

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	118.810	1200	442050.051	295658.109	2.310
S2	0.201	5.00	118.530	1200	442057.553	295627.637	2.180
S3	0.089	5.00	118.765	1200	442073.202	295597.499	2.555
S4	0.030	5.00	118.955	1200	442083.516	295577.633	2.845
S5	0.076	5.00	118.900	1200	442092.081	295566.009	1.970
S6	0.000		118.895	1350	442083.653	295566.603	2.985
S7	0.129	5.00	118.680	1350	442076.465	295557.634	2.980
S8	0.110	5.00	115.840	1200	442007.270	295600.734	1.440
S9	0.022	5.00	116.060	1350	442012.279	295594.558	1.860
S10	0.078	5.00	116.765	1350	442025.736	295568.642	2.665
S11	0.064	5.00	117.300	1350	442041.012	295539.224	3.300
S12	0.118	5.00	118.920	1200	442122.178	295627.520	1.655
S13	0.028	5.00	119.115	1200	442139.262	295594.618	2.069
S14	0.059	5.00	118.690	1200	442156.380	295588.538	1.830
S15	0.065	5.00	117.685	1200	442176.508	295549.774	2.105
S16	0.028	5.00	117.545	1200	442174.249	295540.027	2.015
S17	0.162	5.00	116.550	1350	442106.292	295500.885	2.120
S18	0.000		115.575	1350	442053.404	295477.906	1.330
S19	0.184	5.00	115.565	1350	442043.249	295483.201	1.445
S20	0.025	5.00	116.220	1350	442030.348	295524.160	2.220
S21	0.000		116.445	1500	442026.452	295531.664	2.645
S22	0.180	5.00	115.420	1500	442007.670	295522.842	2.410
S23	0.105	5.00	113.255	1500	441965.926	295510.381	2.410
S24	0.149	5.00	110.680	1200	441937.069	295457.767	1.490
S25	0.015	5.00	111.245	1200	441940.810	295478.715	2.145
S26	0.063	5.00	111.715	1500	441936.451	295501.583	3.015
S27	0.145	5.00	108.930	1200	441894.344	295561.756	1.360
S28	0.091	5.00	109.875	1200	441906.784	295522.129	2.475
S29	0.000		110.380	1200	441911.339	295507.621	3.080
S30	0.050	5.00	110.550	1800	441912.873	295497.800	3.750
S31	0.088	5.00	108.325	1800	441869.458	295491.122	3.025
S32	0.032	5.00	107.660	1800	441855.163	295498.492	2.540
S33	0.053	5.00	107.005	1200	441806.412	295586.706	1.485
S34	0.029	5.00	107.125	1200	441817.585	295559.744	1.725
S35	0.000		106.850	1200	441834.790	295540.184	1.600
S36	0.138	5.00	106.760	1800	441840.912	295527.656	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	118.085	1200	442013.119	295794.997	1.725

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
S38	0.000		118.170	1200	442016.894	295786.451	1.995
S39	0.069	5.00	118.335	1200	442030.605	295767.459	2.430
S40	0.017	5.00	118.590	1200	442037.966	295752.901	3.195
S41	0.252	5.00	118.820	1200	442047.068	295726.878	3.970
S42	0.048	5.00	118.985	1200	442030.372	295718.171	4.465
S43	0.146	5.00	115.645	1200	441954.635	295759.876	1.730
S44	0.084	5.00	117.495	1200	441982.069	295725.792	3.765
S45	0.085	5.00	117.840	1350	442004.782	295697.574	4.410
S46	0.146	5.00	116.400	1350	441981.795	295679.071	4.074
S47	0.247	5.00	115.115	1350	441956.937	295670.222	3.798
S48	0.062	5.00	112.770	1350	441909.609	295670.236	3.262
S49	0.222	5.00	111.820	1500	441893.606	295662.160	3.073
S50	0.377	5.00	107.890	1500	441831.251	295614.343	2.965
S51	0.059	5.00	107.070	1800	441812.456	295608.565	2.540
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	39.948	0.600	115.700	114.000	1.700	23.5	450	6.80	50.0
3.000	S8	S9	7.952	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	33.148	0.600	114.100	114.000	0.100	331.5	450	6.01	50.0
1.006	S11	S21	16.406	0.600	114.000	113.950	0.050	328.1	450	7.05	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	2.010	1.880	0.137	0.0
1.001	1.005	71.0	45.8	1.880	2.255	0.338	0.0
1.002	1.047	74.0	57.9	2.255	2.545	0.427	0.0
1.003	1.054	74.5	61.9	2.545	2.535	0.457	0.0
2.000	4.036	160.5	10.3	1.745	2.535	0.076	0.0
1.004	2.752	437.7	72.2	2.535	2.530	0.533	0.0
1.005	4.207	669.1	89.7	2.530	2.850	0.662	0.0
3.000	1.244	87.9	14.9	1.140	1.410	0.110	0.0
3.001	1.184	188.4	17.9	1.410	2.215	0.132	0.0
3.002	1.111	176.7	28.5	2.215	2.850	0.210	0.0
1.006	1.117	177.6	126.9	2.850	2.045	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	18.166	0.600	117.046	116.935	0.111	163.7	225	5.91	50.0
4.002	S14	S15	43.678	0.600	116.860	115.580	1.280	34.1	300	6.18	50.0
4.003	S15	S16	10.005	0.600	115.580	115.530	0.050	200.1	300	6.33	50.0
4.004	S16	S17	78.424	0.600	115.530	114.505	1.025	76.5	300	7.06	50.0
4.005	S17	S18	57.664	0.600	114.430	114.245	0.185	311.7	375	8.00	50.0
4.006	S18	S19	11.453	0.600	114.245	114.195	0.050	229.1	375	8.16	50.0
4.007	S19	S20	42.943	0.600	114.120	114.000	0.120	357.9	450	8.83	50.0
4.008	S20	S21	8.455	0.600	114.000	113.950	0.050	169.1	450	8.92	50.0
1.007	S21	S22	20.751	0.600	113.800	113.010	0.790	26.3	600	8.99	50.0
1.008	S22	S23	43.564	0.600	113.010	110.845	2.165	20.1	600	9.13	50.0
1.009	S23	S26	30.760	0.600	110.845	108.700	2.145	14.3	600	9.21	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	23.880	0.600	108.700	106.950	1.750	13.6	600	9.27	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	43.926	0.600	106.800	105.300	1.500	29.3	750	9.41	50.0
1.012	S31	S32	16.083	0.600	105.300	105.120	0.180	89.4	750	9.50	50.0
