

Reach	River Sta	Profile	Q Total (m <sup>3</sup> /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 (m <sup>2</sup> )	Top Width (m)	Froude # Chl
Alignment - 1	5757.51	100Yr	49.00	29.49	31.16	30.59	31.17	0.000339	0.61	167.50	286.97	0.18
Alignment - 1	5757.51	10Yr	22.00	29.49	30.78	30.33	30.79	0.000486	0.56	69.17	194.90	0.20
Alignment - 1	5700	100Yr	49.00	28.86	30.83	30.67	31.10	0.005151	2.36	26.38	42.25	0.70
Alignment - 1	5700	10Yr	22.00	28.86	30.65	30.12	30.74	0.001840	1.30	19.54	33.41	0.41
Alignment - 1	5600	100Yr	49.00	29.38	30.65	30.46	30.67	0.002550	1.21	101.73	267.75	0.45
Alignment - 1	5600	10Yr	22.00	29.38	30.43	30.37	30.46	0.004093	1.22	46.98	216.09	0.54
Alignment - 1	5500	100Yr	49.00	28.88	30.47	30.24	30.50	0.001243	1.04	101.38	214.11	0.34
Alignment - 1	5500	10Yr	22.00	28.88	30.27	29.88	30.29	0.000893	0.79	59.26	196.00	0.28
Alignment - 1	5400	100Yr	49.00	29.49	30.20		30.24	0.008654	1.40	60.14	189.54	0.75
Alignment - 1	5400	10Yr	22.00	29.49	30.02	29.98	30.06	0.012724	1.41	28.13	172.59	0.87
Alignment - 1	5300	100Yr	49.00	28.65	29.99	29.66	30.01	0.000995	0.82	122.79	224.43	0.29
Alignment - 1	5300	10Yr	22.00	28.65	29.74	29.53	29.75	0.001339	0.74	65.79	219.74	0.32
Alignment - 1	5200	100Yr	49.00	29.04	29.91	29.51	29.92	0.000778	0.65	135.58	251.19	0.25
Alignment - 1	5200	10Yr	22.00	29.04	29.55	29.41	29.56	0.002793	0.75	51.76	210.64	0.42
Alignment - 1	5100	100Yr	49.00	27.23	29.21	29.21	29.68	0.011336	3.02	16.21	17.39	1.00
Alignment - 1	5100	10Yr	22.00	27.23	28.66	28.66	29.01	0.012460	2.65	8.31	11.64	1.00
Alignment - 1	4900	100Yr	49.00	26.57	28.68	27.66	28.74	0.000853	1.10	44.72	31.93	0.30
Alignment - 1	4900	10Yr	22.00	26.57	28.25	27.27	28.27	0.000419	0.68	32.12	27.25	0.20
Alignment - 1	4700	100Yr	49.00	25.87	28.59	28.15	28.60	0.000441	0.80	159.15	304.83	0.21
Alignment - 1	4700	10Yr	22.00	25.87	28.08	27.29	28.14	0.001164	1.11	31.84	141.08	0.33
Alignment - 1	4600	100Yr	49.00	25.67	28.57	27.52	28.58	0.000156	0.52	207.17	266.67	0.13
Alignment - 1	4600	10Yr	22.00	25.67	28.07	26.93	28.08	0.000237	0.53	83.29	193.20	0.15
Alignment - 1	4400	100Yr	49.00	25.75	28.03	28.03	28.44	0.012212	2.82	17.40	76.83	1.00
Alignment - 1	4400	10Yr	22.00	25.75	27.63	27.63	27.90	0.014053	2.30	9.56	65.44	1.00
Alignment - 1	4300	100Yr	49.00	25.40	27.73	27.07	27.83	0.001549	1.43	41.46	53.49	0.39
Alignment - 1	4300	10Yr	22.00	25.40	27.17	26.61	27.24	0.001680	1.13	19.42	21.87	0.38
