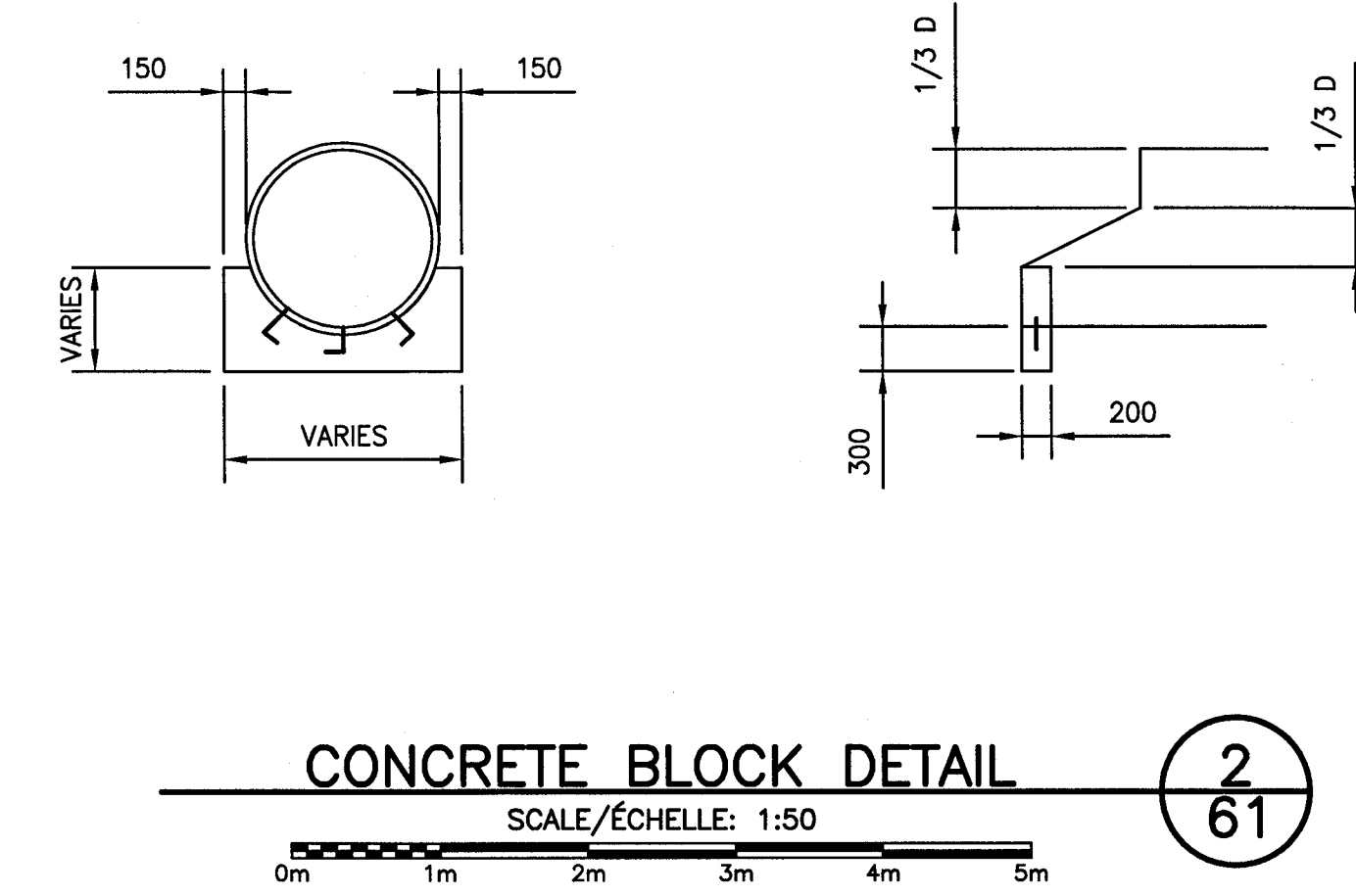
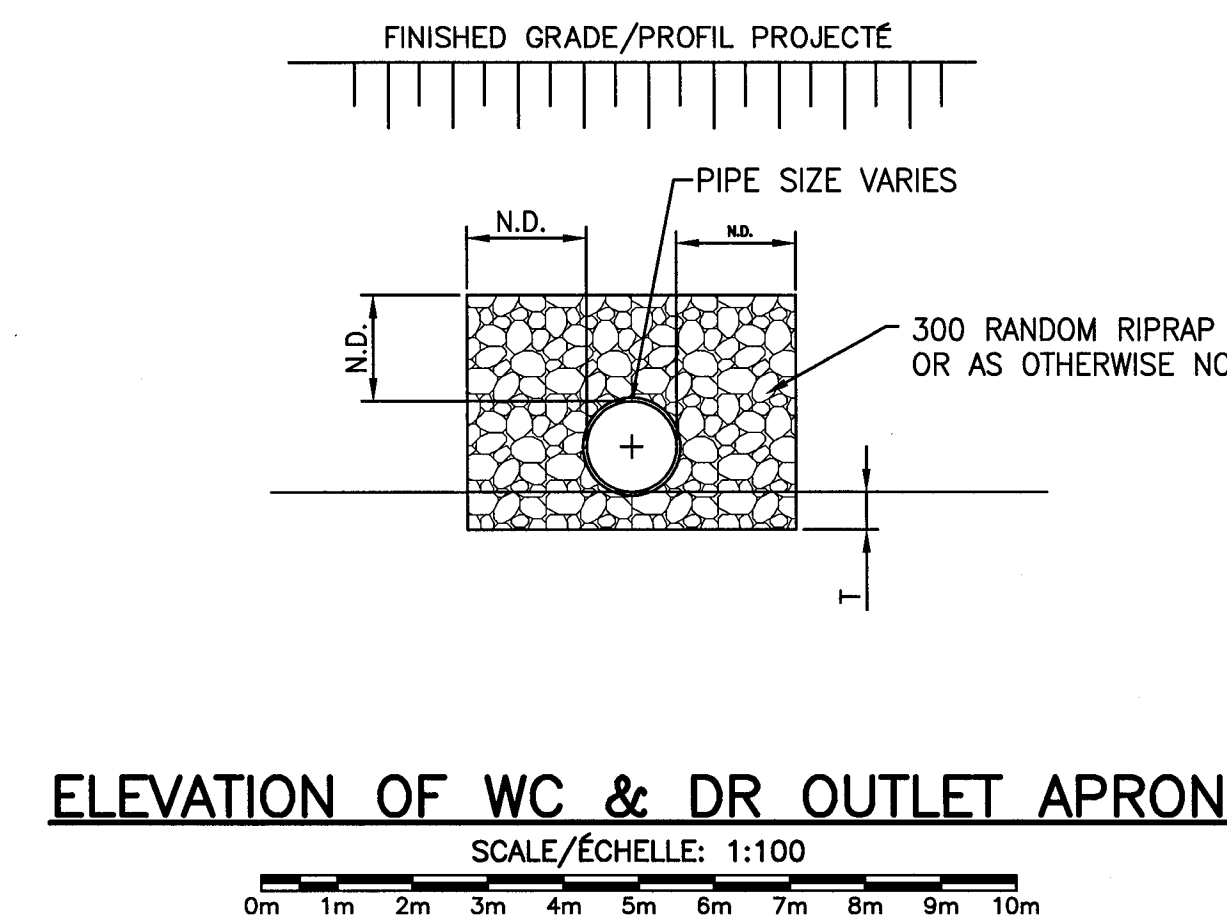
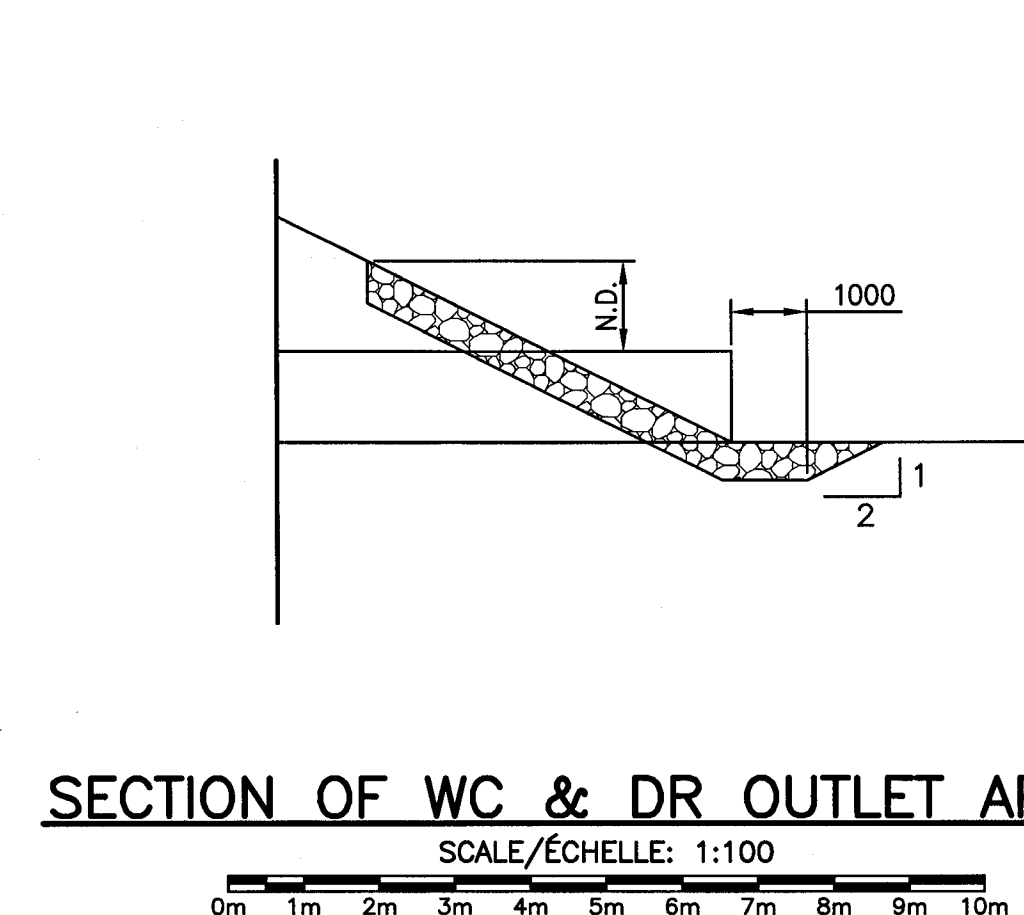
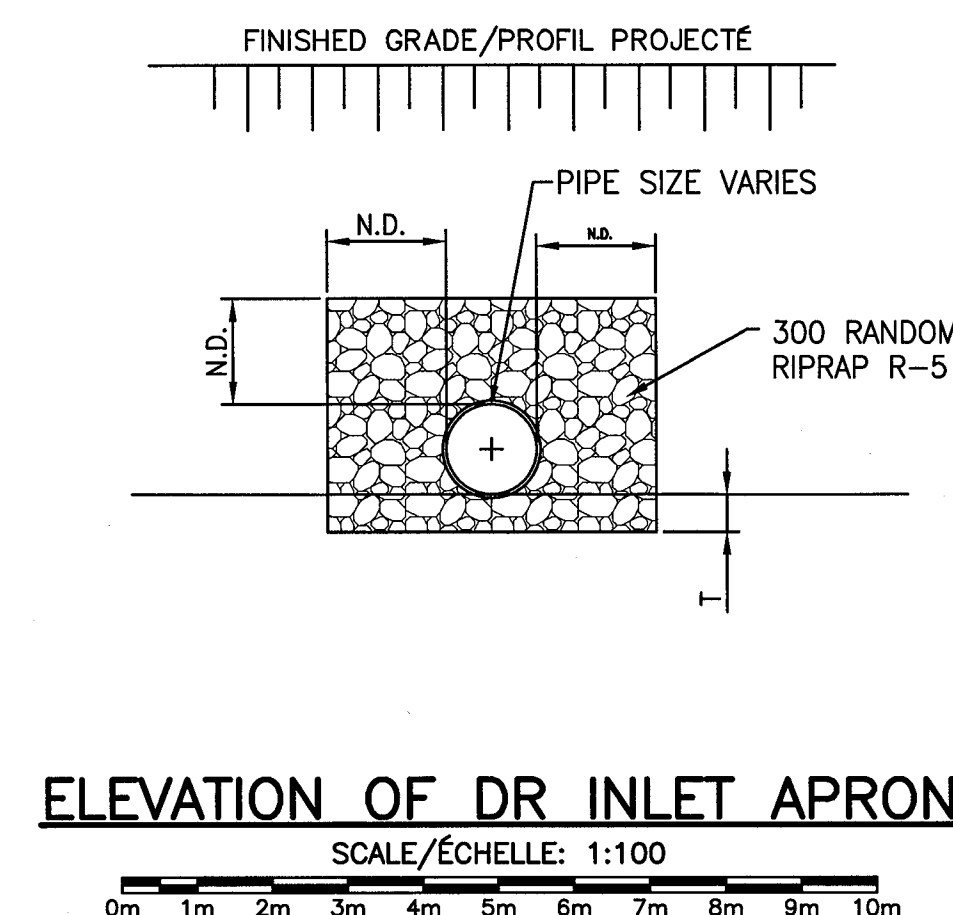
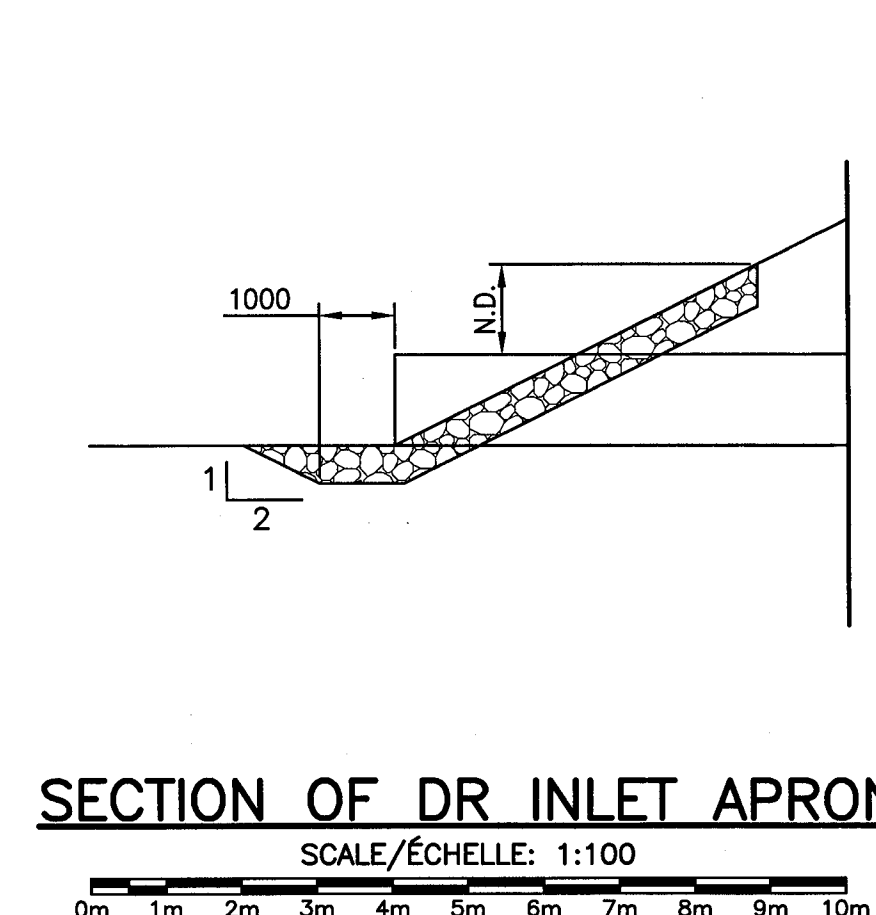
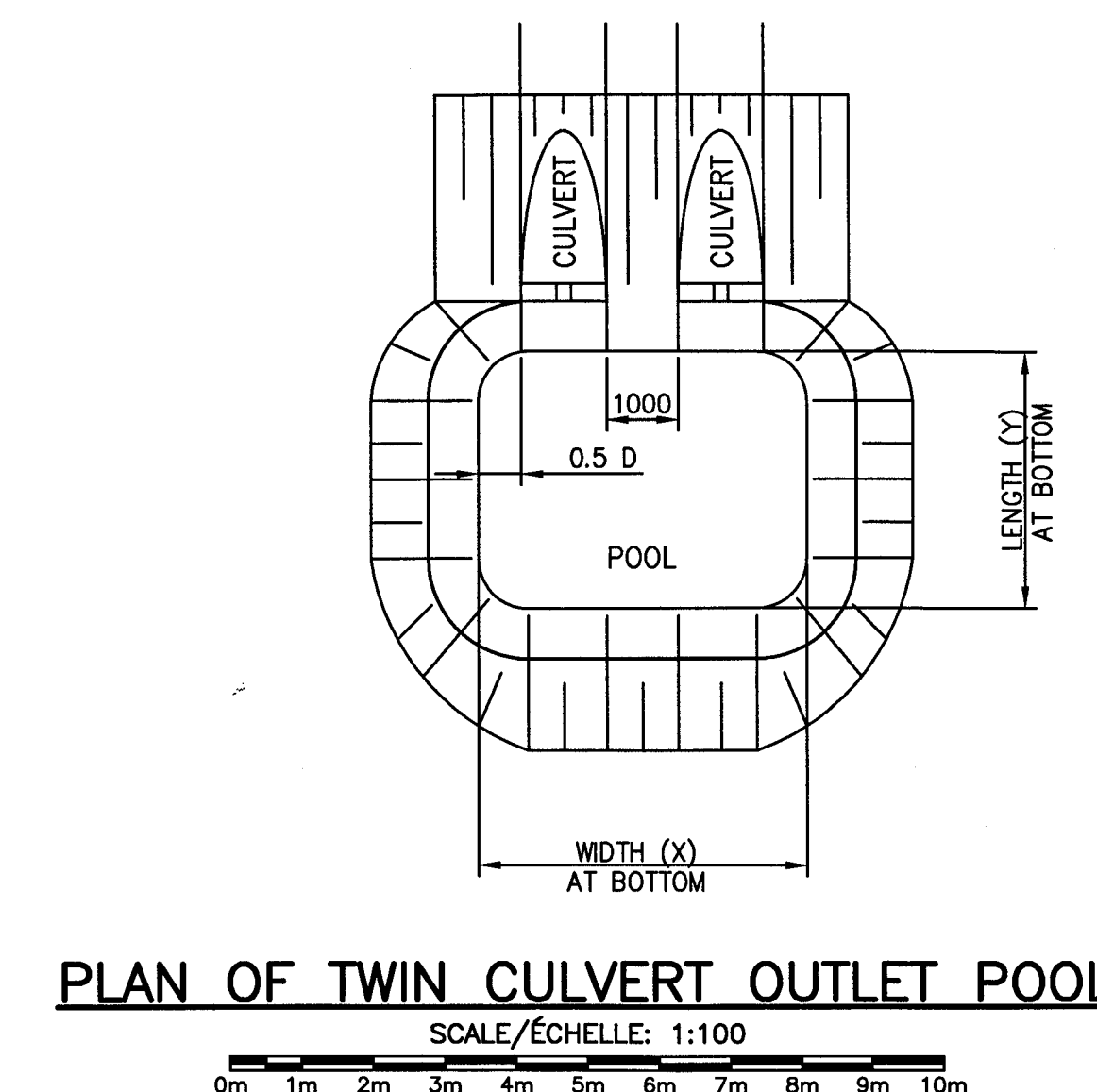
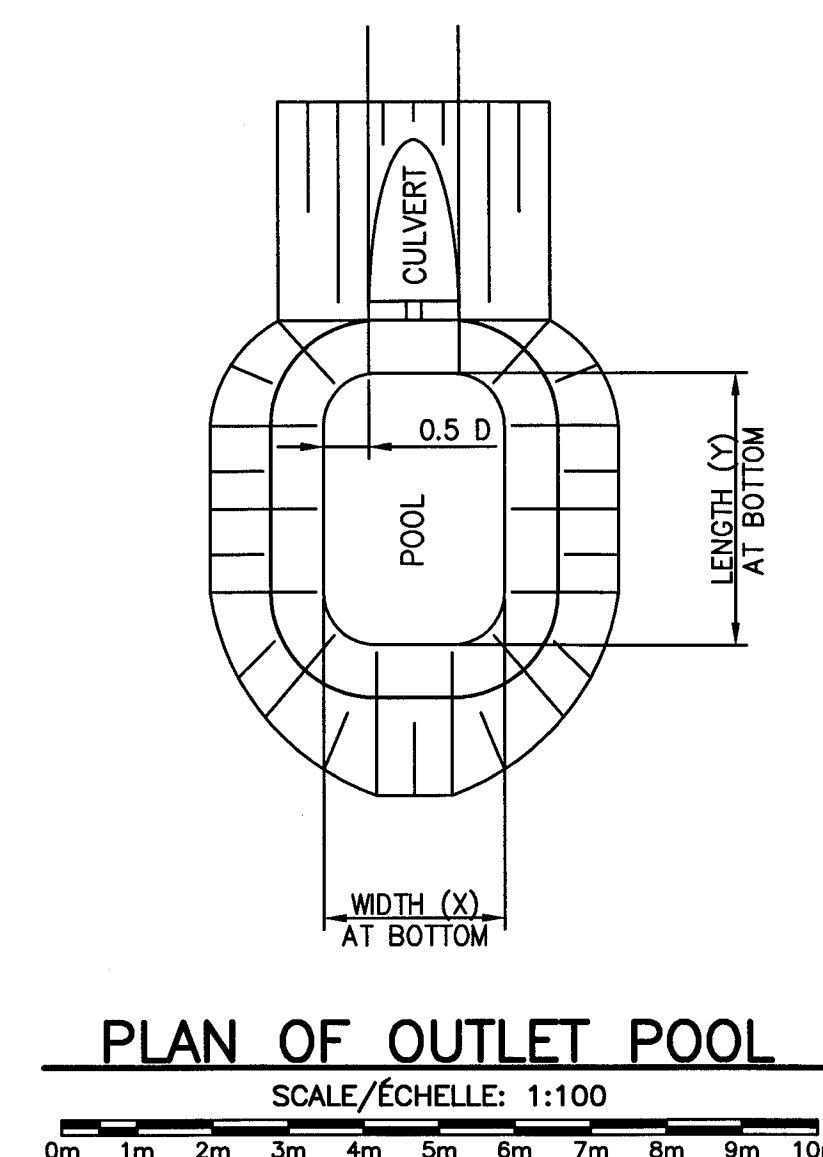
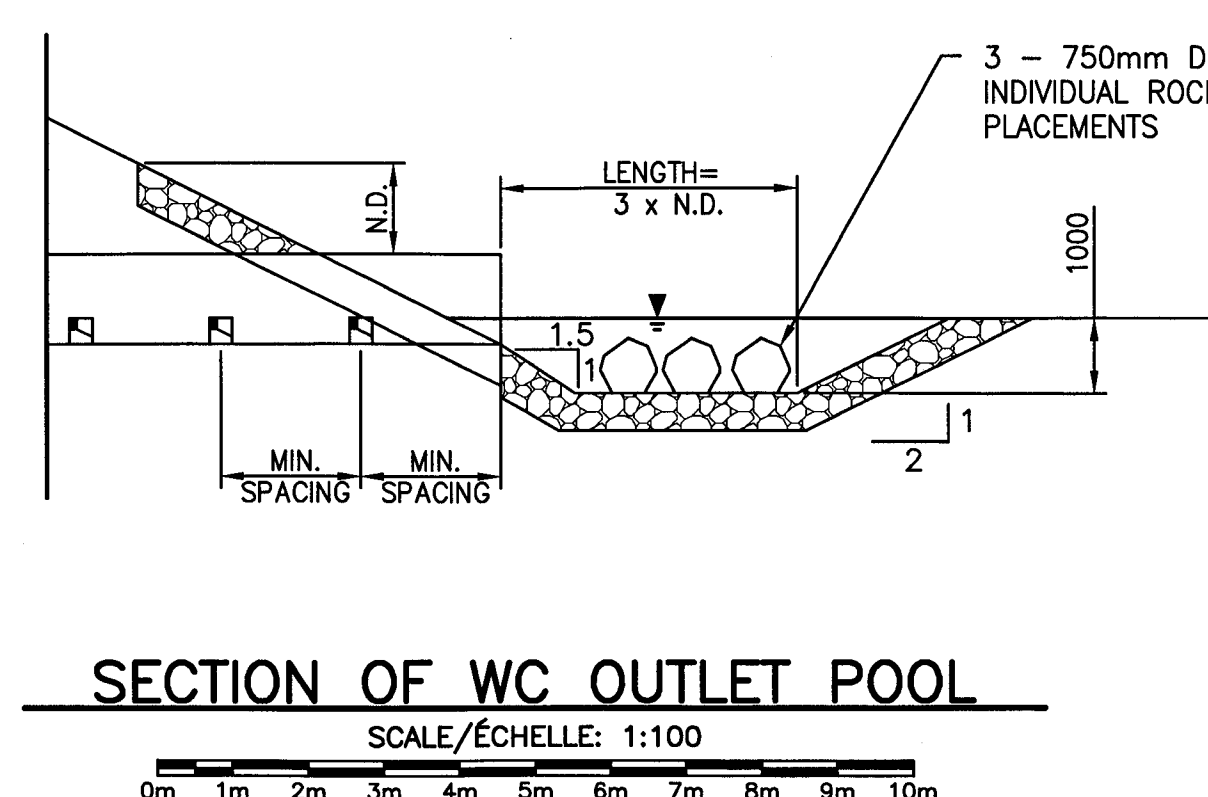
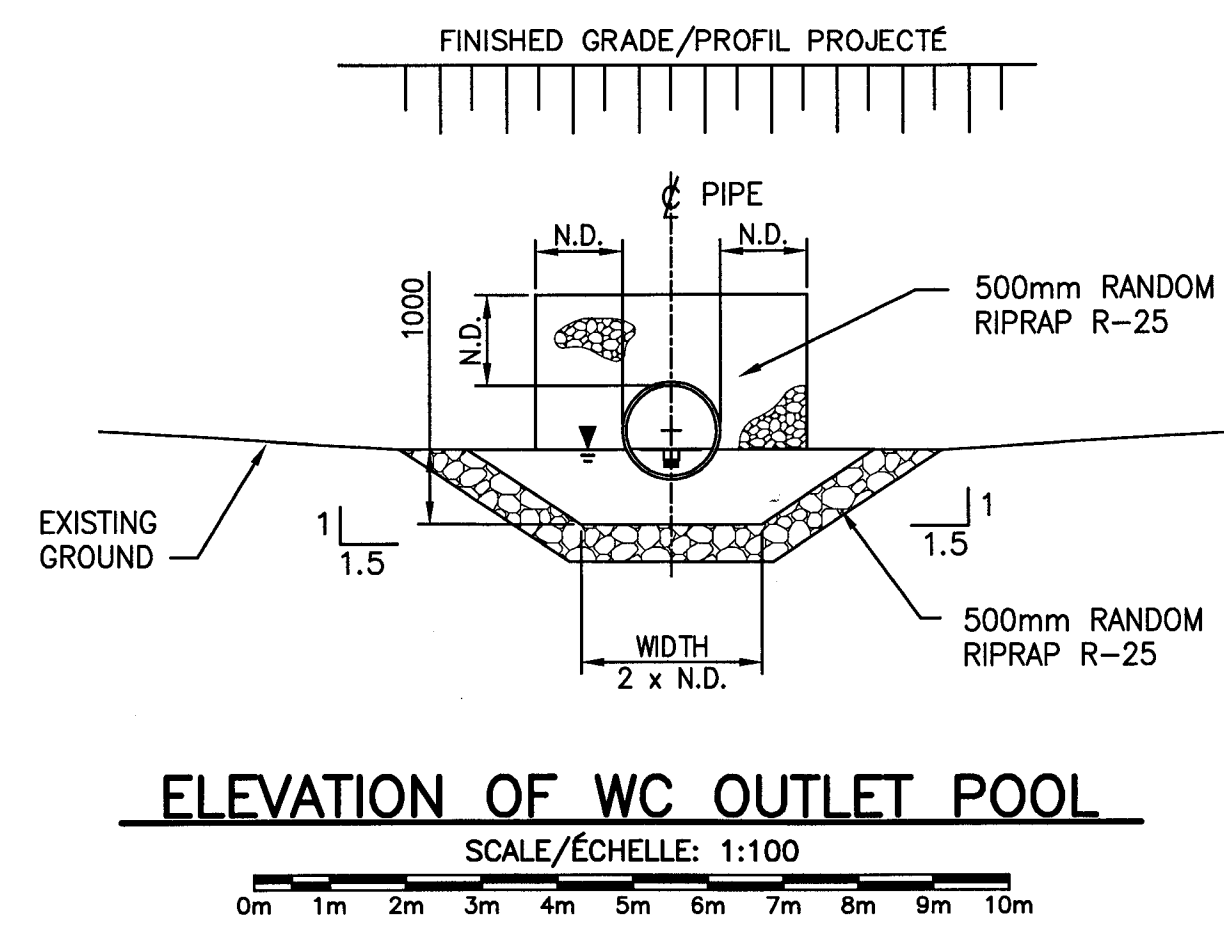
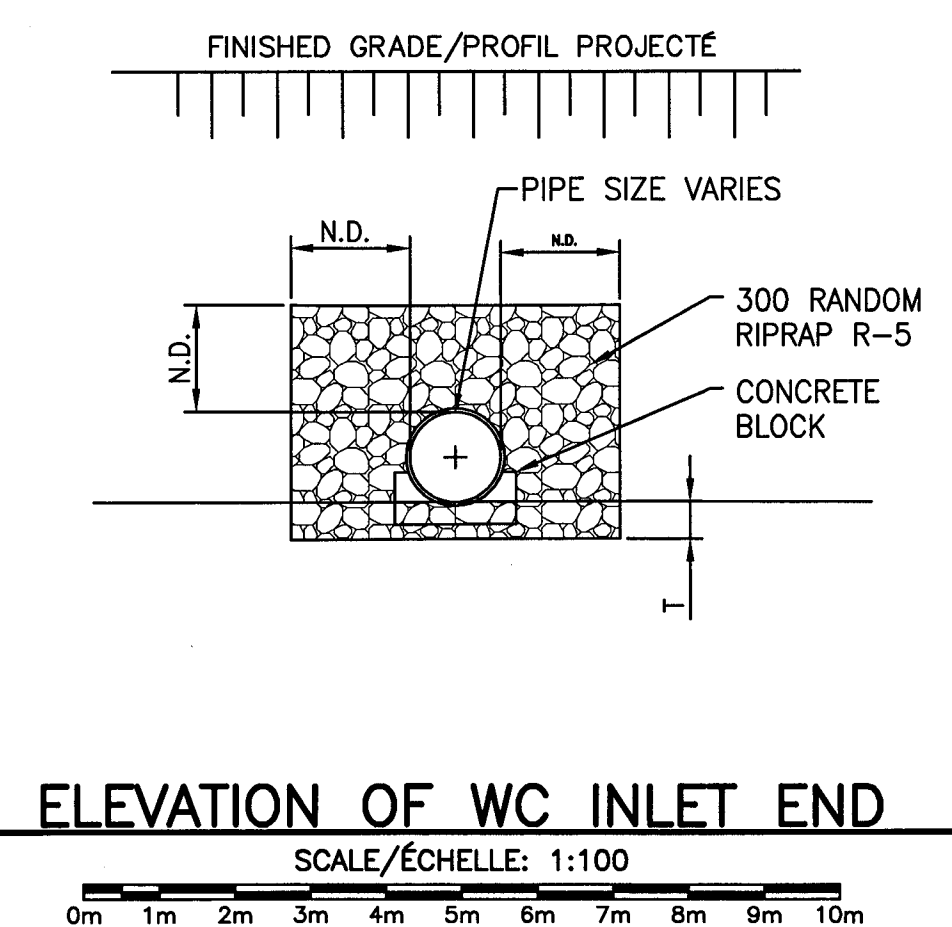
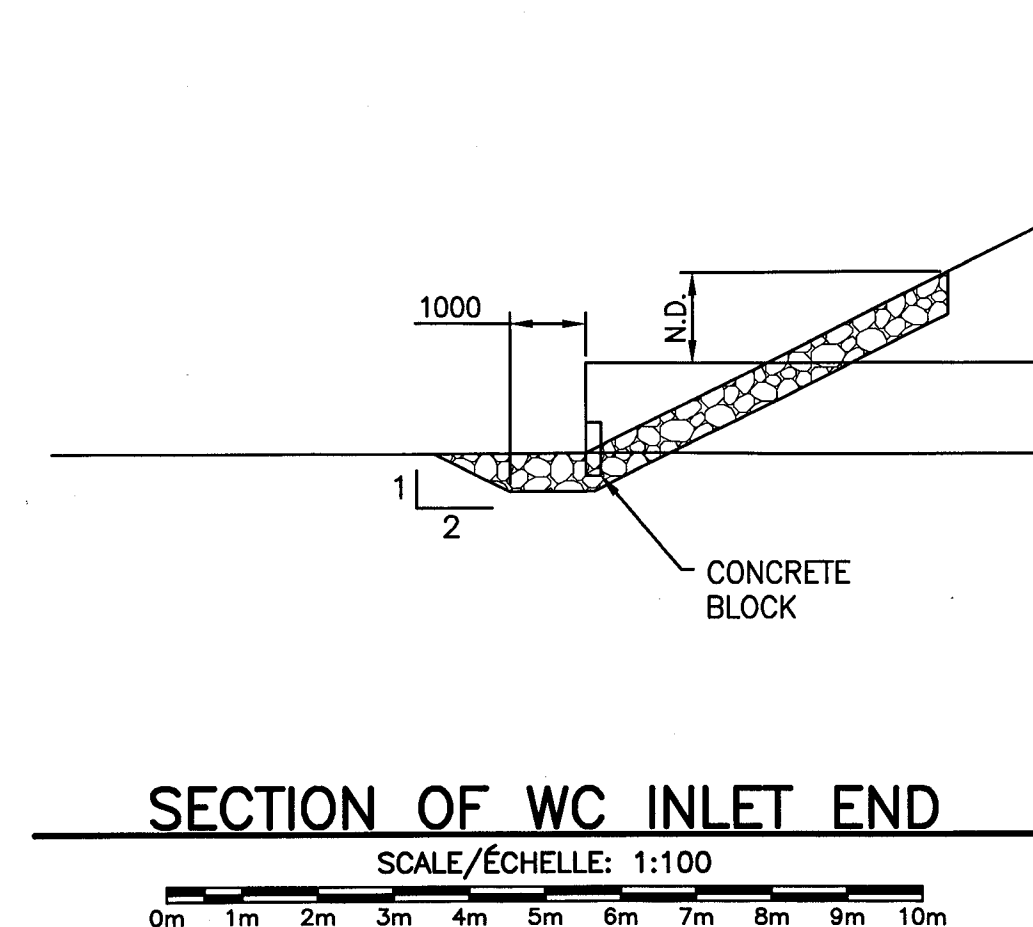


- NOTES:**  
1. ALL CULVERTS TO INCLUDE  
STEP BEVELS AS PER THE  
MANUFACTURERS SPECIFICATIONS

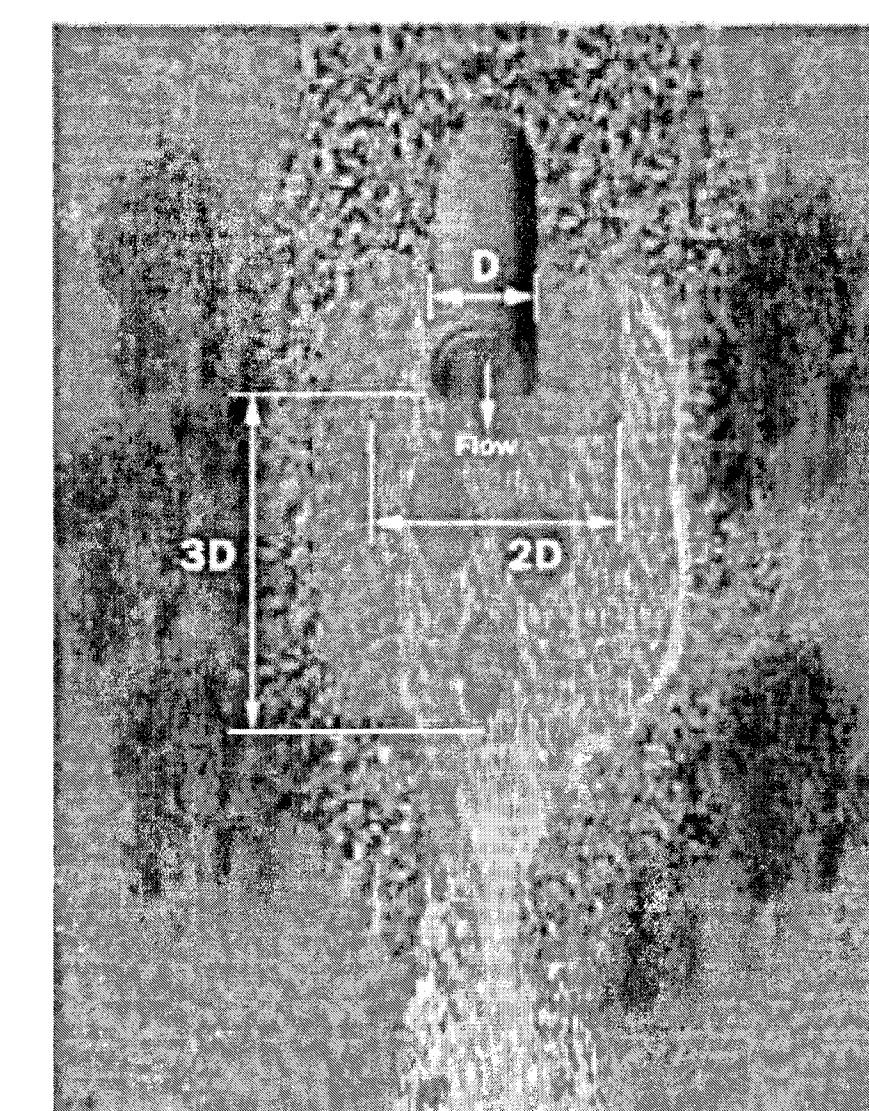


PIPE & BAFFLE PARAMETERS				OUTLET POOL		OUTLET POOL DEPTH (Z)
NOM. DIA. (D)	BAFFLE HEIGHT	DROP	WIDTH (X)	LENGTH (Y)		
1500 CIRCULAR	500	150	3000	4500	1000	
1500 CIRCULAR	350	100	3000	4500	1000	
1500 CIRCULAR	—	150	3000	4500	1000	
1200 CIRCULAR	350	100	2400	3600	1000	
1050 CIRCULAR	350	100	2100	3150	1000	
