

HEC-RAS Plan: Plan 01 River: ARIF Reach: ARIF

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
ARIF	21000	10%	24.00	133.57	134.83	134.83	135.12	0.028329	2.42	12.83	30.88	0.98
ARIF	21000	1%	60.00	133.57	135.34	135.32	135.81	0.022259	3.12	34.67	52.65	0.96
ARIF	20900	10%	24.00	132.02	133.51	133.15	133.65	0.007982	1.63	15.93	28.19	0.55
ARIF	20900	1%	60.00	132.02	134.06		134.35	0.009686	2.41	36.52	42.92	0.65
ARIF	20800	10%	24.00	131.65	132.51	132.35	132.64	0.012847	1.66	21.12	38.31	0.67
ARIF	20800	1%	60.00	131.65	132.99	132.73	133.25	0.012322	2.32	41.63	47.27	0.71
ARIF	20700	10%	24.00	128.86	130.41	130.41	130.78	0.028613	2.70	9.10	20.58	1.00
ARIF	20700	1%	60.00	128.86	131.04	131.04	131.59	0.022458	3.36	30.49	40.71	0.96
ARIF	20600	10%	24.00	127.66	129.33	128.80	129.40	0.003440	1.12	21.35	22.35	0.37
ARIF	20600	1%	60.00	127.66	129.82	129.27	129.99	0.006026	1.80	33.24	25.96	0.51
ARIF	20500	10%	24.00	127.44	128.47	128.43	128.64	0.025707	1.83	13.09	29.89	0.88
ARIF	20500	1%	60.00	127.44	129.08		129.24	0.009481	1.78	33.64	38.76	0.60
ARIF	20400	10%	24.00	125.16	126.87		127.08	0.010431	2.03	11.81	11.64	0.63
ARIF	20400	1%	60.00	125.16	127.39	127.33	127.88	0.019998	3.12	25.38	33.23	0.90
ARIF	20300	10%	24.00	124.49	125.64		125.82	0.015155	1.88	12.76	18.87	0.73
ARIF	20300	1%	60.00	124.49	126.44		126.60	0.007703	1.76	34.04	33.34	0.56
ARIF	20200	10%	24.00	122.80	124.62	124.28	124.78	0.007444	1.79	19.24	26.69	0.55
ARIF	20200	1%	60.00	122.80	125.08	124.90	125.55	0.014194	3.12	34.40	43.37	0.80
ARIF	20100	10%	24.00	123.04	124.15	123.85	124.19	0.004400	0.90	28.42	55.78	0.38
ARIF	20100	1%	60.00	123.04	124.48	124.13	124.58	0.005826	1.40	47.28	58.59	0.48
ARIF	20000	10%	24.00	121.87	123.00	123.00	123.21	0.036787	2.00	13.23	39.18	1.03
ARIF	20000	1%	60.00	121.87	123.51	123.33	123.71	0.013816	1.98	37.10	54.23	0.71
ARIF	19900	10%	24.00	119.86	121.61	121.14	121.75	0.006746	1.66	14.47	13.71	0.52
ARIF	19900	1%	60.00	119.86	122.32		122.59	0.009209	2.32	28.81	34.87	0.63
ARIF	19800	10%	24.00	119.23	120.96		121.07	0.006751	1.45	16.55	19.52	0.50
ARIF	19800	1%	60.00	119.23	121.64		121.81	0.006178	1.86	36.83	36.72	0.52
ARIF	19700	10%	24.00	118.48	120.38		120.47	0.005253	1.38	17.38	19.98	0.45
ARIF	19700	1%	60.00	118.48	120.95		121.16	0.006952	2.01	39.75	43.80	0.55
ARIF	19600	10%	24.00	118.44	119.57		119.70	0.012318	1.62	14.83	23.64	0.65
ARIF	19600	1%	60.00	118.44	120.16		120.35	0.009427	1.91	31.44	32.88	0.61
ARIF	19500	10%	24.00	117.72	118.90		118.97	0.004628	1.18	20.31	24.88	0.42
ARIF	19500	1%	60.00	117.72	119.45		119.60	0.005895	1.70	35.29	29.93	0.50
ARIF	19400	10%	24.00	117.20	118.35		118.42	0.006935	1.20	20.08	32.76	0.49
ARIF	19400	1%	60.00	117.20	118.81		118.95	0.006944	1.64	36.57	37.04	0.53
ARIF	19300	10%	24.00	116.68	117.68		117.75	0.006576	1.15	20.88	34.75	0.47
ARIF	19300	1%	60.00	116.68	118.13		118.26	0.006833	1.60	37.59	39.28	0.52
ARIF	19200	10%	24.00	115.81	117.15		117.20	0.004610	0.92	25.97	45.98	0.39
ARIF	19200	1%	60.00	115.81	117.53		117.62	0.005929	1.28	46.81	61.34	0.47
ARIF	19100	10%	24.00	115.56	116.04	116.04	116.18	0.037738	1.63	14.76	54.48	1.00
ARIF	19100	1%	60.00	115.56	116.31	116.27	116.51	0.026079	1.95	30.87	67.00	0.91
ARIF	19000	10%	24.00	113.10	114.56	114.24	114.64	0.005946	1.29	20.91	32.56	0.47
ARIF	19000	1%	60.00	113.10	115.03	114.65	115.23	0.007605	1.98	38.61	40.99	0.57
ARIF	18900	10%	24.00	112.15	113.23	113.23	113.46	0.032391	2.10	11.44	25.41	1.00
ARIF	18900	1%	60.00	112.15	113.65	113.60	113.98	0.023589	2.55	23.57	30.75	0.93
ARIF	18800	10%	24.00	111.33	112.58	112.11	112.62	0.002805	0.92	26.19	32.25	0.32
ARIF	18800	1%	60.00	111.33	113.22	112.47	113.30	0.002681	1.23	48.65	36.91	0.34
ARIF	18700	10%	24.00	110.71	112.10	111.79	112.21	0.006555	1.47	27.69	47.68	0.50
ARIF	18700	1%	60.00	110.71	112.60	112.26	112.84	0.009004	2.24	52.91	55.28	0.62
ARIF	18600	10%	24.00	110.21	111.29	111.09	111.40	0.010353	1.45	16.58	27.45	0.59
ARIF	18600	1%	60.00	110.21	111.74	111.49	111.91	0.009097	1.87	58.94	87.37	0.60
ARIF	18500	10%	24.00	108.61	109.92		110.12	0.016036	1.99	12.27	22.02	0.75
ARIF	18500	1%	60.00	108.61	110.54	110.32	110.85	0.012260	2.52	39.69	62.13	0.72
ARIF	18400	10%	24.00	107.18	108.65		108.83	0.010484	1.87	12.86	14.38	0.63
ARIF	18400	1%	60.00	107.18	109.25	108.99	109.61	0.012527	2.67	28.75	46.78	0.73
ARIF	18300	10%	24.00	106.86	107.83		107.93	0.007487	1.38	20.30	40.46	0.52
ARIF	18300	1%	60.00	106.86	108.27		108.48	0.009440	2.07	42.41	55.66	0.63

