Plan: Plan 03 RP_1 Alignment - (1) RS: 110 Profile: Tr=50 yr

E.G. Elev (m)	168,48	Element	Left OB	Channel	Right OB
Vel Head (m)	0,83	Wt. n-Val.		0,040	
W.S. Elev (m)	167,66	Reach Len. (m)	10,00	10,00	10,00
Crit W.S. (m)		Flow Area (m2)		302,33	
E.G. Slope (m/m)	0,004006	Area (m2)		302,33	
Q Total (m3/s)	1217,14	Flow (m3/s)		1217,14	
Top Width (m)	72,32	Top Width (m)		72,32	
Vel Total (m/s)	4,03	Avg. Vel. (m/s)		4,03	
Max Chl Dpth (m)	4,87	Hydr. Depth (m)		4,18	
Conv. Total (m3/s)	19229,8	Conv. (m3/s)		19229,8	
Length Wtd. (m)	10,00	Wetted Per. (m)		74,50	
Min Ch El (m)	162,79	Shear (N/m2)		159,44	
Alpha	1,00	Stream Power (N/m s)		641,87	
Frctn Loss (m)	0,04	Cum Volume (1000 m3)		31,72	
C & E Loss (m)	0,00	Cum SA (1000 m2)		6,89	

Plan: Plan 03 RP_1 Alignment - (1) RS: 110 Profile: Tr=100 yr

E.G. Elev (m)	168,90	Element	Left OB	Channel	Right OB
Vel Head (m)	0,85	Wt. n-Val.		0,040	
W.S. Elev (m)	168,05	Reach Len. (m)	10,00	10,00	10,00
Crit W.S. (m)		Flow Area (m2)		330,76	
E.G. Slope (m/m)	0,003746	Area (m2)		330,76	
Q Total (m3/s)	1350,45	Flow (m3/s)		1350,45	
Top Width (m)	73,47	Top Width (m)		73,47	
Vel Total (m/s)	4,08	Avg. Vel. (m/s)		4,08	
Max Chl Dpth (m)	5,26	Hydr. Depth (m)		4,50	
Conv. Total (m3/s)	22065,2	Conv. (m3/s)		22065,2	
Length Wtd. (m)	10,00	Wetted Per. (m)		75,88	
Min Ch El (m)	162,79	Shear (N/m2)		160,11	
Alpha	1,00	Stream Power (N/m s)		653,72	
Frctn Loss (m)	0,04	Cum Volume (1000 m3)		34,38	
C & E Loss (m)	0,00	Cum SA (1000 m2)		7,02	

Plan: Plan 03 RP_1 Alignment - (1) RS: 100 Profile: Tr=50 yr

E.G. Elev (m)	168,44	Element	Left OB	Channel	Right OB
Vel Head (m)	0,81	Wt. n-Val.		0,040	
W.S. Elev (m)	167,63	Reach Len. (m)	10,00	10,00	10,00
Crit W.S. (m)		Flow Area (m2)		305,17	
E.G. Slope (m/m)	0,003836	Area (m2)		305,17	
Q Total (m3/s)	1217,14	Flow (m3/s)		1217,14	
Top Width (m)	71,61	Top Width (m)		71,61	
Vel Total (m/s)	3,99	Avg. Vel. (m/s)		3,99	
Max Chl Dpth (m)	5,18	Hydr. Depth (m)		4,26	
Conv. Total (m3/s)	19650,8	Conv. (m3/s)		19650,8	
Length Wtd. (m)	10,00	Wetted Per. (m)		73,83	
Min Ch El (m)	162,44	Shear (N/m2)		155,52	
Alpha	1,00	Stream Power (N/m s)		620,25	
Frctn Loss (m)	0,04	Cum Volume (1000 m3)		28,68	
C & E Loss (m)	0,01	Cum SA (1000 m2)		6,17	

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Plan: Plan 03 RP_1 Alignment - (1) RS: 100 Profile: Tr=100 yr

E.G. Elev (m)	168,85	Element	Left OB	Channel	Right OB
Vel Head (m)	0,84	Wt. n-Val.		0,040	
W.S. Elev (m)	168,02	Reach Len. (m)	10,00	10,00	10,00
Crit W.S. (m)		Flow Area (m2)		333,44	
E.G. Slope (m/m)	0,003608	Area (m2)		333,44	
Q Total (m3/s)	1350,45	Flow (m3/s)		1350,45	
Top Width (m)	72,83	Top Width (m)		72,83	
Vel Total (m/s)	4,05	Avg. Vel. (m/s)		4,05	
Max Chl Dpth (m)	5,58	Hydr. Depth (m)		4,58	
Conv. Total (m3/s)	22483,1	Conv. (m3/s)		22483,1	
Length Wtd. (m)	10,00	Wetted Per. (m)		75,28	
Min Ch El (m)	162,44	Shear (N/m2)		156,72	
Alpha	1,00	Stream Power (N/m s)		634,71	
Frctn Loss (m)	0,04	Cum Volume (1000 m3)		31,05	
C & E Loss (m)	0,01	Cum SA (1000 m2)		6,29	

Plan: Plan 03 RP_1 Alignment - (1) RS: 90 Profile: Tr=50 yr

E.G. Elev (m)	168,39	Element	Left OB	Channel	Right OB
Vel Head (m)	0,87	Wt. n-Val.		0,040	
W.S. Elev (m)	167,52	Reach Len. (m)	10,00	10,00	10,00
Crit W.S. (m)		Flow Area (m2)		294,76	
E.G. Slope (m/m)	0,004073	Area (m2)		294,76	
Q Total (m3/s)	1217,14	Flow (m3/s)		1217,14	
Top Width (m)	68,33	Top Width (m)		68,33	
Vel Total (m/s)	4,13	Avg. Vel. (m/s)		4,13	
Max Chl Dpth (m)	5,59	Hydr. Depth (m)		4,31	
Conv. Total (m3/s)	19070,5	Conv. (m3/s)		19070,5	
Length Wtd. (m)	10,00	Wetted Per. (m)		70,80	
Min Ch El (m)	161,93	Shear (N/m2)		166,30	
Alpha	1,00	Stream Power (N/m s)		686,68	
Frctn Loss (m)	0,04	Cum Volume (1000 m3)		25,68	
C & E Loss (m)	0,01	Cum SA (1000 m2)		5,47	

