

Table 1 Proposed Model Results													
PCSWMM Pond Output Summary										AHYMO 97			Future Improvements
Pond	Design Storage at Emergency Spillway	100-Yr 24-Hr Peak Storage	Elevation of Pond Bottom (NAVD 29)	Elevation of Emergency Spillway (NAVD 29)	Elevation of Top of Pond (NAVD 29)	100-Yr 24_Hr Peak Water Surface Elevation	100-Yr 24_hr Freeboard to Top of Pond	Peak Outflow	Orifice Plate	100-Yr 24-Hr Peak Storage [a]	Peak Water Surface Elevation [a]	Peak Outflow [a]	
	ac-ft	ac-ft	ft	ft	ft	ft	ft	cfs		ac-ft	ft	cfs	
Pond D	6.32	6.17	5423.30	5431.30	5432.30	5431.17	1.13	17.17	Y	4.04	5435.03	19.7	Existing pond to be smaller footprint, orifice diameter 1.5 ft
Pond F	11.76	9.65	5415.08	5424.33	5425.00	5423.11	1.89	10.13	Y	10.4	5423.56	23.8	Orifice diameter 2.5 ft
Pond F5**	2.64	2.52	5421.30	N/A	5426.30	5426.15	0.15	30.18	Y	1.38	5425.97	19.8	Pond to be constructed at 2.64 ac-ft, orifice diameter 2.25 ft
Pond G	7.21	6.96	5415.67	5422.50	5424.00	5422.35	1.65	17.05	Y	2.96	5419.84	24.6	Orifice diameter 1.23 ft
Pond H	4.65	2.96	5418.65	5422.07	5423.00	5421.90	1.10	24.83	Y	2.87	5421.89	26.8	Orifice diameter 1.5 ft equivalent per BHI's plans dated May 2011
Pond J	7.94	3.70	5414.00	5417.00	5418.00	5415.66	2.34	25.97	Y	3.77	5415.66	32.4	Orifice diameter 2 ft
Pond K	14.84	8.38	5404.85	5409.00	5410.00	5407.78	2.22	24.35	Y	8.39	5407.79	60.7	Orifice diameter 2.43 ft
* The first tract developed will be responsible for improvements to the pond													
** Pond F5 does not have an emergency spillway and does not require freeboard because the top of pond is below the surrounding grade. Spills to Woodmont Ave. at elevation 5429.3													
[a] Values based on the Amendment to the Trails Drainage Master Plan													