1.013	S32	S36	32.460	0.600	105.120	104.704	0.416	78.0	750	9.67	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	26.050	0.600	105.400	105.250	0.150	173.7	300	5.85	50.0
7.002	S35	S36	13.944	0.600	105.250	105.154	0.096	145.2	300	6.03	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	1.430	1.844	0.118	0.0
4.001	1.019	40.5	19.8	1.844	1.530	0.146	0.0
4.002	2.700	190.9	27.8	1.530	1.805	0.205	0.0
4.003	1.108	78.3	36.6	1.805	1.715	0.270	0.0
4.004	1.799	127.2	40.4	1.715	1.745	0.298	0.0
4.005	1.021	112.7	62.3	1.745	0.955	0.460	0.0
4.006	1.193	131.7	62.3	0.955	0.995	0.460	0.0
4.007	1.069	170.0	87.3	0.995	1.770	0.644	0.0
4.008	1.560	248.1	90.7	1.770	2.045	0.669	0.0
1.007	4.763	1346.8	217.5	2.045	1.810	1.605	0.0
1.008	5.444	1539.3	241.9	1.810	1.810	1.785	0.0
1.009	6.451	1824.1	256.1	1.810	2.415	1.890	0.0
5.000	1.018	72.0	20.2	1.190	1.845	0.149	0.0
5.001	1.026	72.5	22.2	1.845	2.415	0.164	0.0
1.010	6.614	1870.0	286.9	2.415	3.000	2.117	0.0
6.000	1.001	70.8	19.7	1.060	2.175	0.145	0.0
6.001	1.272	89.9	32.0	2.175	2.780	0.236	0.0
6.002	1.111	78.5	32.0	2.780	3.000	0.236	0.0
1.011	5.182	2289.3	325.7	3.000	2.275	2.403	0.0
1.012	2.961	1308.1	337.6	2.275	1.790	2.491	0.0
1.013	3.169	1400.2	341.9	1.790	1.306	2.523	0.0
7.000	1.003	70.9	7.2	1.185	1.425	0.053	0.0
7.001	1.190	84.1	11.1	1.425	1.300	0.082	0.0
7.002	1.302	92.0	11.1	1.300	1.306	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	13.939	0.600	104.704	104.654	0.050	278.8	750	9.81	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	9.343	0.600	116.360	116.175	0.185	50.5	300	5.07	50.0
8.001	S38	S39	23.424	0.600	116.175	115.905	0.270	86.8	300	5.30	50.0
8.002	S39	S40	16.313	0.600	115.905	115.395	0.510	32.0	300	5.40	50.0
8.003	S40	S41	27.569	0.600	115.395	114.850	0.545	50.6	300	5.61	50.0
8.004	S41	S42	18.830	0.600	114.850	114.520	0.330	57.1	300	5.76	50.0
8.005	S42	S45	32.849	0.600	114.520	113.868	0.652	50.4	300	6.00	50.0
9.000	S43	S44	43.753	0.600	113.915	113.730	0.185	236.5	300	5.72	50.0
9.001	S44	S45	36.223	0.600	113.730	113.580	0.150	241.5	300	6.32	50.0
8.006	S45	S46	29.509	0.600	113.430	112.326	1.104	26.7	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	6.75	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	7.09	50.0
8.011	S50	S51	19.663	0.600	104.925	104.775	0.150	131.1	525	7.26	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	1.671	738.1	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	1.425	1.695	0.151	0.0
8.001	1.689	119.4	20.5	1.695	2.130	0.151	0.0
8.002	2.789	197.2	29.8	2.130	2.895	0.220	0.0
8.003	2.215	156.6	32.1	2.895	3.670	0.237	0.0
8.004	2.085	147.4	66.3	3.670	4.165	0.489	0.0
8.005	2.220	156.9	72.8	4.165	3.672	0.537	0.0
9.000	1.018	71.9	19.8	1.430	3.465	0.146	0.0
9.001	1.007	71.2	31.2	3.465	3.960	0.230	0.0
8.006	3.944	627.3	115.5	3.960	3.624	0.852	0.0
8.007	3.987	634.2	135.3	3.624	3.348	0.998	0.0
8.008	3.987	634.0	168.7	3.348	2.812	1.245	0.0
8.009	3.989	634.4	177.1	2.812	2.548	1.307	0.0
8.010	4.955	1072.6	207.2	2.548	2.440	1.529	0.0
8.011	1.954	423.1	258.3	2.440	1.770	1.906	0.0
8.012	1.189	525.1	266.3	1.790	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	118.810	116.500	2.010	118.530	116.350	1.880
1.001	33.959	242.6	300	Circular	118.530	116.350	1.880	118.765	116.210	2.255
1.002	22.384	223.8	300	Circular	118.765	116.210	2.255	118.955	116.110	2.545
1.003	11.031	220.6	300	Circular	118.955	116.110	2.545	118.895	116.060	2.535
2.000	8.449	10.6	225	Circular	118.900	116.930	1.745	118.895	116.135	2.535
1.004	11.494	54.7	450	Circular	118.895	115.910	2.535	118.680	115.700	2.530
1.005	39.948	23.5	450	Circular	118.680	115.700	2.530	117.300	114.000	2.850
3.000	7.952	159.0	300	Circular	115.840	114.400	1.140	116.060	114.350	1.410
3.001	29.202	292.0	450	Circular	116.060	114.200	1.410	116.765	114.100	2.215
3.002	33.148	331.5	450	Circular	116.765	114.100	2.215	117.300	114.000	2.850
1.006	16.406	328.1	450	Circular	117.300	114.000	2.850	116.445	113.950	2.045
4.000	37.073	169.3	225	Circular	118.920	117.265	1.430	119.115	117.046	1.844
4.001	18.166	163.7	225	Circular	119.115	117.046	1.844	118.690	116.935	1.530
4.002	43.678	34.1	300	Circular	118.690	116.860	1.530	117.685	115.580	1.805
4.003	10.005	200.1	300	Circular	117.685	115.580	1.805	117.545	115.530	1.715
4.004	78.424	76.5	300	Circular	117.545	115.530	1.715	116.550	114.505	1.745
4.005	57.664	311.7	375	Circular	116.550	114.430	1.745	115.575	114.245	0.955
4.006	11.453	229.1	375	Circular	115.575	114.245	0.955	115.565	114.195	0.995
4.007	42.943	357.9	450	Circular	115.565	114.120	0.995	116.220	114.000	1.770
4.008	8.455	169.1	450	Circular	116.220	114.000	1.770	116.445	113.950	2.045
1.007	20.751	26.3	600	Circular	116.445	113.800	2.045	115.420	113.010	1.810
1.008	43.564	20.1	600	Circular	115.420	113.010	1.810	113.255	110.845	1.810
1.009	30.760	14.3	600	Circular	113.255	110.845	1.810	111.715	108.700	2.415
5.000	21.279	236.4	300	Circular	110.680	109.190	1.190	111.245	109.100	1.845
5.001	23.280	232.8	300	Circular	111.245	109.100	1.845	111.715	109.000	2.415

