

**Nodes**

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
SWMH01	0.100	4.00	119.800	1200	527243.173	202443.624	1.425
SWMH02	0.029	4.00	120.200	1200	527283.666	202434.931	2.219
SWMH03	0.000	4.00	119.800	1200	527291.553	202471.672	1.973
SWMH04	0.000	4.00	119.700	1200	527346.721	202467.051	2.100
SWMH05	0.030	4.00	119.600	1200	527384.293	202463.413	2.623
SWMH06	0.008	4.00	118.500	1200	527413.413	202482.051	1.593
SWMH07	0.000	4.00	119.000	1200	527424.261	202470.023	2.126
SWMH08	0.000	4.00	115.100	1200	527454.311	202459.706	1.700
SWMH09	0.062	4.00	120.700	1200	527323.778	202426.320	1.425
Pond	0.100	4.00	114.400	1200	527468.269	202500.363	1.200
SWMH10	0.034	4.00	120.300	1200	527343.246	202451.720	1.350
SWMH11	0.033	4.00	118.900	1200	527243.740	202511.091	0.900
SWMH12	0.129	4.00	119.400	1200	527254.955	202482.680	1.657
SWMH13	0.000	4.00	119.700	1200	527376.064	202469.523	2.456
SWMH14	0.006	4.00	119.500	1200	527246.816	202473.228	1.300
SWMH15	0.032	4.00	120.500	1200	527368.889	202399.739	1.350
SWMH16	0.026	4.00	120.200	1200	527372.712	202415.542	1.362
SWMH17	0.047	4.00	120.200	1200	527377.382	202434.845	2.697
SWMH18	0.067	4.00	120.700	1200	527341.216	202423.162	1.425
SWMH19	0.035	4.00	119.500	1200	527430.458	202440.556	1.350
SWMH20	0.041	4.00	119.700	1200	527424.441	202420.633	1.832
SWMH21	0.043	4.00	119.500	1200	527423.216	202455.327	1.350
SWMH22	0.061	4.00	118.900	1200	527434.636	202461.703	1.400
SWMH23	0.044	4.00	115.100	1200	527452.850	202455.450	1.200
SWMH24	0.000	4.00	118.700	1200	527474.238	202441.267	3.000
SWMH25	0.172	4.00	117.800	1200	527639.506	202373.418	0.900
SWMH30	0.021	4.00	119.700	1200	527414.288	202409.808	1.200
SWMH31	0.012	4.00	120.600	1200	527435.565	202403.537	2.300
SWMH32	0.000	4.00	120.250	1200	527475.466	202400.417	2.350
SWMH33	0.037	4.00	119.750	1200	527436.588	202432.457	1.250
SWMH34	0.031	4.00	119.350	1200	527482.711	202416.622	1.650
SWMH35	0.028	4.00	119.000	1200	527498.156	202421.467	1.200
SWMH36	0.000	4.00	119.000	1200	527487.089	202426.415	1.500

**Links**

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.000	SWMH01	SWMH02	41.416	0.600	118.375	118.131	0.244	169.7	225	4.69	100.0
1.001	SWMH02	SWMH03	37.578	0.600	117.981	117.827	0.154	244.0	300	5.32	100.0
1.002	SWMH03	SWMH04	55.361	0.600	117.827	117.600	0.227	243.9	300	6.24	82.8
1.003	SWMH04	SWMH05	37.748	0.600	117.600	117.202	0.398	94.8	300	6.86	79.2

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
1.000	1.000	39.8	36.1	1.200	1.844	0.100	0.0	169	1.130
1.001	1.002	70.8	69.0	1.919	1.673	0.191	0.0	241	1.136
1.002	1.002	70.8	57.2	1.673	1.800	0.191	0.0	205	1.111
1.003	1.614	114.1	64.4	1.800	2.098	0.225	0.0	161	1.662