Plan: Plan 03 RP_1 Alignment - (1) RS: 90 Profile: Tr=100 yr

E.G. Elev (m)	168,81	Element	Left OB	Channel	Right OB
Vel Head (m)	0,90	Wt. n-Val.		0,040	
W.S. Elev (m)	167,91	Reach Len. (m)	10,00	10,00	10,00
Crit W.S. (m)		Flow Area (m2)		321,58	
E.G. Slope (m/m)	0,003861	Area (m2)		321,58	
Q Total (m3/s)	1350,45	Flow (m3/s)		1350,45	
Top Width (m)	69,67	Top Width (m)		69,67	
Vel Total (m/s)	4,20	Avg. Vel. (m/s)		4,20	
Max Chl Dpth (m)	5,98	Hydr. Depth (m)		4,62	
Conv. Total (m3/s)	21732,5	Conv. (m3/s)		21732,5	
Length Wtd. (m)	10,00	Wetted Per. (m)		72,36	
Min Ch El (m)	161,93	Shear (N/m2)		168,29	
Alpha	1,00	Stream Power (N/m s)		706,73	
Frctn Loss (m)	0,04	Cum Volume (1000 m3)		27,78	
C & E Loss (m)	0,01	Cum SA (1000 m2)		5,58	

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Plan: Plan 03 RP_1 Alignment - (1) RS: 80 Profile: Tr=50 yr

E.G. Elev (m)	168,34	Element	Left OB	Channel	Right OB
Vel Head (m)	0,93	Wt. n-Val.		0,040	
W.S. Elev (m)	167,41	Reach Len. (m)	10,00	10,00	10,00
Crit W.S. (m)		Flow Area (m2)		285,01	
E.G. Slope (m/m)	0,004372	Area (m2)		285,01	
Q Total (m3/s)	1217,14	Flow (m3/s)		1217,14	
Top Width (m)	66,21	Top Width (m)		66,21	
Vel Total (m/s)	4,27	Avg. Vel. (m/s)		4,27	
Max Chl Dpth (m)	5,46	Hydr. Depth (m)		4,30	
Conv. Total (m3/s)	18407,6	Conv. (m3/s)		18407,6	
Length Wtd. (m)	10,00	Wetted Per. (m)		68,64	
Min Ch El (m)	161,95	Shear (N/m2)		178,03	
Alpha	1,00	Stream Power (N/m s)		760,31	
Frctn Loss (m)	0,04	Cum Volume (1000 m3)		22,78	
C & E Loss (m)	0,00	Cum SA (1000 m2)		4,80	

Plan: Plan 03 RP_1 Alignment - (1) RS: 80 Profile: Tr=100 yr

E.G. Elev (m)	168,76	Element	Left OB	Channel	Right OB
Vel Head (m)	0,96	Wt. n-Val.		0,040	
W.S. Elev (m)	167,80	Reach Len. (m)	10,00	10,00	10,00
Crit W.S. (m)		Flow Area (m2)		311,03	
E.G. Slope (m/m)	0,004140	Area (m2)		311,03	
Q Total (m3/s)	1350,45	Flow (m3/s)		1350,45	
Top Width (m)	67,50	Top Width (m)		67,50	
Vel Total (m/s)	4,34	Avg. Vel. (m/s)		4,34	
Max Chl Dpth (m)	5,85	Hydr. Depth (m)		4,61	
Conv. Total (m3/s)	20988,2	Conv. (m3/s)		20988,2	
Length Wtd. (m)	10,00	Wetted Per. (m)		70,14	
Min Ch El (m)	161,95	Shear (N/m2)		180,04	
Alpha	1,00	Stream Power (N/m s)		781,70	
Frctn Loss (m)	0,04	Cum Volume (1000 m3)		24,62	
C & E Loss (m)	0,00	Cum SA (1000 m2)		4,89	

Plan: Plan 03 RP_1 Alignment - (1) RS: 70 Profile: Tr=50 yr

E.G. Elev (m)	168,30	Element	Left OB	Channel	Right OB
Vel Head (m)	0,96	Wt. n-Val.		0,040	
W.S. Elev (m)	167,33	Reach Len. (m)	10,00	10,00	10,00
Crit W.S. (m)		Flow Area (m2)		279,95	
E.G. Slope (m/m)	0,004530	Area (m2)		279,95	
Q Total (m3/s)	1217,14	Flow (m3/s)		1217,14	
Top Width (m)	64,90	Top Width (m)		64,90	
Vel Total (m/s)	4,35	Avg. Vel. (m/s)		4,35	
Max Chl Dpth (m)	5,26	Hydr. Depth (m)		4,31	
Conv. Total (m3/s)	18084,1	Conv. (m3/s)		18084,1	
Length Wtd. (m)	10,00	Wetted Per. (m)		67,40	
Min Ch El (m)	162,07	Shear (N/m2)		184,51	
Alpha	1,00	Stream Power (N/m s)		802,17	
Frctn Loss (m)	0,05	Cum Volume (1000 m3)		19,96	
C & E Loss (m)	0,00	Cum SA (1000 m2)		4,14	

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Plan: Plan 03 RP_1 Alignment - (1) RS: 70 Profile: Tr=100 yr

