

Robert West	Robert West Consulting Ltd	File: System 2_V5.pfd		Page 1			
		Network: Steve Burgess 06/08/2024					
Design Settings							
Rainfall Methodology		FSR	Maximum Time of Concentration (mins)		30.00		
Return Period (years)		5	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)	Easting (m)	Northing (m)	Depth (m)
S25	0.028	5.00	141.955	1350	538453.930	236173.954	1.350
S26			142.393	1200	538458.025	236189.474	1.895
S53	0.044	5.00	141.319	1350	538483.784	236160.231	1.350
S54	0.026	5.00	141.875	1200	538489.310	236180.358	2.133
S27			141.372	1200	538515.923	236172.605	1.753
S28	0.014	5.00	141.206	1350	538517.943	236178.555	1.615
S29	0.026	5.00	141.141	1350	538527.619	236176.136	1.594
S40	0.054	5.00	140.584	1350	538568.233	236174.754	1.350
S30	0.095	5.00	140.204	1350	538562.516	236161.215	1.500
S55	0.183	5.00	139.898	1350	538624.133	236207.296	1.500
S56	0.030	5.00	139.372	1350	538620.263	236170.216	1.500
S57	0.013	5.00	138.930	1350	538608.724	236143.003	1.575
S37	0.054	5.00	138.974	1350	538583.893	236125.743	1.350
S38	0.024	5.00	137.990	1350	538607.565	236115.556	1.515
S32	0.073	5.00	138.653	1200	538617.410	236139.580	2.458
S33	0.024	5.00	137.948	1350	538636.967	236137.819	2.108
S34	0.021	5.00	137.700	1350	538654.652	236138.661	1.977
S35	0.107	5.00	138.104	1200	538665.471	236153.216	2.416
S62			138.653	1200	538711.185	236207.335	3.100
S89			137.500	1200	538723.194	236229.170	1.997
S58	0.063	5.00	141.113	1350	538570.351	236209.923	1.350
S63	0.067	5.00	141.760	1350	538575.460	236258.972	1.350
S59	0.091	5.00	141.433	1200	538573.189	236235.255	1.933
S75	0.047	5.00	140.787	1350	538643.950	236271.036	1.350
S76	0.034	5.00	140.579	1350	538635.438	236255.681	1.425
S60	0.080	5.00	140.096	1350	538633.686	236230.062	1.575
S61	0.062	5.00	139.650	1350	538661.333	236227.642	1.575
S74	0.031	5.00	138.759	1350	538701.767	236211.171	1.575
S73	0.062	5.00	139.075	1200	538708.716	236228.269	1.941
S72	0.018	5.00	139.259	1200	538710.601	236243.213	2.166
S85			137.500	1350	538724.467	236241.238	2.000
S64	0.070	5.00	141.620	1350	538621.249	236302.596	1.425
S65	0.031	5.00	141.187	1350	538645.079	236305.222	1.425
S66	0.029	5.00	141.086	1350	538662.935	236302.269	1.425
S67	0.037	5.00	140.732	1350	538672.437	236291.724	1.424
S68			140.706	1350	538681.756	236292.092	1.439
S69	0.019	5.00	139.550	1350	538719.212	236282.265	1.350
S70			137.500	1350	538732.209	236273.018	1.992
S87	0.000	5.00	137.500	1350	538726.787	236229.383	2.000
S88			138.358	1200	538704.892	236191.944	3.003
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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	S25	S26	16.051	0.600	140.605	140.498	0.107	150.0	150	5.33	50.0
1.001	S26	S54	32.586	0.600	140.498	139.817	0.681	47.9	150	5.70	50.0
2.000	S53	S54	20.872	0.600	139.969	139.817	0.152	137.3	150	5.41	50.0
1.002	S54	S27	27.719	0.600	139.742	139.619	0.123	225.4	225	6.23	50.0
1.003	S27	S28	6.284	0.600	139.619	139.591	0.028	224.4	225	6.35	50.0
