

MASTER DEVELOPMENT DRAINAGE PLAN MARKETPLACE AT INTERQUEST INTERIM CONDITIONS DRAINAGE MAP

WATER QUALITY SUMMARY

POND	WQ BASIN AREA	WQ BASIN % IMPERVIOUS	WQ VOLUME REQUIRED	WQ PONDING ELEV.	WQ PONDING HEIGHT	# WQ ORIFICE COLUMNS	# WQ ORIFICE ROWS	WQ ORIFICE DIAMETER
(label)	(ac)	(%)	(acre-feet)	(feet)	(feet)			(inches)
EK-3B	100.8	16.3	1.001	6631.6	2.6	3	16	0.750
EK-4	10.9	85.0	0.396	6664.6	1.6	1	6	1.250
BS-1T	44.7	95.0	0.201	6668.5	1.5	2	11	1.000
BS-3T	67.4	25.4	0.918	6625.3	3.3	1	12	2.000

DETENTION POND SUMMARY

POND	RISER DIMENSIONS	RISER CREST ELEV.	OUTLET PIPE DIAMETER	OUTLET PIPE INVERT	INVERT OF POND	INVERT OF EMERG. SPILLWAY	LENGTH OF EMERG. SPILLWAY	EMERGENCY FLOW DEPTH	FREE-BOARD DEPTH	CREST OF DAM
(label)	(feet)	(feet)	(inches)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)
EK-3A	7.0 x 4.0	6638.00	24" RCP	6620.0	6641.00	118	0.8	2.4	0.7	6642.00
EK-4	7.0 x 4.0	N/A	24" RCP	6637.45	6611.33	90	1.0	2.0	0.7	6641.00
BS-1T	7.0 x 4.0	N/A	18" RCP	6796.00	6796.00	N/A	N/A	0.8	0.8	6796.00
BS-3T	7.0 x 4.0	6675.00	36" RCP	6662.0	6670.00	100	1.0	2.0	0.8	6680.00
BS-3T	4.0 x 4.0	6628.50	12" RCP	6624.0	6630.00	100	0.2	N/A	N/A	6632.00

DRAINAGE DESIGN POINTS SUMMARY

Design Point	Q 2 Yr.	Q 5 Yr.	Q 10 Yr.	Q 50 Yr.	Q 100 Yr.
(label)	(cfs)	(cfs)	(cfs)	(cfs)	(cfs)
51	10.16	24.52	37.14	76.72	94.75
52	38.82	69.67	95.04	171.86	208.51
EK-3B IN	38.82	69.67	95.04	171.86	208.51
EK-3B OUT	1.22 / 6632.62	1.53 / 6634.28	3.84 / 6634.60	17.98 / 6636.61	26.60 / 6637.38
4	3.19	8.42	13.61	30.13	37.77
5	2.80	3.98	4.95	11.77	15.60
6	2.29	6.29	10.24	22.93	29.63
EK-3A IN	3.08	7.25	11.28	24.52	32.59
EK-3A OUT	1.43 / 6628.07	2.28 / 6628.21	4.12 / 6628.52	15.93 / 6628.67	19.53 / 6629.13
7	0.38	1.34	2.84	10.50	13.43
83	21.71	30.05	38.61	49.37	54.84
EK-4 IN	21.71	30.05	38.61	49.37	54.84
EK-4 OUT	0.35 / 6636.28	2.49 / 6636.63	6.78 / 6636.98	22.84 / 6637.65	30.64 / 6637.86
84	0.35	2.49	6.78	22.84	30.64
8	0.52	4.52	10.62	38.88	52.65
125-4 IN	0.52	4.52	10.62	38.88	52.65
125-4 OUT	0.45 / 6620.28	3.38 / 6620.86	8.02 / 6621.45	17.99 / 6622.63	21.10 / 6623.12
9	0.45	3.38	8.02	17.99	21.10
10	0.28	3.17	6.48	17.79	23.28
125-5 IN	0.28	3.17	6.48	17.79	23.28
125-5 OUT	0.18 / 6620.12	1.81 / 6620.57	4.16 / 6620.97	13.39 / 6621.04	15.30 / 6621.27
11	0.18	1.81	4.16	13.39	15.30
11B IN	6.83	11.21	14.48	23.05	28.98
11B OUT	1.87 / 6788.08	2.03 / 6788.46	2.20 / 6788.77	2.67 / 6789.68	2.78 / 6791.03
1	1.84	4.18	7.07	18.32	24.02
2	3.15	4.99	7.30	18.88	24.44
3	3.30	5.58	9.89	25.52	33.37
55	4.81	7.10	9.91	25.81	33.87
56	5.52	14.27	22.91	54.08	69.59
57	5.58	15.18	24.43	57.33	73.71
BS-1T IN	5.00	15.18	24.43	57.33	73.71
BS-1T OUT	0.7668 / 6635	0.20 / 6670.16	0.41 / 6670.87	1.03 / 6672.89	1.84 / 6673.61
12	0.63	4.24	4.91	13.20	17.23
13	0.30	1.32	2.19	4.84	6.02
60	33.17	52.81	68.49	112.69	131.83
61	32.22	53.50	71.87	125.49	149.13
62	22.38	53.50	71.87	125.49	149.13
BS-3T OUT	0.84 / 6626.80	0.88 / 6628.34	2.64 / 6628.77	12.90 / 6630.33	42.91 / 6630.53
14	0.98	5.65	13.89	49.21	66.65