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	23.880	13.6	600	Circular	111.715	108.700	2.415	110.550	106.950	3.000
6.000	41.534	244.3	300	Circular	108.930	107.570	1.060	109.875	107.400	2.175
6.001	15.206	152.1	300	Circular	109.875	107.400	2.175	110.380	107.300	2.780
6.002	9.940	198.8	300	Circular	110.380	107.300	2.780	110.550	107.250	3.000
1.011	43.926	29.3	750	Circular	110.550	106.800	3.000	108.325	105.300	2.275
1.012	16.083	89.4	750	Circular	108.325	105.300	2.275	107.660	105.120	1.790
1.013	32.460	78.0	750	Circular	107.660	105.120	1.790	106.760	104.704	1.306
7.000	29.185	243.2	300	Circular	107.005	105.520	1.185	107.125	105.400	1.425
7.001	26.050	173.7	300	Circular	107.125	105.400	1.425	106.850	105.250	1.300
7.002	13.944	145.2	300	Circular	106.850	105.250	1.300	106.760	105.154	1.306
1.014	13.939	278.8	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	9.343	50.5	300	Circular	118.085	116.360	1.425	118.170	116.175	1.695
8.001	23.424	86.8	300	Circular	118.170	116.175	1.695	118.335	115.905	2.130
8.002	16.313	32.0	300	Circular	118.335	115.905	2.130	118.590	115.395	2.895
8.003	27.569	50.6	300	Circular	118.590	115.395	2.895	118.820	114.850	3.670
8.004	18.830	57.1	300	Circular	118.820	114.850	3.670	118.985	114.520	4.165
8.005	32.849	50.4	300	Circular	118.985	114.520	4.165	117.840	113.868	3.672
9.000	43.753	236.5	300	Circular	115.645	113.915	1.430	117.495	113.730	3.465
9.001	36.223	241.5	300	Circular	117.495	113.730	3.465	117.840	113.580	3.960
8.006	29.509	26.7	450	Circular	117.840	113.430	3.960	116.400	112.326	3.624
8.007	26.386	26.2	450	Circular	116.400	112.326	3.624	115.115	111.317	3.348
8.008	47.328	26.2	450	Circular	115.115	111.317	3.348	112.770	109.508	2.812
8.009	17.925	26.1	450	Circular	112.770	109.508	2.812	111.820	108.822	2.548

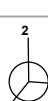
Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.010	S26	1500	Manhole	Adoptable	S30	1800	Manhole	Adoptable
6.000	S27	1200	Manhole	Adoptable	S28	1200	Manhole	Adoptable
6.001	S28	1200	Manhole	Adoptable	S29	1200	Manhole	Adoptable
6.002	S29	1200	Manhole	Adoptable	S30	1800	Manhole	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

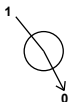
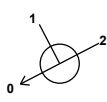
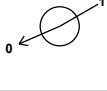
Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
8.010	78.579	20.6	525	Circular	111.820	108.747	2.548	107.890	104.925	2.440
8.011	19.663	131.1	525	Circular	107.890	104.925	2.440	107.070	104.775	1.770
8.012	27.376	547.5	750	Circular	107.070	104.530	1.790	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	118.810	2.310	1200		0	1.000	116.500	300
S2	442057.553	295627.637	118.530	2.180	1200		1	1.000	116.350	300
S3	442073.202	295597.499	118.765	2.555	1200		1	1.001	116.210	300
S4	442083.516	295577.633	118.955	2.845	1200		1	1.002	116.110	300
S5	442092.081	295566.009	118.900	1.970	1200		0	1.003	116.110	300
S6	442083.653	295566.603	118.895	2.985	1350		0	2.000	116.930	225
S7	442076.465	295557.634	118.680	2.980	1350		1	2.000	116.135	225
							2	1.003	116.060	300
							0	1.004	115.910	450
							1	1.004	115.700	450
							0	1.005	115.700	450

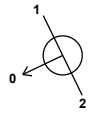
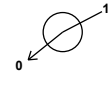
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
S8	442007.270	295600.734	115.840	1.440	1200		0	3.000	114.400	300
S9	442012.279	295594.558	116.060	1.860	1350		1	3.000	114.350	300
S10	442025.736	295568.642	116.765	2.665	1350		0	3.001	114.200	450
S11	442041.012	295539.224	117.300	3.300	1350		1	3.002	114.000	450
S12	442122.178	295627.520	118.920	1.655	1200		2	1.005	114.000	450
S13	442139.262	295594.618	119.115	2.069	1200		0	1.006	114.000	450
S14	442156.380	295588.538	118.690	1.830	1200		0	4.000	117.265	225
S15	442176.508	295549.774	117.685	2.105	1200		1	4.000	117.046	225
S16	442174.249	295540.027	117.545	2.015	1200		0	4.001	117.046	225
S17	442106.292	295500.885	116.550	2.120	1350		1	4.001	116.935	225
S18	442053.404	295477.906	115.575	1.330	1350		0	4.002	116.860	300
S19	442043.249	295483.201	115.565	1.445	1350		1	4.002	115.580	300
S20	442030.348	295524.160	116.220	2.220	1350		0	4.003	115.580	300
							1	4.003	115.530	300
							0	4.004	115.530	300
							1	4.004	114.505	300
							0	4.005	114.430	375
							1	4.005	114.245	375
							0	4.006	114.245	375
							1	4.006	114.195	375
							0	4.007	114.120	450
							1	4.007	114.000	450
							0	4.008	114.000	450

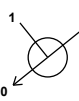
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections		Link	IL (m)	Dia (mm)
S21	442026.452	295531.664	116.445	2.645	1500		1	4.008	113.950	450
							2	1.006	113.950	450
							0	1.007	113.800	600
S22	442007.670	295522.842	115.420	2.410	1500		1	1.007	113.010	600
							0	1.008	113.010	600
S23	441965.926	295510.381	113.255	2.410	1500		1	1.008	110.845	600
							0	1.009	110.845	600
S24	441937.069	295457.767	110.680	1.490	1200					
							0	5.000	109.190	300