E.G. Elev (m)	168,72	Element	Left OB	Channel	Right OB
Vel Head (m)	1,00	Wt. n-Val.		0,040	
W.S. Elev (m)	167,72	Reach Len. (m)	10,00	10,00	10,00
Crit W.S. (m)		Flow Area (m2)		305,50	
E.G. Slope (m/m)	0,004281	Area (m2)		305,50	
Q Total (m3/s)	1350,45	Flow (m3/s)		1350,45	
Top Width (m)	66,02	Top Width (m)		66,02	
Vel Total (m/s)	4,42	Avg. Vel. (m/s)		4,42	
Max Chl Dpth (m)	5,65	Hydr. Depth (m)		4,63	
Conv. Total (m3/s)	20640,3	Conv. (m3/s)		20640,3	
Length Wtd. (m)	10,00	Wetted Per. (m)		68,77	
Min Ch El (m)	162,07	Shear (N/m2)		186,50	
Alpha	1,00	Stream Power (N/m s)		824,41	
Frctn Loss (m)	0,04	Cum Volume (1000 m3)		21,53	
C & E Loss (m)	0,00	Cum SA (1000 m2)		4,23	

Plan: Plan 03 RP_1 Alignment - (1) RS: 60 Profile: Tr=50 yr

E.G. Elev (m)	168,25	Element	Left OB	Channel	Right OB
Vel Head (m)	0,99	Wt. n-Val.		0,040	
W.S. Elev (m)	167,26	Reach Len. (m)	10,00	10,00	10,00
Crit W.S. (m)		Flow Area (m2)		276,02	
E.G. Slope (m/m)	0,004644	Area (m2)		276,02	
Q Total (m3/s)	1217,14	Flow (m3/s)		1217,14	
Top Width (m)	63,61	Top Width (m)		63,61	
Vel Total (m/s)	4,41	Avg. Vel. (m/s)		4,41	
Max Chl Dpth (m)	5,54	Hydr. Depth (m)		4,34	
Conv. Total (m3/s)	17860,1	Conv. (m3/s)		17860,1	
Length Wtd. (m)	10,00	Wetted Per. (m)		66,29	
Min Ch El (m)	161,72	Shear (N/m2)		189,64	
Alpha	1,00	Stream Power (N/m s)		836,22	
Frctn Loss (m)	0,05	Cum Volume (1000 m3)		17,18	
C & E Loss (m)	0,00	Cum SA (1000 m2)		3,50	

Plan: Plan 03 RP_1 Alignment - (1) RS: 60 Profile: Tr=100 yr

E.G. Elev (m)	168,67	Element	Left OB	Channel	Right OB
Vel Head (m)	1,03	Wt. n-Val.		0,040	
W.S. Elev (m)	167,65	Reach Len. (m)	10,00	10,00	10,00
Crit W.S. (m)		Flow Area (m2)		301,01	
E.G. Slope (m/m)	0,004417	Area (m2)		301,01	
Q Total (m3/s)	1350,45	Flow (m3/s)		1350,45	
Top Width (m)	64,81	Top Width (m)		64,81	
Vel Total (m/s)	4,49	Avg. Vel. (m/s)		4,49	
Max Chl Dpth (m)	5,93	Hydr. Depth (m)		4,64	
Conv. Total (m3/s)	20319,5	Conv. (m3/s)		20319,5	
Length Wtd. (m)	10,00	Wetted Per. (m)		67,84	
Min Ch El (m)	161,72	Shear (N/m2)		192,19	
Alpha	1,00	Stream Power (N/m s)		862,26	
Frctn Loss (m)	0,04	Cum Volume (1000 m3)		18,50	
C & E Loss (m)	0,00	Cum SA (1000 m2)		3,57	

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Plan: Plan 03 RP_1 Alignment - (1) RS: 50 Profile: Tr=50 yr

E.G. Elev (m)	168,20	Element	Left OB	Channel	Right OB
Vel Head (m)	1,01	Wt. n-Val.		0,040	
W.S. Elev (m)	167,19	Reach Len. (m)	10,00	10,00	10,00
Crit W.S. (m)		Flow Area (m2)		273,66	
E.G. Slope (m/m)	0,004651	Area (m2)		273,66	
Q Total (m3/s)	1217,14	Flow (m3/s)		1217,14	
Top Width (m)	62,06	Top Width (m)		62,06	
Vel Total (m/s)	4,45	Avg. Vel. (m/s)		4,45	
Max Chl Dpth (m)	5,83	Hydr. Depth (m)		4,41	
Conv. Total (m3/s)	17847,0	Conv. (m3/s)		17847,0	
Length Wtd. (m)	10,00	Wetted Per. (m)		64,95	
Min Ch El (m)	161,36	Shear (N/m2)		192,17	
Alpha	1,00	Stream Power (N/m s)		854,68	
Frctn Loss (m)	0,05	Cum Volume (1000 m3)		14,43	
C & E Loss (m)	0,00	Cum SA (1000 m2)		2,87	

Plan: Plan 03 RP_1 Alignment - (1) RS: 50 Profile: Tr=100 yr

E.G. Elev (m)	168,63	Element	Left OB	Channel	Right OB
Vel Head (m)	1,05	Wt. n-Val.		0,040	
W.S. Elev (m)	167,58	Reach Len. (m)	10,00	10,00	10,00
Crit W.S. (m)		Flow Area (m2)		297,85	
E.G. Slope (m/m)	0,004421	Area (m2)		297,85	
Q Total (m3/s)	1350,45	Flow (m3/s)		1350,45	
Top Width (m)	62,87	Top Width (m)		62,87	
Vel Total (m/s)	4,53	Avg. Vel. (m/s)		4,53	
Max Chl Dpth (m)	6,22	Hydr. Depth (m)		4,74	
Conv. Total (m3/s)	20310,8	Conv. (m3/s)		20310,8	
Length Wtd. (m)	10,00	Wetted Per. (m)		66,12	
Min Ch El (m)	161,36	Shear (N/m2)		195,30	
Alpha	1,00	Stream Power (N/m s)		885,45	
Frctn Loss (m)	0,04	Cum Volume (1000 m3)		15,51	
C & E Loss (m)	0,00	Cum SA (1000 m2)		2,93	

