

Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	10	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)	0.200
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)	Width (mm)	Depth (m)
1.14	0.008	5.00	15.050	450		0.650
1.15	0.000		15.050	450		0.820
1.16	0.011	5.00	15.123	450		1.063
RE1.4	0.003	5.00	15.046	450		0.996
1.23	0.004	5.00	15.120	450		1.170
1.17			15.082	600	450	1.757
1.25	0.006	5.00	15.148	600	450	1.698
1.26	0.006	5.00	15.125	450		1.775
1.24	0.006	5.00	15.157	450		1.657
1.18	0.000		14.949	1200		1.724
1.19	0.025	5.00	14.787	1200		1.737
1.20	0.024	5.00	14.899	1200		2.729
RE1.2	0.003	5.00	15.048	250		1.348
RE1.3	0.004	5.00	15.125	250		1.425
1.27	0.006	5.00	14.993	450		1.693
NODE-2	0.016	5.00	14.909	250		2.776
1.21	0.024	5.00	14.640	1200		2.670
1.22	0.016	5.00	14.778	1200		2.908
1.01	0.006	5.00	15.165	450		0.815
1.02	0.003	5.00	15.065	450		1.035
1.09	0.003	5.00	15.141	450		0.791
1.03	0.000		15.065	450		1.135
1.10	0.009	5.00	15.148	450		0.628
1.11	0.004	5.00	15.148	450		0.798
NODE-1	0.000		15.065	300		1.304
1.12	0.005	5.00	15.164	450		1.144
1.04	0.000		15.065	450		1.365
1.05	0.000		15.119	450		1.609
1.06	0.008	5.00	15.052	450		1.642
RE1.1	0.002	5.00	15.085	250		0.785
1.13	0.005	5.00	15.090	450		0.720
1.07	0.000		14.960	1200		1.730
1.08	0.013	5.00	14.925	1200		3.055
CS1	0.000		14.867	1200		3.047
DMH			14.834	300		3.024

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)
1.000	1.14	1.15	2.126	0.600	14.400	14.300	0.100	21.3	150	5.02
1.001	1.15	1.16	3.831	0.600	14.230	14.130	0.100	38.3	150	5.06
1.002	1.16	1.17	3.397	0.600	14.060	13.850	0.210	16.2	150	5.08
2.000	RE1.4	1.23	5.320	0.600	14.050	13.950	0.100	53.2	150	5.06
2.001	1.23	1.17	2.963	0.600	13.950	13.850	0.100	29.6	150	5.09
1.003	1.17	1.18	9.627	0.600	13.325	13.225	0.100	96.3	150	5.25
3.000	1.25	1.26	5.591	0.600	13.450	13.350	0.100	55.9	150	5.07

Name	US Node	DS Node	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Pro Depth (mm)	Pro Velocity (m/s)
1.000	1.14	1.15	2.194	38.8	1.1	0.500	0.600	0.008	17	0.961
1.001	1.15	1.16	1.631	28.8	1.1	0.670	0.843	0.008	20	0.774
1.002	1.16	1.17	2.517	44.5	2.6	0.913	1.082	0.019	24	1.370
2.000	RE1.4	1.23	1.382	24.4	0.4	0.846	1.020	0.003	14	0.519
2.001	1.23	1.17	1.856	32.8	0.9	1.020	1.082	0.007	17	0.812
1.003	1.17	1.18	1.024	18.1	3.5	1.607	1.574	0.026	45	0.795
3.000	1.25	1.26	1.348	23.8	0.8	1.548	1.625	0.006	19	0.626

