

Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	30	Maximum Rainfall (mm/hr)	50.0
Additional Flow (%)	0	Minimum Velocity (m/s)	1.00
FSR Region	England and Wales	Connection Type	Level Soffits
M5-60 (mm)	20.000	Minimum Backdrop Height (m)	0.000
Ratio-R	0.400	Preferred Cover Depth (m)	1.200
CV	0.750	Include Intermediate Ground	✓
Time of Entry (mins)	5.00	Enforce best practice design rules	✓

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
S1	0.137	5.00	118.830	1200	442050.051	295658.109	2.330
S2	0.201	5.00	118.560	1200	442057.553	295627.637	2.210
S3	0.089	5.00	118.800	1200	442073.202	295597.499	2.590
S4	0.030	5.00	118.990	1200	442083.516	295577.633	2.880
S5	0.076	5.00	118.930	1200	442092.081	295566.009	2.000
S6	0.000		118.910	1350	442083.653	295566.603	3.000
S7	0.129	5.00	118.700	1350	442076.465	295557.634	3.000
S8	0.110	5.00	115.920	1200	442007.735	295600.975	1.520
S9	0.022	5.00	116.390	1350	442012.743	295594.799	2.190
S10	0.078	5.00	116.850	1350	442026.201	295568.883	2.750
S11	0.064	5.00	117.290	1350	442041.476	295539.466	3.290
S12	0.118	5.00	118.905	1200	442122.178	295627.520	1.640
S13	0.028	5.00	119.280	1200	442139.262	295594.618	2.234
S14	0.059	5.00	118.690	1200	442155.918	295588.298	1.830
S15	0.065	5.00	117.735	1200	442175.867	295549.879	2.155
S16	0.028	5.00	117.630	1200	442173.277	295541.025	2.100
S17	0.162	5.00	116.635	1350	442105.618	295502.055	2.205
S18	0.000		115.665	1350	442052.731	295479.076	1.420
S19	0.184	5.00	115.615	1350	442043.249	295483.201	1.495
S20	0.025	5.00	116.210	1350	442030.348	295524.160	2.210
S21	0.000		116.440	1500	442026.452	295531.664	2.640
S22	0.180	5.00	115.410	1500	442007.670	295522.842	2.400
S23	0.105	5.00	113.245	1500	441965.926	295510.381	2.400
S24	0.149	5.00	110.675	1200	441937.069	295457.767	1.485
S25	0.015	5.00	111.235	1200	441940.810	295478.715	2.135
S26	0.063	5.00	111.705	1500	441936.451	295501.583	3.005
S27	0.145	5.00	109.145	1200	441894.985	295561.957	1.575
S28	0.091	5.00	109.910	1200	441907.425	295522.330	2.510
S29	0.000		110.500	1200	441911.980	295507.822	3.200
S30	0.050	5.00	110.545	1800	441913.513	295498.001	3.745
S31	0.088	5.00	108.320	1800	441869.458	295491.122	3.020
S32	0.032	5.00	107.670	1800	441857.075	295497.506	2.550
S33	0.053	5.00	107.035	1200	441806.412	295586.706	1.515
S34	0.029	5.00	107.155	1200	441817.585	295559.744	1.755
S35	0.000		106.860	1200	441838.009	295536.524	1.610
S36	0.138	5.00	106.760	1800	441842.066	295528.220	2.056
HW1	0.000		106.700	1800	441828.339	295521.638	2.046
HW2	0.000	5.00	106.700	1800	441805.376	295527.578	2.096
HW3	0.000		106.700	1800	441795.957	295555.711	2.146
HW4	0.000	5.00	106.700	1800	441781.318	295589.520	2.220
S37	0.151	5.00	118.360	1200	442011.032	295794.075	2.000

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
S38	0.000		118.410	1200	442014.806	295785.529	2.235
S39	0.069	5.00	118.540	1200	442023.412	295774.838	2.635
S40	0.017	5.00	118.800	1200	442035.853	295752.026	3.405
S41	0.252	5.00	119.020	1200	442045.241	295725.925	4.170
S42	0.048	5.00	119.190	1200	442030.372	295718.171	4.670
S43	0.146	5.00	115.915	1200	441954.128	295759.468	2.000
S44	0.084	5.00	117.580	1200	441981.562	295725.385	3.850
S45	0.085	5.00	118.040	1350	442004.276	295697.166	4.610
S46	0.146	5.00	116.600	1350	441981.795	295679.071	4.274
S47	0.247	5.00	115.315	1350	441956.937	295670.222	3.998
S48	0.062	5.00	112.970	1350	441909.609	295670.236	3.462
S49	0.222	5.00	112.020	1500	441893.606	295662.160	3.273
S50	0.377	5.00	108.090	1500	441831.251	295614.343	3.165
S51	0.059	5.00	107.175	1800	441812.456	295608.565	2.645
S52	0.086	5.00	106.490	1800	441785.080	295608.565	2.010
S53	0.050	5.00	106.240	2100	441774.589	295604.017	1.810
HW5	0.000		106.400	1800	441761.929	295619.703	2.020
HW6	0.000	5.00	106.300	1800	441732.406	295605.119	1.990
S54	0.000		106.300	2700	441718.701	295601.053	2.040
HW7	0.000		104.580	1200	441709.095	295601.667	0.370

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	S1	S2	31.382	0.600	116.500	116.350	0.150	209.2	300	5.48	50.0
1.001	S2	S3	33.959	0.600	116.350	116.210	0.140	242.6	300	6.05	50.0
1.002	S3	S4	22.384	0.600	116.210	116.110	0.100	223.8	300	6.40	50.0
1.003	S4	S6	11.031	0.600	116.110	116.060	0.050	220.6	300	6.58	50.0
2.000	S5	S6	8.449	0.600	116.930	116.135	0.795	10.6	225	5.03	50.0
1.004	S6	S7	11.494	0.600	115.910	115.700	0.210	54.7	450	6.65	50.0
1.005	S7	S11	39.425	0.600	115.700	114.000	1.700	23.2	450	6.80	50.0
3.000	S8	S9	7.951	0.600	114.400	114.350	0.050	159.0	300	5.11	50.0
3.001	S9	S10	29.202	0.600	114.200	114.100	0.100	292.0	450	5.52	50.0
3.002	S10	S11	33.146	0.600	114.100	114.000	0.100	331.5	450	6.01	50.0
1.006	S11	S21	16.929	0.600	114.000	113.950	0.050	338.6	450	7.06	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)
1.000	1.083	76.5	18.6	2.030	1.910	0.137	0.0
1.001	1.005	71.0	45.8	1.910	2.290	0.338	0.0
1.002	1.047	74.0	57.9	2.290	2.580	0.427	0.0
1.003	1.054	74.5	61.9	2.580	2.550	0.457	0.0
2.000	4.036	160.5	10.3	1.775	2.550	0.076	0.0
1.004	2.752	437.7	72.2	2.550	2.550	0.533	0.0
1.005	4.235	673.6	89.7	2.550	2.840	0.662	0.0
3.000	1.244	87.9	14.9	1.220	1.740	0.110	0.0
3.001	1.184	188.4	17.9	1.740	2.300	0.132	0.0
3.002	1.111	176.7	28.5	2.300	2.840	0.210	0.0
1.006	1.099	174.8	126.9	2.840	2.040	0.936	0.0