HEC-RAS Plan: Plan 01 River: ARIF Reach: ARIF (Continued)

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
ARIF	18200	10%	24.00	105.21	106.27	106.27	106.56	0.031302	2.40	10.02	17.70	1.02
ARIF	18200	1%	60.00	105.21	106.94	106.78	107.26	0.016232	2.51	26.84	40.46	0.80
ARIF	18100	10%	24.00	104.16	105.74	105.08	105.80	0.002760	1.08	22.24	20.93	0.33
ARIF	18100	1%	60.00	104.16	106.46		106.57	0.003269	1.52	47.91	48.10	0.39
ARIF	18000	10%	50.00	103.77	105.23	104.79	105.34	0.006040	1.45	34.53	38.15	0.49
ARIF	18000	1%	120.00	103.77	105.83	105.34	106.04	0.006933	2.03	59.00	43.29	0.56
ARIF	17900	10%	50.00	102.63	104.42	104.19	104.56	0.010229	1.66	30.10	39.98	0.61
ARIF	17900	1%	120.00	102.63	105.03	104.64	105.26	0.008829	2.15	55.93	45.21	0.62
ARIF	17800	10%	50.00	101.27	103.78	102.81	103.86	0.004875	1.29	38.81	42.98	0.43
ARIF	17800	1%	120.00	101.27	104.58	103.80	104.71	0.003402	1.58	76.79	50.64	0.40
ARIF	17700	10%	50.00	101.30	103.18	102.74	103.33	0.005824	1.72	47.45	51.01	0.50
ARIF	17700	1%	120.00	101.30	103.97	103.35	104.25	0.006171	2.42	89.75	56.46	0.55
ARIF	17600	10%	50.00	101.13	102.29	102.12	102.47	0.014076	1.93	44.29	59.94	0.72
ARIF	17600	1%	120.00	101.13	102.59	102.59	103.10	0.026940	3.28	62.83	63.59	1.04
ARIF	17500	10%	50.00	99.45	100.78		100.95	0.016532	1.79	28.16	50.01	0.75
ARIF	17500	1%	120.00	99.45	102.40	101.06	102.46	0.001128	1.09	128.52	73.65	0.24
ARIF	17400	10%	50.00	97.55	100.69		100.73	0.000653	0.83	81.67	56.98	0.18
ARIF	17400	1%	120.00	97.55	102.33		102.39	0.000530	1.10	183.55	69.18	0.18
ARIF	17300	10%	50.00	97.86	100.68		100.69	0.000168	0.46	140.20	79.06	0.10
ARIF	17300	1%	120.00	97.86	102.33		102.35	0.000161	0.64	306.45	121.79	0.10
ARIF	17200	10%	50.00	97.47	100.62		100.66	0.000641	0.86	58.20	24.81	0.18
ARIF	17200	1%	120.00	97.47	102.25		102.31	0.000791	1.07	111.92	40.16	0.20
ARIF	17100	10%	50.00	97.49	100.04		100.45	0.012112	2.85	17.57	10.41	0.70
ARIF	17100	1%	120.00	97.49	101.47		102.06	0.010870	3.40	35.26	14.44	0.70
ARIF	17000	10%	50.00	95.68	98.59		99.09	0.015226	3.13	15.95	9.12	0.76
ARIF	17000	1%	120.00	95.68	100.16		100.81	0.014473	3.57	33.64	15.51	0.77
ARIF	16900	10%	50.00	94.21	96.86	96.63	97.42	0.018130	3.31	15.11	9.40	0.83
ARIF	16900	1%	120.00	94.21	97.89	97.89	98.93	0.024293	4.51	26.62	13.04	1.01
ARIF	16800	10%	50.00	93.79	94.78	94.78	95.16	0.027235	2.74	18.26	23.95	1.00
ARIF	16800	1%	120.00	93.79	95.26	95.40	96.06	0.032615	3.96	30.29	25.93	1.17
ARIF	16700	10%	50.00	90.79	92.88	92.46	93.18	0.010049	2.44	20.49	14.23	0.65
ARIF	16700	1%	120.00	90.79	93.85	93.41	94.42	0.012090	3.33	36.04	17.80	0.75
ARIF	16600	10%	50.00	89.41	92.03		92.26	0.008111	2.13	23.48	17.26	0.58
ARIF	16600	1%	120.00	89.41	93.00		93.38	0.008085	2.76	48.95	34.45	0.62
ARIF	16500	10%	50.00	88.64	91.53	90.69	91.70	0.003784	1.87	42.33	42.83	0.42
ARIF	16500	1%	120.00	88.64	92.10	91.61	92.57	0.008067	3.23	105.52	82.27	0.64
ARIF	16400	10%	50.00	90.04	90.91	90.77	91.04	0.013695	1.66	33.62	63.49	0.68
ARIF	16400	1%	120.00	90.04	91.53	91.14	91.71	0.007366	1.92	74.99	68.95	0.56
ARIF	16300	10%	50.00	87.15	89.46	89.17	89.72	0.012654	2.43	58.95	80.01	0.71
ARIF	16300	1%	120.00	87.15	90.04	89.95	90.59	0.017576	3.65	109.50	92.57	0.89
ARIF	16200	10%	50.00	85.61	87.45	87.45	87.96	0.025265	3.15	16.66	21.81	0.99
ARIF	16200	1%	120.00	85.61	88.13	88.13	88.76	0.018760	3.81	103.02	105.05	0.93
ARIF	16100	10%	50.00	84.27	87.11	85.83	87.14	0.000812	0.90	129.07	85.44	0.20
ARIF	16100	1%	120.00	84.27	88.11	86.37	88.20	0.001140	1.40	216.92	89.28	0.26
ARIF	16000	10%	50.00	84.89	86.43	86.43	86.87	0.026429	2.94	16.99	19.27	1.00
ARIF	16000	1%	120.00	84.89	87.17	87.17	87.83	0.023024	3.61	33.23	24.91	1.00
ARIF	15900	10%	50.00	82.46	84.50	84.03	84.66	0.007212	1.77	28.30	26.35	0.54
ARIF	15900	1%	120.00	82.46	85.24	84.72	85.56	0.007235	2.50	53.37	41.29	0.59
ARIF	15800	10%	50.00	81.85	83.58		83.80	0.010187	2.15	42.58	60.10	0.65
ARIF	15800	1%	120.00	81.85	84.33		84.72	0.009744	2.90	90.33	67.56	0.69
ARIF	15700	10%	50.00	80.63	82.35	82.06	82.62	0.013879	2.30	22.56	33.55	0.74
ARIF	15700	1%	120.00	80.63	82.98	82.83	83.51	0.015265	3.24	53.63	53.31	0.83
ARIF	15600	10%	50.00	79.59	81.37		81.54	0.008189	1.83	27.96	35.47	0.57
ARIF	15600	1%	120.00	79.59	82.15		82.43	0.007122	2.34	73.34	64.34	0.58
ARIF	15500	10%	50.00	78.93	80.81		80.93	0.004515	1.56	47.11	47.77	0.44