1.004	S28	S29	9.974	0.600	139.591	139.547	0.044	226.7	225	6.55	50.0
1.005	S29	S30	37.953	0.600	139.547	138.779	0.768	49.4	225	6.88	50.0
3.000	S40	S30	14.697	0.600	139.234	138.854	0.380	38.7	150	5.15	50.0
1.006	S30	S57	49.667	0.600	138.704	137.430	1.274	39.0	300	7.21	50.0
4.000	S55	S56	37.281	0.600	138.398	137.872	0.526	70.9	300	5.33	50.0
4.001	S56	S57	29.558	0.600	137.872	137.430	0.442	66.9	300	5.59	50.0
1.007	S57	S32	9.336	0.600	137.355	136.420	0.935	10.0	300	7.24	50.0
5.000	S37	S38	25.771	0.600	137.624	136.625	0.999	25.8	225	5.17	50.0
5.001	S38	S32	25.963	0.600	136.475	136.345	0.130	199.7	375	5.50	50.0
1.008	S32	S33	19.636	0.600	136.195	135.840	0.355	55.3	525	7.35	50.0
1.009	S33	S34	17.705	0.600	135.840	135.723	0.117	151.3	525	7.51	50.0
1.010	S34	S35	18.136	0.600	135.723	135.688	0.035	518.2	525	7.82	50.0
1.011	S35	S62	70.842	0.600	135.688	135.553	0.135	524.8	525	9.04	50.0
1.012	S62	S89	24.920	0.600	135.553	135.503	0.050	498.4	525	9.46	50.0
6.000	S58	S59	25.490	0.600	139.763	139.593	0.170	149.9	150	5.52	50.0
7.000	S63	S59	23.825	0.600	140.410	139.650	0.760	31.3	150	5.22	50.0
6.001	S59	S60	60.719	0.600	139.500	138.596	0.904	67.2	300	6.05	50.0
8.000	S75	S76	17.556	0.600	139.437	139.229	0.208	84.4	150	5.27	50.0
8.001	S76	S60	25.679	0.600	139.154	138.671	0.483	53.2	225	5.51	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)	Pro Depth (mm)	Pro Velocity (m/s)
1.000	0.818	14.5	3.8	1.200	1.745	0.028	0.0	52	0.690
1.001	1.458	25.8	3.8	1.745	1.908	0.028	0.0	39	1.048
2.000	0.855	15.1	5.9	1.200	1.908	0.044	0.0	65	0.805
1.002	0.867	34.5	13.3	1.908	1.528	0.098	0.0	97	0.813
1.003	0.868	34.5	13.3	1.528	1.390	0.098	0.0	97	0.814
1.004	0.864	34.4	15.2	1.390	1.369	0.112	0.0	105	0.839
1.005	1.865	74.1	18.7	1.369	1.200	0.138	0.0	77	1.562
3.000	1.623	28.7	7.4	1.200	1.200	0.054	0.0	52	1.364
1.006	2.525	178.5	39.0	1.200	1.200	0.287	0.0	95	2.033
4.000	1.870	132.2	24.8	1.200	1.200	0.183	0.0	88	1.444
4.001	1.925	136.1	28.8	1.200	1.200	0.213	0.0	93	1.539
1.007	5.003	353.6	69.5	1.275	1.933	0.513	0.0	89	3.910
5.000	2.586	102.8	7.4	1.125	1.140	0.054	0.0	41	1.521
5.001	1.278	141.2	10.7	1.140	1.933	0.079	0.0	69	0.763
1.008	3.016	652.8	90.0	1.933	1.583	0.664	0.0	130	2.147
1.009	1.818	393.6	93.3	1.583	1.452	0.688	0.0	173	1.501
1.010	0.977	211.5	96.1	1.452	1.891	0.709	0.0	248	0.954
1.011	0.971	210.1	110.6	1.891	2.575	0.816	0.0	270	0.982
1.012	0.996	215.7	110.6	2.575	1.472	0.816	0.0	266	1.002
6.000	0.818	14.5	8.6	1.200	1.690	0.063	0.0	83	0.854
7.000	1.804	31.9	9.1	1.200	1.633	0.067	0.0	55	1.559
6.001	1.921	135.8	30.0	1.633	1.200	0.221	0.0	95	1.551
8.000	1.095	19.3	6.4	1.200	1.200	0.047	0.0	59	0.985
8.001	1.797	71.5	11.1	1.200	1.200	0.082	0.0	59	1.310

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)
6.002	S60	S61	27.753	0.600	138.521	138.075	0.446	62.2	375	6.25	50.0
6.003	S61	S74	43.660	0.600	138.075	137.184	0.891	49.0	375	6.53	50.0
6.004	S74	S73	18.456	0.600	137.184	137.134	0.050	369.1	375	6.86	50.0