TWIN 1150 x 820 PIPE-ARCH	—	150	2250	3250	1000	
TWIN 915 x 660 PIPE-ARCH	—	150	3745	2745	1000	

RIPRAP	
RIPRAP TYPE	THICKNESS (T)
R-5	300
R-25	500

CULVERT TABLE					INLET END TREATMENT		OUTLET END TREATMENT	
NAME	START STA.	DESCRIPTION	LENGTH	SLOPE	RIPRAP SIZE	LAYOUT TYPE	RIPRAP SIZE	LAYOUT TYPE
AC01	9+956.66	NEW 600mm DIA. CIRCULAR CULVERT	12.000	1.84%	N/A	N/A	N/A	N/A
AC02	10+950.50	NEW 600mm DIA. CIRCULAR CULVERT	14.500	2.65%	N/A	N/A	N/A	N/A
AC03	10+998.90	NEW 600mm DIA. CIRCULAR CULVERT	21.257	-1.47%	N/A	N/A	N/A	N/A
AC04	11+369.73	NEW 600mm DIA. CIRCULAR CULVERT	26.528	3.00%	N/A	N/A	N/A	N/A
AC05	18+566.56	NEW 600mm DIA. CIRCULAR CULVERT	8.000	0.20%	N/A	N/A	N/A	N/A
DR01	0+505.69	NEW 600mm DIA. CIRCULAR CULVERT	22.095	0.68%	R-5	APRON	R-5	APRON
DR02	0+676.22	NEW 600mm DIA. CIRCULAR CULVERT	20.152	0.00%	R-5	APRON	R-5	APRON
DR03	0+818.54	NEW 600mm DIA. CIRCULAR CULVERT	20.699	0.97%	R-5	APRON	R-5	APRON