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ARIF	15500	1%	120.00	78.93	81.50		81.77	0.005987	2.37	81.79	52.73	0.54
ARIF	15400	10%	50.00	78.73	79.90		80.12	0.018004	2.14	36.49	54.69	0.81
ARIF	15400	1%	120.00	78.73	80.43		80.82	0.016896	2.84	68.51	63.95	0.85
ARIF	15300	10%	50.00	77.75	79.22		79.29	0.004365	1.22	45.16	61.19	0.41
ARIF	15300	1%	120.00	77.75	79.79		79.95	0.004665	1.76	85.36	75.43	0.46
ARIF	15200	10%	50.00	77.31	78.48		78.62	0.011722	1.71	56.03	76.43	0.65
ARIF	15200	1%	120.00	77.31	79.07		79.30	0.009275	2.27	101.75	81.76	0.64
ARIF	15100	10%	50.00	76.46	77.73		77.83	0.005573	1.43	47.97	60.70	0.47
ARIF	15100	1%	120.00	76.46	78.57		78.73	0.003659	1.78	115.04	88.17	0.42
ARIF	15000	10%	50.00	75.05	77.16		77.30	0.005097	1.65	54.17	83.62	0.47
ARIF	15000	1%	120.00	75.05	78.17		78.36	0.003582	2.05	143.98	93.10	0.43
ARIF	14900	10%	50.00	74.63	76.88		76.95	0.002337	1.19	67.79	89.03	0.32
ARIF	14900	1%	120.00	74.63	77.99		78.10	0.001672	1.49	173.22	103.35	0.30
ARIF	14800	10%	50.00	74.03	76.78		76.81	0.000768	0.86	128.68	108.13	0.20
ARIF	14800	1%	120.00	74.03	77.90		77.97	0.000881	1.25	269.83	136.20	0.23
ARIF	14700	10%	50.00	73.49	76.74		76.76	0.000308	0.58	165.83	117.18	0.12
ARIF	14700	1%	120.00	73.49	77.86		77.90	0.000420	0.89	303.75	132.70	0.16
ARIF	14600	10%	50.00	72.53	76.71		76.73	0.000328	0.69	213.64	128.70	0.13
ARIF	14600	1%	120.00	72.53	77.80		77.85	0.000572	1.14	361.13	144.34	0.18
ARIF	14500	10%	50.00	71.37	76.70		76.71	0.000057	0.37	351.82	171.67	0.06
ARIF	14500	1%	120.00	71.37	77.80		77.82	0.000133	0.67	548.89	187.53	0.09
ARIF	14400	10%	50.00	70.55	76.70		76.70	0.000071	0.48	469.71	143.40	0.07
ARIF	14400	1%	120.00	70.55	77.77		77.80	0.000196	0.91	626.93	150.07	0.12
ARIF	14300	10%	50.00	74.24	76.13	76.13	76.63	0.026126	3.14	15.92	15.98	1.00
ARIF	14300	1%	120.00	74.24	76.96	76.96	77.67	0.023400	3.71	32.33	23.24	1.00
ARIF	14200	10%	50.00	69.75	72.31	71.94	72.59	0.008101	2.48	54.62	57.66	0.60
ARIF	14200	1%	120.00	69.75	73.30	72.82	73.82	0.009030	3.53	128.02	95.42	0.68
ARIF	14100	10%	50.00	69.12	71.49		71.77	0.008235	2.40	45.62	55.49	0.61
ARIF	14100	1%	120.00	69.12	72.38	72.02	72.90	0.009375	3.44	112.72	94.37	0.70
ARIF	14000	10%	50.00	68.86	70.71	70.36	70.93	0.008196	2.20	55.71	71.28	0.60
ARIF	14000	1%	120.00	68.86	71.37	71.12	71.87	0.011255	3.35	113.40	102.76	0.75
ARIF	13900	10%	50.00	68.50	70.07		70.20	0.006210	1.60	42.71	77.07	0.50
ARIF	13900	1%	120.00	68.50	70.76		70.99	0.005939	2.20	112.53	121.39	0.54
ARIF	13800	10%	50.00	67.33	69.44		69.58	0.006151	1.69	53.14	107.47	0.50
ARIF	13800	1%	120.00	67.33	70.19		70.42	0.005494	2.24	165.81	197.81	0.52
ARIF	13700	10%	50.00	66.51	68.67	68.18	68.89	0.007594	2.09	31.12	83.50	0.57
ARIF	13700	1%	120.00	66.51	69.51	69.14	69.81	0.006509	2.66	176.08	204.37	0.57
ARIF	13600	10%	50.00	65.82	68.04		68.22	0.005721	1.99	75.75	139.68	0.51
ARIF	13600	1%	120.00	65.82	69.05		69.27	0.004213	2.39	218.28	143.15	0.48
ARIF	13500	10%	50.00	65.09	67.40	66.79	67.63	0.006025	2.12	34.06	61.06	0.52
ARIF	13500	1%	120.00	65.09	68.42	67.81	68.77	0.005655	2.81	168.90	204.66	0.54
ARIF	13400	10%	50.00	64.05	66.75	66.20	66.99	0.006793	2.18	32.39	56.43	0.54
ARIF	13400	1%	120.00	64.05	67.65	67.17	68.10	0.007774	3.12	117.53	141.05	0.62
ARIF	13300	10%	50.00	63.92	66.22	65.69	66.36	0.005260	1.69	43.56	46.12	0.48
ARIF	13300	1%	120.00	63.92	67.29	66.33	67.51	0.003740	2.13	121.14	102.17	0.44
ARIF	13200	10%	50.00	62.96	65.68		65.87	0.004601	1.95	40.91	50.60	0.46
ARIF	13200	1%	120.00	62.96	66.67		67.04	0.005465	2.83	113.71	91.02	0.54
ARIF	13100	10%	50.00	62.89	65.17	64.60	65.37	0.005486	2.02	49.83	59.31	0.50
ARIF	13100	1%	120.00	62.89	66.03	65.43	66.43	0.006778	2.98	124.82	111.62	0.60
ARIF	13000	10%	50.00	62.52	64.36		64.62	0.010541	2.26	28.21	38.84	0.67
ARIF	13000	1%	120.00	62.52	65.22	64.83	65.66	0.008893	3.00	91.93	133.77	0.67
ARIF	12900	10%	50.00	61.85	63.89	63.17	64.00	0.003614	1.52	51.12	82.74	0.40
ARIF	12900	1%	120.00	61.85	64.94	63.93	65.12	0.002826	1.94	162.74	123.44	0.39
ARIF	12800	10%	50.00	61.11	63.58	62.65	63.69	0.002718	1.52	57.33	89.91	0.36
ARIF	12800	1%	120.00	61.11	64.62	63.47	64.83	0.002872	2.12	195.18	262.88	0.40