Links

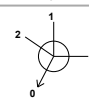
Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)
3.001	1.26	1.18	4.834	0.600	13.350	13.225	0.125	38.7	150	5.12
4.000	1.24	1.18	4.093	0.600	13.500	13.225	0.275	14.9	150	5.03
1.004	1.18	1.19	7.282	0.600	13.225	13.125	0.100	72.8	150	5.35
1.005	1.19	1.20	24.622	0.600	13.050	12.245	0.805	30.6	150	5.57
1.006	1.20	NODE-2	5.601	0.600	12.170	12.133	0.037	150.0	225	5.66
5.000	RE1.2	1.27	16.994	0.600	13.700	13.370	0.330	51.5	150	5.20
6.000	RE1.3	1.27	9.612	0.600	13.700	13.370	0.330	29.1	150	5.09
5.001	1.27	NODE-2	6.060	0.600	13.300	12.208	1.092	5.5	150	5.23
1.007	NODE-2	1.21	24.246	0.600	12.133	11.970	0.163	148.7	225	6.04
1.008	1.21	1.22	12.149	0.600	11.970	11.870	0.100	121.5	225	6.21
1.009	1.22	CS1	4.721	0.600	11.870	11.820	0.050	94.4	225	6.27
7.000	1.01	1.02	3.989	0.600	14.350	14.100	0.250	16.0	150	5.03
7.001	1.02	1.03	5.582	0.600	14.030	13.930	0.100	55.8	150	5.10
8.000	1.09	1.03	2.812	0.600	14.350	14.000	0.350	8.0	150	5.01
7.002	1.03	NODE-1	17.618	0.600	13.930	13.761	0.169	104.2	150	5.39
9.000	1.10	1.11	3.539	0.600	14.520	14.420	0.100	35.4	150	5.03
9.001	1.11	NODE-1	4.104	0.600	14.350	13.761	0.589	7.0	150	5.05
7.003	NODE-1	1.04	6.275	0.600	13.761	13.700	0.061	102.9	150	5.50
10.000	1.12	1.04	2.827	0.600	14.020	13.770	0.250	11.3	150	5.02
7.004	1.04	1.05	8.704	0.600	13.700	13.510	0.190	45.8	150	5.60
7.005	1.05	1.06	8.294	0.600	13.510	13.410	0.100	82.9	150	5.72
7.006	1.06	1.07	6.592	0.600	13.410	13.310	0.100	65.9	150	5.81
11.000	RE1.1	1.07	7.970	0.600	14.300	14.170	0.130	61.3	150	5.10
12.000	1.13	1.07	3.825	0.600	14.370	14.170	0.200	19.1	150	5.03
7.007	1.07	1.08	22.215	0.600	13.230	13.080	0.150	148.1	225	6.16
7.008	1.08	CS1	3.828	0.600	11.870	11.820	0.050	76.6	225	6.20
1.010	CS1	DMH	1.417	0.600	11.820	11.810	0.010	141.7	225	6.29

Name	US Node	DS Node	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Pro Depth (mm)	Pro Velocity (m/s)
3.001	1.26	1.18	1.623	28.7	1.6	1.625	1.574	0.012	24	0.882
4.000	1.24	1.18	2.624	46.4	0.8	1.507	1.574	0.006	14	0.992
1.004	1.18	1.19	1.179	20.8	6.0	1.574	1.512	0.044	55	1.019
1.005	1.19	1.20	1.827	32.3	9.4	1.587	2.504	0.069	55	1.587
1.006	1.20	NODE-2	1.065	42.3	12.6	2.504	2.551	0.093	84	0.931
5.000	RE1.2	1.27	1.405	24.8	0.4	1.198	1.473	0.003	13	0.512
6.000	RE1.3	1.27	1.872	33.1	0.5	1.275	1.473	0.004	13	0.685
5.001	1.27	NODE-2	4.306	76.1	1.8	1.543	2.551	0.013	16	1.767
1.007	NODE-2	1.21	1.070	42.5	16.5	2.551	2.445	0.122	97	1.003
1.008	1.21	1.22	1.185	47.1	19.8	2.445	2.683	0.146	102	1.134
1.009	1.22	CS1	1.346	53.5	22.0	2.683	2.822	0.162	101	1.283
7.000	1.01	1.02	2.534	44.8	0.8	0.665	0.815	0.006	14	0.985
7.001	1.02	1.03	1.349	23.8	1.2	0.885	0.985	0.009	23	0.709
8.000	1.09	1.03	3.577	63.2	0.4	0.641	0.915	0.003	8	0.977
7.002	1.03	NODE-1	0.984	17.4	1.6	0.985	1.154	0.012	31	0.615
9.000	1.10	1.11	1.697	30.0	1.2	0.478	0.578	0.009	21	0.836
9.001	1.11	NODE-1	3.841	67.9	1.8	0.648	1.154	0.013	17	1.651
7.003	NODE-1	1.04	0.990	17.5	3.4	1.154	1.215	0.025	45	0.769
10.000	1.12	1.04	3.012	53.2	0.7	0.994	1.145	0.005	12	1.041
7.004	1.04	1.05	1.490	26.3	4.1	1.215	1.459	0.030	40	1.081
7.005	1.05	1.06	1.104	19.5	4.1	1.459	1.492	0.030	47	0.876
7.006	1.06	1.07	1.240	21.9	5.1	1.492	1.500	0.038	50	1.017
11.000	RE1.1	1.07	1.286	22.7	0.3	0.635	0.640	0.002	11	0.425
12.000	1.13	1.07	2.313	40.9	0.7	0.570	0.640	0.005	14	0.874
7.007	1.07	1.08	1.072	42.6	6.1	1.505	1.620	0.045	58	0.767
7.008	1.08	CS1	1.496	59.5	7.9	2.830	2.822	0.058	55	1.043
1.010	CS1	DMH	1.096	43.6	29.8	2.822	2.799	0.220	137	1.177

Manhole Schedule

Node	CL (m)	Depth (m)	Dia (mm)	Width (mm)	Node Type	Connections	Link	IL (m)	Dia (mm)
1.14	15.050	0.650	450		Manhole				
1.15	15.050	0.820	450		Manhole		0	1.000	14.400
							1	1.000	14.300
							0	1.001	14.230
									150