Alignment - 1	4207.69	100Yr	49.00	25.23	27.50	27.04	27.64	0.002815	1.66	29.97	32.75	0.51
Alignment - 1	4207.69	10Yr	22.00	25.23	26.89	26.58	27.01	0.004034	1.53	14.40	20.04	0.58
Alignment - 1	4096.24	100Yr	49.00	24.62	27.06	26.60	27.28	0.003581	2.05	23.88	19.19	0.59
Alignment - 1	4096.24	10Yr	22.00	24.62	26.49	26.06	26.62	0.003048	1.56	14.07	15.10	0.52
Alignment - 1	4000	100Yr	49.00	24.46	26.92	26.19	27.02	0.001638	1.41	38.52	64.42	0.40
Alignment - 1	4000	10Yr	22.00	24.46	26.32	25.71	26.39	0.001611	1.13	19.39	21.13	0.38
Alignment - 1	3900	100Yr	49.00	23.69	26.71	25.99	26.83	0.002064	1.71	49.18	113.55	0.45
Alignment - 1	3900	10Yr	22.00	23.69	26.11	25.28	26.22	0.001818	1.44	15.31	11.97	0.41
Alignment - 1	3800	100Yr	49.00	23.91	26.64	25.75	26.69	0.000778	1.01	72.86	104.94	0.28
Alignment - 1	3800	10Yr	22.00	23.91	26.01	25.26	26.06	0.001072	0.98	23.93	34.92	0.31
Alignment - 1	3700	100Yr	49.00	24.15	26.21	25.95	26.50	0.005702	2.37	20.64	19.03	0.73
Alignment - 1	3700	10Yr	22.00	24.15	25.52	25.46	25.80	0.009740	2.33	9.44	13.40	0.89
Alignment - 1	3592.88	100Yr	49.00	23.39	26.08	25.14	26.19	0.001298	1.42	35.87	45.38	0.37
Alignment - 1	3592.88	10Yr	22.00	23.39	25.35	24.58	25.42	0.001393	1.15	19.10	18.38	0.36
Alignment - 1	3504.89	100Yr	49.00	23.40	25.53	25.32	25.93	0.006806	2.83	17.30	13.58	0.80
Alignment - 1	3504.89	10Yr	22.00	23.40	24.92	24.71	25.17	0.006315	2.22	9.93	10.74	0.74
Alignment - 1	3400	100Yr	49.00	22.88	25.17		25.39	0.003370	2.06	23.98	20.48	0.57
Alignment - 1	3400	10Yr	22.00	22.88	24.41		24.59	0.004636	1.88	11.70	13.02	0.63
Alignment - 1	3300	100Yr	49.00	22.39	24.95		25.11	0.002109	1.79	27.41	17.97	0.46
Alignment - 1	3300	10Yr	22.00	22.39	24.12		24.24	0.002531	1.54	14.29	13.55	0.48
Alignment - 1	3200	100Yr	49.00	21.54	24.91		24.97	0.000652	1.13	44.01	34.52	0.27
Alignment - 1	3200	10Yr	22.00	21.54	24.07		24.11	0.000528	0.85	25.92	18.43	0.23
Alignment - 1	3100	100Yr	49.00	21.55	24.74	23.86	24.86	0.001912	1.56	31.33	23.79	0.43
Alignment - 1	3100	10Yr	22.00	21.55	23.92	23.25	24.01	0.001973	1.36	16.13	14.93	0.42
Alignment - 1	3000	100Yr	63.00	21.78	24.45		24.65	0.002269	1.95	32.77	24.84	0.48
Alignment - 1	3000	10Yr	28.00	21.78	23.68		23.80	0.002277	1.54	18.13	15.64	0.46
Alignment - 1	2900	100Yr	63.00	21.17	24.14		24.37	0.003429	2.12	29.65	21.68	0.58
Alignment - 1	2900	10Yr	28.00	21.17	23.35		23.52	0.003438	1.82	15.42	14.16	0.56
Alignment - 1	2800	100Yr	63.00	20.54	23.95	22.95	24.11	0.001726	1.76	35.77	20.45	0.43