**Links**

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.004	SWMH05	SWMH06	34.574	0.600	116.977	116.907	0.070	493.9	525	7.44	76.2
1.005	SWMH06	SWMH07	16.197	0.600	116.907	116.874	0.033	490.8	525	7.71	74.9
1.006	SWMH07	SWMH08	44.021	0.600	116.874	113.475	3.399	13.0	525	8.44	71.6
1.007	SWMH08	Pond	34.626	0.600	113.400	113.200	0.200	173.1	600	9.02	69.2
2.000	SWMH09	SWMH02	41.026	0.600	119.275	118.131	1.144	35.9	150	4.41	95.9
3.000	SWMH10	SWMH04	15.720	0.600	118.950	117.750	1.200	13.1	150	4.11	98.5
4.000	SWMH11	SWMH12	30.544	0.600	118.000	117.818	0.182	167.8	225	4.56	94.6
4.001	SWMH12	SWMH13	121.822	0.600	117.743	117.244	0.499	244.1	300	6.59	80.7
4.002	SWMH13	SWMH05	10.249	0.600	117.244	117.202	0.042	244.0	300	6.76	79.8
5.000	SWMH14	SWMH12	12.473	0.600	118.200	117.893	0.307	40.6	100	4.21	97.6
6.000	SWMH15	SWMH16	16.259	0.600	119.150	118.913	0.237	68.6	150	4.27	97.1
6.001	SWMH16	SWMH17	19.860	0.600	118.838	117.503	1.335	14.9	300	4.81	92.6
6.002	SWMH17	SWMH05	29.392	0.600	117.503	117.202	0.301	97.6	300	5.58	87.0
7.000	SWMH18	SWMH16	32.405	0.600	119.275	118.838	0.437	74.2	225	4.54	94.8
8.000	SWMH19	SWMH20	20.812	0.600	118.150	117.943	0.207	100.5	150	4.35	96.4
8.001	SWMH20	SWMH17	49.158	0.600	117.868	117.578	0.290	169.5	225	5.16	89.9
9.000	SWMH21	SWMH22	14.108	0.600	118.150	117.575	0.575	24.5	150	4.23	97.4
9.001	SWMH22	SWMH23	19.257	0.600	117.500	113.975	3.525	5.5	225	4.53	94.9
9.002	SWMH23	SWMH08	12.640	0.600	113.900	113.775	0.125	101.1	300	4.74	93.2
10.000	SWMH25	SWMH24	184.812	0.600	116.900	116.300	0.600	308.0	300	7.08	78.0
10.001	SWMH24	SWMH08	13.031	0.600	115.700	113.700	2.000	6.5	300	7.30	76.9
11.000	SWMH30	SWMH31	22.182	0.600	118.500	118.300	0.200	110.9	150	4.37	100.0
11.001	SWMH31	SWMH32	40.023	0.600	118.300	117.900	0.400	100.1	150	5.04	100.0


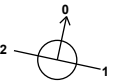

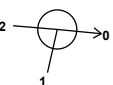
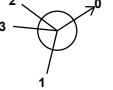
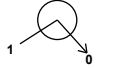

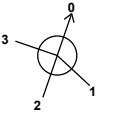
Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
1.004	1.001	216.7	184.8	2.098	1.068	0.671	0.0	375	1.118
1.005	1.004	217.3	183.8	1.068	1.601	0.679	0.0	372	1.120
1.006	6.246	1352.2	175.7	1.601	1.100	0.679	0.0	126	4.373
1.007	1.847	522.4	282.1	1.100	0.600	1.128	0.0	314	1.881
2.000	1.686	29.8	21.5	1.275	1.919	0.062	0.0	95	1.833
3.000	2.798	49.4	12.1	1.200	1.800	0.034	0.0	51	2.324
4.000	1.006	40.0	11.3	0.675	1.357	0.033	0.0	81	0.866
4.001	1.002	70.8	49.0	1.357	2.156	0.168	0.0	184	1.078
4.002	1.002	70.8	48.5	2.156	2.098	0.168	0.0	183	1.076
5.000	1.213	9.5	2.1	1.200	1.407	0.006	0.0	32	0.982
6.000	1.215	21.5	11.2	1.200	1.137	0.032	0.0	77	1.229
6.001	4.096	289.5	41.8	1.062	2.397	0.125	0.0	76	2.942
6.002	1.591	112.5	78.0	2.397	2.098	0.248	0.0	184	1.713
7.000	1.520	60.4	23.0	1.200	1.137	0.067	0.0	96	1.420
8.000	1.002	17.7	12.2	1.200	1.607	0.035	0.0	92	1.079
8.001	1.001	39.8	24.7	1.607	2.397	0.076	0.0	129	1.054
9.000	2.041	36.1	15.1	1.200	1.175	0.043	0.0	68	1.952
9.001	5.635	224.0	35.7	1.175	0.900	0.104	0.0	60	4.147
9.002	1.563	110.5	49.9	0.900	1.025	0.148	0.0	141	1.523
10.000	0.890	62.9	48.5	0.600	2.100	0.172	0.0	198	0.979
10.001	6.196	438.0	83.7	2.700	1.100	0.301	0.0	88	4.810
11.000	0.953	16.8	7.6	1.050	2.150	0.021	0.0	71	0.929
11.001	1.004	17.7	11.9	2.150	2.200	0.033	0.0	90	1.075