Manhole Schedule

Node	CL (m)	Depth (m)	Dia (mm)	Width (mm)	Node Type	Connections	Link	IL (m)	Dia (mm)
1.16	15.123	1.063	450		Manhole		1 1.001	14.130	150
RE1.4	15.046	0.996	450		Manhole		0 1.002	14.060	150
1.23	15.120	1.170	450		Manhole		1 2.000	13.950	150
1.17	15.082	1.757	600	450	Manhole		0 2.001	13.950	150
1.25	15.148	1.698	600	450	Manhole		2 1.002	13.850	150
1.26	15.125	1.775	450		Manhole		0 1.003	13.325	150
1.24	15.157	1.657	450		Manhole		0 3.000	13.450	150
1.18	14.949	1.724	1200		Manhole		1 3.000	13.350	150
1.19	14.787	1.737	1200		Manhole		0 3.001	13.350	150
1.20	14.899	2.729	1200		Manhole		1 4.000	13.500	150
RE1.2	15.048	1.348	250		Manhole		2 3.001	13.225	150
RE1.3	15.125	1.425	250		Manhole		3 1.003	13.225	150
1.27	14.993	1.693	450		Manhole		0 1.004	13.225	150
NODE-2	14.909	2.776	250		Manhole		1 1.005	13.050	150
1.21	14.640	2.670	1200		Manhole		2 1.006	12.245	150
1.22	14.778	2.908	1200		Manhole		0 1.006	12.170	225
1.01	15.165	0.815	450		Manhole		1 1.007	12.133	225
							2 1.007	12.133	225
							0 1.008	11.970	225
							1 1.008	11.870	225
							0 1.009	11.870	225
							1 7.000	14.350	150

Manhole Schedule

Node	CL (m)	Depth (m)	Dia (mm)	Width (mm)	Node Type	Connections	Link	IL (m)	Dia (mm)
1.02	15.065	1.035	450		Manhole	 1	7.000	14.100	150
						0	7.001	14.030	150
1.09	15.141	0.791	450		Manhole	 0	8.000	14.350	150
						0	8.000	14.000	150
1.03	15.065	1.135	450		Manhole	 1 2	7.001	13.930	150
						0	7.002	13.930	150
1.10	15.148	0.628	450		Manhole	 0	9.000	14.520	150
						0	9.000	14.420	150
1.11	15.148	0.798	450		Manhole	 1	9.001	14.350	150
						0	9.001	13.761	150
NODE-1	15.065	1.304	300		Manhole	 1 2	7.002	13.761	150
						0	7.003	13.761	150
1.12	15.164	1.144	450		Manhole	 0	10.000	14.020	150
						0	10.000	13.770	150
1.04	15.065	1.365	450		Manhole	 1 2	7.003	13.700	150
						0	7.004	13.700	150
1.05	15.119	1.609	450		Manhole	 1	7.004	13.510	150
						0	7.005	13.510	150
1.06	15.052	1.642	450		Manhole	 1	7.005	13.410	150
						0	7.006	13.410	150
RE1.1	15.085	0.785	250		Manhole	 0	11.000	14.300	150
						0	11.000	14.300	150
1.13	15.090	0.720	450		Manhole	 0	12.000	14.370	150
						0	12.000	14.170	150
1.07	14.960	1.730	1200		Manhole	 1 2 3	11.000	14.170	150
						0	7.006	13.310	150
						0	7.007	13.230	225
1.08	14.925	3.055	1200		Manhole	 1	7.007	13.080	225
						0	7.008	11.870	225
CS1	14.867	3.047	1200		Manhole	 1 2	1.009	11.820	225
						0	1.010	11.820	225
DMH	14.834	3.024	300		Manhole	 1	1.010	11.810	225

Simulation Settings

Rainfall Methodology	FSR	Summer CV	0.750	Drain Down Time (mins)	240
FSR Region	England and Wales	Winter CV	0.840	Additional Storage (m³/ha)	20.0
M5-60 (mm)	20.000	Analysis Speed	Normal	Check Discharge Rate(s)	x
Ratio-R	0.400	Skip Steady State	✓	Check Discharge Volume	x

Depth	Area	Inf Area	Depth	Area	Inf Area	Depth	Area	Inf Area
(m)	(m ²)	(m ²)	(m)	(m ²)	(m ²)	(m)	(m ²)	(m ²)
0.000	24.0	24.0	1.200	24.0	48.0	1.201	0.0	48.0