Alignment - 1	2800	10Yr	28.00	20.54	23.22	22.29	23.30	0.001217	1.26	22.30	16.31	0.34
Alignment - 1	2700	100Yr	63.00	21.04	23.60		23.85	0.003729	2.25	28.00	20.14	0.61
Alignment - 1	2700	10Yr	28.00	21.04	22.97		23.11	0.002966	1.68	16.67	15.67	0.52

HEC-RAS Plan: Plan 03 River: Hadas Reach: Alignment - 1 (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
Alignment - 1	2600	100Yr	63.00	20.98	23.45		23.56	0.001744	1.48	43.85	54.13	0.42
Alignment - 1	2600	10Yr	28.00	20.98	22.72		22.82	0.002652	1.37	20.50	24.72	0.48
Alignment - 1	2500	100Yr	63.00	20.10	23.30		23.41	0.001312	1.52	51.82	87.81	0.37
Alignment - 1	2500	10Yr	28.00	20.10	22.56		22.64	0.001222	1.20	23.43	18.75	0.34
Alignment - 1	2400	100Yr	63.00	20.21	22.76	22.56	23.13	0.007030	2.70	23.33	20.60	0.81
Alignment - 1	2400	10Yr	28.00	20.21	22.03	21.94	22.35	0.008959	2.50	11.21	13.28	0.87
Alignment - 1	2300	100Yr	63.00	19.19	22.59	21.69	22.74	0.001852	1.78	37.25	28.29	0.44
Alignment - 1	2300	10Yr	28.00	19.19	21.92	20.97	22.01	0.001311	1.25	22.34	17.34	0.35
Alignment - 1	2200	100Yr	63.00	19.22	22.46		22.57	0.001387	1.44	43.90	31.84	0.38
Alignment - 1	2200	10Yr	28.00	19.22	21.83		21.88	0.001044	1.05	26.69	23.35	0.31
Alignment - 1	2083.01	100Yr	63.00	18.92	22.29	21.43	22.40	0.001516	1.53	51.47	106.48	0.39
Alignment - 1	2083.01	10Yr	28.00	18.92	21.67	20.72	21.75	0.001274	1.18	23.97	23.77	0.34
Alignment - 1	2000	100Yr	63.00	19.05	22.01	21.61	22.22	0.003044	2.19	42.12	78.72	0.56
Alignment - 1	2000	10Yr	28.00	19.05	21.47	20.85	21.60	0.002241	1.63	19.89	25.82	0.46
Alignment - 1	1900	100Yr	63.00	18.99	21.92	20.97	22.01	0.001095	1.41	72.37	122.61	0.34
Alignment - 1	1900	10Yr	28.00	18.99	21.40	20.36	21.45	0.000799	1.03	29.80	50.17	0.28
Alignment - 1	1800	100Yr	63.00	19.41	21.64		21.81	0.004031	2.07	47.69	76.95	0.62
Alignment - 1	1800	10Yr	28.00	19.41	20.93	20.83	21.24	0.008859	2.48	11.33	16.31	0.87
Alignment - 1	1700	100Yr	63.00	18.61	21.50		21.60	0.001069	1.56	68.23	100.77	0.35
Alignment - 1	1700	10Yr	28.00	18.61	20.89		20.95	0.000938	1.14	29.34	40.88	0.31
Alignment - 1	1600	100Yr	63.00	18.02	21.38		21.49	0.001274	1.57	74.07	182.93	0.37
Alignment - 1	1600	10Yr	28.00	18.02	20.77		20.84	0.001158	1.24	22.51	16.93	0.34
Alignment - 1	1500	100Yr	63.00	18.11	21.30		21.37	0.000877	1.31	96.72	242.05	0.31
Alignment - 1	1500	10Yr	28.00	18.11	20.69		20.74	0.000800	1.05	29.32	39.61	0.28
Alignment - 1	1400	100Yr	63.00	19.27	21.22		21.28	0.000944	1.27	116.40	264.54	0.32