**Links**





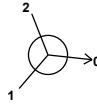
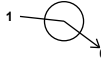


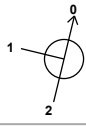
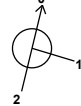



Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
11.002	SWMH32	SWMH34	17.751	0.600	117.900	117.750	0.150	118.3	150	5.21	100.0
11.003	SWMH34	SWMH36	10.727	0.600	117.700	117.575	0.125	85.8	225	5.39	100.0
11.004	SWMH36	SWMH24	19.640	0.600	117.500	116.300	1.200	16.4	300	5.66	98.9
12.000	SWMH33	SWMH34	48.766	0.600	118.500	117.700	0.800	61.0	225	4.81	100.0
13.000	SWMH35	SWMH36	12.123	0.600	117.800	117.575	0.225	53.9	150	4.20	100.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
11.002	0.922	16.3	11.9	2.200	1.450	0.033	0.0	95	1.005
11.003	1.412	56.1	36.5	1.425	1.200	0.101	0.0	132	1.500
11.004	3.905	276.0	46.1	1.200	2.100	0.129	0.0	82	2.920
12.000	1.678	66.7	13.4	1.025	1.425	0.037	0.0	68	1.318
13.000	1.373	24.3	10.1	1.050	1.275	0.028	0.0	68	1.313

**Manhole Schedule**

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
SWMH01	527243.173	202443.624	119.800	1.425	1200		0	1.000	118.375 225
SWMH02	527283.666	202434.931	120.200	2.219	1200		1 2	2.000 1.000	118.131 150 118.131 225
SWMH03	527291.553	202471.672	119.800	1.973	1200		1	1.001	117.981 300 117.827 300
SWMH04	527346.721	202467.051	119.700	2.100	1200		1 2	3.000 1.002	117.750 150 117.600 300
SWMH05	527384.293	202463.413	119.600	2.623	1200		1 2 3	6.002 4.002 1.003	117.202 300 117.202 300 117.202 300
SWMH06	527413.413	202482.051	118.500	1.593	1200		1	1.004	116.977 525 116.907 525
SWMH07	527424.261	202470.023	119.000	2.126	1200		1	1.005	116.874 525 116.874 525
SWMH08	527454.311	202459.706	115.100	1.700	1200		1 2 3	10.001 9.002 1.006	113.700 300 113.775 300 113.475 525
							0	1.007	113.400 600

**Manhole Schedule**

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
SWMH09	527323.778	202426.320	120.700	1.425	1200					
						0	2.000	119.275	150	
Pond	527468.269	202500.363	114.400	1.200	1200		1	1.007	113.200	600
SWMH10	527343.246	202451.720	120.300	1.350	1200		0	3.000	118.950	150
SWMH11	527243.740	202511.091	118.900	0.900	1200		0	4.000	118.000	225
SWMH12	527254.955	202482.680	119.400	1.657	1200		1	5.000	117.893	100
						2	4.000	117.818	225	
						0	4.001	117.743	300	
SWMH13	527376.064	202469.523	119.700	2.456	1200		1	4.001	117.244	300
						0	4.002	117.244	300	
SWMH14	527246.816	202473.228	119.500	1.300	1200		0	5.000	118.200	100
SWMH15	527368.889	202399.739	120.500	1.350	1200		0	6.000	119.150	150
SWMH16	527372.712	202415.542	120.200	1.362	1200		1	7.000	118.838	225
						2	6.000	118.913	150	
						0	6.001	118.838	300	
SWMH17	527377.382	202434.845	120.200	2.697	1200		1	8.001	117.578	225
						2	6.001	117.503	300	
						0	6.002	117.503	300	
SWMH18	527341.216	202423.162	120.700	1.425	1200		0	7.000	119.275	225
SWMH19	527430.458	202440.556	119.500	1.350	1200		0	8.000	118.150	150
SWMH20	527424.441	202420.633	119.700	1.832	1200		1	8.000	117.943	150
						0	8.001	117.868	225	