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)
4.000	S12	S13	37.073	0.600	117.265	117.046	0.219	169.3	225	5.62	50.0
4.001	S13	S14	17.815	0.600	117.046	116.935	0.111	160.5	225	5.91	50.0
4.002	S14	S15	43.290	0.600	116.860	115.580	1.280	33.8	300	6.17	50.0
4.003	S15	S16	9.225	0.600	115.580	115.530	0.050	184.5	300	6.30	50.0
4.004	S16	S17	78.079	0.600	115.530	114.505	1.025	76.2	300	7.03	50.0
4.005	S17	S18	57.663	0.600	114.430	114.245	0.185	311.7	375	7.97	50.0
4.006	S18	S19	10.340	0.600	114.245	114.195	0.050	206.8	375	8.11	50.0
4.007	S19	S20	42.943	0.600	114.120	114.000	0.120	357.9	450	8.77	50.0
4.008	S20	S21	8.455	0.600	114.000	113.950	0.050	169.1	450	8.87	50.0
1.007	S21	S22	20.751	0.600	113.800	113.010	0.790	26.3	600	8.94	50.0
1.008	S22	S23	43.564	0.600	113.010	110.845	2.165	20.1	600	9.07	50.0
1.009	S23	S26	30.760	0.600	110.845	108.700	2.145	14.3	600	9.15	50.0
5.000	S24	S25	21.279	0.600	109.190	109.100	0.090	236.4	300	5.35	50.0
5.001	S25	S26	23.280	0.600	109.100	109.000	0.100	232.8	300	5.73	50.0
1.010	S26	S30	23.216	0.600	108.700	106.950	1.750	13.3	600	9.21	50.0
6.000	S27	S28	41.534	0.600	107.570	107.400	0.170	244.3	300	5.69	50.0
6.001	S28	S29	15.206	0.600	107.400	107.300	0.100	152.1	300	5.89	50.0
6.002	S29	S30	9.940	0.600	107.300	107.250	0.050	198.8	300	6.04	50.0
1.011	S30	S31	44.589	0.600	106.800	105.300	1.500	29.7	750	9.35	50.0
1.012	S31	S32	13.932	0.600	105.300	105.120	0.180	77.4	750	9.43	50.0
1.013	S32	S36	34.185	0.600	105.120	104.704	0.416	82.2	750	9.61	50.0
7.000	S33	S34	29.185	0.600	105.520	105.400	0.120	243.2	300	5.48	50.0
7.001	S34	S35	30.924	0.600	105.400	105.250	0.150	206.2	300	5.96	50.0
7.002	S35	S36	9.242	0.600	105.250	105.200	0.050	184.8	300	6.09	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)
4.000	1.002	39.8	16.0	1.415	2.009	0.118	0.0
4.001	1.029	40.9	19.8	2.009	1.530	0.146	0.0
4.002	2.712	191.7	27.8	1.530	1.855	0.205	0.0
4.003	1.154	81.6	36.6	1.855	1.800	0.270	0.0
4.004	1.803	127.4	40.4	1.800	1.830	0.298	0.0
4.005	1.021	112.7	62.3	1.830	1.045	0.460	0.0
4.006	1.256	138.7	62.3	1.045	1.045	0.460	0.0
4.007	1.069	170.0	87.3	1.045	1.760	0.644	0.0
4.008	1.560	248.1	90.7	1.760	2.040	0.669	0.0
1.007	4.763	1346.8	217.5	2.040	1.800	1.605	0.0
1.008	5.444	1539.3	241.9	1.800	1.800	1.785	0.0
1.009	6.451	1824.1	256.1	1.800	2.405	1.890	0.0
5.000	1.018	72.0	20.2	1.185	1.835	0.149	0.0
5.001	1.026	72.5	22.2	1.835	2.405	0.164	0.0
1.010	6.708	1896.6	286.9	2.405	2.995	2.117	0.0
6.000	1.001	70.8	19.7	1.275	2.210	0.145	0.0
6.001	1.272	89.9	32.0	2.210	2.900	0.236	0.0
6.002	1.111	78.5	32.0	2.900	2.995	0.236	0.0
1.011	5.143	2272.2	325.7	2.995	2.270	2.403	0.0
1.012	3.182	1405.9	337.6	2.270	1.800	2.491	0.0
1.013	3.088	1364.3	341.9	1.800	1.306	2.523	0.0
7.000	1.003	70.9	7.2	1.215	1.455	0.053	0.0
7.001	1.091	77.1	11.1	1.455	1.310	0.082	0.0
7.002	1.153	81.5	11.1	1.310	1.260	0.082	0.0

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)
1.014	S36	HW1	15.223	0.600	104.704	104.654	0.050	304.5	750	9.77	50.0
1.016	HW2	HW3	29.668	0.600	104.604	104.554	0.050	593.4	750	5.43	50.0
1.018	HW4	S53	15.983	0.600	104.480	104.430	0.050	319.7	750	5.17	50.0
8.000	S37	S38	9.342	0.600	116.360	116.175	0.185	50.5	300	5.07	50.0
8.001	S38	S39	13.724	0.600	116.175	115.905	0.270	50.8	300	5.17	50.0
8.002	S39	S40	25.984	0.600	115.905	115.395	0.510	50.9	300	5.37	50.0
8.003	S40	S41	27.738	0.600	115.395	114.850	0.545	50.9	300	5.58	50.0
8.004	S41	S42	16.769	0.600	114.850	114.520	0.330	50.8	300	5.71	50.0
8.005	S42	S45	33.499	0.600	114.520	113.868	0.652	51.4	300	5.96	50.0
9.000	S43	S44	43.752	0.600	113.915	113.730	0.185	236.5	300	5.72	50.0
9.001	S44	S45	36.225	0.600	113.730	113.580	0.150	241.5	300	6.32	50.0
8.006	S45	S46	28.859	0.600	113.430	112.326	1.104	26.1	450	6.44	50.0
8.007	S46	S47	26.386	0.600	112.326	111.317	1.009	26.2	450	6.55	50.0
8.008	S47	S48	47.328	0.600	111.317	109.508	1.809	26.2	450	6.74	50.0
8.009	S48	S49	17.925	0.600	109.508	108.822	0.686	26.1	450	6.82	50.0
8.010	S49	S50	78.579	0.600	108.747	104.925	3.822	20.6	525	7.08	50.0
8.011	S50	S51	19.663	0.600	104.925	104.775	0.150	131.1	525	7.25	50.0
8.012	S51	S52	27.376	0.600	104.530	104.480	0.050	547.5	750	7.64	50.0
8.013	S52	S53	11.434	0.600	104.480	104.430	0.050	228.7	750	7.74	50.0
1.019	S53	HW5	20.158	0.600	104.430	104.380	0.050	403.2	750	7.98	50.0
1.021	HW6	S54	14.295	0.600	104.310	104.260	0.050	285.9	750	5.14	50.0
1.022	S54	HW7	9.626	0.600	104.260	104.210	0.050	192.5	300	5.29	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)
1.014	1.598	706.0	371.7	1.306	1.296	2.743	0.0
1.016	1.141	504.2	0.0	1.346	1.396	0.000	0.0
1.018	1.559	688.9	0.0	1.470	1.060	0.000	0.0
8.000	2.217	156.7	20.5	1.700	1.935	0.151	0.0
8.001	2.210	156.2	20.5	1.935	2.335	0.151	0.0
8.002	2.207	156.0	29.8	2.335	3.105	0.220	0.0
8.003	2.209	156.1	32.1	3.105	3.870	0.237	0.0
8.004	2.210	156.2	66.3	3.870	4.370	0.489	0.0
8.005	2.198	155.4	72.8	4.370	3.872	0.537	0.0
9.000	1.018	71.9	19.8	1.700	3.550	0.146	0.0
9.001	1.007	71.2	31.2	3.550	4.160	0.230	0.0
8.006	3.988	634.3	115.5	4.160	3.824	0.852	0.0
8.007	3.987	634.2	135.3	3.824	3.548	0.998	0.0
8.008	3.987	634.0	168.7	3.548	3.012	1.245	0.0
8.009	3.989	634.4	177.1	3.012	2.748	1.307	0.0
8.010	4.955	1072.6	207.2	2.748	2.640	1.529	0.0
8.011	1.954	423.1	258.3	2.640	1.875	1.906	0.0
8.012	1.189	525.1	266.3	1.895	1.260	1.965	0.0
8.013	1.846	815.5	278.0	1.260	1.060	2.051	0.0
1.019	1.387	612.9	284.7	1.060	1.270	2.101	0.0
1.021	1.650	728.8	0.0	1.240	1.290	0.000	0.0
1.022	1.129	79.8	0.0	1.740	0.070	0.000	0.0

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
1.000	31.382	209.2	300	Circular	118.830	116.500	2.030	118.560	116.350	1.910
1.001	33.959	242.6	300	Circular	118.560	116.350	1.910	118.800	116.210	2.290
1.002	22.384	223.8	300	Circular	118.800	116.210	2.290	118.990	116.110	2.580
1.003	11.031	220.6	300	Circular	118.990	116.110	2.580	118.910	116.060	2.550
2.000	8.449	10.6	225	Circular	118.930	116.930	1.775	118.910	116.135	2.550
1.004	11.494	54.7	450	Circular	118.910	115.910	2.550	118.700	115.700	2.550
1.005	39.425	23.2	450	Circular	118.700	115.700	2.550	117.290	114.000	2.840
3.000	7.951	159.0	300	Circular	115.920	114.400	1.220	116.390	114.350	1.740
3.001	29.202	292.0	450	Circular	116.390	114.200	1.740	116.850	114.100	2.300
3.002	33.146	331.5	450	Circular	116.850	114.100	2.300	117.290	114.000	2.840
1.006	16.929	338.6	450	Circular	117.290	114.000	2.840	116.440	113.950	2.040
4.000	37.073	169.3	225	Circular	118.905	117.265	1.415	119.280	117.046	2.009
4.001	17.815	160.5	225	Circular	119.280	117.046	2.009	118.690	116.935	1.530
4.002	43.290	33.8	300	Circular	118.690	116.860	1.530	117.735	115.580	1.855
4.003	9.225	184.5	300	Circular	117.735	115.580	1.855	117.630	115.530	1.800
4.004	78.079	76.2	300	Circular	117.630	115.530	1.800	116.635	114.505	1.830
4.005	57.663	311.7	375	Circular	116.635	114.430	1.830	115.665	114.245	1.045
4.006	10.340	206.8	375	Circular	115.665	114.245	1.045	115.615	114.195	1.045
4.007	42.943	357.9	450	Circular	115.615	114.120	1.045	116.210	114.000	1.760
4.008	8.455	169.1	450	Circular	116.210	114.000	1.760	116.440	113.950	2.040
1.007	20.751	26.3	600	Circular	116.440	113.800	2.040	115.410	113.010	1.800
1.008	43.564	20.1	600	Circular	115.410	113.010	1.800	113.245	110.845	1.800
1.009	30.760	14.3	600	Circular	113.245	110.845	1.800	111.705	108.700	2.405
5.000	21.279	236.4	300	Circular	110.675	109.190	1.185	111.235	109.100	1.835
5.001	23.280	232.8	300	Circular	111.235	109.100	1.835	111.705	109.000	2.405