DR04	1+477.86	NEW 750mm DIA. CIRCULAR CULVERT	24.524	0.00%	R-5	APRON	R-5	APRON
DR05	1+867.64	NEW 750mm DIA. CIRCULAR CULVERT	21.224	0.00%	R-5	APRON	R-5	APRON
DR06	2+263.34	NEW 600mm DIA. CIRCULAR CULVERT	19.688	0.76%	R-5	APRON	R-5	APRON
DR07	2+527.37	NEW 600mm DIA. CIRCULAR CULVERT	18.184	2.14%	R-5	APRON	R-5	APRON
DR08	2+671.79	NEW 600mm DIA. CIRCULAR CULVERT	19.217	0.00%	R-5	APRON	R-5	APRON
DR09	3+008.35	NEW 600mm DIA. CIRCULAR CULVERT	20.431	0.00%	R-5	APRON	R-5	APRON
DR10	3+156.38	NEW 600mm DIA. CIRCULAR CULVERT	19.715	1.78%	R-5	APRON	R-5	APRON
DR11	4+243.74	NEW 750mm DIA. CIRCULAR CULVERT	28.134	0.43%	R-5	APRON	R-5	APRON
DR12	4+627.56	NEW 600mm DIA. CIRCULAR CULVERT	25.140	1.59%	R-5	APRON	R-5	APRON
DR13	5+573.23	NEW 600mm DIA. CIRCULAR CULVERT	29.954	0.43%	R-5	APRON	R-5	APRON
DR14	5+821.94	NEW 600mm DIA. CIRCULAR CULVERT	30.120	-1.03%	R-5	APRON	R-5	APRON
DR15	6+199.91	NEW 750mm DIA. CIRCULAR CULVERT	23.373	0.44%	R-5	APRON	R-5	APRON