Results for 1 year Critical Storm Duration. Lowest mass balance: 97.79%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m³)	Status
15 minute winter	1.14	11	14.419	0.019	1.1	0.0000	OK
15 minute winter	1.15	11	14.251	0.021	1.1	0.0000	OK
15 minute winter	1.16	10	14.087	0.027	2.7	0.0000	OK
15 minute winter	RE1.4	11	14.063	0.013	0.4	0.0000	OK
15 minute winter	1.23	10	13.969	0.019	1.0	0.0000	OK
15 minute winter	1.17	10	13.372	0.047	3.7	0.0000	OK
15 minute winter	1.25	11	13.469	0.019	0.8	0.0000	OK
15 minute winter	1.26	11	13.374	0.024	1.6	0.0000	OK
15 minute winter	1.24	11	13.514	0.014	0.8	0.0000	OK
15 minute winter	1.18	11	13.284	0.059	6.0	0.0000	OK
15 minute winter	1.19	11	13.107	0.057	9.4	0.0000	OK
15 minute winter	1.20	11	12.268	0.098	12.6	0.0000	OK
15 minute winter	RE1.2	11	13.713	0.013	0.4	0.0000	OK
15 minute winter	RE1.3	10	13.714	0.014	0.6	0.0000	OK
15 minute winter	1.27	10	13.316	0.016	1.7	0.0000	OK
15 minute winter	NODE-2	11	12.234	0.101	16.5	0.0000	OK
15 minute winter	1.21	11	12.081	0.111	19.8	0.0000	OK
15 minute winter	1.22	11	11.985	0.115	22.0	0.0000	OK
15 minute winter	1.01	11	14.364	0.014	0.8	0.0000	OK
15 minute winter	1.02	11	14.053	0.023	1.2	0.0000	OK
15 minute winter	1.09	11	14.359	0.009	0.4	0.0000	OK
15 minute winter	1.03	11	13.961	0.031	1.6	0.0000	OK
15 minute winter	1.10	10	14.542	0.022	1.3	0.0000	OK
15 minute winter	1.11	10	14.367	0.017	1.9	0.0000	OK
15 minute winter	NODE-1	11	13.808	0.047	3.4	0.0000	OK
15 minute winter	1.12	11	14.033	0.013	0.7	0.0000	OK
15 minute winter	1.04	11	13.741	0.041	4.1	0.0000	OK
15 minute winter	1.05	11	13.559	0.049	4.1	0.0000	OK
15 minute winter	1.06	11	13.463	0.053	5.2	0.0000	OK
15 minute winter	RE1.1	11	14.312	0.012	0.3	0.0000	OK
15 minute winter	1.13	11	14.384	0.014	0.7	0.0000	OK
15 minute winter	1.07	11	13.288	0.058	6.2	0.0000	OK
15 minute winter	1.08	11	11.931	0.061	7.7	0.0000	OK
30 minute winter	CS1	24	11.577	-0.243	23.3	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	1.14	1.000	1.15	1.1	0.922	0.028	0.0025	
15 minute winter	1.15	1.001	1.16	1.1	0.763	0.038	0.0055	
15 minute winter	1.16	1.002	1.17	2.7	1.326	0.060	0.0069	
15 minute winter	RE1.4	2.000	1.23	0.4	0.407	0.016	0.0054	
15 minute winter	1.23	2.001	1.17	1.0	0.799	0.030	0.0036	
15 minute winter	1.17	1.003	1.18	3.6	0.654	0.199	0.0533	
15 minute winter	1.25	3.000	1.26	0.8	0.518	0.034	0.0087	
15 minute winter	1.26	3.001	1.18	1.6	0.484	0.056	0.0200	
15 minute winter	1.24	4.000	1.18	0.8	0.596	0.017	0.0148	
15 minute winter	1.18	1.004	1.19	6.0	0.979	0.289	0.0448	
15 minute winter	1.19	1.005	1.20	9.4	1.563	0.291	0.1478	
15 minute winter	1.20	1.006	NODE-2	12.6	0.747	0.298	0.0947	
15 minute winter	RE1.2	5.000	1.27	0.4	0.520	0.016	0.0130	
15 minute winter	RE1.3	6.000	1.27	0.6	0.701	0.017	0.0077	
15 minute winter	1.27	5.001	NODE-2	1.7	1.651	0.023	0.0091	
15 minute winter	NODE-2	1.007	1.21	16.6	0.903	0.390	0.4457	
15 minute winter	1.21	1.008	1.22	19.9	0.994	0.421	0.2427	
15 minute winter	1.22	1.009	CS1	21.9	1.174	0.410	0.0882	
15 minute winter	1.01	7.000	1.02	0.8	0.951	0.018	0.0034	
15 minute winter	1.02	7.001	1.03	1.2	0.576	0.050	0.0119	
15 minute winter	1.09	8.000	1.03	0.4	0.979	0.006	0.0011	
15 minute winter	1.03	7.002	NODE-1	1.6	0.439	0.092	0.0648	
15 minute winter	1.10	9.000	1.11	1.3	0.816	0.043	0.0055	
15 minute winter	1.11	9.001	NODE-1	1.9	0.894	0.027	0.0120	
15 minute winter	NODE-1	7.003	1.04	3.4	0.787	0.194	0.0271	
15 minute winter	1.12	10.000	1.04	0.7	1.026	0.013	0.0019	
15 minute winter	1.04	7.004	1.05	4.1	0.933	0.156	0.0385	
15 minute winter	1.05	7.005	1.06	4.1	0.780	0.211	0.0438	
15 minute winter	1.06	7.006	1.07	5.2	0.972	0.237	0.0352	
15 minute winter	RE1.1	11.000	1.07	0.3	0.446	0.013	0.0053	
15 minute winter	1.13	12.000	1.07	0.7	0.858	0.017	0.0031	
15 minute winter	1.07	7.007	1.08	6.0	0.756	0.142	0.1776	
15 minute winter	1.08	7.008	CS1	7.6	0.958	0.128	0.0306	
15 minute summer	CS1	1.010	DMH	0.0	0.000	0.000	0.0000	