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	S1	1200	Manhole	Adoptable	S2	1200	Manhole	Adoptable
1.001	S2	1200	Manhole	Adoptable	S3	1200	Manhole	Adoptable
1.002	S3	1200	Manhole	Adoptable	S4	1200	Manhole	Adoptable
1.003	S4	1200	Manhole	Adoptable	S6	1350	Manhole	Adoptable
2.000	S5	1200	Manhole	Adoptable	S6	1350	Manhole	Adoptable
1.004	S6	1350	Manhole	Adoptable	S7	1350	Manhole	Adoptable
1.005	S7	1350	Manhole	Adoptable	S11	1350	Manhole	Adoptable
3.000	S8	1200	Manhole	Adoptable	S9	1350	Manhole	Adoptable
3.001	S9	1350	Manhole	Adoptable	S10	1350	Manhole	Adoptable
3.002	S10	1350	Manhole	Adoptable	S11	1350	Manhole	Adoptable
1.006	S11	1350	Manhole	Adoptable	S21	1500	Manhole	Adoptable
4.000	S12	1200	Manhole	Adoptable	S13	1200	Manhole	Adoptable
4.001	S13	1200	Manhole	Adoptable	S14	1200	Manhole	Adoptable
4.002	S14	1200	Manhole	Adoptable	S15	1200	Manhole	Adoptable
4.003	S15	1200	Manhole	Adoptable	S16	1200	Manhole	Adoptable
4.004	S16	1200	Manhole	Adoptable	S17	1350	Manhole	Adoptable
4.005	S17	1350	Manhole	Adoptable	S18	1350	Manhole	Adoptable
4.006	S18	1350	Manhole	Adoptable	S19	1350	Manhole	Adoptable
4.007	S19	1350	Manhole	Adoptable	S20	1350	Manhole	Adoptable
4.008	S20	1350	Manhole	Adoptable	S21	1500	Manhole	Adoptable
1.007	S21	1500	Manhole	Adoptable	S22	1500	Manhole	Adoptable
1.008	S22	1500	Manhole	Adoptable	S23	1500	Manhole	Adoptable
1.009	S23	1500	Manhole	Adoptable	S26	1500	Manhole	Adoptable
5.000	S24	1200	Manhole	Adoptable	S25	1200	Manhole	Adoptable
5.001	S25	1200	Manhole	Adoptable	S26	1500	Manhole	Adoptable

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
1.010	23.216	13.3	600	Circular	111.705	108.700	2.405	110.545	106.950	2.995
6.000	41.534	244.3	300	Circular	109.145	107.570	1.275	109.910	107.400	2.210
6.001	15.206	152.1	300	Circular	109.910	107.400	2.210	110.500	107.300	2.900
6.002	9.940	198.8	300	Circular	110.500	107.300	2.900	110.545	107.250	2.995
1.011	44.589	29.7	750	Circular	110.545	106.800	2.995	108.320	105.300	2.270
1.012	13.932	77.4	750	Circular	108.320	105.300	2.270	107.670	105.120	1.800
1.013	34.185	82.2	750	Circular	107.670	105.120	1.800	106.760	104.704	1.306
7.000	29.185	243.2	300	Circular	107.035	105.520	1.215	107.155	105.400	1.455
7.001	30.924	206.2	300	Circular	107.155	105.400	1.455	106.860	105.250	1.310
7.002	9.242	184.8	300	Circular	106.860	105.250	1.310	106.760	105.200	1.260
1.014	15.223	304.5	750	Circular	106.760	104.704	1.306	106.700	104.654	1.296
1.016	29.668	593.4	750	Circular	106.700	104.604	1.346	106.700	104.554	1.396
1.018	15.983	319.7	750	Circular	106.700	104.480	1.470	106.240	104.430	1.060
8.000	9.342	50.5	300	Circular	118.360	116.360	1.700	118.410	116.175	1.935
8.001	13.724	50.8	300	Circular	118.410	116.175	1.935	118.540	115.905	2.335
8.002	25.984	50.9	300	Circular	118.540	115.905	2.335	118.800	115.395	3.105
8.003	27.738	50.9	300	Circular	118.800	115.395	3.105	119.020	114.850	3.870
8.004	16.769	50.8	300	Circular	119.020	114.850	3.870	119.190	114.520	4.370
8.005	33.499	51.4	300	Circular	119.190	114.520	4.370	118.040	113.868	3.872
9.000	43.752	236.5	300	Circular	115.915	113.915	1.700	117.580	113.730	3.550
9.001	36.225	241.5	300	Circular	117.580	113.730	3.550	118.040	113.580	4.160
8.006	28.859	26.1	450	Circular	118.040	113.430	4.160	116.600	112.326	3.824
8.007	26.386	26.2	450	Circular	116.600	112.326	3.824	115.315	111.317	3.548
8.008	47.328	26.2	450	Circular	115.315	111.317	3.548	112.970	109.508	3.012
8.009	17.925	26.1	450	Circular	112.970	109.508	3.012	112.020	108.822	2.748

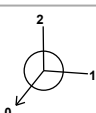
Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.010	S26	1500	Manhole	Adoptable	S30	1800	Manhole	Adoptable
6.000	S27	1200	Manhole	Adoptable	S28	1200	Manhole	Adoptable
6.001	S28	1200	Manhole	Adoptable	S29	1200	Manhole	Adoptable
6.002	S29	1200	Manhole	Adoptable	S30	1800	Manhole	Adoptable
1.011	S30	1800	Manhole	Adoptable	S31	1800	Manhole	Adoptable
1.012	S31	1800	Manhole	Adoptable	S32	1800	Manhole	Adoptable
1.013	S32	1800	Manhole	Adoptable	S36	1800	Manhole	Adoptable
7.000	S33	1200	Manhole	Adoptable	S34	1200	Manhole	Adoptable
7.001	S34	1200	Manhole	Adoptable	S35	1200	Manhole	Adoptable
7.002	S35	1200	Manhole	Adoptable	S36	1800	Manhole	Adoptable
1.014	S36	1800	Manhole	Adoptable	HW1	1800	Manhole	Adoptable
1.016	HW2	1800	Manhole	Adoptable	HW3	1800	Manhole	Adoptable
1.018	HW4	1800	Manhole	Adoptable	S53	2100	Manhole	Adoptable
8.000	S37	1200	Manhole	Adoptable	S38	1200	Manhole	Adoptable
8.001	S38	1200	Manhole	Adoptable	S39	1200	Manhole	Adoptable
8.002	S39	1200	Manhole	Adoptable	S40	1200	Manhole	Adoptable
8.003	S40	1200	Manhole	Adoptable	S41	1200	Manhole	Adoptable
8.004	S41	1200	Manhole	Adoptable	S42	1200	Manhole	Adoptable
8.005	S42	1200	Manhole	Adoptable	S45	1350	Manhole	Adoptable
9.000	S43	1200	Manhole	Adoptable	S44	1200	Manhole	Adoptable
9.001	S44	1200	Manhole	Adoptable	S45	1350	Manhole	Adoptable
8.006	S45	1350	Manhole	Adoptable	S46	1350	Manhole	Adoptable
8.007	S46	1350	Manhole	Adoptable	S47	1350	Manhole	Adoptable
8.008	S47	1350	Manhole	Adoptable	S48	1350	Manhole	Adoptable
8.009	S48	1350	Manhole	Adoptable	S49	1500	Manhole	Adoptable