HEC-RAS Plan: Plan 01 River: ARIF Reach: ARIF (Continued)

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
ARIF	12700	10%	50.00	61.09	63.20		63.35	0.004250	1.76	59.29	74.62	0.45
ARIF	12700	1%	120.00	61.09	64.23		64.49	0.003997	2.39	147.80	116.79	0.47
ARIF	12600	10%	50.00	60.05	62.60	62.12	62.82	0.006479	2.16	50.15	72.62	0.54
ARIF	12600	1%	120.00	60.05	63.66	62.98	64.01	0.005668	2.82	145.06	103.68	0.55
ARIF	12500	10%	50.00	59.50	62.15	61.45	62.30	0.003949	1.83	66.53	61.91	0.43
ARIF	12500	1%	120.00	59.50	63.18	62.24	63.48	0.004627	2.66	138.06	79.40	0.50
ARIF	12400	10%	50.00	58.82	61.85	60.87	61.98	0.002600	1.61	69.39	92.40	0.36
ARIF	12400	1%	120.00	58.82	62.90	61.71	63.09	0.002837	2.20	236.35	181.57	0.40
ARIF	12300	10%	50.00	58.61	61.44		61.63	0.004552	2.12	102.78	158.62	0.46
ARIF	12300	1%	120.00	58.61	62.55		62.76	0.003857	2.56	300.24	198.72	0.45
ARIF	12200	10%	50.00	58.06	61.20		61.29	0.002210	1.55	157.82	168.59	0.33
ARIF	12200	1%	120.00	58.06	62.32		62.45	0.002233	2.04	367.76	208.23	0.35
ARIF	12100	10%	50.00	57.53	60.98		61.07	0.002169	1.46	135.87	147.83	0.32
ARIF	12100	1%	120.00	57.53	62.08		62.22	0.002289	1.98	318.94	197.62	0.35
ARIF	12000	10%	50.00	58.17	60.74		60.83	0.002781	1.35	49.43	60.29	0.35
ARIF	12000	1%	120.00	58.17	61.84		61.99	0.002341	1.79	127.07	81.13	0.35
ARIF	11900	10%	50.00	57.02	60.65	59.21	60.69	0.000711	0.85	74.95	60.35	0.19
ARIF	11900	1%	120.00	57.02	61.75	59.81	61.83	0.000928	1.29	182.57	136.22	0.23
ARIF	11800	10%	50.00	56.64	60.62		60.64	0.000260	0.67	149.91	93.70	0.12
ARIF	11800	1%	120.00	56.64	61.70		61.76	0.000509	1.14	280.15	145.28	0.18
ARIF	11700	10%	50.00	56.88	60.49	59.04	60.58	0.001839	1.33	40.19	26.31	0.29
ARIF	11700	1%	120.00	56.88	61.40	60.03	61.63	0.003190	2.18	74.29	64.62	0.41
ARIF	11600	10%	50.00	56.51	60.17	59.11	60.30	0.004519	1.63	30.67	21.15	0.43
ARIF	11600	1%	120.00	56.51	60.35	60.20	60.96	0.017811	3.48	34.60	21.88	0.87
ARIF	11500	10%	50.00	55.62	58.54	58.54	59.31	0.028437	3.89	12.86	8.39	1.00
ARIF	11500	1%	120.00	55.62	59.78	59.78	59.89	0.005581	2.15	309.87	162.66	0.48
ARIF	11400	10%	50.00	55.05	57.46	57.06	57.65	0.007285	2.11	76.73	75.68	0.55
ARIF	11400	1%	120.00	55.05	58.43	57.74	58.75	0.006894	2.87	158.82	92.53	0.59
ARIF	11300	10%	50.00	53.76	56.56	56.21	56.82	0.009369	2.27	29.70	36.02	0.62
ARIF	11300	1%	120.00	53.76	57.44	57.02	57.93	0.009465	3.18	74.83	63.93	0.68
ARIF	11200	10%	50.00	53.48	55.82	55.23	56.04	0.006431	2.10	27.57	64.41	0.53
ARIF	11200	1%	120.00	53.48	56.75	56.14	57.12	0.006395	2.86	110.88	81.80	0.58
ARIF	11100	10%	50.00	52.93	55.51	54.49	55.62	0.002572	1.52	40.50	34.07	0.35
ARIF	11100	1%	120.00	52.93	56.39	55.33	56.62	0.003395	2.25	166.37	169.30	0.43
ARIF	11000	10%	50.00	52.45	55.18	54.28	55.32	0.003429	1.74	83.59	177.53	0.40
ARIF	11000	1%	120.00	52.45	56.10	55.39	56.28	0.003220	2.19	307.51	241.90	0.41
ARIF	10900	10%	50.00	52.32	54.68	54.15	54.88	0.005801	2.03	41.55	46.17	0.51
ARIF	10900	1%	120.00	52.32	55.74	54.98	55.93	0.003671	2.27	276.52	231.79	0.45
ARIF	10800	10%	50.00	51.74	54.45	53.51	54.53	0.001921	1.26	56.14	44.54	0.30
ARIF	10800	1%	120.00	51.74	55.53	54.16	55.66	0.001837	1.70	188.13	104.03	0.32
ARIF	10700	10%	50.00	51.27	54.02		54.22	0.005243	2.07	62.93	84.27	0.49
ARIF	10700	1%	120.00	51.27	55.00		55.34	0.005567	2.85	180.47	155.44	0.55
ARIF	10600	10%	50.00	50.95	53.61	52.87	53.76	0.003831	1.78	55.53	76.47	0.43
ARIF	10600	1%	120.00	50.95	54.63	53.70	54.86	0.003695	2.36	203.56	171.17	0.45
ARIF	10500	10%	50.00	50.62	53.22	52.52	53.37	0.003896	1.78	67.36	98.33	0.43
ARIF	10500	1%	120.00	50.62	54.24	53.40	54.48	0.003910	2.42	202.13	168.78	0.46
ARIF	10400	10%	50.00	50.09	52.93	52.05	53.04	0.002679	1.51	65.77	90.08	0.36
ARIF	10400	1%	120.00	50.09	53.91	52.86	54.12	0.003097	2.16	174.29	135.98	0.41
ARIF	10300	10%	50.00	49.82	52.61		52.74	0.003315	1.80	135.11	178.27	0.40
ARIF	10300	1%	120.00	49.82	53.64		53.80	0.003074	2.27	327.78	197.02	0.41
ARIF	10200	10%	50.00	49.56	52.34	51.40	52.45	0.002480	1.64	140.98	208.06	0.35
ARIF	10200	1%	120.00	49.56	53.40	52.44	53.53	0.002261	2.03	406.42	278.83	0.36
ARIF	10100	10%	50.00	48.94	51.88	51.12	52.10	0.004843	2.13	36.83	31.20	0.48
ARIF	10100	1%	120.00	48.94	52.80	52.17	53.17	0.005700	2.96	150.59	98.12	0.55
ARIF	10000	10%	50.00	48.62	51.52	50.78	51.67	0.003594	1.85	100.34	132.76	0.42
ARIF	10000	1%	120.00	48.62	52.42	51.70	52.65	0.004099	2.53	305.03	286.60	0.47