DRAINAGE BASIN SUMMARY

BASIN	TOTAL AREA	TOTAL AREA	WEIGHTED CN	TOTAL LAG TIME	TOTAL T ₀	Q 2 Yr.	Q 5 Yr.	Q 10 Yr.	Q 50 Yr.	Q 100 Yr.
(label)	(ac)	(ac)		(min)	(hr)	(cfs)	(cfs)	(cfs)	(cfs)	(cfs)
02B	12.4	0.0194	61.0	0.2265	0.3774	0.54	1.71	3.95	7.19	10.06
EKA	10.5	0.0194	61.0	0.1774	0.2669	0.13	1.74	3.87	7.00	9.94
EKB	7.1	0.0111	79.8	0.0684	0.1091	0.63	11.21	34.48	109.07	230.06
EKC1	0.3	0.0004	66.0	0.0487	0.0833	0.54	0.84	0.97	1.17	1.30
EKC2	0.4	0.0007	63.0	0.0487	0.0833	0.68	1.22	1.44	1.78	2.00
EKD	11.4	0.0176	61.0	0.1676	0.2517	0.12	1.31	2.83	5.17	7.31
EKH	1.2	0.0019	66.0	0.0487	0.0833	1.70	2.23	2.58	3.11	3.46
EKI	1.1	0.0017	65.7	0.0487	0.0833	1.44	2.21	2.75	3.57	4.12
VP-1	1.3	0.0020	65.7	0.0487	0.0833	2.81	3.54	4.21	4.86	5.52
FP-2	2.0	0.0031	65.7	0.1348	0.2247	2.43	3.80	4.76	6.50	7.18
SE-1	5.0	0.0078	61.0	0.1487	0.2478	5.07	6.84	8.70	13.71	16.66
AF-1	11.8	0.0161	61.0	0.1795	0.3041	1.54	1.96	2.03	7.88	11.08
AF-2	20.5	0.0320	61.0	0.1820	0.3033	2.25	3.33	3.85	13.61	18.94
AF-3	18.4	0.0266	61.0	0.1831	0.3119	1.98	2.96	3.27	10.90	14.94
EK-3M	22.2	0.0347	63.2	0.1949	0.3248	2.78	4.97	5.18	17.94	23.04
EK-3N	10.1	0.0158	69.0	0.0781	0.1251	3.91	7.49	10.94	16.70	20.81
EK-3O	14.6	0.0228	62.5	0.0808	0.1344	28.90	38.74	47.14	88.19	95.51
EK-3P	16.5	0.0258	61.0	0.2038	0.3496	1.16	2.42	3.00	10.65	14.01
EK-3Q	37.4	0.0564	62.7	0.2390	0.3834	10.14	23.71	32.54	92.90	126.99
EK-3R	10.9	0.0170	62.5	0.0987	0.1612	21.71	30.06	36.61	43.88	49.37
EK-3S	3.0	0.0047	62.1	0.1487	0.2478	1.08	1.80	2.43	3.32	4.27
BS-1M	27.8	0.0424	65.0	0.1687	0.3111	1.94	3.04	3.23	24.90	33.94
BS-1N	3.8	0.0056	65.7	0.1308	0.2276	0.43	1.54	2.40	4.16	5.39
BS-1O	15.3	0.0239	61.0	0.2295	0.3774	0.17	2.15	4.39	8.67	12.40
BS-2M	3.1	0.0048	64.4	0.0994	0.1324	0.30	1.32	2.16	3.72	4.84
BS-2N	34.6	0.0541	71.9	0.2280	0.3434	8.90	20.76	30.61	47.16	58.11
BS-2O	7.0	0.0119	62.5	0.0621	0.0833	21.06	24.92	30.58	34.50	38.31
BS-3O	8.4	0.0131	62.5	0.0684	0.0973	16.72	23.15	27.43	33.80	38.03
BS-3P	16.8	0.0263	62.7	0.1076	0.1666	1.88	3.88	4.68	12.98	17.10
BS-3Q	30.4	0.0475	61.0	0.2285	0.3774	0.34	3.97	6.24	16.85	23.83