Table 2 PCSWMM Node Summary										
Name	Invert Elevation	Rim Elevation	Depth	Max Depth	Max HGL	Time Max HGL	Max Total Inflow	Freeboard to Rim Elevation		
	ft	ft	ft	ft	ft	h.m	cfs	ft		
Node163	5427.20	5441.10	13.90	4.01	5431.21	4.35	164.54	9.89		
SDMH-59	5421.17	5427.97	6.80	3.47	5424.64	3.27	16.91	3.33		
SDMH-5	5420.55	5429.66	9.11	2.61	5423.16	3.05	30.18	6.50		
Node191	5420.65	5427.90	7.25	5.56	5426.21	1.96	116.45	1.69		
Node193	5421.37	5430.00	8.63	5.09	5426.46	1.29	24.42	3.54		
Node192	5420.82	5427.50	6.68	5.45	5426.27	1.50	63.94	1.23		
SDMH-4	5419.57	5428.42	8.85	3.57	5423.14	3.19	30.08	5.28		
SDMH-3	5418.95	5427.02	8.07	4.18	5423.13	3.20	94.85	3.89		
SDMH-2	5418.19	5426.49	8.30	4.93	5423.12	3.20	94.41	3.37		
SDMH-1	5417.95	5426.15	8.20	5.17	5423.12	3.20	94.51	3.03		
SDMH-57	5418.36	5426.89	8.53	6.52	5424.88	1.27	16.53	2.02		
SDMH-58	5418.80	5425.80	7.00	6.04	5424.84	1.27	16.53	0.96		
SDMH-62	5417.70	5425.18	7.48	5.69	5423.39	3.26	16.53	1.79		
SDMH-56	5416.94	5423.59	6.65	6.18	5423.12	3.25	156.44	0.47		
SDMH-34	5414.83	5423.47	8.64	8.27	5423.10	3.25	154.95	0.37		
SDMH-63	5416.02	5423.27	7.25	7.09	5423.11	3.25	155.00	0.16		
Node190	5414.80	5423.47	8.67	7.73	5422.53	12.23	29.05	0.94		
SDMH-29	5414.05	5423.18	9.13	8.39	5422.44	12.35	29.05	0.74		
SDMH-24	5413.05	5422.42	9.37	9.31	5422.36	12.47	72.35	0.06		
SDMH-27	5413.76	5424.36	10.60	8.63	5422.39	12.42	29.05	1.97		
Node162	5413.50	5423.00	9.50	8.85	5422.35	12.49	48.23	0.65		
SDMH-9	5410.76	5422.61	11.85	1.67	5412.43	12.50	17.05	10.18		
Node176	5411.39	5423.00	11.61	1.97	5413.36	12.49	17.05	9.64		
MH-3	5414.50	5421.62	7.12	3.35	5417.85	1.30	86.37	3.77		
MH-2	5412.73	5421.46	8.73	4.12	5416.85	1.29	85.01	4.61		
Node180	5410.90	5418.00	7.10	4.76	5415.66	2.03	10.65	2.34		
MH-1	5410.20	5417.81	7.61	5.45	5415.65	2.02	139.57	2.16		
Node181	5410.20	5417.80	7.60	1.34	5411.54	2.07	30.68	6.26		
SDMH4	5407.70	5414.70	7.00	2.99	5410.69	1.31	82.07	4.01		
SDMH5	5403.52	5412.27	8.75	8.75	5412.27	1.23	78.34	0.00		
SDMH-13	5402.03	5411.23	9.20	7.07	5409.10	1.33	110.93	2.13		
SDMH-12	5409.57	5420.97	11.40	1.15	5410.72	1.29	33.05	10.25		
Node160	5401.95	5412.16	10.21	6.36	5408.31	1.34	133.78	8.15		
Node195	5405.00	5414.00	9.00	2.78	5407.78	4.03	18.28	6.22		
SDMH-10	5410.15	5422.70	12.55	2.02	5412.17	1.30	17.05	10.53		
SDMH-11	5409.79	5419.64	9.85	2.23	5412.02	1.29	33.23	7.62		
MH54	5400.70	5415.00	14.30	7.84	5408.74	1.20	93.54	6.46		
MH-OUT	5398.00	5412.00	14.00	10.27	5408.27	1.34	61.69	3.73		
Node183	5397.50	5413.00	15.50	3.13	5406.63	1.34	61.70	12.37		
Node164	5414.96	5427.31	12.35	12.35	5427.31	1.17	110.67	0.00		
Node177	5412.15	5423.00	10.85	1.23	5413.38	2.27	24.83	9.62		
MH46	5408.62	5420.77	12.15	3.55	5412.17	1.30	24.83	8.61		
MH47	5407.75	5419.81	12.06	4.03	5411.78	1.30	24.90	8.03		
MH48	5408.87	5419.57	10.70	2.79	5411.66	1.30	72.32	7.91		
MH53	5405.08	5415.24	10.16	4.02	5409.10	1.34	101.88	6.14		
Node205	5423.70	5428.00	4.30	3.43	5427.13	1.33	17.16	0.87		
Node200	5417.15	5423.00	5.85	0.00	5417.15	0.00	0.00	5.85		
NodeF5	5420.55	5426.30	5.75	3.17	5423.72	2.07	30.18	2.59		
NodeD	5423.30	5431.30	8.00	4.19	5427.49	3.35	17.17	3.81		
Node184	5397.00	5413.00	16.00	2.45	5399.45	0.07	61.69	13.55		

TABLE 4 PCSWMM Storage Summary										
Name	Invert Elevation	Emergency Spillway Elevation	Depth to Emergency Spillway	Max Water Surface Depth	Max HGL	Time Max HGL	Max Total Inflow	Freeboard to Emergency Spillway	Max Volume	Max Outflow
	ft	ft	ft	ft	ft	h.m	cfs	ft	ac-ft	cfs
PondF5	5420.55	N/A	5.75	5.60	5426.15	1.96	116.44	0.15	2.52	30.18
PondD	5423.30	5431.30	8.00	7.87	5431.17	4.39	163.94	1.13	6.17	17.17
PondF	5415.08	5424.33	9.25	8.03	5423.11	3.25	224.78	1.22	9.65	10.13
PondG	5411.39	5422.50	11.11	10.96	5422.35	12.49	120.58	0.15	6.96	17.05
PondJ	5410.50	5417.00	6.50	5.16	5415.66	2.03	132.96	2.34	3.70	25.97
PondK	5402.00	5409.00	7.00	5.78	5407.78	4.03	161.21	2.65	8.38	24.35
PondH	5412.15	5422.07	9.92	9.75	5421.90	2.26	110.67	1.10	2.96	24.83

Table 5 PCSWMM Orifice Summary			
Name	Diameter	Area	Max Flow
	ft	ft^2	cfs
ORF_G	1.23	1.19	17.05
ORF_J	2	3.14	30.68
ORF_H	1.5	1.77	24.83
ORF_F	2.5	4.91	29.05
ORF-K	2.43	4.64	61.7
ORF_F5	2.25	3.98	30.18
ORF_D	1.5	1.77	17.17