HEC-RAS Plan: Plan 01 River: ARIF Reach: ARIF (Continued)

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
ARIF	9900	10%	50.00	48.29	51.16	50.50	51.28	0.003908	1.73	92.64	92.26	0.42
ARIF	9900	1%	120.00	48.29	52.11	51.21	52.26	0.003175	2.10	347.62	272.76	0.41
ARIF	9800	10%	50.00	48.06	50.81	50.05	50.94	0.003116	1.73	124.04	184.86	0.39
ARIF	9800	1%	120.00	48.06	51.80	50.94	51.96	0.002852	2.17	377.33	290.10	0.40
ARIF	9700	10%	50.00	47.69	50.47	49.85	50.60	0.003658	1.83	131.26	156.72	0.42
ARIF	9700	1%	120.00	47.69	51.45	50.62	51.64	0.003651	2.40	296.72	178.16	0.45
ARIF	9603.4	10%	50.00	47.25	50.08	49.24	50.25	0.003563	1.93	85.58	126.61	0.42
ARIF	9603.4	1%	120.00	47.25	51.10	50.35	51.30	0.003272	2.40	326.35	255.34	0.43
ARIF	9500	10%	50.00	46.78	49.74	49.01	49.88	0.003380	1.86	127.60	159.54	0.40
ARIF	9500	1%	120.00	46.78	50.78	49.89	50.96	0.003214	2.36	392.47	323.45	0.42
ARIF	9398.26	10%	50.00	46.54	49.44	48.68	49.56	0.002843	1.66	132.94	153.52	0.37
ARIF	9398.26	1%	120.00	46.54	50.49	49.35	50.65	0.002808	2.17	339.86	224.86	0.39
ARIF	9300	10%	50.00	46.20	48.98	48.42	49.18	0.004953	2.25	106.71	121.52	0.48
ARIF	9300	1%	120.00	46.20	49.94	49.23	50.25	0.005795	3.10	259.27	185.78	0.56
ARIF	9200	10%	50.00	46.00	48.65	47.96	48.76	0.003274	1.59	112.88	122.67	0.39
ARIF	9200	1%	120.00	46.00	49.56	48.44	49.75	0.003759	2.27	254.02	194.58	0.45
ARIF	9100	10%	50.00	45.50	48.26	47.61	48.40	0.003865	1.84	112.29	151.09	0.42
ARIF	9100	1%	120.00	45.50	49.20	48.42	49.38	0.003681	2.34	353.20	339.81	0.44
ARIF	9000	10%	50.00	44.99	48.00	47.30	48.08	0.002400	1.52	231.55	294.20	0.34
ARIF	9000	1%	120.00	44.99	49.00	48.02	49.08	0.002016	1.80	562.56	375.96	0.33
ARIF	8900	10%	50.00	44.92	47.74	47.10	47.83	0.002607	1.56	180.29	190.93	0.35
ARIF	8900	1%	120.00	44.92	48.72	47.72	48.85	0.002660	2.06	371.79	200.14	0.38
ARIF	8800	10%	50.00	44.59	47.32	46.64	47.49	0.004378	1.90	80.75	123.42	0.45
ARIF	8800	1%	120.00	44.59	48.19	47.56	48.47	0.005124	2.66	197.40	148.65	0.52
ARIF	8700	10%	50.00	43.93	46.95	46.12	47.08	0.003615	1.67	87.99	142.83	0.40
ARIF	8700	1%	120.00	43.93	47.90	47.02	48.05	0.002984	2.02	369.29	348.60	0.39
ARIF	8600	10%	50.00	43.93	46.56	45.88	46.71	0.003787	1.88	134.83	235.02	0.42
ARIF	8600	1%	120.00	43.93	47.63	46.83	47.76	0.002700	2.11	455.83	378.61	0.38
ARIF	8500	10%	50.00	43.54	46.19	45.48	46.33	0.003754	1.71	66.47	88.97	0.42
ARIF	8500	1%	120.00	43.54	47.20	46.30	47.43	0.003704	2.32	170.82	135.30	0.45
ARIF	8400	10%	50.00	43.25	45.99	45.11	46.05	0.001795	1.27	175.59	191.67	0.30
ARIF	8400	1%	120.00	43.25	47.07	45.79	47.16	0.001638	1.64	430.07	264.18	0.30
ARIF	8300	10%	50.00	42.88	45.37	45.00	45.69	0.008377	2.57	45.03	72.07	0.62
ARIF	8300	1%	120.00	42.88	46.38	45.98	46.81	0.007626	3.30	169.97	148.53	0.63
ARIF	8200	10%	50.00	42.19	44.90		45.06	0.004292	1.76	38.59	77.21	0.44
ARIF	8200	1%	120.00	42.19	46.06		46.27	0.003249	2.19	173.20	147.99	0.42
ARIF	8100	10%	50.00	41.76	44.71		44.78	0.001652	1.23	53.40	62.15	0.28
ARIF	8100	1%	120.00	41.76	45.88		46.02	0.001717	1.72	167.99	131.44	0.31
ARIF	8000	10%	50.00	41.71	44.53	43.53	44.61	0.001895	1.29	77.97	87.04	0.30
ARIF	8000	1%	120.00	41.71	45.70	44.26	45.84	0.001809	1.75	205.92	131.52	0.32
ARIF	7900	10%	50.00	41.35	44.35		44.43	0.001623	1.29	77.59	75.43	0.28
ARIF	7900	1%	120.00	41.35	45.51		45.66	0.001839	1.84	200.11	134.93	0.33
ARIF	7800	10%	50.00	41.16	44.21		44.28	0.001373	1.20	82.06	105.74	0.26
ARIF	7800	1%	120.00	41.16	45.35		45.48	0.001545	1.70	253.75	231.72	0.30
ARIF	7700	10%	50.00	41.22	44.05	43.01	44.13	0.001672	1.25	97.31	129.01	0.29
ARIF	7700	1%	120.00	41.22	45.21	43.81	45.32	0.001579	1.66	308.02	242.43	0.30
ARIF	7600	10%	50.00	40.89	43.88	42.80	43.96	0.001687	1.29	99.07	126.86	0.29
ARIF	7600	1%	120.00	40.89	45.05	43.63	45.16	0.001601	1.70	312.94	226.37	0.30
ARIF	7500	10%	50.00	40.70	43.74	42.38	43.81	0.001294	1.25	95.34	120.13	0.26
ARIF	7500	1%	120.00	40.70	44.90	43.24	45.01	0.001397	1.70	347.49	263.20	0.29
ARIF	7400	10%	50.00	40.72	43.48	42.54	43.62	0.002883	1.69	63.60	97.38	0.38
ARIF	7400	1%	120.00	40.72	44.73	43.51	44.85	0.001842	1.85	381.56	259.12	0.33
ARIF	7300	10%	50.00	40.61	43.32	42.22	43.39	0.001547	1.18	60.78	57.17	0.28
ARIF	7300	1%	120.00	40.61	44.62	42.91	44.70	0.001104	1.42	341.96	241.14	0.25
ARIF	7200	10%	50.00	40.34	43.21	41.99	43.25	0.001153	0.94	61.98	51.57	0.23