DRAINAGE CONVEYANCE SUMMARY

Conveyance Label	Type	Length ft.	Upper Invert ft.	Lower Invert ft.	Bottom Width ft.	Slope	Side Slope	Manning's N	Available Depth ft.	Q 5 Yr. cfs	Q 100 Yr. cfs	Capacity cfs
C1	Grass Lined Channel	1200	6794.00	6784.58	4.0	0.7850	3:0	0.038	1.5	1.02	11.05	48.20
C2	18" RCP	160	6789.00	6784.58	1.5	1.4200	N/A	0.013	1.5	2.03	2.78	7.41
C3	36" RCP	250	6794.58	6782.08	3.0	1.0000	N/A	0.013	3.0	4.18	24.02	66.69
C4	Grass Lined Channel	1050	6782.08	6748.00	4.0	3.4882	3:0	0.038	2.0	4.33	23.87	177.88
C5	36" RCP	100	6748.00	6743.00	3.0	1.0000	N/A	0.013	3.0	3.52	31.69	98.69
C6	Paved Channel	1400	6738.00	6698.00	10.0	3.0000	10:0	0.013	1.0	2.07	4.53	168.12
C7	Grass Lined Channel	100	6697.00	6695.00	2.0	2.0000	N/A	0.013	2.0	1.34	13.43	31.89
C11	24" RCP	100	6690.00	6688.00	2.0	2.0000	N/A	0.013	2.0	3.38	21.10	31.89
C12	36" RCP	100	6688.00	6686.00	3.0	2.0000	N/A	0.013	3.0	4.03	31.89	31.89
C13	42" RCP	1250	6683.00	6680.75	3.3	0.8000	N/A	0.013	3.3	8.39	37.71	71.74
C14	48" RCP	100	6684.00	6682.50	4.0	0.8000	N/A	0.013	4.0	14.31	68.21	101.97
C15	54" RCP	1700	6683.00	6684.50	4.5	0.8000	N/A	0.013	4.5	1.81	18.98	139.05
C16	60" RCP	250	6684.00	6684.75	5.0	0.8000	N/A	0.013	5.0	24.92	94.83	184.18
C17	66" RCP	300	6684.00	6687.50	4.0	0.8000	N/A	0.013	4.0	1.29	18.13	101.87
C18	36" RCP	100	6683.80	6681.80	3.0	1.0000	N/A	0.013	3.0	2.69	30.64	86.70
C19	Grass Lined Channel	1300	6743.00	6736.75	3.0	0.8000	N/A	0.013	3.0	6.71	33.28	71.74
C20	42" RCP	900	6697.00	6692.50	4.5	0.8000	N/A	0.013	4.5	13.89	68.11	139.05
C21	48" RCP	200	6697.00	6693.00	3.5	2.0000	N/A	0.013	3.5	0.81	5.19	142.08
C22	Grass Lined Channel	750	6650.00	6630.00	8.0	1.4867	3:0	0.038	2.0	16.90	69.59	176.57
C23	48" RCP	1100	6652.00	6648.50	4.0	0.5000	N/A	0.013	4.0	29.71	38.09	101.97
C24	36" RCP	800	6639.00	6622.00	6.0	2.8333	3:0	0.038	2.0	50.80	126.64	248.13
C25	12" RCP	100	6622.00	6621.00	1.5	1.0000	N/A	0.013	1.5	0.53	3.26	10.60
C26	Grass Lined Channel	500	6621.00	6616.00	6.0	1.0000						