**Manhole Schedule**

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
SWMH21	527423.216	202455.327	119.500	1.350	1200		0	9.000	118.150	150
SWMH22	527434.636	202461.703	118.900	1.400	1200		1	9.000	117.575	150
SWMH23	527452.850	202455.450	115.100	1.200	1200		0	9.001	117.500	225
SWMH24	527474.238	202441.267	118.700	3.000	1200		1	11.004	116.300	300
SWMH25	527639.506	202373.418	117.800	0.900	1200		2	10.000	116.300	300
SWMH30	527414.288	202409.808	119.700	1.200	1200		0	10.001	115.700	300
SWMH31	527435.565	202403.537	120.600	2.300	1200		0	10.000	116.900	300
SWMH32	527475.466	202400.417	120.250	2.350	1200		1	11.000	118.500	150
SWMH33	527436.588	202432.457	119.750	1.250	1200		1	11.000	118.300	150
SWMH34	527482.711	202416.622	119.350	1.650	1200		0	11.001	117.900	150
SWMH35	527498.156	202421.467	119.000	1.200	1200		0	11.002	117.900	150
SWMH36	527487.089	202426.415	119.000	1.500	1200		1	12.000	118.500	225
							2	12.000	117.700	225
							0	11.002	117.750	150
							0	11.003	117.700	225
							0	13.000	117.800	150
							1	13.000	117.575	150
							2	11.003	117.575	225
							0	11.004	117.500	300

**Simulation Settings**

Rainfall Methodology	FSR	Analysis Speed	Normal
FSR Region	England and Wales	Skip Steady State	x
M5-60 (mm)	20.000	Drain Down Time (mins)	240
Ratio-R	0.400	Additional Storage (m <sup>3</sup> /ha)	20.0
Summer CV	0.750	Check Discharge Rate(s)	x
Winter CV	0.840	Check Discharge Volume	x

**Storm Durations**

15	60	180	360	600	960	2160
30	120	240	480	720	1440	2880

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
30	0	0	0
100	40	0	0

**Node Pond Online Hydro-Brake® Control**

Flap Valve	x	Objective (HE)	Minimise upstream storage
Replaces Downstream Link	✓	Sump Available	✓
Invert Level (m)	113.000	Product Number	CTL-SHE-0100-4500-1000-4500
Design Depth (m)	1.000	Min Outlet Diameter (m)	0.150
Design Flow (l/s)	4.5	Min Node Diameter (mm)	1200

**Node Pond Depth/Area Storage Structure**

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	113.000
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	

Depth (m)	Area (m <sup>2</sup> )	Inf Area (m <sup>2</sup> )	Depth (m)	Area (m <sup>2</sup> )	Inf Area (m <sup>2</sup> )
0.000	1118.0	0.0	1.000	1571.0	0.0