DR16	6+523.32	NEW 750mm DIA. CIRCULAR CULVERT	27.429	1.72%	R-5	APRON	R-5	APRON
DR17	6+687.38	NEW 600mm DIA. CIRCULAR CULVERT	27.892	1.28%	R-5	APRON	R-5	APRON
DR18	7+223.93	NEW 750mm DIA. CIRCULAR CULVERT	22.864	2.07%	R-5	APRON	R-5	APRON
DR19	12+481.96	NEW 600mm DIA. CIRCULAR CULVERT	23.178	2.15%	R-5	APRON	R-5	APRON
DR20	12+764.47	NEW 600mm DIA. CIRCULAR CULVERT	23.178	1.14%	R-5	APRON	R-5	APRON
DR21	12+909.79	NEW 600mm DIA. CIRCULAR CULVERT	18.596	0.28%	R-5	APRON	R-5	APRON
DR22	14+027.93	NEW 600mm DIA. CIRCULAR CULVERT	22.543	-3.28%	R-5	APRON	R-5	APRON
DR23	14+796.09	NEW 750mm DIA. CIRCULAR CULVERT	23.553	1.60%	R-5	APRON	R-5	APRON
DR24	15+173.22	NEW 750mm DIA. CIRCULAR CULVERT	19.962	1.45%	R-5	APRON	R-5	APRON
DR25	15+374.32	NEW 600mm DIA. CIRCULAR CULVERT	22.409	1.12%	R-5	APRON	R-5	APRON
DR26	15+770.62	NEW 1050mm DIA. CIRCULAR CULVERT	22.796	1.32%	R-5	APRON	R-25	APRON