6.005	S73	S72	15.062	0.600	137.134	137.093	0.041	367.4	375	7.12	50.0
6.006	S72	S85	14.006	0.600	137.093	135.500	1.593	8.8	375	7.16	50.0
9.000	S64	S65	23.974	0.600	140.195	139.762	0.433	55.4	225	5.23	50.0
9.001	S65	S66	18.099	0.600	139.762	139.661	0.101	179.2	225	5.54	50.0
9.002	S66	S67	14.195	0.600	139.661	139.308	0.353	40.2	225	5.65	50.0
9.003	S67	S68	9.326	0.600	139.308	139.267	0.041	227.5	225	5.83	50.0
9.004	S68	S69	38.724	0.600	139.267	138.200	1.067	36.3	225	6.13	50.0
9.005	S69	S70	15.951	0.600	138.200	136.000	2.200	7.3	225	6.18	50.0
1.014	S87	S88	43.371	0.600	135.500	135.355	0.145	299.1	300	5.80	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)	Pro Depth (mm)	Pro Velocity (m/s)
6.002	2.300	254.0	51.9	1.200	1.200	0.383	0.0	115	1.824
6.003	2.593	286.4	60.4	1.200	1.200	0.445	0.0	116	2.070
6.004	0.937	103.5	64.6	1.200	1.566	0.477	0.0	215	0.986
6.005	0.939	103.7	73.0	1.566	1.791	0.538	0.0	233	1.014
6.006	6.140	678.2	75.4	1.791	1.625	0.556	0.0	84	4.112
9.000	1.761	70.0	9.5	1.200	1.200	0.070	0.0	56	1.240
9.001	0.973	38.7	13.6	1.200	1.200	0.101	0.0	92	0.889
9.002	2.069	82.3	17.5	1.200	1.199	0.129	0.0	70	1.648
9.003	0.863	34.3	22.6	1.199	1.214	0.166	0.0	133	0.919
9.004	2.178	86.6	22.6	1.214	1.125	0.166	0.0	78	1.835
9.005	4.890	194.4	25.1	1.125	1.275	0.185	0.0	54	3.388
1.014	0.904	63.9	0.0	1.700	2.703	0.000	0.0	0	0.000

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	16.051	150.0	150	Circular	141.955	140.605	1.200	142.393	140.498	1.745
1.001	32.586	47.9	150	Circular	142.393	140.498	1.745	141.875	139.817	1.908
2.000	20.872	137.3	150	Circular	141.319	139.969	1.200	141.875	139.817	1.908
1.002	27.719	225.4	225	Circular	141.875	139.742	1.908	141.372	139.619	1.528
1.003	6.284	224.4	225	Circular	141.372	139.619	1.528	141.206	139.591	1.390
1.004	9.974	226.7	225	Circular	141.206	139.591	1.390	141.141	139.547	1.369
1.005	37.953	49.4	225	Circular	141.141	139.547	1.369	140.204	138.779	1.200
3.000	14.697	38.7	150	Circular	140.584	139.234	1.200	140.204	138.854	1.200

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	S25	1350	Manhole	Adoptable	S26	1200	Manhole	Adoptable
1.001	S26	1200	Manhole	Adoptable	S54	1200	Manhole	Adoptable
2.000	S53	1350	Manhole	Adoptable	S54	1200	Manhole	Adoptable
1.002	S54	1200	Manhole	Adoptable	S27	1200	Manhole	Adoptable
1.003	S27	1200	Manhole	Adoptable	S28	1350	Manhole	Adoptable
1.004	S28	1350	Manhole	Adoptable	S29	1350	Manhole	Adoptable
1.005	S29	1350	Manhole	Adoptable	S30	1350	Manhole	Adoptable
3.000	S40	1350	Manhole	Adoptable	S30	1350	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)
1.006	49.667	39.0	300	Circular	140.204	138.704	1.200	138.930	137.430	1.200
4.000	37.281	70.9	300	Circular	139.898	138.398	1.200	139.372	137.872	1.200
4.001	29.558	66.9	300	Circular	139.372	137.872	1.200	138.930	137.430	1.200
1.007	9.336	10.0	300	Circular	138.930	137.355	1.275	138.653	136.420	1.933
5.000	25.771	25.8	225	Circular	138.974	137.624	1.125	137.990	136.625	1.140