**Results for 30 year Critical Storm Duration. Lowest mass balance: 99.52%**

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	SWMH01	10	118.550	0.175	36.6	0.4440	0.0000	OK
15 minute winter	SWMH02	10	118.233	0.252	69.2	0.3504	0.0000	OK
15 minute winter	SWMH03	11	118.070	0.242	67.8	0.2742	0.0000	OK
15 minute winter	SWMH04	11	117.792	0.192	78.2	0.2167	0.0000	OK
15 minute winter	SWMH05	11	117.402	0.425	230.1	0.5782	0.0000	OK
15 minute winter	SWMH06	11	117.243	0.336	232.0	0.4135	0.0000	OK
15 minute winter	SWMH07	11	117.018	0.144	230.8	0.1627	0.0000	OK
15 minute winter	SWMH08	11	113.803	0.403	370.4	0.4562	0.0000	OK
15 minute summer	SWMH09	10	119.376	0.101	22.7	0.2020	0.0000	OK
720 minute winter	Pond	690	113.371	0.171	33.6	446.0744	0.0000	OK
15 minute winter	SWMH10	10	119.003	0.053	12.4	0.0869	0.0000	OK
15 minute winter	SWMH11	10	118.084	0.084	12.1	0.1566	0.0000	OK
15 minute winter	SWMH12	10	117.956	0.213	61.4	0.5727	0.0000	OK
15 minute winter	SWMH13	11	117.471	0.227	59.7	0.2567	0.0000	OK
15 minute winter	SWMH14	10	118.233	0.033	2.2	0.0401	0.0000	OK
15 minute winter	SWMH15	10	119.233	0.083	11.7	0.1334	0.0000	OK
15 minute summer	SWMH16	10	118.918	0.080	45.7	0.1211	0.0000	OK
15 minute winter	SWMH17	10	117.721	0.218	90.6	0.3220	0.0000	OK
15 minute summer	SWMH18	10	119.381	0.106	24.5	0.2196	0.0000	OK
15 minute winter	SWMH19	10	118.249	0.099	12.8	0.1632	0.0000	OK
15 minute summer	SWMH20	10	118.010	0.142	27.7	0.2239	0.0000	OK
15 minute winter	SWMH21	10	118.223	0.073	15.7	0.1296	0.0000	OK
15 minute winter	SWMH22	10	117.562	0.062	38.0	0.1247	0.0000	OK
15 minute summer	SWMH23	10	114.064	0.164	54.1	0.3063	0.0000	OK
15 minute winter	SWMH24	11	115.799	0.099	91.5	0.1122	0.0000	OK

Link Event (Upstream Depth)	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	SWMH01	1.000	SWMH02	35.8	1.135	0.901	1.3071	
15 minute winter	SWMH02	1.001	SWMH03	67.8	1.115	0.957	2.3114	
15 minute winter	SWMH03	1.002	SWMH04	67.3	1.244	0.950	3.0032	
15 minute winter	SWMH04	1.003	SWMH05	78.0	1.667	0.683	1.8387	
15 minute winter	SWMH05	1.004	SWMH06	229.5	1.369	1.059	5.7601	
15 minute winter	SWMH06	1.005	SWMH07	230.8	2.403	1.062	1.5695	
15 minute winter	SWMH07	1.006	SWMH08	229.9	2.531	0.170	4.1820	
15 minute winter	SWMH08	1.007	Pond	364.4	1.949	0.698	6.5165	
15 minute summer	SWMH09	2.000	SWMH02	22.7	1.810	0.763	0.5154	
720 minute winter	Pond	Hydro-Brake®		4.5				195.2
15 minute winter	SWMH10	3.000	SWMH04	12.4	2.276	0.251	0.0857	
15 minute winter	SWMH11	4.000	SWMH12	12.1	0.709	0.302	0.5962	
15 minute winter	SWMH12	4.001	SWMH13	59.7	1.121	0.843	6.6418	
15 minute winter	SWMH13	4.002	SWMH05	58.0	1.139	0.819	0.5490	
15 minute winter	SWMH14	5.000	SWMH12	2.2	0.904	0.231	0.0463	
15 minute winter	SWMH15	6.000	SWMH16	11.7	1.207	0.545	0.1575	
15 minute summer	SWMH16	6.001	SWMH17	45.7	1.382	0.158	0.6910	
15 minute winter	SWMH17	6.002	SWMH05	88.5	1.702	0.787	1.5278	
15 minute summer	SWMH18	7.000	SWMH16	24.5	1.583	0.406	0.5027	
15 minute winter	SWMH19	8.000	SWMH20	12.8	1.067	0.721	0.2491	
15 minute summer	SWMH20	8.001	SWMH17	27.7	1.051	0.696	1.2955	
15 minute winter	SWMH21	9.000	SWMH22	15.7	1.905	0.435	0.1163	
15 minute winter	SWMH22	9.001	SWMH23	38.0	3.550	0.170	0.2271	
15 minute summer	SWMH23	9.002	SWMH08	54.1	1.470	0.490	0.4654	
15 minute winter	SWMH24	10.001	SWMH08	91.7	4.574	0.209	0.2723	