DR27	17+090.24	NEW 750mm DIA. CIRCULAR CULVERT	24.178	0.26%	R-5	APRON	R-5	APRON

CULVERT TABLE					WEIRS		INLET END TREATMENT		OUTLET END TREATMENT	
NAME	START STA.	DESCRIPTION	LENGTH	SLOPE	NUMBER	MIN. SPACING	RIPRAP SIZE	LAYOUT TYPE	RIPRAP SIZE	LAYOUT TYPE
WC01	3+253.65	NEW 1200mm DIA. CIRCULAR CULVERT	51.085	1.68%	8	5.92	R-5	APRON	R-25	POOL
WC02	5+032.13	NEW 1500mm DIA. CIRCULAR CULVERT	52.971	3.21%	17	3.12	R-5	APRON	R-25	POOL
WC03	5+157.89	NEW 1200mm DIA. CIRCULAR CULVERT	43.271	5.10%	22	1.95	R-5	APRON	R-25	POOL
WC04	7+824.29	NEW 1200mm DIA. CIRCULAR CULVERT	45.679	3.19%	15	3.13	R-5	APRON	R-25	POOL
WC05	8+325.24	NEW 1500mm DIA. CIRCULAR CULVERT	55.583	1.78%	10	5.62	R-5	APRON	R-25	POOL
WC06	10+099.73	NEW 1200mm DIA. CIRCULAR CULVERT	36.823	2.57%	9	3.89	R-5	APRON	R-25	POOL
WC07	11+197.98	NEW 1050mm DIA. CIRCULAR CULVERT	39.605	1.74%	7	5.78	R-5	APRON	R-25	POOL