Results for 1 year Critical Storm Duration. Lowest mass balance: 97.79%

Node Event		US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m³)	Status
15 minute summer		DMH	1	11.810	0.000	0.0	0.0000	OK
Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	CS1	Infiltration		14.4				
15 minute summer	DMH	Weir	CS1	0.0				0.0

Results for 10 year Critical Storm Duration. Lowest mass balance: 97.79%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m³)	Status
15 minute winter	1.14	10	14.427	0.027	2.2	0.0000	OK
15 minute winter	1.15	10	14.260	0.030	2.2	0.0000	OK
15 minute winter	1.16	10	14.098	0.038	5.2	0.0000	OK
15 minute winter	RE1.4	11	14.069	0.019	0.8	0.0000	OK
15 minute winter	1.23	10	13.976	0.026	1.9	0.0000	OK
15 minute winter	1.17	10	13.394	0.069	7.0	0.0000	OK
15 minute summer	1.25	10	13.477	0.026	1.6	0.0000	OK
15 minute summer	1.26	10	13.384	0.034	3.2	0.0000	OK
15 minute summer	1.24	10	13.519	0.019	1.6	0.0000	OK
15 minute winter	1.18	11	13.313	0.088	11.7	0.0000	OK
15 minute winter	1.19	11	13.134	0.084	18.2	0.0000	OK
15 minute winter	1.20	11	12.324	0.154	24.4	0.0000	OK
15 minute winter	RE1.2	11	13.719	0.019	0.8	0.0000	OK
15 minute winter	RE1.3	10	13.719	0.019	1.1	0.0000	OK
15 minute winter	1.27	10	13.322	0.022	3.5	0.0000	OK
15 minute winter	NODE-2	11	12.288	0.155	31.9	0.0000	OK
15 minute winter	1.21	11	12.150	0.180	38.4	0.0000	OK
15 minute winter	1.22	11	12.049	0.179	42.5	0.0000	OK
15 minute summer	1.01	10	14.370	0.020	1.6	0.0000	OK
15 minute winter	1.02	10	14.063	0.033	2.4	0.0000	OK
15 minute winter	1.09	10	14.362	0.012	0.8	0.0000	OK
15 minute winter	1.03	11	13.973	0.043	3.2	0.0000	OK
15 minute winter	1.10	10	14.551	0.031	2.5	0.0000	OK
15 minute winter	1.11	10	14.373	0.023	3.6	0.0000	OK
15 minute winter	NODE-1	11	13.830	0.069	6.7	0.0000	OK
15 minute winter	1.12	10	14.038	0.018	1.4	0.0000	OK
15 minute winter	1.04	11	13.759	0.059	7.9	0.0000	OK
15 minute winter	1.05	11	13.582	0.072	8.0	0.0000	OK
15 minute winter	1.06	11	13.489	0.079	10.1	0.0000	OK
15 minute summer	RE1.1	11	14.316	0.016	0.5	0.0000	OK
15 minute winter	1.13	10	14.390	0.020	1.4	0.0000	OK
15 minute winter	1.07	11	13.314	0.084	12.0	0.0000	OK
15 minute winter	1.08	11	11.959	0.089	15.2	0.0000	OK
30 minute winter	CS1	23	11.868	0.048	44.7	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	1.14	1.000	1.15	2.2	1.108	0.056	0.0042	
15 minute winter	1.15	1.001	1.16	2.2	0.920	0.075	0.0090	
15 minute winter	1.16	1.002	1.17	5.1	1.572	0.116	0.0111	
15 minute winter	RE1.4	2.000	1.23	0.8	0.495	0.033	0.0088	
15 minute winter	1.23	2.001	1.17	1.9	0.960	0.057	0.0058	
15 minute winter	1.17	1.003	1.18	7.0	0.749	0.384	0.0894	
15 minute summer	1.25	3.000	1.26	1.6	0.631	0.066	0.0141	
15 minute winter	1.26	3.001	1.18	3.2	0.501	0.110	0.0329	
15 minute summer	1.24	4.000	1.18	1.6	0.672	0.034	0.0241	
15 minute winter	1.18	1.004	1.19	11.6	1.145	0.556	0.0737	
15 minute winter	1.19	1.005	1.20	18.2	1.842	0.563	0.2430	
15 minute winter	1.20	1.006	NODE-2	24.5	0.842	0.579	0.1630	
15 minute winter	RE1.2	5.000	1.27	0.8	0.640	0.032	0.0212	
15 minute winter	RE1.3	6.000	1.27	1.1	0.848	0.032	0.0121	
15 minute winter	1.27	5.001	NODE-2	3.4	1.571	0.045	0.0337	
15 minute winter	NODE-2	1.007	1.21	32.2	1.016	0.757	0.7663	
15 minute winter	1.21	1.008	1.22	38.4	1.132	0.815	0.4123	
15 minute winter	1.22	1.009	CS1	42.5	1.366	0.794	0.1462	
15 minute summer	1.01	7.000	1.02	1.6	1.159	0.035	0.0055	
15 minute winter	1.02	7.001	1.03	2.4	0.681	0.099	0.0195	
15 minute winter	1.09	8.000	1.03	0.8	1.204	0.013	0.0019	
15 minute winter	1.03	7.002	NODE-1	3.2	0.527	0.182	0.1062	
15 minute winter	1.10	9.000	1.11	2.5	0.977	0.082	0.0089	
15 minute winter	1.11	9.001	NODE-1	3.5	0.990	0.052	0.0196	
15 minute winter	NODE-1	7.003	1.04	6.6	0.926	0.377	0.0448	
15 minute winter	1.12	10.000	1.04	1.4	1.247	0.026	0.0031	
15 minute winter	1.04	7.004	1.05	8.0	1.079	0.303	0.0644	
15 minute winter	1.05	7.005	1.06	8.0	0.901	0.411	0.0738	
15 minute winter	1.06	7.006	1.07	10.1	1.146	0.463	0.0583	
15 minute summer	RE1.1	11.000	1.07	0.5	0.520	0.022	0.0077	
15 minute winter	1.13	12.000	1.07	1.4	1.043	0.034	0.0051	
15 minute winter	1.07	7.007	1.08	11.9	0.905	0.278	0.2913	
15 minute winter	1.08	7.008	CS1	15.1	1.139	0.254	0.0509	
15 minute winter	CS1	1.010	DMH	0.6	0.170	0.014	0.0099	