S25	441940.810	295478.715	111.245	2.145	1200		1	5.000	109.100	300
							0	5.001	109.100	300
S26	441936.451	295501.583	111.715	3.015	1500		1	5.001	109.000	300
							2	1.009	108.700	600
							0	1.010	108.700	600
S27	441894.344	295561.756	108.930	1.360	1200					
							0	6.000	107.570	300
S28	441906.784	295522.129	109.875	2.475	1200		1	6.000	107.400	300
							0	6.001	107.400	300
S29	441911.339	295507.621	110.380	3.080	1200		1	6.001	107.300	300
							0	6.002	107.300	300
S30	441912.873	295497.800	110.550	3.750	1800		1	6.002	107.250	300
							2	1.010	106.950	600
							0	1.011	106.800	750
S31	441869.458	295491.122	108.325	3.025	1800		1	1.011	105.300	750
							0	1.012	105.300	750
S32	441855.163	295498.492	107.660	2.540	1800		1	1.012	105.120	750
							0	1.013	105.120	750
S33	441806.412	295586.706	107.005	1.485	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	107.125	1.725	1200		1 7.000	105.400	300
							0 7.001	105.400	300
S35	441834.790	295540.184	106.850	1.600	1200		1 7.001	105.250	300
							0 7.002	105.250	300
S36	441840.912	295527.656	106.760	2.056	1800		1 7.002	105.154	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	442013.119	295794.997	118.085	1.725	1200		0 8.000	116.360	300
S38	442016.894	295786.451	118.170	1.995	1200		1 8.000	116.175	300
							0 8.001	116.175	300
S39	442030.605	295767.459	118.335	2.430	1200		1 8.001	115.905	300
							0 8.002	115.905	300
S40	442037.966	295752.901	118.590	3.195	1200		1 8.002	115.395	300
							0 8.003	115.395	300
S41	442047.068	295726.878	118.820	3.970	1200		1 8.003	114.850	300
							0 8.004	114.850	300
S42	442030.372	295718.171	118.985	4.465	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	441954.635	295759.876	115.645	1.730	1200	 0	9.000	113.915	300
S44	441982.069	295725.792	117.495	3.765	1200	 1 0	9.000 9.001	113.730 113.730	300 300
S45	442004.782	295697.574	117.840	4.410	1350	 1 2 0	9.001 8.005 8.006	113.580 113.868 113.430	300 300 450
S46	441981.795	295679.071	116.400	4.074	1350	 1 0	8.006 8.007	112.326 112.326	450 450
S47	441956.937	295670.222	115.115	3.798	1350	 1 0	8.007 8.008	111.317 111.317	450 450
S48	441909.609	295670.236	112.770	3.262	1350	 1 0	8.008 8.009	109.508 109.508	450 450
S49	441893.606	295662.160	111.820	3.073	1500	 1 0	8.009 8.010	108.822 108.747	450 525
S50	441831.251	295614.343	107.890	2.965	1500	 1 0	8.010 8.011	104.925 104.925	525 525
S51	441812.456	295608.565	107.070	2.540	1800	 1 0	8.011 8.012	104.775 104.530	525 750
S52	441785.080	295608.565	106.490	2.010	1800	 1 0	8.012 8.013	104.480 104.480	750 750
S53	441774.589	295604.017	106.240	1.810	2100	 1 2 0	8.013 1.018 1.019	104.430 104.430 104.430	750 750 750
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: 99.87%

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	0.2329	0.0000	OK
15 minute winter	S2	11	116.535	0.185	47.2	0.5490	0.0000	OK
15 minute winter	S3	11	116.433	0.223	58.0	0.4077	0.0000	OK
15 minute winter	S4	11	116.337	0.227	62.0	0.3043	0.0000	OK
15 minute winter	S5	10	116.971	0.041	10.7	0.0784	0.0000	OK
15 minute winter	S6	11	116.048	0.138	71.7	0.1980	0.0000	OK
15 minute winter	S7	11	115.809	0.109	88.7	0.2506	0.0000	OK
15 minute winter	S8	10	114.491	0.091	15.5	0.2430	0.0000	OK
15 minute winter	S9	10	114.292	0.092	18.4	0.1541	0.0000	OK
15 minute winter	S10	12	114.288	0.188	29.0	0.3799	0.0000	OK
15 minute winter	S11	12	114.283	0.283	122.1	0.5153	0.0000	OK
15 minute winter	S12	10	117.367	0.102	16.6	0.2598	0.0000	OK
15 minute winter	S13	11	117.164	0.118	20.2	0.1650	0.0000	OK
15 minute winter	S14	11	116.937	0.077	27.9	0.1367	0.0000	OK
15 minute winter	S15	11	115.729	0.149	36.5	0.2607	0.0000	OK
15 minute winter	S16	11	115.646	0.116	40.3	0.1632	0.0000	OK
15 minute winter	S17	11	114.629	0.199	61.7	0.5903	0.0000	OK
15 minute winter	S18	12	114.439	0.194	60.0	0.2770	0.0000	OK
15 minute winter	S19	12	114.345	0.225	79.9	0.8943	0.0000	OK
15 minute winter	S20	12	114.200	0.200	83.1	0.3317	0.0000	OK
15 minute winter	S21	12	113.971	0.171	202.4	0.3020	0.0000	OK
15 minute winter	S22	12	113.170	0.160	222.3	0.5223	0.0000	OK
15 minute winter	S23	12	110.994	0.149	234.2	0.3925	0.0000	OK
15 minute winter	S24	10	109.306	0.116	21.0	0.3620	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	1.7257	
15 minute winter	S3	1.002	S4	58.0	1.023	0.783	1.2680	
15 minute winter	S4	1.003	S6	61.5	1.168	0.826	0.5796	
15 minute winter	S5	2.000	S6	10.6	2.224	0.066	0.0404	
15 minute winter	S6	1.004	S7	71.6	2.025	0.164	0.4076	
15 minute winter	S7	1.005	S11	88.6	1.384	0.132	2.6765	
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	1.2523	
15 minute winter	S10	3.002	S11	25.8	0.387	0.146	2.7837	
15 minute winter	S11	1.006	S21	120.1	1.250	0.676	1.5749	
15 minute winter	S12	4.000	S13	16.3	0.862	0.409	0.7027	
15 minute winter	S13	4.001	S14	20.1	0.993	0.496	0.3675	
15 minute winter	S14	4.002	S15	27.9	1.152	0.146	1.0743	
15 minute winter	S15	4.003	S16	36.6	1.221	0.467	0.3002	
15 minute winter	S16	4.004	S17	40.3	1.529	0.317	2.0657	