Pipeline Schedule

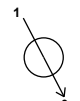
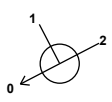
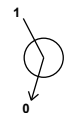
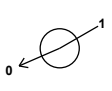
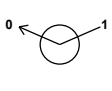
Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
8.010	78.579	20.6	525	Circular	112.020	108.747	2.748	108.090	104.925	2.640
8.011	19.663	131.1	525	Circular	108.090	104.925	2.640	107.175	104.775	1.875
8.012	27.376	547.5	750	Circular	107.175	104.530	1.895	106.490	104.480	1.260
8.013	11.434	228.7	750	Circular	106.490	104.480	1.260	106.240	104.430	1.060
1.019	20.158	403.2	750	Circular	106.240	104.430	1.060	106.400	104.380	1.270
1.021	14.295	285.9	750	Circular	106.300	104.310	1.240	106.300	104.260	1.290
1.022	9.626	192.5	300	Circular	106.300	104.260	1.740	104.580	104.210	0.070

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
8.010	S49	1500	Manhole	Adoptable	S50	1500	Manhole	Adoptable
8.011	S50	1500	Manhole	Adoptable	S51	1800	Manhole	Adoptable
8.012	S51	1800	Manhole	Adoptable	S52	1800	Manhole	Adoptable
8.013	S52	1800	Manhole	Adoptable	S53	2100	Manhole	Adoptable
1.019	S53	2100	Manhole	Adoptable	HW5	1800	Manhole	Adoptable
1.021	HW6	1800	Manhole	Adoptable	S54	2700	Manhole	Adoptable
1.022	S54	2700	Manhole	Adoptable	HW7	1200	Manhole	Adoptable

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
S1	442050.051	295658.109	118.830	2.330	1200		0	1.000	116.500	300
S2	442057.553	295627.637	118.560	2.210	1200		1	1.000	116.350	300
S3	442073.202	295597.499	118.800	2.590	1200		1	1.001	116.210	300
S4	442083.516	295577.633	118.990	2.880	1200		1	1.002	116.210	300
S5	442092.081	295566.009	118.930	2.000	1200		0	1.003	116.110	300
S6	442083.653	295566.603	118.910	3.000	1350		1	2.000	116.930	225
							2	1.003	116.060	300
							0	1.004	115.910	450
S7	442076.465	295557.634	118.700	3.000	1350		1	1.004	115.700	450
							0	1.005	115.700	450

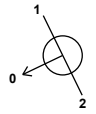
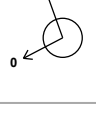
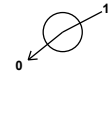
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
S8	442007.735	295600.975	115.920	1.520	1200		0	3.000	114.400	300
S9	442012.743	295594.799	116.390	2.190	1350		1	3.000	114.350	300
							0	3.001	114.200	450
S10	442026.201	295568.883	116.850	2.750	1350		1	3.001	114.100	450
							0	3.002	114.100	450
S11	442041.476	295539.466	117.290	3.290	1350		1	3.002	114.000	450
							2	1.005	114.000	450
							0	1.006	114.000	450
S12	442122.178	295627.520	118.905	1.640	1200		0	4.000	117.265	225
S13	442139.262	295594.618	119.280	2.234	1200		1	4.000	117.046	225
							0	4.001	117.046	225
S14	442155.918	295588.298	118.690	1.830	1200		1	4.001	116.935	225
							0	4.002	116.860	300
S15	442175.867	295549.879	117.735	2.155	1200		1	4.002	115.580	300
							0	4.003	115.580	300
S16	442173.277	295541.025	117.630	2.100	1200		1	4.003	115.530	300
							0	4.004	115.530	300
S17	442105.618	295502.055	116.635	2.205	1350		1	4.004	114.505	300
							0	4.005	114.430	375
S18	442052.731	295479.076	115.665	1.420	1350		1	4.005	114.245	375
							0	4.006	114.245	375
S19	442043.249	295483.201	115.615	1.495	1350		1	4.006	114.195	375
							0	4.007	114.120	450
S20	442030.348	295524.160	116.210	2.210	1350		1	4.007	114.000	450
							0	4.008	114.000	450

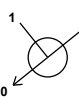
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections		Link	IL (m)	Dia (mm)
S21	442026.452	295531.664	116.440	2.640	1500		1	4.008	113.950	450
							2	1.006	113.950	450
							0	1.007	113.800	600
S22	442007.670	295522.842	115.410	2.400	1500		1	1.007	113.010	600
							0	1.008	113.010	600
S23	441965.926	295510.381	113.245	2.400	1500		1	1.008	110.845	600
							0	1.009	110.845	600
S24	441937.069	295457.767	110.675	1.485	1200					
							0	5.000	109.190	300
S25	441940.810	295478.715	111.235	2.135	1200		1	5.000	109.100	300
							0	5.001	109.100	300
S26	441936.451	295501.583	111.705	3.005	1500		1	5.001	109.000	300
							2	1.009	108.700	600
							0	1.010	108.700	600
S27	441894.985	295561.957	109.145	1.575	1200		0	6.000	107.570	300
							1	6.000	107.400	300
S28	441907.425	295522.330	109.910	2.510	1200		0	6.001	107.400	300
							1	6.001	107.300	300
S29	441911.980	295507.822	110.500	3.200	1200		0	6.002	107.300	300
							1	6.002	107.250	300
S30	441913.513	295498.001	110.545	3.745	1800		1	6.002	107.250	300
							2	1.010	106.950	600
							0	1.011	106.800	750
S31	441869.458	295491.122	108.320	3.020	1800		1	1.011	105.300	750
							0	1.012	105.300	750
S32	441857.075	295497.506	107.670	2.550	1800		1	1.012	105.120	750
							0	1.013	105.120	750
S33	441806.412	295586.706	107.035	1.515	1200		0	7.000	105.520	300

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
S34	441817.585	295559.744	107.155	1.755	1200		1 7.000	105.400	300
							0 7.001	105.400	300
S35	441838.009	295536.524	106.860	1.610	1200		1 7.001	105.250	300
							0 7.002	105.250	300
S36	441842.066	295528.220	106.760	2.056	1800		1 7.002	105.200	300
							2 1.013	104.704	750
							0 1.014	104.704	750
HW1	441828.339	295521.638	106.700	2.046	1800		1 1.014	104.654	750
HW2	441805.376	295527.578	106.700	2.096	1800		0 1.016	104.604	750
HW3	441795.957	295555.711	106.700	2.146	1800		1 1.016	104.554	750
HW4	441781.318	295589.520	106.700	2.220	1800		0 1.018	104.480	750
S37	442011.032	295794.075	118.360	2.000	1200		0 8.000	116.360	300
S38	442014.806	295785.529	118.410	2.235	1200		1 8.000	116.175	300
							0 8.001	116.175	300
S39	442023.412	295774.838	118.540	2.635	1200		1 8.001	115.905	300
							0 8.002	115.905	300
S40	442035.853	295752.026	118.800	3.405	1200		1 8.002	115.395	300
							0 8.003	115.395	300
S41	442045.241	295725.925	119.020	4.170	1200		1 8.003	114.850	300
							0 8.004	114.850	300
S42	442030.372	295718.171	119.190	4.670	1200		1 8.004	114.520	300
							0 8.005	114.520	300

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
S43	441954.128	295759.468	115.915	2.000	1200		0	9.000	113.915	300
S44	441981.562	295725.385	117.580	3.850	1200		1	9.000	113.730	300
							0	9.001	113.730	300
S45	442004.276	295697.166	118.040	4.610	1350		1	9.001	113.580	300
							2	8.005	113.868	300
							0	8.006	113.430	450
S46	441981.795	295679.071	116.600	4.274	1350		1	8.006	112.326	450
							0	8.007	112.326	450
S47	441956.937	295670.222	115.315	3.998	1350		1	8.007	111.317	450
							0	8.008	111.317	450
S48	441909.609	295670.236	112.970	3.462	1350		1	8.008	109.508	450
							0	8.009	109.508	450
S49	441893.606	295662.160	112.020	3.273	1500		1	8.009	108.822	450
							0	8.010	108.747	525
S50	441831.251	295614.343	108.090	3.165	1500		1	8.010	104.925	525
							0	8.011	104.925	525
S51	441812.456	295608.565	107.175	2.645	1800		1	8.011	104.775	525
							0	8.012	104.530	750
S52	441785.080	295608.565	106.490	2.010	1800		1	8.012	104.480	750
							0	8.013	104.480	750
S53	441774.589	295604.017	106.240	1.810	2100		1	8.013	104.430	750
							2	1.018	104.430	750
							0	1.019	104.430	750
HW5	441761.929	295619.703	106.400	2.020	1800		1	1.019	104.380	750
HW6	441732.406	295605.119	106.300	1.990	1800		0	1.021	104.310	750

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
S54	441718.701	295601.053	106.300	2.040	2700		1	1.021	104.260	750
							0	1.022	104.260	300
HW7	441709.095	295601.667	104.580	0.370	1200		1	1.022	104.210	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 (m³/ha)	20.0
Summer CV	0.750	Check Discharge Rate(s)	x
Winter CV	0.840	Check Discharge Volume	x