HEC-RAS Plan: Plan 01 River: ARIF Reach: ARIF (Continued)

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
ARIF	7200	1%	120.00	40.34	44.58	42.69	44.61	0.000540	0.96	494.71	254.84	0.18
ARIF	7100	10%	50.00	39.39	43.17	40.92	43.19	0.000344	0.66	97.48	101.97	0.13
ARIF	7100	1%	120.00	39.39	44.52	41.67	44.57	0.000403	0.96	281.85	175.07	0.16
ARIF	7000	10%	90.00	39.33	43.05	41.31	43.12	0.001060	1.21	133.38	117.53	0.24
ARIF	7000	1%	200.00	39.33	44.36	42.23	44.49	0.001134	1.65	429.06	326.15	0.27
ARIF	6900	10%	90.00	39.15	42.93	41.20	43.01	0.001142	1.29	150.65	145.56	0.25
ARIF	6900	1%	200.00	39.15	44.22	42.11	44.36	0.001299	1.78	423.95	285.33	0.28
ARIF	6800	10%	90.00	39.10	42.82	41.18	42.89	0.001125	1.28	204.48	185.74	0.25
ARIF	6800	1%	200.00	39.10	44.11	42.12	44.23	0.001188	1.70	520.19	304.84	0.27
ARIF	6700	10%	90.00	39.08	42.74	40.84	42.79	0.000796	1.12	221.72	155.27	0.21
ARIF	6700	1%	200.00	39.08	44.01	41.77	44.12	0.001005	1.61	446.37	204.08	0.25
ARIF	6600	10%	90.00	38.70	42.69	40.90	42.72	0.000596	0.87	388.49	227.15	0.18
ARIF	6600	1%	200.00	38.70	43.97	41.76	44.02	0.000626	1.18	697.16	253.93	0.19
ARIF	6500	10%	90.00	38.72	42.57	40.71	42.63	0.001047	1.13	79.57	33.30	0.23
ARIF	6500	1%	200.00	38.72	43.79	41.55	43.93	0.001427	1.62	128.94	49.43	0.29
ARIF	6400	10%	90.00	38.62	42.47	40.59	42.53	0.001040	1.13	79.69	33.28	0.23
ARIF	6400	1%	200.00	38.62	43.66	41.46	43.78	0.001401	1.60	212.88	224.20	0.28
ARIF	6300	10%	90.00	38.62	42.35	40.72	42.42	0.001194	1.16	78.51	39.57	0.25
ARIF	6300	1%	200.00	38.62	43.55	41.53	43.65	0.001119	1.50	462.00	400.00	0.26
ARIF	6200	10%	90.00	38.50	42.22	40.49	42.29	0.001279	1.19	75.32	33.71	0.26
ARIF	6200	1%	200.00	38.50	43.41	41.32	43.53	0.001288	1.59	325.64	219.74	0.27
ARIF	6100	10%	90.00	38.54	42.08	40.37	42.17	0.001245	1.28	100.97	122.87	0.26
ARIF	6100	1%	200.00	38.54	43.28	41.25	43.40	0.001289	1.68	467.72	380.81	0.28
ARIF	6000	10%	90.00	38.38	41.94	40.21	42.03	0.001608	1.31	70.17	53.78	0.28
ARIF	6000	1%	200.00	38.38	43.14	41.13	43.26	0.001442	1.64	392.10	293.16	0.29
ARIF	5900	10%	90.00	38.16	41.68	40.29	41.83	0.002364	1.68	60.28	76.77	0.35
ARIF	5900	1%	200.00	38.16	42.85	41.31	43.07	0.002431	2.22	349.28	349.98	0.38
ARIF	5800	10%	90.00	38.24	41.30	40.30	41.51	0.004176	2.02	44.45	21.37	0.45
ARIF	5800	1%	200.00	38.24	42.45	41.29	42.75	0.004148	2.55	230.55	223.74	0.47
ARIF	5700	10%	90.00	38.20	40.95	39.99	41.10	0.003742	1.73	51.96	29.97	0.42
ARIF	5700	1%	200.00	38.20	42.11	40.86	42.36	0.003313	2.23	108.64	65.20	0.43
ARIF	5600	10%	90.00	37.77	39.62	39.62	40.29	0.023269	3.63	24.82	18.51	1.00
ARIF	5600	1%	200.00	37.77	40.61	40.61	41.61	0.020662	4.43	45.12	22.43	1.00
ARIF	5500	10%	90.00	36.04	39.44	37.36	39.47	0.000458	0.77	117.58	47.95	0.16
ARIF	5500	1%	200.00	36.04	40.73	37.99	40.79	0.000626	1.09	182.84	54.81	0.19
ARIF	5400	10%	90.00	36.00	39.26	37.98	39.37	0.002597	1.51	59.64	32.17	0.35
ARIF	5400	1%	200.00	36.00	40.48	38.91	40.66	0.002933	1.88	106.67	47.01	0.39
ARIF	5300	10%	90.00	35.70	39.01	37.69	39.13	0.002274	1.50	59.87	29.26	0.34
ARIF	5300	1%	200.00	35.70	40.16	38.59	40.38	0.002700	2.08	100.77	49.38	0.39
ARIF	5200	10%	90.00	35.54	38.77	37.42	38.89	0.002469	1.56	57.83	28.46	0.35
ARIF	5200	1%	200.00	35.54	39.91	38.38	40.11	0.002626	2.03	214.25	220.12	0.38
ARIF	5100	10%	90.00	35.26	38.48	37.33	38.63	0.002842	1.68	61.69	44.20	0.38
ARIF	5100	1%	200.00	35.26	39.57	38.28	39.82	0.002985	2.29	227.69	231.26	0.41
ARIF	5000	10%	90.00	35.22	38.01	37.27	38.21	0.006199	2.01	44.86	30.56	0.53
ARIF	5000	1%	200.00	35.22	39.17	38.20	39.46	0.004311	2.39	99.78	72.54	0.48
ARIF	4900	10%	90.00	34.01	37.97	35.68	38.02	0.000625	0.98	93.43	45.29	0.19
ARIF	4900	1%	200.00	34.01	39.11	36.53	39.23	0.001000	1.55	152.82	58.58	0.25
ARIF	4800	10%	90.00	34.16	37.90	35.76	37.95	0.000845	0.98	92.24	40.97	0.21
ARIF	4800	1%	200.00	34.16	39.03	36.63	39.12	0.001008	1.39	285.78	252.85	0.24
ARIF	4700	10%	90.00	33.89	37.83	35.64	37.88	0.000623	1.02	103.68	56.89	0.19
ARIF	4700	1%	200.00	33.89	38.88	36.48	39.01	0.001060	1.62	222.16	152.01	0.26
ARIF	4600	10%	90.00	33.85	37.76	35.51	37.82	0.000644	1.01	97.72	50.46	0.19
ARIF	4600	1%	200.00	33.85	38.77	36.38	38.90	0.001155	1.65	154.57	62.66	0.27
ARIF	4500	10%	90.00	33.96	37.68	35.56	37.74	0.000808	1.09	84.29	44.18	0.21
ARIF	4500	1%	200.00	33.96	38.63	36.44	38.77	0.001399	1.74	235.48	229.58	0.29