Plan: Plan 03 RP_1 Alignment - (1) RS: 40 Profile: Tr=50 yr

E.G. Elev (m)	168,15	Element	Left OB	Channel	Right OB
Vel Head (m)	1,00	Wt. n-Val.		0,040	
W.S. Elev (m)	167,15	Reach Len. (m)	10,00	10,00	10,00
Crit W.S. (m)		Flow Area (m2)		274,68	
E.G. Slope (m/m)	0,004420	Area (m2)		274,68	
Q Total (m3/s)	1217,14	Flow (m3/s)		1217,14	
Top Width (m)	59,55	Top Width (m)		59,55	
Vel Total (m/s)	4,43	Avg. Vel. (m/s)		4,43	
Max Chl Dpth (m)	6,14	Hydr. Depth (m)		4,61	
Conv. Total (m3/s)	18307,0	Conv. (m3/s)		18307,0	
Length Wtd. (m)	10,00	Wetted Per. (m)		63,10	
Min Ch El (m)	161,01	Shear (N/m2)		188,69	
Alpha	1,00	Stream Power (N/m s)		836,11	
Frctn Loss (m)	0,04	Cum Volume (1000 m3)		11,69	
C & E Loss (m)	0,07	Cum SA (1000 m2)		2,26	

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Plan: Plan 03 RP_1 Alignment - (1) RS: 40 Profile: Tr=100 yr

E.G. Elev (m)	168,58	Element	Left OB	Channel	Right OB
Vel Head (m)	1,05	Wt. n-Val.		0,040	
W.S. Elev (m)	167,53	Reach Len. (m)	10,00	10,00	10,00
Crit W.S. (m)		Flow Area (m2)		297,73	
E.G. Slope (m/m)	0,004310	Area (m2)		297,73	
Q Total (m3/s)	1350,45	Flow (m3/s)		1350,45	
Top Width (m)	61,07	Top Width (m)		61,07	
Vel Total (m/s)	4,54	Avg. Vel. (m/s)		4,54	
Max Chl Dpth (m)	6,53	Hydr. Depth (m)		4,87	
Conv. Total (m3/s)	20570,4	Conv. (m3/s)		20570,4	
Length Wtd. (m)	10,00	Wetted Per. (m)		64,80	
Min Ch El (m)	161,01	Shear (N/m2)		194,18	
Alpha	1,00	Stream Power (N/m s)		880,77	
Frctn Loss (m)	0,03	Cum Volume (1000 m3)		12,53	
C & E Loss (m)	0,07	Cum SA (1000 m2)		2,31	

Plan: Plan 03 RP_1 Alignment - (1) RS: 30 Profile: Tr=50 yr

E.G. Elev (m)	168,05	Element	Left OB	Channel	Right OB
Vel Head (m)	0,76	WL n-Val.		0,040	
W.S. Elev (m)	167,28	Reach Len. (m)	10,00	10,00	10,00
Crit W.S. (m)		Flow Area (m2)		314,34	
E.G. Slope (m/m)	0,002857	Area (m2)		314,34	
Q Total (m3/s)	1217,14	Flow (m3/s)		1217,14	
Top Width (m)	59,61	Top Width (m)		59,61	
Vel Total (m/s)	3,87	Avg. Vel. (m/s)		3,87	
Max Chl Dpth (m)	7,00	Hydr. Depth (m)		5,27	
Conv. Total (m3/s)	22771,8	Conv. (m3/s)		22771,8	
Length Wtd. (m)	10,00	Wetted Per. (m)		63,72	
Min Ch El (m)	160,28	Shear (N/m2)		138,19	
Alpha	1,00	Stream Power (N/m s)		535,10	
Frctn Loss (m)	0,03	Cum Volume (1000 m3)		8,74	
C & E Loss (m)	0,01	Cum SA (1000 m2)		1,67	

Plan: Plan 03 RP_1 Alignment - (1) RS: 30 Profile: Tr=100 yr

E.G. Elev (m)	168,48	Element	Left OB	Channel	Right OB
Vel Head (m)	0,82	Wt. n-Val.		0,040	
W.S. Elev (m)	167,66	Reach Len. (m)	10,00	10,00	10,00
Crit W.S. (m)		Flow Area (m2)		337,29	
E.G. Slope (m/m)	0,002884	Area (m2)		337,29	
Q Total (m3/s)	1350,45	Flow (m3/s)		1350,45	
Top Width (m)	61,20	Top Width (m)		61,20	
Vel Total (m/s)	4,00	Avg. Vel. (m/s)		4,00	
Max Chl Dpth (m)	7,38	Hydr. Depth (m)		5,51	
Conv. Total (m3/s)	25146,0	Conv. (m3/s)		25146,0	
Length Wtd. (m)	10,00	Wetted Per. (m)		65,49	
Min Ch El (m)	160,28	Shear (N/m2)		145,66	
Alpha	1,00	Stream Power (N/m s)		583,19	
Frctn Loss (m)	0,03	Cum Volume (1000 m3)		9,35	
C & E Loss (m)	0,01	Cum SA (1000 m2)		1,70	

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Plan: Plan 03 RP_1 Alignment - (1) RS: 20 Profile: Tr=50 yr

E.G. Elev (m)	168,01	Element	Left OB	Channel	Right OB
Vel Head (m)	0,84	Wt. n-Val.		0,040	
W.S. Elev (m)	167,16	Reach Len. (m)	10,00	10,00	10,00
Crit W.S. (m)		Flow Area (m2)		299,11	
E.G. Slope (m/m)	0,003165	Area (m2)		299,11	
Q Total (m3/s)	1217,14	Flow (m3/s)		1217,14	
Top Width (m)	56,51	Top Width (m)		56,51	
Vel Total (m/s)	4,07	Avg. Vel. (m/s)		4,07	
Max Chl Dpth (m)	6,94	Hydr. Depth (m)		5,29	
Conv. Total (m3/s)	21633,9	Conv. (m3/s)		21633,9	
Length Wtd. (m)	10,00	Wetted Per. (m)		60,78	
Min Ch El (m)	160,23	Shear (N/m2)		152,75	
Alpha	1,00	Stream Power (N/m s)		621,55	
Frctn Loss (m)	0,03	Cum Volume (1000 m3)		5,68	
C & E Loss (m)	0,01	Cum SA (1000 m2)		1,09	