Storm Durations

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

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
1	0	0	0
30	0	0	0
100	40	0	0

Node S54 Online Hydro-Brake® Control

Flap Valve	✓	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	✓	Sump Available	✓
Invert Level (m)	104.260	Product Number	CTL-SHE-0240-3280-1500-3280
Design Depth (m)	1.500	Min Outlet Diameter (m)	0.300
Design Flow (l/s)	32.8	Min Node Diameter (mm)	1800

Node HW2 Flow through Pond Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Main Channel Length (m)	24.886
Side Inf Coefficient (m/hr)	0.00000	Invert Level (m)	104.604	Main Channel Slope (1:X)	500.0
Safety Factor	2.0	Time to half empty (mins)	0	Main Channel n	0.250

Inlets

HW1

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	571.3	0.0	1.450	999.3	0.0

Node HW4 Flow through Pond Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Main Channel Length (m)	37.103
Side Inf Coefficient (m/hr)	0.00000	Invert Level (m)	104.480	Main Channel Slope (1:X)	500.0
Safety Factor	2.0	Time to half empty (mins)	0	Main Channel n	0.250

Inlets
HW3

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	1425.4	0.0	1.580	2130.4	0.0

Node HW6 Flow through Pond Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Main Channel Length (m)	34.878
Side Inf Coefficient (m/hr)	0.00000	Invert Level (m)	104.310	Main Channel Slope (1:X)	500.0
Safety Factor	2.0	Time to half empty (mins)	0	Main Channel n	0.250

Inlets
HW5

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	206.0	0.0	1.750	750.0	0.0

Results for 1 year Critical Storm Duration. Lowest mass balance: 99.90%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S1	10	116.601	0.101	19.3	0.2319	0.0000	OK
15 minute winter	S2	11	116.535	0.185	47.2	0.5444	0.0000	OK
15 minute winter	S3	11	116.433	0.223	58.0	0.4055	0.0000	OK
15 minute winter	S4	11	116.337	0.227	62.0	0.3036	0.0000	OK
15 minute winter	S5	10	116.971	0.041	10.7	0.0779	0.0000	OK
15 minute winter	S6	11	116.048	0.138	71.7	0.1981	0.0000	OK
15 minute winter	S7	11	115.809	0.109	88.7	0.2491	0.0000	OK
15 minute winter	S8	10	114.491	0.091	15.5	0.2357	0.0000	OK
15 minute winter	S9	10	114.292	0.092	18.4	0.1508	0.0000	OK
15 minute winter	S10	12	114.289	0.189	29.0	0.3783	0.0000	OK
15 minute winter	S11	12	114.284	0.284	122.0	0.5176	0.0000	OK
15 minute winter	S12	10	117.367	0.102	16.6	0.2613	0.0000	OK
15 minute winter	S13	11	117.163	0.117	20.2	0.1619	0.0000	OK
15 minute winter	S14	11	116.937	0.077	27.9	0.1364	0.0000	OK
15 minute winter	S15	11	115.727	0.147	36.5	0.2555	0.0000	OK
15 minute winter	S16	11	115.646	0.116	40.3	0.1618	0.0000	OK
15 minute winter	S17	11	114.630	0.200	61.8	0.5795	0.0000	OK
15 minute winter	S18	12	114.434	0.189	60.1	0.2699	0.0000	OK
15 minute winter	S19	12	114.345	0.225	80.1	0.8773	0.0000	OK
15 minute winter	S20	12	114.201	0.201	83.5	0.3330	0.0000	OK
15 minute winter	S21	12	113.971	0.171	202.8	0.3023	0.0000	OK
15 minute winter	S22	12	113.170	0.160	222.7	0.5237	0.0000	OK
15 minute winter	S23	12	110.994	0.149	234.7	0.3938	0.0000	OK
15 minute winter	S24	10	109.306	0.116	21.0	0.3628	0.0000	OK
15 minute winter	S25	11	109.220	0.119	22.7	0.1518	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	S1	1.000	S2	18.9	0.578	0.247	1.0323	
15 minute winter	S2	1.001	S3	46.2	0.912	0.650	1.7258	
15 minute winter	S3	1.002	S4	58.0	1.023	0.784	1.2681	
15 minute winter	S4	1.003	S6	61.5	1.168	0.826	0.5797	
15 minute winter	S5	2.000	S6	10.6	2.224	0.066	0.0404	
15 minute winter	S6	1.004	S7	71.6	2.029	0.164	0.4069	
15 minute winter	S7	1.005	S11	88.6	1.381	0.131	2.6486	
15 minute winter	S8	3.000	S9	15.3	0.894	0.174	0.1359	
15 minute winter	S9	3.001	S10	18.0	0.584	0.096	1.2640	
15 minute winter	S10	3.002	S11	25.6	0.383	0.145	2.7978	
15 minute winter	S11	1.006	S21	120.0	1.246	0.686	1.6288	
15 minute winter	S12	4.000	S13	16.3	0.864	0.409	0.7008	
15 minute winter	S13	4.001	S14	20.1	0.999	0.491	0.3580	
15 minute winter	S14	4.002	S15	27.9	1.165	0.146	1.0530	
15 minute winter	S15	4.003	S16	36.6	1.233	0.449	0.2743	
15 minute winter	S16	4.004	S17	40.3	1.530	0.316	2.0592	
15 minute winter	S17	4.005	S18	60.1	1.049	0.533	3.3084	
15 minute winter	S18	4.006	S19	59.8	1.154	0.431	0.5362	
15 minute winter	S19	4.007	S20	80.7	1.092	0.475	3.1738	
15 minute winter	S20	4.008	S21	82.9	1.319	0.334	0.5315	
15 minute winter	S21	1.007	S22	202.9	3.208	0.151	1.3127	
15 minute winter	S22	1.008	S23	223.1	3.886	0.145	2.5020	
15 minute winter	S23	1.009	S26	235.0	4.038	0.129	1.7913	
15 minute winter	S24	5.000	S25	20.6	0.814	0.286	0.5390	
15 minute winter	S25	5.001	S26	22.6	0.895	0.312	0.5888	

Results for 1 year Critical Storm Duration. Lowest mass balance: 99.90%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S26	12	108.863	0.163	262.9	0.3570	0.0000	OK
15 minute winter	S27	10	107.677	0.107	20.4	0.3189	0.0000	OK
15 minute winter	S28	11	107.536	0.136	32.6	0.2523	0.0000	OK
15 minute winter	S29	11	107.446	0.146	32.2	0.1647	0.0000	OK
15 minute winter	S30	12	106.980	0.180	299.5	0.5049	0.0000	OK
15 minute winter	S31	12	105.585	0.285	309.7	0.8903	0.0000	OK
15 minute winter	S32	12	105.387	0.267	314.4	0.7476	0.0000	OK
15 minute winter	S33	10	105.584	0.064	7.5	0.1176	0.0000	OK
15 minute winter	S34	11	105.478	0.078	11.4	0.1146	0.0000	OK
15 minute winter	S35	11	105.329	0.079	11.2	0.0897	0.0000	OK
15 minute summer	S36	9	105.183	0.478	322.2	1.8599	0.0000	OK
30 minute winter	HW1	28	104.917	0.263	281.3	0.6692	0.0000	OK
30 minute winter	HW2	28	104.915	0.311	234.1	0.7916	0.0000	OK
240 minute winter	HW3	200	104.728	0.174	73.9	0.4434	0.0000	OK
240 minute winter	HW4	200	104.728	0.248	51.0	0.6315	0.0000	OK
15 minute winter	S37	10	116.441	0.080	21.3	0.2125	0.0000	OK
15 minute winter	S38	10	116.251	0.076	21.1	0.0864	0.0000	OK
15 minute winter	S39	10	115.998	0.093	30.6	0.1533	0.0000	OK
15 minute winter	S40	11	115.487	0.092	32.7	0.1136	0.0000	OK
15 minute winter	S41	10	115.000	0.150	67.8	0.3507	0.0000	OK
15 minute winter	S42	11	114.673	0.153	73.7	0.2046	0.0000	OK
15 minute winter	S43	10	114.022	0.107	20.6	0.2771	0.0000	OK
15 minute winter	S44	11	113.873	0.143	31.8	0.2242	0.0000	OK
15 minute winter	S45	11	113.564	0.134	116.3	0.2410	0.0000	OK
15 minute winter	S46	11	112.473	0.147	135.9	0.3112	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	S26	1.010	S30	263.5	4.547	0.139	1.3462	
15 minute winter	S27	6.000	S28	19.8	0.745	0.280	1.1095	
15 minute winter	S28	6.001	S29	32.2	0.993	0.358	0.4935	
15 minute winter	S29	6.002	S30	32.4	1.014	0.412	0.3174	
15 minute winter	S30	1.011	S31	300.0	2.591	0.132	5.2168	
15 minute winter	S31	1.012	S32	310.9	2.116	0.221	2.0477	
15 minute winter	S32	1.013	S36	314.9	1.827	0.231	6.0298	
15 minute winter	S33	7.000	S34	7.3	0.573	0.103	0.3725	
15 minute winter	S34	7.001	S35	11.2	0.761	0.146	0.4562	
15 minute winter	S35	7.002	S36	11.1	0.783	0.136	0.1311	
15 minute summer	S36	1.014	HW1	319.1	2.734	0.452	2.2984	
30 minute winter	HW1	Flow through pond	HW2	234.1	0.065	0.020	176.4621	
30 minute winter	HW2	1.016	HW3	168.8	2.238	0.335	2.6058	
240 minute winter	HW3	Flow through pond	HW4	45.6	0.017	0.002	311.5508	
240 minute winter	HW4	1.018	S53	27.5	0.568	0.040	2.3143	
15 minute winter	S37	8.000	S38	21.1	1.443	0.135	0.1369	
15 minute winter	S38	8.001	S39	20.9	1.287	0.134	0.2237	
15 minute winter	S39	8.002	S40	30.3	1.651	0.194	0.4774	
15 minute winter	S40	8.003	S41	32.6	1.235	0.209	0.7412	
15 minute winter	S41	8.004	S42	66.9	1.888	0.428	0.5945	
15 minute winter	S42	8.005	S45	74.0	2.125	0.476	1.1663	
15 minute winter	S43	9.000	S44	20.0	0.742	0.278	1.2130	
15 minute winter	S44	9.001	S45	31.0	0.971	0.436	1.1573	
15 minute winter	S45	8.006	S46	116.5	2.759	0.184	1.2192	
15 minute winter	S46	8.007	S47	136.2	2.857	0.215	1.2581	