HEC-RAS Plan: Plan 01 River: ARIF Reach: ARIF (Continued)

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
ARIF	4400	10%	90.00	33.82	37.52	35.78	37.63	0.001550	1.45	72.83	47.28	0.29
ARIF	4400	1%	200.00	33.82	38.34	36.84	38.58	0.002655	2.27	254.43	233.33	0.39
ARIF	4300	10%	90.00	33.28	37.21	35.97	37.40	0.003397	1.94	55.04	54.32	0.41
ARIF	4300	1%	200.00	33.28	37.98	37.10	38.25	0.004123	2.59	397.20	393.65	0.47
ARIF	4200	10%	90.00	32.98	36.99	35.69	37.10	0.002222	1.63	255.56	387.83	0.33
ARIF	4200	1%	200.00	32.98	37.66	36.66	37.85	0.003363	2.35	521.58	400.00	0.43
ARIF	4100	10%	90.00	32.86	35.82	35.70	36.55	0.019221	3.79	23.84	14.18	0.91
ARIF	4100	1%	200.00	32.86	36.74	36.74	37.26	0.011172	3.83	356.69	391.23	0.74
ARIF	4000	10%	90.00	32.73	34.74	34.40	35.02	0.010495	2.38	37.87	29.49	0.67
ARIF	4000	1%	200.00	32.73	35.98	35.17	36.31	0.005352	2.55	85.68	44.98	0.53
ARIF	3900	10%	90.00	30.64	34.56	32.70	34.66	0.001446	1.35	66.47	26.16	0.27
ARIF	3900	1%	200.00	30.64	35.76	33.65	35.97	0.001967	2.03	111.75	47.88	0.34
ARIF	3800	10%	90.00	30.44	34.45	32.42	34.53	0.001122	1.19	75.44	30.34	0.24
ARIF	3800	1%	200.00	30.44	35.63	33.38	35.78	0.001493	1.74	203.04	312.20	0.30
ARIF	3700	10%	90.00	30.25	34.31	32.57	34.40	0.001373	1.30	71.91	38.82	0.26
ARIF	3700	1%	200.00	30.25	35.45	33.50	35.62	0.001720	1.88	288.06	396.87	0.32
ARIF	3600	10%	90.00	30.41	34.19	32.37	34.27	0.001231	1.23	75.01	41.99	0.25
ARIF	3600	1%	200.00	30.41	35.28	33.28	35.45	0.001700	1.85	200.46	240.90	0.32
ARIF	3500	10%	90.00	30.22	34.05	32.35	34.13	0.001451	1.29	70.35	36.53	0.27
ARIF	3500	1%	200.00	30.22	35.13	33.23	35.27	0.001627	1.74	381.51	400.00	0.30
ARIF	3400	10%	90.00	30.17	33.83	32.27	33.95	0.002234	1.57	57.40	25.59	0.33
ARIF	3400	1%	200.00	30.17	34.88	33.33	35.07	0.002359	2.07	383.79	400.00	0.36
ARIF	3300	10%	90.00	30.01	33.60	32.24	33.72	0.002352	1.53	58.67	28.56	0.34
ARIF	3300	1%	200.00	30.01	34.65	33.17	34.84	0.002394	2.03	330.15	337.99	0.37
ARIF	3200	10%	90.00	29.78	33.28	32.17	33.44	0.003431	1.77	50.86	26.31	0.41
ARIF	3200	1%	200.00	29.78	34.29	33.13	34.54	0.003526	2.31	270.19	354.97	0.44
ARIF	3100	10%	90.00	29.94	32.07	32.04	32.68	0.022007	3.46	25.99	19.96	0.97
ARIF	3100	1%	200.00	29.94	33.55	33.07	34.00	0.008597	2.98	105.40	178.33	0.66
ARIF	3000	10%	90.00	28.01	32.17	30.21	32.24	0.001041	1.14	79.21	32.60	0.23
ARIF	3000	1%	200.00	28.01	33.52	31.12	33.64	0.001238	1.55	196.47	258.58	0.27
ARIF	2900	10%	90.00	27.94	32.06	30.25	32.13	0.001128	1.16	77.44	32.65	0.24
ARIF	2900	1%	200.00	27.94	33.40	31.11	33.51	0.001296	1.49	226.20	288.89	0.27
ARIF	2800	10%	90.00	27.75	31.94	30.08	32.01	0.001179	1.15	78.29	34.93	0.25
ARIF	2800	1%	200.00	27.75	33.26	30.99	33.38	0.001222	1.55	209.54	287.67	0.27
ARIF	2700	10%	90.00	27.61	31.86	29.80	31.91	0.000815	1.03	87.42	34.85	0.21
ARIF	2700	1%	200.00	27.61	33.17	30.64	33.27	0.000962	1.44	282.72	389.87	0.24
ARIF	2600	10%	90.00	27.36	31.78	29.59	31.83	0.000777	1.03	87.23	33.16	0.20
ARIF	2600	1%	200.00	27.36	33.07	30.45	33.17	0.000931	1.44	346.86	395.30	0.24
ARIF	2500	10%	90.00	27.42	31.69	29.59	31.75	0.000864	1.06	85.26	34.12	0.21
ARIF	2500	1%	200.00	27.42	33.00	30.48	33.08	0.000839	1.37	471.94	397.11	0.22
ARIF	2400	10%	90.00	27.34	31.60	29.52	31.66	0.000906	1.11	80.79	30.88	0.22
ARIF	2400	1%	200.00	27.34	32.84	30.41	32.98	0.001203	1.66	190.28	205.40	0.27
ARIF	2300	10%	90.00	27.40	31.49	29.59	31.56	0.001060	1.16	77.79	31.48	0.23
ARIF	2300	1%	200.00	27.40	32.71	30.46	32.85	0.001327	1.67	211.27	267.40	0.28
ARIF	2200	10%	90.00	27.17	31.37	29.51	31.45	0.001221	1.21	74.36	31.04	0.25
ARIF	2200	1%	200.00	27.17	32.54	30.43	32.70	0.001613	1.77	131.69	75.05	0.30
ARIF	2100	10%	90.00	27.18	31.21	29.55	31.31	0.001564	1.36	66.47	31.32	0.28
ARIF	2100	1%	200.00	27.18	32.36	30.48	32.53	0.001822	1.91	272.47	240.06	0.32
ARIF	2000	10%	90.00	27.15	31.05	29.36	31.14	0.001776	1.37	66.85	35.80	0.30
ARIF	2000	1%	200.00	27.15	32.27	30.35	32.36	0.001213	1.51	603.64	400.00	0.26
ARIF	1900	10%	90.00	27.17	30.81	29.45	30.94	0.002197	1.58	58.29	35.59	0.33
ARIF	1900	1%	200.00	27.17	31.98	30.40	32.18	0.002256	2.11	282.39	220.23	0.36
ARIF	1800	10%	90.00	27.14	30.57	29.33	30.70	0.002628	1.62	55.61	26.93	0.36
ARIF	1800	1%	200.00	27.14	31.73	30.23	31.94	0.002627	2.08	223.37	190.13	0.38
ARIF	1700	10%	90.00	26.69	30.31	29.09	30.44	0.002640	1.58	56.88	28.36	0.36
ARIF	1700	1%	200.00	26.69	31.46	29.96	31.68	0.002616	2.10	219.18	250.83	0.38