15 minute winter	S17	4.005	S18	60.0	1.032	0.533	3.3613	
15 minute winter	S18	4.006	S19	59.6	1.111	0.452	0.6141	
15 minute winter	S19	4.007	S20	80.3	1.090	0.472	3.1621	
15 minute winter	S20	4.008	S21	82.4	1.317	0.332	0.5292	
15 minute winter	S21	1.007	S22	202.5	3.206	0.150	1.3108	
15 minute winter	S22	1.008	S23	222.6	3.886	0.145	2.4967	
15 minute winter	S23	1.009	S26	234.5	4.023	0.129	1.7944	
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: 99.87%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S26	12	108.864	0.164	262.5	0.3584	0.0000	OK
15 minute winter	S27	10	107.677	0.107	20.4	0.3499	0.0000	OK
15 minute winter	S28	11	107.536	0.136	32.6	0.2537	0.0000	OK
15 minute winter	S29	11	107.446	0.146	32.2	0.1646	0.0000	OK
15 minute winter	S30	12	106.979	0.179	299.0	0.5023	0.0000	OK
15 minute winter	S31	12	105.589	0.289	309.2	0.9029	0.0000	OK
15 minute winter	S32	12	105.384	0.264	313.9	0.7378	0.0000	OK
15 minute winter	S33	10	105.584	0.064	7.5	0.1188	0.0000	OK
15 minute winter	S34	11	105.476	0.075	11.4	0.1107	0.0000	OK
15 minute winter	S35	11	105.324	0.074	11.2	0.0834	0.0000	OK
15 minute winter	S36	8	105.186	0.482	340.3	1.8718	0.0000	OK
30 minute winter	HW1	28	104.917	0.263	281.0	0.6693	0.0000	OK
30 minute winter	HW2	28	104.915	0.311	234.0	0.7917	0.0000	OK
240 minute winter	HW3	200	104.728	0.174	73.9	0.4435	0.0000	OK
240 minute winter	HW4	200	104.728	0.248	51.0	0.6315	0.0000	OK
15 minute winter	S37	10	116.440	0.080	21.3	0.2293	0.0000	OK
15 minute winter	S38	10	116.263	0.088	21.1	0.1000	0.0000	OK
15 minute winter	S39	10	115.987	0.082	30.5	0.1390	0.0000	OK
15 minute winter	S40	11	115.487	0.092	32.7	0.1140	0.0000	OK
15 minute winter	S41	10	115.004	0.154	67.8	0.3699	0.0000	OK
15 minute winter	S42	11	114.672	0.152	73.6	0.2050	0.0000	OK
15 minute winter	S43	10	114.022	0.107	20.6	0.3014	0.0000	OK
15 minute winter	S44	11	113.873	0.143	31.8	0.2256	0.0000	OK
15 minute winter	S45	11	113.565	0.135	116.3	0.2447	0.0000	OK
15 minute winter	S46	11	112.473	0.147	135.9	0.3161	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	263.0	4.506	0.141	1.3948	
15 minute winter	S27	6.000	S28	19.8	0.744	0.280	1.1095	
15 minute winter	S28	6.001	S29	32.2	0.993	0.358	0.4934	
15 minute winter	S29	6.002	S30	32.3	1.013	0.412	0.3173	
15 minute winter	S30	1.011	S31	299.5	2.562	0.131	5.1919	
15 minute winter	S31	1.012	S32	310.4	2.110	0.237	2.3666	
15 minute winter	S32	1.013	S36	314.3	1.874	0.225	5.7837	
15 minute winter	S33	7.000	S34	7.3	0.589	0.103	0.3625	
15 minute winter	S34	7.001	S35	11.2	0.826	0.134	0.3555	
15 minute winter	S35	7.002	S36	11.2	0.865	0.122	0.1805	
15 minute winter	S36	1.014	HW1	338.8	2.680	0.459	2.0925	
30 minute winter	HW1	Flow through pond	HW2	234.0	0.065	0.020	176.4821	
30 minute winter	HW2	1.016	HW3	168.8	2.238	0.335	2.6064	
240 minute winter	HW3	Flow through pond	HW4	45.6	0.017	0.002	311.5786	
240 minute winter	HW4	1.018	S53	27.5	0.568	0.040	2.3145	
15 minute winter	S37	8.000	S38	21.1	1.310	0.135	0.1506	
15 minute winter	S38	8.001	S39	20.8	1.272	0.175	0.3847	
15 minute winter	S39	8.002	S40	30.3	1.795	0.154	0.2754	
15 minute winter	S40	8.003	S41	32.6	1.207	0.208	0.7538	
15 minute winter	S41	8.004	S42	66.8	1.859	0.453	0.6777	
15 minute winter	S42	8.005	S45	74.0	2.139	0.471	1.1361	
15 minute winter	S43	9.000	S44	20.0	0.742	0.278	1.2129	
15 minute winter	S44	9.001	S45	31.0	0.971	0.435	1.1568	
15 minute winter	S45	8.006	S46	116.5	2.748	0.186	1.2514	
15 minute winter	S46	8.007	S47	136.2	2.857	0.215	1.2580	

Results for 1 year Critical Storm Duration. Lowest mass balance: 99.87%

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	168.9	0.4363	0.0000	OK
15 minute winter	S48	11	109.690	0.182	177.6	0.3301	0.0000	OK
15 minute winter	S49	11	108.901	0.153	207.1	0.4930	0.0000	OK
15 minute winter	S50	11	105.255	0.330	257.0	1.4225	0.0000	OK
15 minute winter	S51	12	104.922	0.392	261.5	1.1802	0.0000	OK
15 minute winter	S52	12	104.843	0.363	269.9	1.2330	0.0000	OK
15 minute winter	S53	12	104.774	0.344	271.4	1.3825	0.0000	OK
240 minute winter	HW5	200	104.726	0.347	65.2	0.8821	0.0000	OK
240 minute winter	HW6	200	104.725	0.415	51.1	1.0569	0.0000	OK
240 minute winter	S54	200	104.725	0.465	33.4	2.6619	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	169.4	3.068	0.267	2.6145	
15 minute winter	S48	8.009	S49	177.6	3.210	0.280	0.9925	
15 minute winter	S49	8.010	S50	207.0	2.133	0.193	7.6763	
15 minute winter	S50	8.011	S51	253.7	1.932	0.600	2.5852	
15 minute winter	S51	8.012	S52	258.5	1.192	0.492	6.0750	
15 minute winter	S52	8.013	S53	265.9	1.380	0.326	2.3323	
15 minute winter	S53	1.019	HW5	240.4	2.026	0.392	3.8142	
240 minute winter	HW5	Flow through pond	HW6	51.1	0.035	0.011	101.3722	
240 minute winter	HW6	1.021	S54	33.4	0.347	0.046	3.8368	
240 minute winter	S54	Hydro-Brake®	HW7	32.8				734.5

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.87%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S1	11	117.457	0.957	47.4	2.2178	0.0000	SURCHARGED