WC08	11+526.38	NEW 1500mm DIA. CIRCULAR CULVERT	35.279	1.49%	5	6.62	R-5	APRON	R-25	POOL
WC09	11+699.62	NEW 1050mm DIA. CIRCULAR CULVERT	28.146	4.13%	12	2.46	R-5	APRON	R-25	POOL
WC10	11+925.59	NEW 1050mm DIA. CIRCULAR CULVERT	31.867	3.41%	11	2.93	R-5	APRON	R-25	POOL
WC11	12+121.60	NEW 1200mm DIA. CIRCULAR CULVERT	39.312	2.90%	11	3.43	R-5	APRON	R-25	POOL
WC12	14+288.06	NEW 900mm DIA. CIRCULAR CULVERT	24.817	0.00%	—	—	R-5	APRON	R-25	APRON
WC13	16+180.55	NEW 1050mm DIA. CIRCULAR CULVERT	25.241	1.96%	5	3.45	R-5	APRON	R-25	POOL
WC14a	16+358.89	NEW 800 x 580mm PIPE-ARCH CULVERT	21.846	1.42%	—	—	R-5	APRON	R-25	APRON
WC14b	16+360.69	NEW 800 x 580mm PIPE-ARCH CULVERT	21.869	1.42%	—	—	R-5	APRON	R-25	APRON
WC15	17+538.48	NEW 750mm DIA. CIRCULAR CULVERT	24.022	0.12%	—	—	R-5	APRON	R-25	APRON
WC16a	17+760.41	NEW 915 x 660mm PIPE-ARCH CULVERT	23.448	0.64%	—	—	R-5	APRON	R-25	POOL
WC16b	17+762.34	NEW 915 x 660mm PIPE-ARCH CULVERT	23.322	0.64%	—	—	R-5	APRON	R-25	POOL