Plan: Plan 03 RP_1 Alignment - (1) RS: 20 Profile: Tr=100 yr

E.G. Elev (m)	168,44	Element	Left OB	Channel	Right OB
Vel Head (m)	0,91	Wt. n-Val.		0,040	
W.S. Elev (m)	167,53	Reach Len. (m)	10,00	10,00	10,00
Crit W.S. (m)		Flow Area (m2)		320,19	
E.G. Slope (m/m)	0,003206	Area (m2)		320,19	
Q Total (m3/s)	1350,45	Flow (m3/s)		1350,45	
Top Width (m)	57,77	Top Width (m)		57,77	
Vel Total (m/s)	4,22	Avg. Vel. (m/s)		4,22	
Max Chl Dpth (m)	7,30	Hydr. Depth (m)		5,54	
Conv. Total (m3/s)	23849,0	Conv. (m3/s)		23849,0	
Length Wtd. (m)	10,00	Wetted Per. (m)		62,26	
Min Ch El (m)	160,23	Shear (N/m2)		161,70	
Alpha	1,00	Stream Power (N/m s)		681,98	
Frctn Loss (m)	0,03	Cum Volume (1000 m3)		6,07	
C & E Loss (m)	0,01	Cum SA (1000 m2)		1,11	

Plan: Plan 03 RP_1 Alignment - (1) RS: 10 Profile: Tr=50 yr

E.G. Elev (m)	167,97	Element	Left OB	Channel	Right OB
Vel Head (m)	0,90	Wt. n-Val.		0,040	
W.S. Elev (m)	167,07	Reach Len. (m)	10,00	10,00	10,00
Crit W.S. (m)		Flow Area (m2)		289,66	
E.G. Slope (m/m)	0,003477	Area (m2)		289,66	
Q Total (m3/s)	1217,14	Flow (m3/s)		1217,14	
Top Width (m)	54,25	Top Width (m)		54,25	
Vel Total (m/s)	4,20	Avg. Vel. (m/s)		4,20	
Max Chl Dpth (m)	6,87	Hydr. Depth (m)		5,34	
Conv. Total (m3/s)	20640,5	Conv. (m3/s)		20640,5	
Length Wtd. (m)	10,00	Wetted Per. (m)		60,19	
Min Ch El (m)	160,20	Shear (N/m2)		164,10	
Alpha	1,00	Stream Power (N/m s)		689,53	
Frctn Loss (m)	0,04	Cum Volume (1000 m3)		2,73	
C & E Loss (m)	0,02	Cum SA (1000 m2)		0,53	

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Plan: Plan 03 RP_1 Alignment - (1) RS: 10 Profile: Tr=100 yr

E.G. Elev (m)	168,40	Element	Left OB	Channel	Right OB
Vel Head (m)	0,97	Wt. n-Val.		0,040	
W.S. Elev (m)	167,43	Reach Len. (m)	10,00	10,00	10,00
Crit W.S. (m)		Flow Area (m2)		309,17	
E.G. Slope (m/m)	0,003552	Area (m2)		309,17	
Q Total (m3/s)	1350,45	Flow (m3/s)		1350,45	
Top Width (m)	55,32	Top Width (m)		55,32	
Vel Total (m/s)	4,37	Avg. Vel. (m/s)		4,37	
Max Chl Dpth (m)	7,22	Hydr. Depth (m)		5,59	
Conv. Total (m3/s)	22658,4	Conv. (m3/s)		22658,4	
Length Wtd. (m)	10,00	Wetted Per. (m)		61,60	
Min Ch El (m)	160,20	Shear (N/m2)		174,84	
Alpha	1,00	Stream Power (N/m s)		763,69	
Frctn Loss (m)	0,04	Cum Volume (1000 m3)		2,92	
C & E Loss (m)	0,03	Cum SA (1000 m2)		0,54	

Plan: Plan 03 RP_1 Alignment - (1) RS: 0 Profile: Tr=50 yr

E.G. Elev (m)	167,90	Element	Left OB	Channel	Right OB
Vel Head (m)	1,15	Wt. n-Val.		0,040	
W.S. Elev (m)	166,76	Reach Len. (m)			
Crit W.S. (m)	165,52	Flow Area (m2)		256,78	
E.G. Slope (m/m)	0,005002	Area (m2)		256,78	
Q Total (m3/s)	1217,14	Flow (m3/s)		1217,14	
Top Width (m)	52,54	Top Width (m)		52,54	
Vel Total (m/s)	4,74	Avg. Vel. (m/s)		4,74	
Max Chl Dpth (m)	6,73	Hydr. Depth (m)		4,89	
Conv. Total (m3/s)	17210,0	Conv. (m3/s)		17210,0	
Length Wtd. (m)		Wetted Per. (m)		58,50	
Min Ch El (m)	160,03	Shear (N/m2)		215,31	
Alpha	1,00	Stream Power (N/m s)		1020,58	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

Plan: Plan 03 RP_1 Alignment - (1) RS: 0 Profile: Tr=100 yr

E.G. Elev (m)	168,33	Element	Left OB	Channel	Right OB
Vel Head (m)	1,23	Wt. n-Val.		0,040	
W.S. Elev (m)	167,10	Reach Len. (m)			
Crit W.S. (m)	165,84	Flow Area (m2)		274,90	
E.G. Slope (m/m)	0,005001	Area (m2)		274,90	
Q Total (m3/s)	1350,45	Flow (m3/s)		1350,45	
Top Width (m)	53,02	Top Width (m)		53,02	
Vel Total (m/s)	4,91	Avg. Vel. (m/s)		4,91	
Max Chl Dpth (m)	7,07	Hydr. Depth (m)		5,18	
Conv. Total (m3/s)	19097,0	Conv. (m3/s)		19097,0	
Length Wtd. (m)		Wetted Per. (m)		59,34	
Min Ch El (m)	160,03	Shear (N/m2)		227,16	
Alpha	1,00	Stream Power (N/m s)		1115,93	
Frctn Loss (m)		Cum Volume (1000 m3)			
C & E Loss (m)		Cum SA (1000 m2)			