15 minute winter	S2	11	117.401	1.051	106.9	3.1268	0.0000	SURCHARGED
15 minute winter	S3	11	117.038	0.828	132.1	1.5128	0.0000	SURCHARGED
15 minute winter	S4	11	116.625	0.515	140.4	0.6905	0.0000	SURCHARGED
15 minute winter	S5	10	116.997	0.067	26.3	0.1269	0.0000	OK
15 minute winter	S6	11	116.136	0.226	164.7	0.3229	0.0000	OK
15 minute winter	S7	11	115.869	0.169	206.4	0.3875	0.0000	OK
15 minute winter	S8	11	114.589	0.189	38.1	0.5029	0.0000	OK
15 minute winter	S9	11	114.581	0.381	45.1	0.6348	0.0000	OK
15 minute winter	S10	11	114.569	0.469	62.2	0.9455	0.0000	SURCHARGED
15 minute winter	S11	11	114.553	0.553	290.0	1.0064	0.0000	SURCHARGED
15 minute winter	S12	11	117.528	0.263	40.8	0.6716	0.0000	SURCHARGED
15 minute winter	S13	11	117.298	0.252	46.9	0.3532	0.0000	SURCHARGED
15 minute winter	S14	10	116.980	0.120	66.3	0.2135	0.0000	OK
15 minute winter	S15	11	115.838	0.258	88.0	0.4520	0.0000	OK
15 minute winter	S16	11	115.723	0.192	96.0	0.2712	0.0000	OK
15 minute winter	S17	12	114.988	0.558	149.0	1.6504	0.0000	SURCHARGED
15 minute winter	S18	12	114.653	0.408	141.8	0.5842	0.0000	SURCHARGED
15 minute winter	S19	12	114.552	0.432	197.3	1.7199	0.0000	OK
15 minute winter	S20	12	114.357	0.357	201.2	0.5915	0.0000	OK
15 minute winter	S21	12	114.088	0.288	485.9	0.5093	0.0000	OK
15 minute winter	S22	12	113.272	0.262	535.3	0.8543	0.0000	OK
15 minute winter	S23	12	111.089	0.244	567.4	0.6435	0.0000	OK
15 minute winter	S24	10	109.395	0.205	51.5	0.6419	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	0.551	2.2099	
15 minute winter	S2	1.001	S3	103.1	1.465	1.452	2.3914	
15 minute winter	S3	1.002	S4	130.6	1.854	1.765	1.5763	
15 minute winter	S4	1.003	S6	139.8	1.986	1.876	0.7636	
15 minute winter	S5	2.000	S6	26.2	2.824	0.163	0.0783	
15 minute winter	S6	1.004	S7	164.4	2.471	0.376	0.7686	
15 minute winter	S7	1.005	S11	206.2	1.645	0.308	4.2481	
15 minute winter	S8	3.000	S9	37.5	1.109	0.427	0.4171	
15 minute winter	S9	3.001	S10	41.1	0.613	0.218	4.4011	
15 minute winter	S10	3.002	S11	67.3	0.425	0.381	5.2521	
15 minute winter	S11	1.006	S21	283.4	1.809	1.596	2.4505	
15 minute winter	S12	4.000	S13	37.8	1.010	0.949	1.4744	
15 minute winter	S13	4.001	S14	46.4	1.189	1.145	0.6704	
15 minute winter	S14	4.002	S15	65.5	1.418	0.343	1.9850	
15 minute winter	S15	4.003	S16	86.9	1.534	1.111	0.5617	
15 minute winter	S16	4.004	S17	96.2	1.518	0.757	4.6336	
15 minute winter	S17	4.005	S18	141.8	1.286	1.258	6.3602	
15 minute winter	S18	4.006	S19	142.3	1.307	1.080	1.2523	
15 minute winter	S19	4.007	S20	194.4	1.320	1.144	6.2542	
15 minute winter	S20	4.008	S21	202.5	1.631	0.816	1.0464	
15 minute winter	S21	1.007	S22	486.7	3.864	0.361	2.6143	
15 minute winter	S22	1.008	S23	539.0	4.779	0.350	4.9149	
15 minute winter	S23	1.009	S26	569.7	4.840	0.312	3.6215	
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: 99.87%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S26	12	108.979	0.279	637.5	0.6085	0.0000	OK
15 minute winter	S27	10	107.757	0.187	50.2	0.6107	0.0000	OK
15 minute winter	S28	11	107.669	0.269	80.2	0.5014	0.0000	OK
15 minute winter	S29	11	107.569	0.269	78.6	0.3040	0.0000	OK
15 minute winter	S30	12	107.092	0.292	730.1	0.8201	0.0000	OK
15 minute winter	S31	12	105.831	0.531	760.2	1.6608	0.0000	OK
15 minute winter	S32	12	105.613	0.493	772.8	1.3779	0.0000	OK
15 minute winter	S33	10	105.624	0.104	18.3	0.1926	0.0000	OK
15 minute winter	S34	10	105.523	0.123	28.0	0.1804	0.0000	OK
15 minute winter	S35	11	105.371	0.121	27.7	0.1370	0.0000	OK
15 minute winter	S36	7	105.322	0.618	833.8	2.4030	0.0000	OK
30 minute winter	HW1	24	105.162	0.509	691.4	1.2942	0.0000	OK
30 minute winter	HW2	24	105.157	0.553	491.8	1.4076	0.0000	OK
360 minute winter	HW3	344	105.062	0.508	104.5	1.2916	0.0000	OK
240 minute winter	HW4	240	105.061	0.581	95.9	1.4790	0.0000	OK
15 minute winter	S37	10	116.496	0.136	52.2	0.3916	0.0000	OK
15 minute winter	S38	10	116.322	0.147	51.8	0.1659	0.0000	OK
15 minute winter	S39	10	116.042	0.137	75.2	0.2334	0.0000	OK
15 minute winter	S40	12	115.625	0.230	80.8	0.2843	0.0000	OK
15 minute winter	S41	11	115.522	0.672	162.4	1.6128	0.0000	SURCHARGED
15 minute winter	S42	11	115.041	0.521	166.4	0.7010	0.0000	SURCHARGED
15 minute winter	S43	10	114.098	0.183	50.5	0.5162	0.0000	OK
15 minute winter	S44	11	114.007	0.277	78.4	0.4369	0.0000	OK
15 minute winter	S45	11	113.649	0.219	269.3	0.3980	0.0000	OK
15 minute winter	S46	11	112.571	0.245	316.5	0.5258	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	641.8	5.551	0.343	2.7628	
15 minute winter	S27	6.000	S28	48.7	0.869	0.688	2.3344	
15 minute winter	S28	6.001	S29	78.6	1.183	0.874	1.0121	
15 minute winter	S29	6.002	S30	78.8	1.284	1.003	0.6050	
15 minute winter	S30	1.011	S31	736.4	2.978	0.322	10.8010	
15 minute winter	S31	1.012	S32	764.2	2.387	0.584	5.1468	
15 minute winter	S32	1.013	S36	770.7	2.287	0.550	10.9078	
15 minute winter	S33	7.000	S34	18.0	0.737	0.254	0.7144	
15 minute winter	S34	7.001	S35	27.7	1.033	0.329	0.7000	