Results for 10 year Critical Storm Duration. Lowest mass balance: 97.79%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m³)	Status
30 minute winter	DMH	23	11.869	0.059	0.6	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	CS1	Infiltration		28.0				
15 minute winter	DMH	Weir	CS1	0.5				0.0

Results for 30 year Critical Storm Duration. Lowest mass balance: 97.79%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m³)	Status
15 minute winter	1.14	10	14.430	0.030	2.8	0.0000	OK
15 minute winter	1.15	10	14.264	0.034	2.8	0.0000	OK
15 minute winter	1.16	10	14.103	0.043	6.5	0.0000	OK
15 minute winter	RE1.4	11	14.071	0.021	1.0	0.0000	OK
15 minute winter	1.23	10	13.980	0.030	2.4	0.0000	OK
15 minute winter	1.17	10	13.404	0.079	8.9	0.0000	OK
15 minute winter	1.25	10	13.481	0.031	2.1	0.0000	OK
15 minute winter	1.26	10	13.389	0.039	4.2	0.0000	OK
15 minute winter	1.24	10	13.522	0.022	2.1	0.0000	OK
15 minute winter	1.18	11	13.330	0.105	15.1	0.0000	OK
15 minute winter	1.19	10	13.146	0.096	23.4	0.0000	OK
15 minute winter	1.20	11	12.401	0.231	31.5	0.0000	SURCHARGED
15 minute winter	RE1.2	11	13.721	0.021	1.0	0.0000	OK
15 minute winter	RE1.3	10	13.721	0.021	1.4	0.0000	OK
15 minute winter	1.27	10	13.325	0.025	4.5	0.0000	OK
15 minute winter	NODE-2	11	12.367	0.234	40.6	0.0000	SURCHARGED
15 minute winter	1.21	11	12.211	0.241	47.2	0.0000	SURCHARGED
15 minute winter	1.22	11	12.085	0.215	50.6	0.0000	OK
15 minute winter	1.01	10	14.373	0.023	2.1	0.0000	OK
15 minute winter	1.02	10	14.068	0.038	3.1	0.0000	OK
15 minute winter	1.09	10	14.364	0.014	1.0	0.0000	OK
15 minute winter	1.03	11	13.979	0.049	4.1	0.0000	OK
15 minute winter	1.10	10	14.555	0.035	3.1	0.0000	OK
15 minute winter	1.11	10	14.376	0.026	4.5	0.0000	OK
15 minute winter	NODE-1	11	13.840	0.079	8.5	0.0000	OK
15 minute winter	1.12	10	14.039	0.019	1.7	0.0000	OK
15 minute winter	1.04	11	13.768	0.068	10.0	0.0000	OK
15 minute winter	1.05	11	13.594	0.084	10.1	0.0000	OK
15 minute winter	1.06	11	13.502	0.092	12.7	0.0000	OK
15 minute winter	RE1.1	11	14.318	0.018	0.7	0.0000	OK
15 minute winter	1.13	10	14.392	0.022	1.7	0.0000	OK
15 minute winter	1.07	11	13.326	0.096	15.1	0.0000	OK
30 minute winter	1.08	23	12.021	0.151	15.2	0.0000	OK
30 minute winter	CS1	23	12.020	0.200	57.7	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	1.14	1.000	1.15	2.8	1.178	0.072	0.0050	