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HEC-RAS Plan: Plan 03 River: RP 1 Reach: Alignment - (1)

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Alignment - (1)	560	Tr=50 yr	1217.14	169.90	173.95	173.95	175.05	0.012742	4.63	262.71	121.67	1.01
Alignment - (1)	560	Tr=100 yr	1350.45	169.90	174.11	174.11	175.28	0.012377	4.78	282.58	121.97	1.00
Alignment - (1)	550	Tr=50 yr	1217.14	169.90	173.73	173.64	174.74	0.011176	4.45	273.68	121.88	0.95
Alignment - (1)	550	Tr=100 yr	1350.45	169.90	173.96	173.82	174.99	0.009683	4.43	304.71	122.18	0.90
Alignment - (1)	540	Tr=50 yr	1217.14	169.40	173.64	173.47	174.63	0.009984	4.40	276.61	113.94	0.90
Alignment - (1)	540	Tr=100 yr	1350.45	169.40	173.90		174.89	0.008930	4.41	306.32	115.55	0.86
Alignment - (1)	530	Tr=50 yr	1217.14	168.61	173.66		174.49	0.007780	4.04	301.55	116.26	0.80
Alignment - (1)	530	Tr=100 yr	1350.45	168.61	173.92		174.77	0.007128	4.06	332.52	118.62	0.77
Alignment - (1)	520	Tr=50 yr	1217.14	168.25	173.72		174.38	0.005173	3.59	338.68	115.52	0.67
Alignment - (1)	520	Tr=100 yr	1350.45	168.25	173.98		174.66	0.004899	3.67	368.13	116.85	0.66
Alignment - (1)	510	Tr=50 yr	1217.14	168.22	173.58		174.32	0.005949	3.79	321.29	110.71	0.71
Alignment - (1)	510	Tr=100 yr	1350.45	168.22	173.84		174.60	0.005555	3.86	349.87	110.69	0.69
Alignment - (1)	500	Tr=50 yr	1217.14	168.19	173.55		174.24	0.006159	3.68	330.78	122.69	0.72
Alignment - (1)	**500**	**Tr=100 yr**	**1350.45**	**168.19**	**173.83**		**174.53**	**0.005536**	**3.70**	**364.79**	**123.45**	**0.69**
Alignment - (1)	490	Tr=50 yr	1217.14	168.15	173.60		174.15	0.004578	3.25	372.96	132.18	0.63
Alignment - (1)	490	Tr=100 yr	1350.45	168.15	173.88		174.44	0.004266	3.30	408.69	135.49	0.61
Alignment - (1)	480	Tr=50 yr	1217.14	168.27	173.51	172.62	174.10	0.004401	3.39	359.31	117.11	0.62
Alignment - (1)	480	Tr=100 yr	1350.45	168.27	173.78	172.79	174.39	0.004274	3.46	390.77	120.18	0.61
Alignment - (1)	470	Tr=50 yr	1217.14	168.39	172.61	172.61	173.96	0.012097	5.13	237.05	107.05	1.00
Alignment - (1)	470	Tr=100 yr	1350.45	168.39	172.81	172.81	174.24	0.011932	5.29	255.31	114.29	1.01
Alignment - (1)	460	Tr=50 yr	1217.14	168.18	172.61	172.29	173.74	0.008499	4.72	257.65	186.31	0.86
Alignment - (1)	460	Tr=100 yr	1350.45	168.18	172.80	172.50	174.04	0.008567	4.92	274.22	191.29	0.87
Alignment - (1)	450	Tr=50 yr	1217.14	168.21	172.65		173.62	0.006733	4.35	279.83	195.95	0.77
Alignment - (1)	450	Tr=100 yr	1350.45	168.21	172.86		173.91	0.006812	4.54	297.46	196.57	0.78
Alignment - (1)	440	Tr=50 yr	1217.14	168.18	172.52		173.54	0.006906	4.48	271.71	186.84	0.79
Alignment - (1)	**440**	**Tr=100 yr**	**1350.45**	**168.18**	**172.68**		**173.83**	**0.007299**	**4.74**	**284.86**	**182.34**	**0.81**
Alignment - (1)	430	Tr=50 yr	1217.14	167.93	172.00	172.00	173.41	0.011808	5.26	231.31	108.74	1.01
Alignment - (1)	430	Tr=100 yr	1350.45	167.93	172.28	172.28	173.71	0.011844	5.30	255.00	116.79	1.01
Alignment - (1)	420	**Tr=50 yr**	**1217.14**	**167.83**	**172.09**		**172.78**	**0.005413**	**3.63**	**335.02**	**117.64**	**0.66**
Alignment - (1)	**420**	**Tr=100 yr**	**1350.45**	**167.83**	**172.35**		173.04	0.005048	3.69	365.84	118.96	0.67
Alignment - (1)	410	Tr=50 yr	**1217.14**	**167.72**	**171.90**		**172.69**	**0.006363**	**3.93**	**309.61**	**107.12**	**0.74**
