (fish

Culvert Ref.	Chainage	Location Note	Type	Length (m)	W x H or Ø (m)	Fish Bearing?	NRA (2009) Quality	Potential Impact Significance (without mitigation)	Construction Phase Mitigation
								Potential for fish mortality in temporary works area.	removal) permits required from Loughs Agency. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. Careful implementation of pollutant loss controls.
S3-CUL.25	0+911 LX3014 Tullyrap	W3-13	Box	50.2	2.0 x 1.9	Yes	D	Short term significant negative direct and indirect effects on fish habitat owing to instream works. Indirect pollutant effects locally and downstream. Potential for fish mortality in temporary works area.	<u>Timing restriction:</u> In-stream works will be carried out during the period 1 May - 30 September of any year. Section 47 (instream work) and Section 70 (fish removal) permits required from Loughs Agency. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. Careful implementation of pollutant loss controls.
S3-CUL.26	10+055 Mainline	W3-13	Box	47.2	2.2 x 1.9	Yes	D		
S3-CUL.27	10+395 Mainline	W3-13	Bottomless Box	36.2	9.5 x 2.85	Yes	D		
S3-CUL.28	11+930 Mainline	W3-16	Box	60	2.0X1.8	Yes	D	Short term significant negative direct and indirect effects on fish habitat owing to instream works. Indirect pollutant effects locally and downstream. Potential for fish mortality in temporary works area.	<u>Timing restriction:</u> In-stream works will be carried out during the period 1 May - 30 September of any year. Section 47 (instream work) and Section 70 (fish removal) permits required from Loughs Agency. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. Careful

Culvert Ref.	Chainage	Location Note	Type	Length (m)	W x H or Ø (m)	Fish Bearing?	NRA (2009) Quality	Potential Impact Significance (without mitigation)	Construction Phase Mitigation
									implementation of pollutant loss controls.
S3-CUL.29	11+641 Mainline	W3-15	Box	58.0	2.8 x 2.2	Yes	D	Short term significant negative direct and indirect effects on fish habitat owing to instream works. Indirect pollutant effects locally and downstream. Potential for fish mortality in temporary works area.	<u>Timing restriction:</u> In-stream works will be carried out during the period 1 May - 30 September of any year. Section 47 (instream work) and Section 70 (fish removal) permits required from Loughs Agency. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. Careful implementation of pollutant loss controls.
S3-CUL.30	1+500 L2444 Ballindrait	W3-17A	Box	66.0	2.0 x 1.8	Yes	D	Short term significant negative direct and indirect effects on fish habitat owing to instream works. Indirect pollutant effects locally and downstream. Potential for fish mortality in temporary works area.	<u>Timing restriction:</u> In-stream works will be carried out during the period 1 May - 30 September of any year. Section 47 (instream work) and Section 70 (fish removal) permits required from Loughs Agency. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. Careful implementation of pollutant loss controls.

Culvert Ref.	Chainage	Location Note	Type	Length (m)	W x H or Ø (m)	Fish Bearing?	NRA (2009) Quality	Potential Impact Significance (without mitigation)	Construction Phase Mitigation
S3-CUL.31	14+935 Mainline	W3-18	Box	60.0	1.8 x 1.8	Yes	D	Short term significant negative direct and indirect effects on fish habitat owing to instream works. Indirect pollutant effects locally and downstream. Potential for fish mortality in temporary works area.	<u>Timing restriction:</u> In-stream works will be carried out during the period 1 May - 30 September of any year. Section 47 (instream work) and Section 70 (fish removal) permits required from Loughs Agency. Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. Careful implementation of pollutant loss controls.
S3-CUL.32	15+140 Mainline	W3-19	Pipe	44.5	1.2	No	E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant effects downstream.	Pollutant controls (sediment, HC, concrete). Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.
S3-CUL.33	15+556 Mainline	W3-20	Pipe	50.7	1.2	No	D/E	Not significant direct negative; Potential for indirect temporary significant negative effects relating to pollutant effects downstream.	Pollutant controls (sediment, HC, concrete). Ensure dry working conditions (diversion, pump-over) to prevent pollutant export. No fisheries timing restriction.