Results for 1 year Critical Storm Duration. Lowest mass balance: 99.90%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S47	11	111.477	0.160	169.0	0.4260	0.0000	OK
15 minute winter	S48	11	109.690	0.182	177.7	0.3262	0.0000	OK
15 minute winter	S49	11	108.901	0.154	207.2	0.4797	0.0000	OK
15 minute winter	S50	11	105.255	0.330	257.1	1.3703	0.0000	OK
15 minute winter	S51	12	104.922	0.392	261.8	1.1735	0.0000	OK
15 minute winter	S52	12	104.843	0.363	270.3	1.2337	0.0000	OK
15 minute winter	S53	12	104.775	0.345	271.5	1.3836	0.0000	OK
240 minute winter	HW5	200	104.726	0.347	65.2	0.8820	0.0000	OK
240 minute winter	HW6	200	104.725	0.415	51.0	1.0568	0.0000	OK
240 minute winter	S54	200	104.725	0.465	33.4	2.6618	0.0000	SURCHARGED
15 minute summer	HW7	1	104.210	0.000	32.5	0.0000	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	S47	8.008	S48	169.5	3.069	0.267	2.6154	
15 minute winter	S48	8.009	S49	177.8	3.211	0.280	0.9929	
15 minute winter	S49	8.010	S50	207.1	2.133	0.193	7.6817	
15 minute winter	S50	8.011	S51	254.0	1.932	0.600	2.5874	
15 minute winter	S51	8.012	S52	258.9	1.192	0.493	6.0782	
15 minute winter	S52	8.013	S53	266.0	1.380	0.326	2.3344	
15 minute winter	S53	1.019	HW5	240.7	2.031	0.393	3.8159	
240 minute winter	HW5	Flow through pond	HW6	51.0	0.035	0.011	101.3658	
240 minute winter	HW6	1.021	S54	33.4	0.347	0.046	3.8366	
240 minute winter	S54	Hydro-Brake®	HW7	32.8				734.5

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.90%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S1	11	117.460	0.959	47.4	2.2136	0.0000	SURCHARGED
15 minute winter	S2	11	117.403	1.053	107.0	3.1069	0.0000	SURCHARGED
15 minute winter	S3	11	117.039	0.829	132.2	1.5071	0.0000	SURCHARGED
15 minute winter	S4	11	116.625	0.515	140.5	0.6898	0.0000	SURCHARGED
15 minute winter	S5	10	116.997	0.067	26.3	0.1261	0.0000	OK
15 minute winter	S6	11	116.136	0.226	164.8	0.3231	0.0000	OK
15 minute winter	S7	11	115.868	0.168	206.6	0.3853	0.0000	OK
15 minute winter	S8	11	114.594	0.194	38.1	0.4992	0.0000	OK
15 minute winter	S9	11	114.586	0.386	45.0	0.6297	0.0000	OK
15 minute winter	S10	11	114.570	0.470	62.1	0.9388	0.0000	SURCHARGED
15 minute winter	S11	11	114.559	0.559	289.6	1.0165	0.0000	SURCHARGED
15 minute winter	S12	11	117.524	0.259	40.8	0.6658	0.0000	SURCHARGED
15 minute winter	S13	11	117.295	0.249	46.8	0.3441	0.0000	SURCHARGED
15 minute winter	S14	10	116.980	0.120	66.4	0.2130	0.0000	OK
15 minute winter	S15	11	115.835	0.255	88.1	0.4427	0.0000	OK
15 minute winter	S16	11	115.722	0.192	96.1	0.2689	0.0000	OK
15 minute winter	S17	12	114.982	0.552	149.2	1.6024	0.0000	SURCHARGED
15 minute winter	S18	12	114.649	0.404	142.0	0.5778	0.0000	SURCHARGED
15 minute winter	S19	12	114.554	0.433	198.1	1.6874	0.0000	OK
15 minute winter	S20	12	114.358	0.358	201.6	0.5931	0.0000	OK
15 minute winter	S21	12	114.089	0.289	486.8	0.5100	0.0000	OK
15 minute winter	S22	12	113.272	0.262	536.0	0.8562	0.0000	OK
15 minute winter	S23	12	111.089	0.244	568.2	0.6456	0.0000	OK
15 minute winter	S24	10	109.395	0.205	51.5	0.6433	0.0000	OK
15 minute winter	S25	11	109.307	0.207	55.7	0.2636	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	S1	1.000	S2	42.2	0.628	0.552	2.2099	
15 minute winter	S2	1.001	S3	103.2	1.466	1.453	2.3914	
15 minute winter	S3	1.002	S4	130.7	1.856	1.767	1.5763	
15 minute winter	S4	1.003	S6	140.0	1.988	1.878	0.7637	
15 minute winter	S5	2.000	S6	26.2	2.824	0.163	0.0783	
15 minute winter	S6	1.004	S7	164.6	2.476	0.376	0.7677	
15 minute winter	S7	1.005	S11	206.3	1.648	0.306	4.1879	
15 minute winter	S8	3.000	S9	37.4	1.100	0.425	0.4274	
15 minute winter	S9	3.001	S10	41.0	0.613	0.218	4.4258	
15 minute winter	S10	3.002	S11	67.2	0.424	0.380	5.2518	
15 minute winter	S11	1.006	S21	283.9	1.812	1.624	2.5295	
15 minute winter	S12	4.000	S13	37.7	1.013	0.947	1.4744	
15 minute winter	S13	4.001	S14	46.4	1.189	1.134	0.6574	
15 minute winter	S14	4.002	S15	65.6	1.433	0.342	1.9514	
15 minute winter	S15	4.003	S16	87.0	1.548	1.067	0.5148	
15 minute winter	S16	4.004	S17	96.4	1.520	0.756	4.6118	
15 minute winter	S17	4.005	S18	142.0	1.288	1.260	6.3601	
15 minute winter	S18	4.006	S19	142.5	1.312	1.028	1.1314	
15 minute winter	S19	4.007	S20	194.8	1.321	1.146	6.2641	
15 minute winter	S20	4.008	S21	203.0	1.631	0.818	1.0485	
15 minute winter	S21	1.007	S22	487.5	3.865	0.362	2.6175	
15 minute winter	S22	1.008	S23	539.8	4.778	0.351	4.9227	
15 minute winter	S23	1.009	S26	570.7	4.857	0.313	3.6161	
15 minute winter	S24	5.000	S25	50.5	0.982	0.702	1.0935	
15 minute winter	S25	5.001	S26	55.4	1.141	0.764	1.1286	