Alignment - 1	1400	10Yr	28.00	19.27	20.40		20.57	0.004934	1.82	15.39	21.53	0.65
Alignment - 1	1300	100Yr	63.00	18.66	21.21		21.23	0.000202	0.66	224.96	324.81	0.15
Alignment - 1	1300	10Yr	28.00	18.66	20.33		20.35	0.000855	0.91	56.62	106.76	0.28
Alignment - 1	1200	100Yr	63.00	17.60	21.16		21.20	0.000400	1.03	142.66	263.16	0.22
Alignment - 1	1200	10Yr	28.00	17.60	20.20		20.26	0.001026	1.16	31.54	45.30	0.32
Alignment - 1	1100	100Yr	63.00	17.71	21.11		21.15	0.000590	1.14	137.42	244.87	0.25
Alignment - 1	1100	10Yr	28.00	17.71	19.86		20.06	0.004133	1.99	14.08	12.93	0.61
Alignment - 1	1000	100Yr	63.00	17.12	21.11	19.36	21.12	0.000094	0.54	278.22	287.66	0.11
Alignment - 1	1000	10Yr	28.00	17.12	19.83	18.71	19.87	0.000711	0.96	37.24	93.35	0.27
Alignment - 1	900	100Yr	63.00	17.15	21.10	19.20	21.11	0.000070	0.50	324.78	318.90	0.09
Alignment - 1	900	10Yr	28.00	17.15	19.77	18.64	19.81	0.000525	0.90	34.62	48.65	0.23
Alignment - 1	813.84	100Yr	63.00	17.52	21.09	19.97	21.10	0.000136	0.59	254.87	243.29	0.12
Alignment - 1	813.84	10Yr	28.00	17.52	19.45	19.19	19.68	0.005486	2.16	13.07	15.82	0.69
Alignment - 1	730.22	100Yr	63.00	16.74	21.09	19.23	21.09	0.000033	0.35	462.12	357.62	0.07
Alignment - 1	730.22	10Yr	28.00	16.74	19.49	18.58	19.52	0.000523	0.84	55.40	80.03	0.23
Alignment - 1	600	100Yr	63.00	16.79	21.09	18.86	21.09	0.000029	0.34	467.82	385.00	0.06
Alignment - 1	600	10Yr	28.00	16.79	19.43	18.25	19.46	0.000447	0.81	47.31	59.31	0.21
Alignment - 1	500	100Yr	63.00	16.13	21.08	18.60	21.09	0.000048	0.45	308.87	221.74	0.08
Alignment - 1	500	10Yr	28.00	16.13	19.37	17.93	19.41	0.000459	0.85	36.94	62.41	0.22
Alignment - 1	400	100Yr	63.00	16.24	21.08	18.55	21.08	0.000009	0.23	739.34	400.00	0.04
Alignment - 1	400	10Yr	28.00	16.24	19.36	17.92	19.38	0.000191	0.69	79.81	110.29	0.15
Alignment - 1	300	100Yr	63.00	15.56	21.08	18.08	21.08	0.000007	0.20	771.14	391.10	0.03
Alignment - 1	300	10Yr	28.00	15.56	19.35	17.36	19.36	0.000108	0.54	88.57	134.13	0.11
Alignment - 1	200	100Yr	63.00	16.64	21.08		21.08	0.000007	0.16	829.43	400.00	0.03
Alignment - 1	200	10Yr	28.00	16.64	19.34		19.34	0.000226	0.51	139.98	322.40	0.15
Alignment - 1	107.09	100Yr	63.00	15.56	21.08		21.08	0.000006	0.18	825.58	400.00	0.03
Alignment - 1	107.09	10Yr	28.00	15.56	19.33		19.33	0.000064	0.42	135.80	288.85	0.09
Alignment - 1	0	100Yr	63.00	15.12	21.08	16.03	21.08	0.000001	0.06	1039.93	400.00	0.01
Alignment - 1	0	10Yr	28.00	15.12	19.33	15.82	19.33	0.000003	0.07	409.05	258.59	0.02