WC17	18+065.87	NEW 1050mm DIA. CIRCULAR CULVERT	23.462	2.77%	7	3.61	R-5	APRON	R-25	POOL
WC18	18+918.66	NEW 1500mm DIA. CIRCULAR CULVERT	28.703	0.00%	—	—	R-5	APRON	R-25	POOL
WC19	19+240.64	NEW 1050mm DIA. CIRCULAR CULVERT	25.155	2.32%	6	4.24	R-5	APRON	R-25	POOL
WC20	19+560.87	NEW 1050mm DIA. CIRCULAR CULVERT	25.116	-0.00%	—	—	R-5	APRON	R-25	POOL
WC21a	19+887.34	NEW 1150 x 820mm PIPE-ARCH CULVERT	25.767	0.00%	—	—	R-5	APRON	R-25	POOL
WC21b	19+889.55	NEW 1150 x 820mm PIPE-ARCH CULVERT	25.781	-0.00%	—	—	R-5	APRON	R-25	POOL
WC22	20+256.12	NEW 750mm DIA. CIRCULAR CULVERT	25.959	-0.00%	—	—	R-5	APRON	R-25	APRON
WC23	20+588.92	NEW 1050mm DIA. CIRCULAR CULVERT	28.504	0.00%	—	—	R-5	APRON	R-25	APRON
WC24a	20+801.95	NEW 1350mm DIA. CIRCULAR CULVERT	27.952	0.00%	—	—	R-5	APRON	R-25	APRON
WC24b	20+807.00	NEW 1350mm DIA. CIRCULAR CULVERT	27.918	0.00%	—	—	R-5	APRON	R-25	APRON