15 minute winter	1.15	1.001	1.16	2.7	0.980	0.095	0.0107	
15 minute winter	1.16	1.002	1.17	6.5	1.666	0.146	0.0133	
15 minute winter	RE1.4	2.000	1.23	1.0	0.521	0.041	0.0104	
15 minute winter	1.23	2.001	1.17	2.4	1.023	0.073	0.0069	
15 minute winter	1.17	1.003	1.18	8.8	0.778	0.487	0.1087	
15 minute winter	1.25	3.000	1.26	2.1	0.679	0.087	0.0172	
15 minute winter	1.26	3.001	1.18	4.2	0.508	0.145	0.0404	
15 minute winter	1.24	4.000	1.18	2.1	0.671	0.045	0.0302	
15 minute winter	1.18	1.004	1.19	15.0	1.206	0.718	0.0903	
15 minute winter	1.19	1.005	1.20	23.3	1.844	0.720	0.3598	
15 minute winter	1.20	1.006	NODE-2	30.6	0.855	0.723	0.2228	
15 minute winter	RE1.2	5.000	1.27	1.0	0.684	0.040	0.0248	
15 minute winter	RE1.3	6.000	1.27	1.4	0.913	0.042	0.0145	
15 minute winter	1.27	5.001	NODE-2	4.5	1.699	0.058	0.0589	
15 minute winter	NODE-2	1.007	1.21	38.9	1.026	0.916	0.9643	
15 minute winter	1.21	1.008	1.22	45.9	1.160	0.974	0.4791	
15 minute winter	1.22	1.009	CS1	50.6	1.402	0.946	0.1692	
15 minute winter	1.01	7.000	1.02	2.1	1.252	0.047	0.0067	
15 minute winter	1.02	7.001	1.03	3.1	0.729	0.129	0.0236	
15 minute winter	1.09	8.000	1.03	1.0	1.287	0.016	0.0022	
15 minute winter	1.03	7.002	NODE-1	4.1	0.563	0.233	0.1275	
15 minute winter	1.10	9.000	1.11	3.1	1.035	0.102	0.0105	
15 minute winter	1.11	9.001	NODE-1	4.5	1.085	0.066	0.0235	
15 minute winter	NODE-1	7.003	1.04	8.4	0.979	0.480	0.0539	
15 minute winter	1.12	10.000	1.04	1.7	1.319	0.032	0.0036	
15 minute winter	1.04	7.004	1.05	10.1	1.127	0.382	0.0779	
15 minute winter	1.05	7.005	1.06	10.1	0.942	0.519	0.0891	
15 minute winter	1.06	7.006	1.07	12.8	1.207	0.583	0.0697	
15 minute winter	RE1.1	11.000	1.07	0.7	0.574	0.031	0.0097	
15 minute winter	1.13	12.000	1.07	1.7	1.103	0.041	0.0058	
15 minute winter	1.07	7.007	1.08	15.0	0.963	0.353	0.3472	
15 minute winter	1.08	7.008	CS1	19.2	1.209	0.323	0.1234	
15 minute winter	CS1	1.010	DMH	2.3	0.173	0.052	0.0532	

Results for 30 year Critical Storm Duration. Lowest mass balance: 97.79%

Node Event		US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m³)	Status
30 minute winter		DMH	23	12.021	0.211	1.7	0.0000	OK
Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	CS1	Infiltration		35.1				
15 minute winter	DMH	Weir	CS1	0.8				0.0