**Results for 30 year Critical Storm Duration. Lowest mass balance: 99.52%**

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	SWMH25	11	117.102	0.202	62.9	1.0011	0.0000	OK
15 minute summer	SWMH30	10	118.572	0.072	7.7	0.1061	0.0000	OK
15 minute summer	SWMH31	10	118.392	0.092	12.1	0.1138	0.0000	OK
15 minute winter	SWMH32	11	118.000	0.100	12.1	0.1128	0.0000	OK
15 minute winter	SWMH33	10	118.568	0.068	13.5	0.1176	0.0000	OK
15 minute winter	SWMH34	10	117.844	0.144	36.3	0.2172	0.0000	OK
15 minute winter	SWMH35	10	117.872	0.072	10.2	0.1150	0.0000	OK
15 minute winter	SWMH36	10	117.586	0.086	45.3	0.0972	0.0000	OK

Link Event (Upstream Depth)	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	SWMH25	10.000	SWMH24	47.7	1.047	0.759	8.4169	
15 minute summer	SWMH30	11.000	SWMH31	7.7	0.786	0.459	0.2179	
15 minute summer	SWMH31	11.001	SWMH32	12.1	1.029	0.680	0.4702	
15 minute winter	SWMH32	11.002	SWMH34	11.9	0.984	0.729	0.2142	
15 minute winter	SWMH33	12.000	SWMH34	13.5	0.765	0.202	0.9023	
15 minute winter	SWMH34	11.003	SWMH36	35.1	1.407	0.625	0.2687	
15 minute winter	SWMH35	13.000	SWMH36	10.2	1.270	0.420	0.0974	
15 minute winter	SWMH36	11.004	SWMH24	45.0	2.807	0.163	0.3146	



**Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.52%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	SWMH01	11	119.488	1.113	66.5	2.8202	0.0000	SURCHARGED
15 minute winter	SWMH02	11	118.982	1.001	103.2	1.3939	0.0000	SURCHARGED
15 minute winter	SWMH03	11	118.624	0.797	98.3	0.9012	0.0000	SURCHARGED
15 minute winter	SWMH04	11	118.129	0.529	116.5	0.5984	0.0000	SURCHARGED
15 minute winter	SWMH05	11	117.629	0.652	369.6	0.8873	0.0000	SURCHARGED
15 minute winter	SWMH06	11	117.357	0.450	374.0	0.5542	0.0000	OK
15 minute winter	SWMH07	11	117.059	0.185	373.4	0.2090	0.0000	OK
15 minute winter	SWMH08	11	114.104	0.704	611.7	0.7960	0.0000	SURCHARGED
15 minute winter	SWMH09	11	120.338	1.063	41.2	2.1271	0.0000	SURCHARGED
1440 minute winter	Pond	1410	113.713	0.513	34.6	913.7900	0.0000	OK
15 minute summer	SWMH10	9	119.025	0.075	22.6	0.1220	0.0000	OK
15 minute winter	SWMH11	11	118.673	0.673	21.9	1.2544	0.0000	FLOOD RISK
15 minute winter	SWMH12	11	118.640	0.897	102.7	2.4104	0.0000	SURCHARGED
15 minute winter	SWMH13	11	117.743	0.499	90.5	0.5645	0.0000	SURCHARGED
15 minute winter	SWMH14	11	118.663	0.463	8.3	0.5659	0.0000	SURCHARGED
15 minute winter	SWMH15	10	119.287	0.137	21.3	0.2202	0.0000	OK
15 minute winter	SWMH16	10	118.949	0.111	83.0	0.1683	0.0000	OK
15 minute winter	SWMH17	11	118.272	0.769	150.5	1.1376	0.0000	SURCHARGED
15 minute summer	SWMH18	10	119.431	0.156	44.5	0.3224	0.0000	OK
15 minute winter	SWMH19	11	118.896	0.746	23.3	1.2304	0.0000	SURCHARGED
15 minute winter	SWMH20	11	118.632	0.764	42.7	1.2057	0.0000	SURCHARGED
15 minute winter	SWMH21	10	118.261	0.111	28.6	0.1961	0.0000	OK
15 minute winter	SWMH22	10	117.585	0.085	69.2	0.1705	0.0000	OK
15 minute winter	SWMH23	11	114.219	0.319	98.5	0.5949	0.0000	SURCHARGED
15 minute winter	SWMH24	11	115.821	0.121	152.1	0.1365	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	SWMH01	1.000	SWMH02	54.2	1.362	1.361	1.6472	
15 minute winter	SWMH02	1.001	SWMH03	98.3	1.396	1.388	2.6462	
15 minute winter	SWMH03	1.002	SWMH04	99.3	1.411	1.402	3.8985	
15 minute winter	SWMH04	1.003	SWMH05	116.6	1.732	1.022	2.6582	
15 minute winter	SWMH05	1.004	SWMH06	369.5	1.720	1.705	7.1427	
15 minute winter	SWMH06	1.005	SWMH07	373.4	2.735	1.718	2.1458	
15 minute winter	SWMH07	1.006	SWMH08	372.8	2.503	0.276	6.2476	
15 minute winter	SWMH08	1.007	Pond	609.6	2.181	1.167	9.2708	
15 minute winter	SWMH09	2.000	SWMH02	30.6	1.803	1.028	0.7223	
1440 minute winter	Pond	Hydro-Brake®		4.5				329.1
15 minute summer	SWMH10	3.000	SWMH04	22.6	2.581	0.457	0.2031	
15 minute winter	SWMH11	4.000	SWMH12	20.4	0.702	0.511	1.2148	
15 minute winter	SWMH12	4.001	SWMH13	90.5	1.285	1.278	8.5786	
15 minute winter	SWMH13	4.002	SWMH05	90.2	1.281	1.274	0.7217	
15 minute winter	SWMH14	5.000	SWMH12	7.0	0.893	0.733	0.0976	
15 minute winter	SWMH15	6.000	SWMH16	21.1	1.333	0.983	0.2708	
15 minute winter	SWMH16	6.001	SWMH17	82.0	1.477	0.283	0.9350	
15 minute winter	SWMH17	6.002	SWMH05	146.7	2.084	1.305	2.0698	
15 minute summer	SWMH18	7.000	SWMH16	44.5	1.829	0.737	0.7861	
15 minute winter	SWMH19	8.000	SWMH20	20.5	1.167	1.161	0.3664	
15 minute winter	SWMH20	8.001	SWMH17	43.8	1.169	1.100	1.9551	
15 minute winter	SWMH21	9.000	SWMH22	28.6	2.152	0.793	0.1873	
15 minute winter	SWMH22	9.001	SWMH23	69.2	3.622	0.309	0.5024	
15 minute winter	SWMH23	9.002	SWMH08	94.5	1.637	0.855	0.8901	
15 minute winter	SWMH24	10.001	SWMH08	152.1	4.703	0.347	0.6315	

**Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.52%**

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	SWMH25	12	117.369	0.469	114.3	2.3239	0.0000	SURCHARGED
15 minute winter	SWMH30	11	118.726	0.226	14.0	0.3346	0.0000	SURCHARGED
15 minute winter	SWMH31	11	118.620	0.320	21.6	0.3955	0.0000	SURCHARGED
15 minute winter	SWMH32	11	118.177	0.277	18.4	0.3131	0.0000	SURCHARGED
15 minute winter	SWMH33	10	118.594	0.094	24.6	0.1618	0.0000	OK
15 minute winter	SWMH34	10	117.970	0.270	61.0	0.4067	0.0000	SURCHARGED
15 minute summer	SWMH35	10	117.908	0.108	18.6	0.1724	0.0000	OK
15 minute winter	SWMH36	10	117.616	0.116	77.2	0.1310	0.0000	OK

Link Event (Upstream Depth)	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	SWMH25	10.000	SWMH24	77.8	1.154	1.237	11.5702	
15 minute winter	SWMH30	11.000	SWMH31	13.6	0.864	0.807	0.3905	
15 minute winter	SWMH31	11.001	SWMH32	18.4	1.091	1.035	0.7046	
15 minute winter	SWMH32	11.002	SWMH34	18.5	1.057	1.132	0.3125	
15 minute winter	SWMH33	12.000	SWMH34	24.6	0.852	0.369	1.3521	
15 minute winter	SWMH34	11.003	SWMH36	58.7	1.490	1.046	0.4125	
15 minute summer	SWMH35	13.000	SWMH36	18.6	1.442	0.767	0.1563	
15 minute winter	SWMH36	11.004	SWMH24	76.6	3.220	0.277	0.4679	