15 minute winter	S35	7.002	S36	27.7	1.080	0.301	0.4056	
15 minute winter	S36	1.014	HW1	873.7	3.215	1.184	4.3132	
30 minute winter	HW1	Flow through pond	HW2	491.8	0.075	0.042	345.2879	
30 minute winter	HW2	1.016	HW3	613.0	3.156	1.216	6.0168	
360 minute winter	HW3	Flow through pond	HW4	40.0	0.018	0.002	842.4977	
240 minute winter	HW4	1.018	S53	-53.2	-0.333	-0.077	6.0896	
15 minute winter	S37	8.000	S38	51.8	1.590	0.331	0.3046	
15 minute winter	S38	8.001	S39	51.3	1.595	0.430	0.7689	
15 minute winter	S39	8.002	S40	74.9	2.183	0.380	0.7078	
15 minute winter	S40	8.003	S41	77.9	1.291	0.497	1.7691	
15 minute winter	S41	8.004	S42	150.8	2.142	1.023	1.3260	
15 minute winter	S42	8.005	S45	165.7	2.473	1.056	2.3121	
15 minute winter	S43	9.000	S44	49.3	0.890	0.686	2.4548	
15 minute winter	S44	9.001	S45	75.9	1.228	1.066	2.2101	
15 minute winter	S45	8.006	S46	269.0	3.278	0.429	2.4294	
15 minute winter	S46	8.007	S47	315.4	3.426	0.497	2.4458	

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.87%

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	0.265	395.8	0.7253	0.0000	OK
15 minute winter	S48	11	109.834	0.326	417.7	0.5904	0.0000	OK
15 minute winter	S49	11	108.991	0.244	490.6	0.7829	0.0000	OK
15 minute winter	S50	11	105.787	0.861	612.6	3.7129	0.0000	SURCHARGED
15 minute winter	S51	11	105.252	0.722	629.1	2.1712	0.0000	OK
15 minute winter	S52	11	105.121	0.641	654.7	2.1795	0.0000	OK
360 minute winter	S53	328	105.066	0.636	96.7	2.5528	0.0000	OK
360 minute winter	HW5	344	105.061	0.681	65.1	1.7334	0.0000	OK
360 minute winter	HW6	344	105.062	0.752	49.6	1.9133	0.0000	SURCHARGED
360 minute winter	S54	344	105.062	0.802	33.7	4.5905	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	397.5	3.600	0.627	5.2115	
15 minute winter	S48	8.009	S49	418.3	3.818	0.659	1.9581	
15 minute winter	S49	8.010	S50	489.8	2.701	0.457	12.3417	
15 minute winter	S50	8.011	S51	609.9	2.823	1.441	4.1918	
15 minute winter	S51	8.012	S52	626.7	1.492	1.194	11.4374	
15 minute winter	S52	8.013	S53	651.0	1.714	0.798	4.3324	
360 minute winter	S53	1.019	HW5	65.1	0.866	0.106	8.2324	
360 minute winter	HW5	Flow through pond	HW6	49.6	0.036	0.011	227.7425	
360 minute winter	HW6	1.021	S54	33.7	0.380	0.046	6.2896	
360 minute winter	S54	Hydro-Brake®	HW7	32.8				997.0

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.87%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S1	10	118.788	2.288	86.1	5.3007	0.0000	FLOOD RISK
15 minute winter	S2	10	118.530	2.180	214.6	6.4855	9.6945	FLOOD
15 minute winter	S3	10	117.888	1.678	194.1	3.0679	0.0000	SURCHARGED
15 minute winter	S4	10	116.989	0.879	212.2	1.1795	0.0000	SURCHARGED
15 minute winter	S5	10	117.024	0.094	47.8	0.1797	0.0000	OK
15 minute winter	S6	10	116.217	0.307	259.3	0.4398	0.0000	OK
15 minute winter	S7	11	115.957	0.257	339.9	0.5912	0.0000	OK
15 minute winter	S8	11	115.174	0.774	69.1	2.0579	0.0000	SURCHARGED
15 minute winter	S9	11	115.121	0.921	79.6	1.5369	0.0000	SURCHARGED
15 minute winter	S10	11	115.097	0.996	126.5	2.0099	0.0000	SURCHARGED
15 minute winter	S11	11	115.028	1.028	499.1	1.8690	0.0000	SURCHARGED
15 minute winter	S12	12	118.741	1.476	74.2	3.7751	0.0000	FLOOD RISK
15 minute winter	S13	12	118.277	1.231	80.9	1.7259	0.0000	SURCHARGED
15 minute winter	S14	12	117.911	1.050	115.3	1.8657	0.0000	SURCHARGED
15 minute winter	S15	12	117.559	1.979	139.5	3.4614	0.0000	FLOOD RISK
15 minute winter	S16	12	117.360	1.830	134.3	2.5788	0.0000	FLOOD RISK
15 minute winter	S17	12	116.085	1.655	218.2	4.8989	0.0000	SURCHARGED
15 minute winter	S18	11	115.301	1.056	216.2	1.5113	0.0000	FLOOD RISK
15 minute winter	S19	11	115.081	0.961	316.9	3.8237	0.0000	SURCHARGED
15 minute winter	S20	11	114.565	0.565	328.4	0.9361	0.0000	SURCHARGED
15 minute winter	S21	11	114.221	0.421	828.3	0.7436	0.0000	OK
15 minute winter	S22	11	113.384	0.374	934.5	1.2183	0.0000	OK
15 minute winter	S23	11	111.196	0.351	996.2	0.9269	0.0000	OK
15 minute winter	S24	11	109.670	0.480	93.7	1.5039	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	88.3	1.255	1.154	2.2099	
15 minute winter	S2	1.001	S3	146.7	2.083	2.065	2.3914	
15 minute winter	S3	1.002	S4	193.3	2.745	2.613	1.5763	
15 minute winter	S4	1.003	S6	211.7	3.007	2.841	0.7689	
15 minute winter	S5	2.000	S6	47.6	3.262	0.297	0.1233	
15 minute winter	S6	1.004	S7	258.9	2.642	0.591	1.2002	
15 minute winter	S7	1.005	S11	335.1	2.369	0.501	5.0365	
15 minute winter	S8	3.000	S9	66.6	1.114	0.757	0.5600	
15 minute winter	S9	3.001	S10	80.3	0.642	0.426	4.6269	
15 minute winter	S10	3.002	S11	127.3	0.803	0.720	5.2521	
15 minute winter	S11	1.006	S21	500.4	3.159	2.818	2.5731	
15 minute winter	S12	4.000	S13	63.3	1.591	1.589	1.4744	
15 minute winter	S13	4.001	S14	78.2	1.966	1.930	0.7225	
15 minute winter	S14	4.002	S15	98.7	1.610	0.517	3.0758	
15 minute winter	S15	4.003	S16	123.4	1.752	1.576	0.7045	
15 minute winter	S16	4.004	S17	138.5	1.967	1.089	5.5226	
15 minute winter	S17	4.005	S18	216.2	1.960	1.917	6.3602	