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 97.79%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m³)	Status
15 minute winter	1.14	10	14.442	0.042	5.0	0.0000	OK
15 minute winter	1.15	10	14.276	0.046	5.0	0.0000	OK
15 minute winter	1.16	10	14.121	0.061	11.8	0.0000	OK
15 minute winter	RE1.4	10	14.078	0.028	1.9	0.0000	OK
15 minute winter	1.23	10	13.991	0.041	4.4	0.0000	OK
15 minute winter	1.17	13	13.897	0.572	16.1	0.0000	SURCHARGED
15 minute winter	1.25	13	13.860	0.410	3.8	0.0000	SURCHARGED
15 minute winter	1.26	13	13.858	0.508	7.2	0.0000	SURCHARGED
15 minute winter	1.24	13	13.853	0.353	3.8	0.0000	SURCHARGED
15 minute winter	1.18	13	13.851	0.626	19.9	0.0000	SURCHARGED
15 minute winter	1.19	13	13.742	0.692	30.4	0.0000	SURCHARGED
30 minute winter	1.20	24	13.110	0.940	37.8	0.0000	SURCHARGED
15 minute winter	RE1.2	10	13.728	0.028	1.9	0.0000	OK
15 minute winter	RE1.3	10	13.729	0.029	2.5	0.0000	OK
15 minute winter	1.27	10	13.333	0.033	8.1	0.0000	OK
30 minute winter	NODE-2	24	13.087	0.954	49.7	0.0000	SURCHARGED
30 minute winter	1.21	24	12.982	1.012	59.5	0.0000	SURCHARGED
30 minute winter	1.22	24	12.902	1.032	64.8	0.0000	SURCHARGED
15 minute winter	1.01	10	14.382	0.032	3.8	0.0000	OK
15 minute winter	1.02	10	14.084	0.054	5.7	0.0000	OK
15 minute winter	1.09	10	14.369	0.019	1.9	0.0000	OK
15 minute winter	1.03	10	13.998	0.068	7.5	0.0000	OK
15 minute winter	1.10	10	14.569	0.049	5.7	0.0000	OK
15 minute winter	1.11	10	14.385	0.035	8.2	0.0000	OK
15 minute winter	NODE-1	11	13.884	0.123	15.6	0.0000	OK
15 minute winter	1.12	9	14.046	0.026	3.1	0.0000	OK
15 minute winter	1.04	11	13.809	0.109	18.3	0.0000	OK
15 minute winter	1.05	11	13.705	0.195	18.0	0.0000	SURCHARGED
15 minute winter	1.06	11	13.591	0.181	22.3	0.0000	SURCHARGED
15 minute winter	RE1.1	10	14.325	0.025	1.3	0.0000	OK
15 minute winter	1.13	10	14.400	0.030	3.1	0.0000	OK
15 minute winter	1.07	11	13.364	0.134	26.4	0.0000	OK
30 minute winter	1.08	24	12.856	0.986	27.8	0.0000	SURCHARGED
30 minute winter	CS1	24	12.842	1.022	120.1	0.0000	SURCHARGED

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	1.14	1.000	1.15	5.0	1.360	0.128	0.0078	
15 minute winter	1.15	1.001	1.16	4.9	1.140	0.171	0.0166	
15 minute winter	1.16	1.002	1.17	11.8	1.916	0.265	0.0209	
15 minute winter	RE1.4	2.000	1.23	1.9	0.610	0.077	0.0166	
15 minute winter	1.23	2.001	1.17	4.4	1.195	0.133	0.0108	
15 minute winter	1.17	1.003	1.18	14.2	0.824	0.785	0.1695	
15 minute summer	1.25	3.000	1.26	3.8	0.764	0.158	0.0984	
15 minute winter	1.26	3.001	1.18	7.6	0.609	0.263	0.0851	
15 minute winter	1.24	4.000	1.18	3.8	0.860	0.082	0.0721	
15 minute summer	1.18	1.004	1.19	20.3	1.203	0.976	0.1282	
30 minute summer	1.19	1.005	1.20	28.6	1.799	0.885	0.4335	
15 minute winter	1.20	1.006	NODE-2	39.4	0.992	0.931	0.2228	
15 minute winter	RE1.2	5.000	1.27	1.9	0.819	0.075	0.0386	
15 minute winter	RE1.3	6.000	1.27	2.5	1.082	0.075	0.0220	
15 minute winter	1.27	5.001	NODE-2	8.1	1.562	0.107	0.0620	
15 minute winter	NODE-2	1.007	1.21	55.4	1.392	1.302	0.9643	
15 minute summer	1.21	1.008	1.22	68.2	1.714	1.447	0.4832	
15 minute winter	1.22	1.009	CS1	76.4	1.922	1.429	0.1878	
15 minute winter	1.01	7.000	1.02	3.8	1.471	0.084	0.0102	
15 minute winter	1.02	7.001	1.03	5.6	0.840	0.237	0.0375	
15 minute winter	1.09	8.000	1.03	1.9	1.539	0.030	0.0035	
15 minute winter	1.03	7.002	NODE-1	7.4	0.634	0.427	0.2041	
15 minute winter	1.10	9.000	1.11	5.7	1.208	0.188	0.0166	
15 minute winter	1.11	9.001	NODE-1	8.1	1.331	0.120	0.0379	
15 minute winter	NODE-1	7.003	1.04	15.2	1.071	0.868	0.0916	
15 minute winter	1.12	10.000	1.04	3.1	1.534	0.058	0.0078	
15 minute winter	1.04	7.004	1.05	18.0	1.209	0.684	0.1365	
15 minute winter	1.05	7.005	1.06	17.7	1.007	0.908	0.1460	
15 minute winter	1.06	7.006	1.07	22.1	1.294	1.009	0.1127	
15 minute winter	RE1.1	11.000	1.07	1.3	0.682	0.056	0.0148	
15 minute winter	1.13	12.000	1.07	3.1	1.302	0.076	0.0091	
15 minute winter	1.07	7.007	1.08	26.0	1.102	0.610	0.5258	
15 minute winter	1.08	7.008	CS1	32.2	1.318	0.541	0.1522	
30 minute winter	CS1	1.010	DMH	-14.8	-0.372	-0.340	0.0564	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 97.79%

Node Event		US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m³)	Status
30 minute winter		DMH	24	12.874	1.064	72.4	0.0000	OK
Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	CS1	Infiltration		53.9				
30 minute winter	DMH	Weir	CS1	53.9				13.7