Alignment - (1)	410	Tr=100 yr	1350.45	167.72	172.16		172.96	0.006050	4.01	337.12	109.00	0.73
Alignment - (1)	400	Tr=50 yr	1217.14	167.61	171.84		172.63	0.006353	3.92	310.48	108.01	0.74
Alignment - (1)	400	Tr=100 yr	1350.45	167.61	172.10		172.91	0.005988	3.99	338.74	109.73	0.72
Alignment - (1)	390	Tr=50 yr	1217.14	167.49	171.82		172.55	0.005702	3.78	322.41	109.80	0.70
Alignment - (1)	390	Tr=100 yr	1350.45	167.49	172.09		172.84	0.005399	3.84	351.70	111.89	0.68
Alignment - (1)	**380**	**Tr=50 yr**	**1217.14**	**167.33**	**171.68**	**171.02**	**172.48**	**0.006490**	**3.97**	**306.35**	**106.25**	**0.75**
Alignment - (1)	**380**	**Tr=100 yr**	**1350.45**	**167.33**	**171.95**	171.27	172.77	0.006132	4.01	336.52	110.19	0.73
Alignment - (1)	370	Tr=50 yr	1217.14	167.13	170.99	170.99	172.34	0.011863	5.13	236.27	87.54	1.00
Alignment - (1)	**370**	**Tr=100 yr**	**1350.45**	**167.13**	**171.18**	**171.18**	**172.63**	**0.011836**	**5.33**	253.48	89.17	1.01
Alignment - (1)	360	Tr=50 yr	1217.14	166.93	170.87	170.87	172.08	0.012120	4.87	249.75	103.69	1.00
Alignment - (1)	360	Tr=100 yr	**1350.45**	166.93	**171.07**	**171.07**	**172.33**	**0.012067**	**4.97**	**271.73**	**109.12**	1.01
Alignment - (1)	**350**	**Tr=50 yr**	**1217.14**	**166.72**	**170.61**	**170.61**	**171.79**	**0.012065**	**4.81**	**252.82**	105.97	1.00
Alignment - (1)	**350**	**Tr=100 yr**	**1350.45**	**166.72**	**170.78**	**170.78**	172.05	0.011949	4.99	270.98	107.80	1.00
Alignment - (1)	340	Tr=50 yr	1217.14	166.56	170.41	170.17	171.56	0.010211	4.75	256.46	97.75	0.94
Alignment - (1)	**340**	**Tr=100 yr**	**1350.45**	**166.56**	**170.62**	**170.49**	**171.83**	**0.010061**	**4.88**	276.86	100.01	0.94
Alignment - (1)	**330**	**Tr=50 yr**	**1217.14**	**166.40**	**170.38**		**171.45**	**0.008127**	**4.56**	**265.60**	**88.98**	**0.85**
Alignment - (1)	330	Tr=100 yr	1350.45	166.40	170.55	170.24	171.72	0.008530	4.69	281.23	91.02	0.87
Alignment - (1)	320	Tr=50 yr	1217.14	166.23	170.33	169.97	171.36	0.007696	4.50	270.62	90.62	0.83
Alignment - (1)	**320**	**Tr=100 yr**	**1350.45**	**166.23**	**170.50**	**170.16**	**171.63**	**0.008126**	**4.72**	**286.11**	**90.92**	**0.85**
Alignment - (1)	310	Tr=50 yr	1217.14	166.07	169.94	169.94	171.24	0.012003	5.05	241.21	94.37	1.01
Alignment - (1)	310	Tr=100 yr	1350.45	166.07	170.13	170.13	171.51	0.011778	5.21	259.20	95.24	1.01
Alignment - (1)	300	Tr=50 yr	1217.14	165.92	169.78	169.78	171.09	0.011939	5.07	240.28	92.66	1.00
Alignment - (1)	300	Tr=100 yr	1350.45	165.92	169.98	169.98	171.37	0.011713	5.22	258.70	93.81	1.00
Alignment - (1)	290	Tr=50 yr	1217.14	165.78	169.42	169.42	170.85	0.011457	5.29	230.06	81.11	1.00
Alignment - (1)	**290**	**Tr=100 yr**	**1350.45**	**165.78**	**169.62**	**169.62**	**171.15**	**0.011333**	**5.48**	**246.56**	**81.75**	**1.01**
Alignment - (1)	280	Tr=50 yr	1217.14	165.45	169.19	169.19	170.65	0.011351	5.35	227.68	78.75	1.00
Alignment - (1)	280	Tr=100 yr	1350.45	165.45	169.41	169.41	170.96	0.011147	5.50	245.35	79.59	1.00
Alignment - (1)	270	Tr=50 yr	1217.14	165.03	169.01	169.01	170.49	0.011315	5.40	225.58	76.85	1.00
Alignment - (1)	270	Tr=100 yr	1350.45	165.03	169.23	169.23	170.81	0.011099	5.57	242.63	77.46	1.00