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.90%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S26	12	108.977	0.277	638.6	0.6064	0.0000	OK
15 minute winter	S27	10	107.757	0.187	50.2	0.5568	0.0000	OK
15 minute winter	S28	11	107.669	0.269	80.2	0.4989	0.0000	OK
15 minute winter	S29	11	107.569	0.269	78.7	0.3042	0.0000	OK
15 minute winter	S30	12	107.093	0.293	730.7	0.8239	0.0000	OK
15 minute winter	S31	12	105.828	0.528	760.6	1.6502	0.0000	OK
15 minute winter	S32	12	105.619	0.499	773.2	1.3943	0.0000	OK
15 minute winter	S33	10	105.623	0.103	18.3	0.1892	0.0000	OK
15 minute winter	S34	11	105.528	0.128	28.0	0.1874	0.0000	OK
15 minute winter	S35	11	105.381	0.131	27.7	0.1482	0.0000	OK
15 minute winter	S36	7	105.344	0.640	835.6	2.4865	0.0000	OK
30 minute winter	HW1	24	105.162	0.508	684.7	1.2938	0.0000	OK
30 minute winter	HW2	24	105.157	0.553	491.6	1.4073	0.0000	OK
360 minute winter	HW3	344	105.061	0.507	104.5	1.2913	0.0000	OK
360 minute winter	HW4	344	105.061	0.581	67.3	1.4788	0.0000	OK
15 minute winter	S37	10	116.495	0.135	52.2	0.3575	0.0000	OK
15 minute winter	S38	10	116.304	0.129	51.9	0.1459	0.0000	OK
15 minute winter	S39	10	116.061	0.156	75.4	0.2580	0.0000	OK
15 minute winter	S40	11	115.608	0.212	80.8	0.2616	0.0000	OK
15 minute winter	S41	11	115.503	0.653	162.6	1.5282	0.0000	SURCHARGED
15 minute winter	S42	11	115.058	0.538	167.1	0.7196	0.0000	SURCHARGED
15 minute winter	S43	10	114.098	0.183	50.5	0.4747	0.0000	OK
15 minute winter	S44	11	114.007	0.277	78.4	0.4344	0.0000	OK
15 minute winter	S45	11	113.648	0.218	270.0	0.3925	0.0000	OK
15 minute winter	S46	11	112.572	0.246	317.4	0.5192	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	S26	1.010	S30	642.5	5.596	0.339	2.6669	
15 minute winter	S27	6.000	S28	48.7	0.870	0.689	2.3346	
15 minute winter	S28	6.001	S29	78.7	1.183	0.875	1.0124	
15 minute winter	S29	6.002	S30	78.9	1.285	1.004	0.6052	
15 minute winter	S30	1.011	S31	736.8	2.990	0.324	10.9325	
15 minute winter	S31	1.012	S32	764.6	2.392	0.544	4.4722	
15 minute winter	S32	1.013	S36	771.9	2.281	0.566	11.6297	
15 minute winter	S33	7.000	S34	18.0	0.720	0.254	0.7322	
15 minute winter	S34	7.001	S35	27.7	0.953	0.359	0.9014	
15 minute winter	S35	7.002	S36	27.8	0.998	0.341	0.2571	
15 minute winter	S36	1.014	HW1	876.3	3.249	1.241	4.7187	
30 minute winter	HW1	Flow through pond	HW2	491.6	0.075	0.042	345.1968	
30 minute winter	HW2	1.016	HW3	612.9	3.155	1.216	6.0158	
360 minute winter	HW3	Flow through pond	HW4	41.5	0.018	0.002	842.3217	
360 minute winter	HW4	1.018	S53	44.2	-0.203	0.064	6.0945	
15 minute winter	S37	8.000	S38	51.9	1.735	0.331	0.2793	
15 minute winter	S38	8.001	S39	51.5	1.594	0.330	0.4524	
15 minute winter	S39	8.002	S40	74.9	2.030	0.480	1.1435	
15 minute winter	S40	8.003	S41	77.3	1.324	0.495	1.7167	
15 minute winter	S41	8.004	S42	151.5	2.152	0.970	1.1809	
15 minute winter	S42	8.005	S45	166.4	2.450	1.071	2.3568	
15 minute winter	S43	9.000	S44	49.4	0.891	0.686	2.4548	
15 minute winter	S44	9.001	S45	75.9	1.228	1.066	2.2107	
15 minute winter	S45	8.006	S46	269.9	3.292	0.425	2.3741	
15 minute winter	S46	8.007	S47	316.5	3.428	0.499	2.4503	

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.90%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S47	11	111.583	0.266	396.8	0.7081	0.0000	OK
15 minute winter	S48	11	109.834	0.326	417.5	0.5835	0.0000	OK
15 minute winter	S49	11	108.991	0.244	491.4	0.7628	0.0000	OK
15 minute winter	S50	11	105.789	0.864	614.2	3.5854	0.0000	SURCHARGED
15 minute winter	S51	11	105.253	0.723	630.3	2.1612	0.0000	OK
15 minute winter	S52	11	105.121	0.641	655.5	2.1802	0.0000	OK
360 minute winter	S53	328	105.066	0.636	96.7	2.5538	0.0000	OK
360 minute winter	HW5	344	105.061	0.681	65.1	1.7328	0.0000	OK
360 minute winter	HW6	344	105.062	0.752	50.5	1.9127	0.0000	SURCHARGED
360 minute winter	S54	344	105.062	0.801	33.7	4.5894	0.0000	SURCHARGED
15 minute summer	HW7	1	104.210	0.000	32.8	0.0000	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	S47	8.008	S48	397.3	3.598	0.627	5.2131	
15 minute winter	S48	8.009	S49	419.1	3.822	0.661	1.9600	
15 minute winter	S49	8.010	S50	491.4	2.709	0.458	12.3508	
15 minute winter	S50	8.011	S51	611.1	2.829	1.444	4.1922	
15 minute winter	S51	8.012	S52	627.5	1.493	1.195	11.4429	
15 minute winter	S52	8.013	S53	651.1	1.714	0.798	4.3329	
360 minute winter	S53	1.019	HW5	65.1	0.863	0.106	8.2320	
360 minute winter	HW5	Flow through pond	HW6	50.5	0.036	0.011	227.6436	
360 minute winter	HW6	1.021	S54	33.7	0.381	0.046	6.2896	
360 minute winter	S54	Hydro-Brake®	HW7	32.8				997.1

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.90%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S1	10	118.820	2.320	86.1	5.3525	0.0000	FLOOD RISK
15 minute winter	S2	10	118.560	2.210	214.2	6.5195	9.4625	FLOOD
15 minute winter	S3	10	117.906	1.696	195.5	3.0841	0.0000	SURCHARGED
15 minute winter	S4	10	116.996	0.886	213.3	1.1862	0.0000	SURCHARGED
15 minute winter	S5	10	117.024	0.094	47.8	0.1786	0.0000	OK
15 minute winter	S6	10	116.218	0.308	260.4	0.4413	0.0000	OK
15 minute winter	S7	11	115.959	0.259	341.0	0.5929	0.0000	OK
15 minute winter	S8	11	115.189	0.789	69.1	2.0328	0.0000	SURCHARGED
15 minute winter	S9	11	115.136	0.936	79.5	1.5279	0.0000	SURCHARGED
15 minute winter	S10	11	115.111	1.011	126.4	2.0213	0.0000	SURCHARGED
15 minute winter	S11	11	115.042	1.042	500.1	1.8968	0.0000	SURCHARGED
15 minute winter	S12	12	118.734	1.469	74.2	3.7745	0.0000	FLOOD RISK
15 minute winter	S13	12	118.268	1.222	80.9	1.6888	0.0000	SURCHARGED
15 minute winter	S14	12	117.905	1.045	115.4	1.8558	0.0000	SURCHARGED
15 minute winter	S15	12	117.554	1.974	139.7	3.4224	0.0000	FLOOD RISK
15 minute winter	S16	12	117.363	1.833	134.8	2.5626	0.0000	FLOOD RISK
15 minute winter	S17	12	116.082	1.652	218.7	4.7915	0.0000	SURCHARGED
15 minute winter	S18	11	115.296	1.051	216.9	1.5033	0.0000	SURCHARGED
15 minute winter	S19	11	115.086	0.966	317.8	3.7617	0.0000	SURCHARGED
15 minute winter	S20	11	114.567	0.566	329.5	0.9392	0.0000	SURCHARGED
15 minute winter	S21	11	114.222	0.422	830.4	0.7452	0.0000	OK
15 minute winter	S22	11	113.384	0.374	936.6	1.2223	0.0000	OK
15 minute winter	S23	11	111.197	0.352	998.2	0.9306	0.0000	OK
15 minute winter	S24	11	109.670	0.480	93.7	1.5073	0.0000	SURCHARGED
15 minute winter	S25	11	109.485	0.385	99.3	0.4888	0.0000	SURCHARGED