WC25	21+417.84	NEW 1200mm DIA. CIRCULAR CULVERT	27.928	0.00%	—	—	R-5	APRON	R-25	APRON
WC26	22+063.88	NEW 1050mm DIA. CIRCULAR CULVERT	26.522	0.00%	—	—	R-5	APRON	R-25	APRON
WC27	22+415.95	NEW 1050mm DIA. CIRCULAR CULVERT	28.803	0.00%	—	—	R-5	APRON	R-25	APRON
WC28	23+111.16	NEW 1500mm DIA. CIRCULAR CULVERT	30.587	3.88%	8	3.43	R-5	APRON	R-25	POOL



**ILLUSTRATION OF OUTLET POOL**  
SOURCE: GUIDELINES FOR THE DESIGN OF FISH  
PASSAGE FOR CULVERTS IN NOVA SCOTIA,  
FISHERIES AND OCEANS CANADA, FEBRUARY 2015

0 ISSUED FOR TENDER 04/14 2015

ROUTE 117 REHABILITATION  
REHABILITATION ROUTE 117  
PARC NATIONAL  
KOUCHIBOUQUAC  
NATIONAL PARK  
COMTE DE KENT COUNTY, NB

TYPICAL  
CULVERT  
DETAILS

designed D.L.S./J.L.D. 2015/04/14  
date 2015/04/14  
drawn J.L.D. 2015/04/14  
date 2015/04/14  
approved 2015/04/14  
date 2015/04/14  
project number 2015/04/14  
no. du projet 2015/04/14  
R.070695.001  
C65 OF/DE C82