15 minute winter	S18	4.006	S19	217.7	1.974	1.653	1.2632	
15 minute winter	S19	4.007	S20	313.6	1.980	1.845	6.8040	
15 minute winter	S20	4.008	S21	327.9	2.073	1.321	1.2939	
15 minute winter	S21	1.007	S22	828.0	4.203	0.615	4.1049	
15 minute winter	S22	1.008	S23	934.1	5.250	0.607	7.7503	
15 minute winter	S23	1.009	S26	995.8	5.370	0.546	5.7221	
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: 99.87%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S26	11	109.102	0.402	1132.9	0.8784	0.0000	OK
15 minute winter	S27	11	108.453	0.883	91.1	2.8812	0.0000	SURCHARGED
15 minute winter	S28	11	108.153	0.753	140.1	1.4042	0.0000	SURCHARGED
15 minute winter	S29	11	107.798	0.498	140.4	0.5636	0.0000	SURCHARGED
15 minute winter	S30	11	107.366	0.566	1305.0	1.5897	0.0000	OK
15 minute winter	S31	12	106.696	1.396	1341.2	4.3665	0.0000	SURCHARGED
15 minute winter	S32	12	106.291	1.171	1340.2	3.2763	0.0000	SURCHARGED
15 minute winter	S33	12	105.773	0.253	33.3	0.4672	0.0000	OK
15 minute winter	S34	12	105.780	0.380	50.8	0.5568	0.0000	SURCHARGED
15 minute winter	S35	12	105.729	0.479	53.5	0.5420	0.0000	SURCHARGED
15 minute winter	S36	12	105.692	0.988	1446.8	3.8392	0.0000	SURCHARGED
480 minute winter	HW1	472	105.562	0.908	185.0	2.3101	0.0000	OK
480 minute winter	HW2	472	105.562	0.958	149.0	2.4372	0.0000	SURCHARGED
480 minute winter	HW3	472	105.562	1.008	112.0	2.5644	0.0000	OK
480 minute winter	HW4	472	105.562	1.082	86.7	2.7527	0.0000	SURCHARGED
15 minute winter	S37	12	118.085	1.725	94.9	4.9715	0.3884	FLOOD
15 minute winter	S38	12	118.030	1.855	74.7	2.0984	0.0000	FLOOD RISK
15 minute winter	S39	12	117.917	2.012	102.3	3.4181	0.0000	SURCHARGED
15 minute winter	S40	12	117.728	2.333	112.9	2.8854	0.0000	SURCHARGED
15 minute winter	S41	12	117.396	2.546	240.2	6.1109	0.0000	SURCHARGED
15 minute winter	S42	12	116.266	1.746	256.3	2.3497	0.0000	SURCHARGED
15 minute winter	S43	12	114.899	0.984	91.8	2.7727	0.0000	SURCHARGED
15 minute winter	S44	12	114.662	0.932	135.1	1.4700	0.0000	SURCHARGED
15 minute winter	S45	12	114.165	0.735	423.4	1.3354	0.0000	SURCHARGED
15 minute winter	S46	12	113.479	1.153	505.2	2.4769	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	1135.0	6.073	0.607	4.8827	
15 minute winter	S27	6.000	S28	86.3	1.226	1.220	2.9248	
15 minute winter	S28	6.001	S29	140.4	1.993	1.561	1.0708	
15 minute winter	S29	6.002	S30	140.4	1.994	1.787	0.6882	
15 minute winter	S30	1.011	S31	1289.1	3.027	0.563	17.4900	
15 minute winter	S31	1.012	S32	1323.5	3.007	1.012	7.0785	
15 minute winter	S32	1.013	S36	1341.7	3.049	0.958	14.2863	
15 minute winter	S33	7.000	S34	32.6	0.838	0.460	1.9533	
15 minute winter	S34	7.001	S35	53.5	1.124	0.636	1.8344	
15 minute winter	S35	7.002	S36	40.3	1.102	0.438	0.9819	
15 minute winter	S36	1.014	HW1	1444.2	3.690	1.957	6.1179	
480 minute winter	HW1	Flow through pond	HW2	149.0	0.026	0.013	661.9306	
480 minute winter	HW2	1.016	HW3	112.0	1.314	0.222	13.0575	
480 minute winter	HW3	Flow through pond	HW4	34.2	0.020	0.002	1733.1129	
480 minute winter	HW4	1.018	S53	-61.1	0.350	-0.089	7.0344	
15 minute winter	S37	8.000	S38	74.7	1.680	0.476	0.6579	
15 minute winter	S38	8.001	S39	75.5	1.639	0.633	1.6495	
15 minute winter	S39	8.002	S40	108.5	2.207	0.550	1.1488	
15 minute winter	S40	8.003	S41	124.0	1.761	0.792	1.9414	
15 minute winter	S41	8.004	S42	231.5	3.288	1.571	1.3260	
15 minute winter	S42	8.005	S45	256.9	3.648	1.637	2.3115	
15 minute winter	S43	9.000	S44	84.3	1.197	1.172	3.0811	
15 minute winter	S44	9.001	S45	129.9	1.846	1.825	2.5508	
15 minute winter	S45	8.006	S46	426.5	3.404	0.680	4.6755	
15 minute winter	S46	8.007	S47	494.9	3.624	0.780	4.1807	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.87%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S47	12	112.600	1.283	622.3	3.5058	0.0000	SURCHARGED
15 minute winter	S48	12	110.428	0.920	653.1	1.6675	0.0000	SURCHARGED
15 minute winter	S49	11	109.163	0.416	781.4	1.3375	0.0000	OK
15 minute winter	S50	11	107.032	2.107	992.4	9.0810	0.0000	SURCHARGED
15 minute winter	S51	11	105.721	1.191	1011.6	3.5849	0.0000	SURCHARGED
480 minute winter	S52	464	105.564	1.084	137.8	3.6844	0.0000	SURCHARGED
480 minute winter	S53	480	105.562	1.132	139.8	4.5444	0.0000	SURCHARGED
480 minute winter	HW5	472	105.561	1.181	77.2	3.0064	0.0000	OK
480 minute winter	HW6	472	105.561	1.251	54.5	3.1846	0.0000	SURCHARGED
480 minute winter	S54	472	105.561	1.301	33.6	7.4501	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	622.7	3.930	0.982	7.4988	
15 minute winter	S48	8.009	S49	654.7	4.133	1.032	2.8400	
15 minute winter	S49	8.010	S50	774.5	3.667	0.722	15.7057	
15 minute winter	S50	8.011	S51	982.6	4.549	2.323	4.2479	
15 minute winter	S51	8.012	S52	1016.4	2.310	1.936	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	0.870	0.126	8.8720	
480 minute winter	HW5	Flow through pond	HW6	54.5	0.038	0.012	481.0516	
480 minute winter	HW6	1.021	S54	33.6	0.394	0.046	6.2915	
480 minute winter	S54	Hydro-Brake®	HW7	32.8				1198.8