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	S1	1.000	S2	87.9	1.249	1.149	2.2099	
15 minute winter	S2	1.001	S3	147.5	2.095	2.077	2.3914	
15 minute winter	S3	1.002	S4	194.5	2.762	2.629	1.5763	
15 minute winter	S4	1.003	S6	212.8	3.022	2.856	0.7689	
15 minute winter	S5	2.000	S6	47.6	3.262	0.297	0.1233	
15 minute winter	S6	1.004	S7	259.9	2.645	0.594	1.2049	
15 minute winter	S7	1.005	S11	335.7	2.370	0.498	4.9830	
15 minute winter	S8	3.000	S9	66.5	1.115	0.757	0.5599	
15 minute winter	S9	3.001	S10	80.2	0.642	0.426	4.6269	
15 minute winter	S10	3.002	S11	127.2	0.803	0.720	5.2518	
15 minute winter	S11	1.006	S21	501.4	3.165	2.869	2.6552	
15 minute winter	S12	4.000	S13	63.3	1.592	1.590	1.4744	
15 minute winter	S13	4.001	S14	78.3	1.969	1.913	0.7085	
15 minute winter	S14	4.002	S15	98.8	1.613	0.515	3.0485	
15 minute winter	S15	4.003	S16	123.9	1.759	1.518	0.6496	
15 minute winter	S16	4.004	S17	139.1	1.975	1.091	5.4983	
15 minute winter	S17	4.005	S18	216.9	1.966	1.924	6.3601	
15 minute winter	S18	4.006	S19	218.5	1.981	1.575	1.1405	
15 minute winter	S19	4.007	S20	314.7	1.986	1.852	6.8040	
15 minute winter	S20	4.008	S21	329.0	2.079	1.326	1.2946	
15 minute winter	S21	1.007	S22	830.1	4.206	0.616	4.1130	
15 minute winter	S22	1.008	S23	936.2	5.249	0.608	7.7696	
15 minute winter	S23	1.009	S26	997.7	5.399	0.547	5.7043	
15 minute winter	S24	5.000	S25	90.1	1.280	1.252	1.4985	
15 minute winter	S25	5.001	S26	99.8	1.438	1.377	1.5366	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.90%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S26	10	109.099	0.399	1134.9	0.8721	0.0000	OK
15 minute winter	S27	11	108.461	0.891	91.1	2.6477	0.0000	SURCHARGED
15 minute winter	S28	11	108.158	0.758	140.5	1.4067	0.0000	SURCHARGED
15 minute winter	S29	11	107.801	0.501	141.0	0.5664	0.0000	SURCHARGED
15 minute winter	S30	11	107.373	0.573	1308.1	1.6111	0.0000	OK
15 minute winter	S31	12	106.717	1.417	1343.9	4.4311	0.0000	SURCHARGED
15 minute winter	S32	12	106.335	1.215	1343.4	3.3979	0.0000	SURCHARGED
15 minute winter	S33	12	105.832	0.312	33.3	0.5711	0.0000	SURCHARGED
15 minute winter	S34	12	105.786	0.386	50.8	0.5636	0.0000	SURCHARGED
15 minute winter	S35	12	105.736	0.486	53.0	0.5495	0.0000	SURCHARGED
15 minute winter	S36	12	105.714	1.010	1450.7	3.9270	0.0000	SURCHARGED
480 minute winter	HW1	472	105.561	0.907	184.9	2.3092	0.0000	OK
480 minute winter	HW2	472	105.562	0.958	148.9	2.4370	0.0000	SURCHARGED
480 minute winter	HW3	472	105.561	1.007	111.9	2.5632	0.0000	OK
480 minute winter	HW4	472	105.561	1.081	86.7	2.7515	0.0000	SURCHARGED
15 minute winter	S37	12	118.143	1.783	94.9	4.7099	0.0000	FLOOD RISK
15 minute winter	S38	12	118.080	1.905	72.0	2.1549	0.0000	SURCHARGED
15 minute winter	S39	12	118.002	2.097	103.6	3.4699	0.0000	SURCHARGED
15 minute winter	S40	12	117.730	2.335	113.7	2.8738	0.0000	SURCHARGED
15 minute winter	S41	12	117.395	2.545	241.7	5.9562	0.0000	SURCHARGED
15 minute winter	S42	12	116.356	1.836	258.3	2.4553	0.0000	SURCHARGED
15 minute winter	S43	12	114.924	1.009	91.8	2.6136	0.0000	SURCHARGED
15 minute winter	S44	12	114.684	0.954	135.9	1.4955	0.0000	SURCHARGED
15 minute winter	S45	12	114.179	0.749	423.3	1.3489	0.0000	SURCHARGED
15 minute winter	S46	12	113.501	1.175	505.3	2.4842	0.0000	SURCHARGED

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	S26	1.010	S30	1137.4	6.075	0.600	4.7741	
15 minute winter	S27	6.000	S28	86.8	1.232	1.226	2.9248	
15 minute winter	S28	6.001	S29	141.0	2.002	1.568	1.0708	
15 minute winter	S29	6.002	S30	141.1	2.003	1.796	0.6884	
15 minute winter	S30	1.011	S31	1291.8	3.036	0.569	17.8596	
15 minute winter	S31	1.012	S32	1324.5	3.010	0.942	6.1318	
15 minute winter	S32	1.013	S36	1341.9	3.049	0.984	15.0455	
15 minute winter	S33	7.000	S34	32.6	0.820	0.459	2.0552	
15 minute winter	S34	7.001	S35	53.0	1.058	0.688	2.1776	
15 minute winter	S35	7.002	S36	41.0	0.995	0.503	0.6508	
15 minute winter	S36	1.014	HW1	1451.9	3.685	2.056	6.6815	
480 minute winter	HW1	Flow through pond	HW2	148.9	0.026	0.013	661.7495	
480 minute winter	HW2	1.016	HW3	111.9	1.314	0.222	13.0575	
480 minute winter	HW3	Flow through pond	HW4	34.2	0.020	0.002	1732.2358	
480 minute winter	HW4	1.018	S53	-61.2	0.350	-0.089	7.0344	
15 minute winter	S37	8.000	S38	72.0	1.820	0.459	0.6579	
15 minute winter	S38	8.001	S39	75.2	1.640	0.481	0.9664	
15 minute winter	S39	8.002	S40	108.6	2.034	0.696	1.8298	
15 minute winter	S40	8.003	S41	124.4	1.767	0.797	1.9533	
15 minute winter	S41	8.004	S42	231.7	3.291	1.483	1.1809	
15 minute winter	S42	8.005	S45	257.2	3.652	1.655	2.3590	
15 minute winter	S43	9.000	S44	83.1	1.181	1.155	3.0810	
15 minute winter	S44	9.001	S45	130.8	1.859	1.838	2.5509	
15 minute winter	S45	8.006	S46	425.5	3.415	0.671	4.5725	
15 minute winter	S46	8.007	S47	496.5	3.624	0.783	4.1807	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.90%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S47	12	112.616	1.299	627.4	3.4654	0.0000	SURCHARGED
15 minute winter	S48	12	110.433	0.925	654.7	1.6561	0.0000	SURCHARGED
15 minute winter	S49	11	109.167	0.420	783.8	1.3117	0.0000	OK
15 minute winter	S50	11	107.043	2.118	995.4	8.7883	0.0000	SURCHARGED
15 minute winter	S51	11	105.725	1.195	1014.2	3.5750	0.0000	SURCHARGED
480 minute winter	S52	464	105.562	1.082	137.8	3.6794	0.0000	SURCHARGED
480 minute winter	S53	472	105.562	1.132	139.8	4.5448	0.0000	SURCHARGED
480 minute winter	HW5	472	105.561	1.181	77.2	3.0053	0.0000	OK
480 minute winter	HW6	472	105.561	1.251	54.5	3.1835	0.0000	SURCHARGED
480 minute winter	S54	472	105.561	1.301	33.6	7.4475	0.0000	SURCHARGED
15 minute summer	HW7	1	104.210	0.000	32.7	0.0000	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	S47	8.008	S48	624.3	3.941	0.985	7.4988	
15 minute winter	S48	8.009	S49	656.4	4.143	1.035	2.8400	
15 minute winter	S49	8.010	S50	776.7	3.672	0.724	15.7625	
15 minute winter	S50	8.011	S51	985.2	4.561	2.329	4.2479	
15 minute winter	S51	8.012	S52	1019.0	2.316	1.941	12.0487	
480 minute winter	S52	8.013	S53	136.4	0.743	0.167	5.0323	
480 minute winter	S53	1.019	HW5	77.2	0.868	0.126	8.8720	
480 minute winter	HW5	Flow through pond	HW6	54.5	0.038	0.012	480.8039	
480 minute winter	HW6	1.021	S54	33.6	0.393	0.046	6.2915	
480 minute winter	S54	Hydro-Brake®	HW7	32.8				1198.7