

**Results for 1 year Critical Storm Duration. Lowest mass balance: 98.41%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
15 minute winter	SPPIC1	11	232.270	0.040	3.2	0.0325	0.0000	OK
15 minute winter	SPPIC2	11	232.186	0.049	5.0	0.0270	0.0000	OK
15 minute winter	SPPIC3	11	232.083	0.073	10.5	0.0761	0.0000	OK
15 minute winter	SPPIC4	11	231.983	0.101	16.0	0.0979	0.0000	OK
15 minute winter	SPPIC5	11	231.915	0.108	19.1	0.0718	0.0000	OK
15 minute winter	SPPIC6	11	231.814	0.119	23.1	0.0858	0.0000	OK
60 minute summer	SPPIC7	39	231.753	0.119	19.1	8.6086	0.0000	OK
60 minute winter	SPPIC8	44	231.659	0.085	15.1	6.1377	0.0000	OK
15 minute winter	SMH1	11	231.936	0.029	1.3	0.0368	0.0000	OK
15 minute winter	SMH2	10	231.802	0.056	3.7	0.0787	0.0000	OK
60 minute winter	SPPIC9	43	231.526	0.087	13.7	0.0417	0.0000	OK
60 minute winter	SPPIC10	42	231.390	0.092	14.8	0.0657	0.0000	OK
360 minute winter	SPPIC11	264	231.353	0.196	9.2	32.6071	0.0000	OK
240 minute winter	SMH7	196	231.352	0.296	8.5	0.3349	0.0000	OK
240 minute winter	SMH8	200	231.355	0.252	3.9	0.3212	0.0000	OK

  

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
15 minute winter	SPPIC1	1.000	SPPIC2	3.2	0.576	0.068	0.0620	
15 minute winter	SPPIC2	1.001	SPPIC3	5.0	0.575	0.105	0.1335	
15 minute winter	SPPIC3	1.002	SPPIC4	10.5	0.742	0.221	0.2169	
15 minute winter	SPPIC4	1.003	SPPIC5	15.9	0.886	0.336	0.1624	
15 minute winter	SPPIC5	1.004	SPPIC6	19.1	0.953	0.403	0.2702	
15 minute winter	SPPIC6	1.005	SPPIC7	23.1	1.650	0.487	0.1282	
60 minute summer	SPPIC7	1.006	SPPIC8	12.2	0.671	0.529	0.5395	
60 minute winter	SPPIC8	1.007	SPPIC9	13.3	0.956	0.280	0.2259	
15 minute winter	SMH1	2.000	SMH2	1.3	0.325	0.080	0.0796	
15 minute winter	SMH2	2.001	SPPIC8	3.8	1.117	0.234	0.0869	
60 minute winter	SPPIC9	1.008	SPPIC10	13.7	0.948	0.290	0.2487	
60 minute winter	SPPIC10	1.009	SPPIC11	14.8	1.407	0.313	0.2421	
30 minute summer	SPPIC11	1.010	SMH7	7.5	0.611	0.159	0.2464	
120 minute winter	SMH7	1.011	SMH3 HYDRO	9.3	0.197	0.032	1.4168	
60 minute winter	SMH8	4.003	SMH7	9.1	0.599	0.031	0.3855	

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Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
240 minute winter	SMH3 HYDRO	188	231.355	0.399	8.5	0.5429	0.0000	OK
240 minute winter	EXG C1	200	229.818	0.048	4.2	0.0538	0.0000	OK
240 minute winter	DUMMY OUTFALL	200	229.747	0.045	4.2	0.0000	0.0000	OK
15 minute winter	SMH4	11	231.508	0.040	2.5	0.0607	0.0000	OK
15 minute winter	SMH5	11	231.398	0.052	4.0	0.0709	0.0000	OK
360 minute winter	SMH6	264	231.352	0.128	1.3	0.1687	0.0000	OK
15 minute winter	SPPIC14	10	231.907	0.026	1.1	0.0110	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
240 minute winter	SMH3 HYDRO	Hydro-Brake®	EXG C1	4.2				
240 minute winter	EXG C1	1.013	DUMMY OUTFALL	4.2	0.720	0.089	0.0483	77.8
15 minute winter	SMH4	4.000	SMH5	2.5	0.552	0.154	0.0663	
15 minute winter	SMH5	4.001	SMH6	4.0	0.658	0.246	0.0884	
15 minute winter	SMH6	4.002	SMH8	5.2	0.915	0.322	0.1186	
15 minute winter	SPPIC14	3.000	SPPIC8	1.1	0.814	0.058	0.0929	