HEC-RAS Plan: Plan 01 River: ARIF Reach: ARIF (Continued)

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
ARIF	1600	10%	90.00	26.78	29.17	29.17	29.79	0.024001	3.49	25.76	20.63	1.00
ARIF	1600	1%	200.00	26.78	30.64	30.08	31.19	0.009953	3.28	60.98	27.39	0.70
ARIF	1500	10%	90.00	25.20	29.06	26.99	29.15	0.001199	1.27	70.74	26.71	0.25
ARIF	1500	1%	200.00	25.20	30.61	27.99	30.76	0.001458	1.70	119.91	44.10	0.29
ARIF	1400	10%	90.00	25.03	28.96	27.14	29.04	0.000999	1.28	82.54	34.13	0.24
ARIF	1400	1%	200.00	25.03	30.45	27.94	30.62	0.001218	1.86	205.56	206.24	0.28
ARIF	1300	10%	90.00	24.85	28.85	27.08	28.92	0.001273	1.23	72.97	30.76	0.26
ARIF	1300	1%	200.00	24.85	30.36	27.96	30.49	0.001185	1.63	191.15	211.72	0.27
ARIF	1200	10%	90.00	24.63	28.74	26.84	28.80	0.001083	1.15	78.38	32.76	0.24
ARIF	1200	1%	200.00	24.63	30.27	27.74	30.38	0.001012	1.48	225.52	208.23	0.25
ARIF	1100	10%	90.00	24.50	28.62	26.94	28.69	0.001190	1.16	77.58	34.12	0.25
ARIF	1100	1%	200.00	24.50	30.16	27.75	30.27	0.001072	1.47	181.51	170.67	0.25
ARIF	1000	10%	90.00	24.38	28.49	26.65	28.57	0.001198	1.22	73.60	29.84	0.25
ARIF	1000	1%	200.00	24.38	30.02	27.56	30.15	0.001255	1.61	147.14	98.71	0.27
ARIF	900	10%	90.00	24.35	28.35	26.61	28.44	0.001450	1.34	67.25	27.33	0.27
ARIF	900	1%	200.00	24.35	29.85	27.54	30.01	0.001626	1.78	114.48	42.23	0.30
ARIF	800	10%	90.00	24.15	28.08	26.16	28.25	0.002397	1.80	50.48	22.53	0.33
ARIF	800	1%	200.00	24.15	29.39	27.41	29.76	0.003388	2.73	114.33	107.76	0.42
ARIF	700	10%	90.00	24.15	27.85	26.64	27.98	0.002728	1.63	55.19	26.94	0.36
ARIF	700	1%	200.00	24.15	29.18	27.54	29.40	0.002900	2.11	94.70	32.48	0.39
ARIF	600	10%	90.00	23.99	27.61	26.18	27.73	0.002269	1.56	57.74	26.16	0.33
ARIF	600	1%	200.00	23.99	28.89	27.15	29.12	0.002763	2.11	94.64	31.11	0.39
ARIF	500	10%	90.00	24.11	27.32	26.08	27.47	0.002973	1.72	52.33	25.31	0.38
ARIF	500	1%	200.00	24.11	28.53	27.06	28.80	0.003667	2.31	86.62	31.30	0.44
ARIF	400	10%	90.00	24.07	26.14	26.14	26.77	0.024178	3.51	25.61	20.38	1.00
ARIF	400	1%	200.00	24.07	27.09	27.09	28.00	0.021313	4.23	47.33	25.88	1.00
ARIF	300	10%	90.00	22.01	25.68	23.42	25.73	0.000750	1.03	87.44	32.27	0.20
ARIF	300	1%	200.00	22.01	26.95	24.29	27.07	0.001138	1.53	130.78	35.83	0.26
ARIF	200	10%	90.00	21.83	25.50	24.10	25.60	0.002344	1.44	80.85	85.64	0.34
ARIF	200	1%	200.00	21.83	26.75	25.09	26.91	0.001949	1.85	205.78	115.79	0.33
ARIF	100	10%	90.00	21.98	25.06	24.18	25.26	0.005002	2.03	44.43	24.90	0.48
ARIF	100	1%	200.00	21.98	26.27	25.16	26.60	0.005001	2.55	78.38	30.78	0.51