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HEC-RAS Plan: Plan 02 River: RP_1 Reach: Alignment - (1) (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Alignment - (1)	260	Tr=50 yr	1217.14	164.68	168.73	168.73	170.26	0.011299	5.44	223.75	74.68	1.00
Alignment - (1)	260	Tr=100 yr	1350.45	164.68	168.97	168.97	170.58	0.011094	5.61	240.62	75.49	1.00
Alignment - (1)	250	Tr=50 yr	1217.14	164.56	168.60	168.60	170.12	0.011270	5.47	222.61	73.52	1.00
Alignment - (1)	250	Tr=100 yr	1350.45	164.56	168.82	168.82	170.44	0.011062	5.64	239.36	74.24	1.00
Alignment - (1)	240	Tr=50 yr	1217.14	164.46	168.42	168.42	169.95	0.011282	5.48	222.12	72.97	1.00
Alignment - (1)	240	Tr=100 yr	1350.45	164.46	168.65	168.65	170.28	0.011070	5.66	238.77	73.82	1.00
Alignment - (1)	230	Tr=50 yr	1217.14	164.32	168.15	168.15	169.69	0.011250	5.50	221.44	72.12	1.00
Alignment - (1)	230	Tr=100 yr	1350.45	164.32	168.38	168.38	170.02	0.011044	5.68	237.95	72.71	1.00
Alignment - (1)	220	Tr=50 yr	1217.14	164.20	168.13	167.95	169.51	0.009355	5.20	234.11	72.32	0.92
Alignment - (1)	220	Tr=100 yr	1350.45	164.20	168.39	168.17	169.85	0.009033	5.34	252.95	72.99	0.92
Alignment - (1)	210	Tr=50 yr	1217.14	164.08	168.10	167.82	169.40	0.008512	5.05	241.17	72.65	0.88
Alignment - (1)	210	Tr=100 yr	1350.45	164.08	168.36	168.05	169.73	0.008290	5.18	260.50	73.33	0.88
Alignment - (1)	200	Tr=50 yr	1217.14	163.96	168.07		169.29	0.007684	4.89	249.09	73.06	0.85
Alignment - (1)	200	Tr=100 yr	1350.45	163.96	168.34		169.63	0.007451	5.02	268.86	73.76	0.84
Alignment - (1)	190	Tr=50 yr	1217.14	163.69	168.04		169.20	0.007062	4.77	255.27	72.92	0.81
Alignment - (1)	190	Tr=100 yr	1350.45	163.69	168.31		169.54	0.006871	4.90	275.35	73.71	0.81
Alignment - (1)	180	Tr=50 yr	1217.14	163.62	167.87	167.53	169.09	0.009606	5.27	230.78	71.96	0.94
Alignment - (1)	180	Tr=100 yr	1350.45	163.62	168.06	167.75	169.45	0.008356	5.23	258.36	72.81	0.89
Alignment - (1)	170	Tr=50 yr	1217.14	163.50	167.68	167.36	168.96	0.008318	5.01	242.80	72.79	0.88
Alignment - (1)	170	Tr=100 yr	1350.45	163.50	168.07		169.33	0.007368	4.97	271.83	75.50	0.84
Alignment - (1)	160	Tr=50 yr	1217.14	163.33	167.71		168.84	0.007194	4.72	257.94	75.90	0.82
Alignment - (1)	160	Tr=100 yr	1350.45	163.33	168.10		169.22	0.006367	4.69	288.08	77.94	0.78
Alignment - (1)	150	Tr=50 yr	1217.14	163.15	167.69		168.75	0.006269	4.57	266.48	73.85	0.77
Alignment - (1)	150	Tr=100 yr	1350.45	163.15	168.08		169.14	0.005612	4.57	295.41	75.06	0.74
Alignment - (1)	140	Tr=50 yr	1217.14	163.01	167.66		168.68	0.005712	4.47	272.36	72.47	0.74
Alignment - (1)	140	Tr=100 yr	1350.45	163.01	168.05		169.06	0.005182	4.49	300.80	73.72	0.71
Alignment - (1)	130	Tr=50 yr	1217.14	162.95	167.68		168.60	0.004837	4.25	286.15	72.45	0.68
Alignment - (1)	130	Tr=100 yr	1350.45	162.95	168.06		169.00	0.004453	4.29	314.45	73.57	0.66
Alignment - (1)	120	Tr=50 yr	1217.14	162.90	167.67		168.53	0.004316	4.11	296.01	72.47	0.65
Alignment - (1)	120	Tr=100 yr	1350.45	162.90	168.06		168.94	0.004010	4.16	324.38	73.56	0.63
Alignment - (1)	110	Tr=50 yr	1217.14	162.79	167.66		168.48	0.004006	4.03	302.53	72.32	0.63
Alignment - (1)	110	Tr=100 yr	1350.45	162.79	168.05		168.90	0.003746	4.08	330.76	73.47	0.61
Alignment - (1)	100	Tr=50 yr	1217.14	162.44	167.63		168.44	0.003836	3.99	305.17	71.61	0.62
Alignment - (1)	100	Tr=100 yr	1350.45	162.44	168.02		168.85	0.003598	4.05	333.44	72.83	0.60
Alignment - (1)	90	Tr=50 yr	1217.14	161.93	167.52		168.39	0.004073	4.13	294.76	68.33	0.63
Alignment - (1)	90	Tr=100 yr	1350.45	161.93	167.91		168.81	0.003861	4.20	321.58	69.67	0.62
Alignment - (1)	80	Tr=50 yr	1217.14	161.95	167.41		168.34	0.004372	4.27	285.01	66.21	0.66
Alignment - (1)	80	Tr=100 yr	1350.45	161.95	167.80		168.78	0.004140	4.34	311.03	67.50	0.65
Alignment - (1)	70	Tr=50 yr	1217.14	162.07	167.33		168.30	0.004530	4.36	279.95	64.90	0.67
Alignment - (1)	70	Tr=100 yr	1350.45	162.07	167.72		168.72	0.004281	4.42	306.50	66.02	0.66
Alignment - (1)	60	Tr=50 yr	1217.14	161.72	167.26		168.25	0.004644	4.41	276.02	63.61	0.68
Alignment - (1)	60	Tr=100 yr	1350.45	161.72	167.65		168.67	0.004417	4.49	301.01	64.81	0.66
Alignment - (1)	50	Tr=50 yr	1217.14	161.36	167.19		168.20	0.004651	4.45	273.66	62.06	0.68
Alignment - (1)	50	Tr=100 yr	1350.45	161.36	167.58		168.63	0.004421	4.53	297.85	62.87	0.67
Alignment - (1)	40	Tr=50 yr	1217.14	161.01	167.15		168.15	0.004429	4.43	274.68	59.55	0.66
Alignment - (1)	40	Tr=100 yr	1350.45	161.01	167.53		168.58	0.004310	4.54	297.73	61.07	0.66
Alignment - (1)	30	Tr=50 yr	1217.14	160.28	167.26		168.05	0.002857	3.87	314.34	59.61	0.54
Alignment - (1)	30	Tr=100 yr	1350.45	160.28	167.66		168.48	0.002664	4.00	337.29	61.20	0.54
Alignment - (1)	20	Tr=50 yr	1217.14	160.23	167.16		168.01	0.003165	4.07	299.11	56.51	0.56
Alignment - (1)	20	Tr=100 yr	1350.45	160.23	167.53		168.44	0.003206	4.22	320.19	57.77	0.57
Alignment - (1)	10	Tr=50 yr	1217.14	160.20	167.07		167.97	0.003477	4.20	289.66	54.25	0.58
Alignment - (1)	10	Tr=100 yr	1350.45	160.20	167.43		168.40	0.003352	4.37	309.17	55.32	0.59
Alignment - (1)	0	Tr=50 yr	1217.14	160.03	166.76	165.52	167.90	0.005002	4.74	256.78	52.54	0.69
Alignment - (1)	0	Tr=100 yr	1350.45	160.03	167.10	165.84	168.33	0.005001	4.91	274.90	53.02	0.69

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