**Results for 30 year +40% CC Critical Storm Duration. Lowest mass balance: 98.41%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
15 minute winter	SPPIC1	12	232.521	0.291	10.9	0.2356	0.0000	SURCHARGED
15 minute winter	SPPIC2	12	232.515	0.378	15.6	0.2085	0.0000	SURCHARGED
15 minute winter	SPPIC3	12	232.498	0.488	31.9	0.5074	0.0000	SURCHARGED
15 minute winter	SPPIC4	12	232.423	0.541	48.5	0.5267	0.0000	SURCHARGED
15 minute winter	SPPIC5	12	232.305	0.498	58.2	0.3304	0.0000	SURCHARGED
30 minute winter	SPPIC6	21	232.095	0.400	62.8	0.2889	0.0000	SURCHARGED
30 minute winter	SPPIC7	25	231.970	0.336	65.7	24.2633	0.0000	SURCHARGED
360 minute winter	SPPIC8	352	231.968	0.394	21.4	28.4196	0.0000	SURCHARGED
360 minute winter	SMH1	352	231.968	0.061	1.0	0.0786	0.0000	OK
360 minute winter	SMH2	352	231.968	0.222	2.8	0.3129	0.0000	SURCHARGED
360 minute winter	SPPIC9	352	231.968	0.529	21.8	0.2542	0.0000	SURCHARGED
360 minute winter	SPPIC10	352	231.967	0.669	23.1	0.4763	0.0000	SURCHARGED
360 minute winter	SPPIC11	352	231.966	0.809	24.1	134.9067	0.0000	SURCHARGED
360 minute winter	SMH7	352	231.968	0.911	7.5	1.0309	0.0000	SURCHARGED
360 minute winter	SMH8	360	231.966	0.863	4.1	1.1015	0.0000	SURCHARGED

  

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
15 minute summer	SPPIC1	1.000	SPPIC2	10.7	0.761	0.225	0.4125	
15 minute summer	SPPIC2	1.001	SPPIC3	17.7	0.707	0.373	0.6054	
15 minute winter	SPPIC3	1.002	SPPIC4	31.3	0.847	0.661	0.6086	
15 minute winter	SPPIC4	1.003	SPPIC5	48.2	1.212	1.016	0.3587	
15 minute winter	SPPIC5	1.004	SPPIC6	57.8	1.452	1.218	0.5362	
15 minute winter	SPPIC6	1.005	SPPIC7	69.6	1.897	1.469	0.2935	
30 minute winter	SPPIC7	1.006	SPPIC8	40.7	1.028	1.771	1.1756	
30 minute summer	SPPIC8	1.007	SPPIC9	42.2	1.159	0.891	0.6119	
15 minute winter	SMH1	2.000	SMH2	4.5	0.471	0.278	0.1831	
15 minute winter	SMH2	2.001	SPPIC8	12.9	1.335	0.795	0.2854	
30 minute winter	SPPIC9	1.008	SPPIC10	43.4	1.137	0.915	0.6746	
30 minute winter	SPPIC10	1.009	SPPIC11	49.0	1.730	1.033	0.6710	
15 minute winter	SPPIC11	1.010	SMH7	-21.2	-0.716	-0.447	0.4816	
180 minute winter	SMH7	1.011	SMH3 HYDRO	8.6	0.198	0.029	1.9023	
15 minute winter	SMH8	4.003	SMH7	20.8	0.734	0.071	0.8138	

**Results for 30 year +40% CC Critical Storm Duration. Lowest mass balance: 98.41%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
360 minute winter	SMH3 HYDRO	352	231.965	1.009	5.5	1.3734	0.0000	SURCHARGED
30 minute summer	EXG C1	25	229.818	0.048	4.2	0.0538	0.0000	OK
15 minute summer	DUMMY OUTFALL	23	229.747	0.045	4.2	0.0000	0.0000	OK
360 minute winter	SMH4	344	231.966	0.498	1.9	0.7624	0.0000	SURCHARGED
360 minute winter	SMH5	344	231.966	0.620	2.8	0.8517	0.0000	SURCHARGED
360 minute winter	SMH6	344	231.966	0.742	3.5	0.9776	0.0000	SURCHARGED
360 minute winter	SPPIC14	352	231.968	0.087	0.8	0.0367	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
15 minute summer	SMH3 HYDRO	Hydro-Brake®	EXG C1	4.2				
15 minute summer	EXG C1	1.013	DUMMY OUTFALL	4.2	0.720	0.089	0.0483	62.2
15 minute winter	SMH4	4.000	SMH5	8.7	0.717	0.535	0.2237	
15 minute summer	SMH5	4.001	SMH6	12.8	0.833	0.790	0.2569	
15 minute winter	SMH6	4.002	SMH8	15.8	0.969	0.976	0.2565	
15 minute winter	SPPIC14	3.000	SPPIC8	3.8	0.961	0.191	0.2533	

**Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 98.41%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
15 minute winter	SPPIC1	12	233.067	0.837	14.6	0.6781	0.0000	FLOOD RISK
15 minute winter	SPPIC2	12	233.058	0.921	19.8	0.5074	0.0000	FLOOD RISK
15 minute winter	SPPIC3	12	233.030	1.020	41.8	1.0609	0.0000	FLOOD RISK
15 minute winter	SPPIC4	12	232.903	1.021	63.9	0.9931	0.0000	SURCHARGED
15 minute winter	SPPIC5	12	232.699	0.891	76.5	0.5920	0.0000	SURCHARGED
30 minute winter	SPPIC6	21	232.337	0.642	85.8	0.4644	0.0000	SURCHARGED
360 minute winter	SPPIC7	352	232.285	0.651	23.1	46.9309	0.0000	SURCHARGED
360 minute winter	SPPIC8	352	232.284	0.710	25.0	51.2084	0.0000	SURCHARGED
360 minute winter	SMH1	352	232.284	0.377	1.3	0.4852	0.0000	SURCHARGED
360 minute winter	SMH2	352	232.284	0.538	3.6	0.7581	0.0000	SURCHARGED
360 minute winter	SPPIC9	352	232.283	0.844	24.3	0.4062	0.0000	SURCHARGED
360 minute winter	SPPIC10	352	232.283	0.985	25.9	0.7011	0.0000	SURCHARGED
360 minute winter	SPPIC11	352	232.282	1.125	27.8	166.8190	0.0000	FLOOD RISK
360 minute winter	SMH7	352	232.282	1.226	5.7	1.3870	0.0000	FLOOD RISK
360 minute winter	SMH8	352	232.280	1.177	5.7	1.5023	0.0000	FLOOD RISK

  

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
15 minute winter	SPPIC1	1.000	SPPIC2	12.6	0.788	0.267	0.4427	
15 minute winter	SPPIC2	1.001	SPPIC3	20.4	0.694	0.430	0.6054	
15 minute winter	SPPIC3	1.002	SPPIC4	41.1	1.034	0.867	0.6086	
15 minute winter	SPPIC4	1.003	SPPIC5	63.2	1.589	1.333	0.3587	
15 minute winter	SPPIC5	1.004	SPPIC6	75.7	1.905	1.598	0.5362	
15 minute winter	SPPIC6	1.005	SPPIC7	91.6	2.305	1.933	0.2935	
15 minute winter	SPPIC7	1.006	SPPIC8	45.4	1.150	1.975	1.1823	
15 minute summer	SPPIC8	1.007	SPPIC9	43.8	1.158	0.923	0.6264	
15 minute winter	SMH1	2.000	SMH2	6.0	0.486	0.371	0.2329	
15 minute winter	SMH2	2.001	SPPIC8	16.6	1.359	1.027	0.3572	
15 minute summer	SPPIC9	1.008	SPPIC10	44.5	1.175	0.939	0.6746	
30 minute summer	SPPIC10	1.009	SPPIC11	52.8	1.797	1.115	0.6710	
120 minute summer	SPPIC11	1.010	SMH7	28.8	0.725	0.609	0.4816	
120 minute summer	SMH7	1.011	SMH3 HYDRO	15.6	0.210	0.053	1.9023	
60 minute winter	SMH8	4.003	SMH7	67.9	0.614	0.230	0.8936	

**Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 98.41%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
360 minute winter	SMH3 HYDRO	352	232.281	1.325	6.8	1.8034	0.0000	FLOOD RISK
60 minute summer	EXG C1	33	229.818	0.048	4.2	0.0538	0.0000	OK
30 minute summer	DUMMY OUTFALL	20	229.747	0.045	4.2	0.0000	0.0000	OK
360 minute winter	SMH4	352	232.282	0.814	2.5	1.2448	0.0000	SURCHARGED
360 minute winter	SMH5	352	232.281	0.935	3.8	1.2853	0.0000	FLOOD RISK
360 minute winter	SMH6	352	232.281	1.057	4.8	1.3936	0.0000	FLOOD RISK
360 minute winter	SPPIC14	352	232.284	0.403	1.1	0.1697	0.0000	SURCHARGED

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
15 minute summer	SMH3 HYDRO	Hydro-Brake®	EXG C1	4.2				
30 minute summer	EXG C1	1.013	DUMMY OUTFALL	4.2	0.720	0.089	0.0483	63.2
15 minute winter	SMH4	4.000	SMH5	10.3	0.731	0.636	0.2569	
15 minute winter	SMH5	4.001	SMH6	15.8	0.895	0.974	0.2569	
15 minute winter	SMH6	4.002	SMH8	20.5	1.163	1.264	0.2565	
15 minute winter	SPPIC14	3.000	SPPIC8	5.0	0.978	0.252	0.2772	