5.001	25.963	199.7	375	Circular	137.990	136.475	1.140	138.653	136.345	1.933
1.008	19.636	55.3	525	Circular	138.653	136.195	1.933	137.948	135.840	1.583
1.009	17.705	151.3	525	Circular	137.948	135.840	1.583	137.700	135.723	1.452
1.010	18.136	518.2	525	Circular	137.700	135.723	1.452	138.104	135.688	1.891
1.011	70.842	524.8	525	Circular	138.104	135.688	1.891	138.653	135.553	2.575
1.012	24.920	498.4	525	Circular	138.653	135.553	2.575	137.500	135.503	1.472
6.000	25.490	149.9	150	Circular	141.113	139.763	1.200	141.433	139.593	1.690
7.000	23.825	31.3	150	Circular	141.760	140.410	1.200	141.433	139.650	1.633
6.001	60.719	67.2	300	Circular	141.433	139.500	1.633	140.096	138.596	1.200
8.000	17.556	84.4	150	Circular	140.787	139.437	1.200	140.579	139.229	1.200
8.001	25.679	53.2	225	Circular	140.579	139.154	1.200	140.096	138.671	1.200
6.002	27.753	62.2	375	Circular	140.096	138.521	1.200	139.650	138.075	1.200
6.003	43.660	49.0	375	Circular	139.650	138.075	1.200	138.759	137.184	1.200
6.004	18.456	369.1	375	Circular	138.759	137.184	1.200	139.075	137.134	1.566
6.005	15.062	367.4	375	Circular	139.075	137.134	1.566	139.259	137.093	1.791
6.006	14.006	8.8	375	Circular	139.259	137.093	1.791	137.500	135.500	1.625
9.000	23.974	55.4	225	Circular	141.620	140.195	1.200	141.187	139.762	1.200
9.001	18.099	179.2	225	Circular	141.187	139.762	1.200	141.086	139.661	1.200
9.002	14.195	40.2	225	Circular	141.086	139.661	1.200	140.732	139.308	1.199
9.003	9.326	227.5	225	Circular	140.732	139.308	1.199	140.706	139.267	1.214

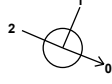
Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.006	S30	1350	Manhole	Adoptable	S57	1350	Manhole	Adoptable
4.000	S55	1350	Manhole	Adoptable	S56	1350	Manhole	Adoptable
4.001	S56	1350	Manhole	Adoptable	S57	1350	Manhole	Adoptable
1.007	S57	1350	Manhole	Adoptable	S32	1200	Manhole	Adoptable
5.000	S37	1350	Manhole	Adoptable	S38	1350	Manhole	Adoptable
5.001	S38	1350	Manhole	Adoptable	S32	1200	Manhole	Adoptable
1.008	S32	1200	Manhole	Adoptable	S33	1350	Manhole	Adoptable
1.009	S33	1350	Manhole	Adoptable	S34	1350	Manhole	Adoptable
1.010	S34	1350	Manhole	Adoptable	S35	1200	Manhole	Adoptable
1.011	S35	1200	Manhole	Adoptable	S62	1200	Manhole	Adoptable
1.012	S62	1200	Manhole	Adoptable	S89	1200	Manhole	Adoptable
6.000	S58	1350	Manhole	Adoptable	S59	1200	Manhole	Adoptable
7.000	S63	1350	Manhole	Adoptable	S59	1200	Manhole	Adoptable
6.001	S59	1200	Manhole	Adoptable	S60	1350	Manhole	Adoptable
8.000	S75	1350	Manhole	Adoptable	S76	1350	Manhole	Adoptable
8.001	S76	1350	Manhole	Adoptable	S60	1350	Manhole	Adoptable
6.002	S60	1350	Manhole	Adoptable	S61	1350	Manhole	Adoptable
6.003	S61	1350	Manhole	Adoptable	S74	1350	Manhole	Adoptable
6.004	S74	1350	Manhole	Adoptable	S73	1200	Manhole	Adoptable
6.005	S73	1200	Manhole	Adoptable	S72	1200	Manhole	Adoptable
6.006	S72	1200	Manhole	Adoptable	S85	1350	Manhole	Adoptable
9.000	S64	1350	Manhole	Adoptable	S65	1350	Manhole	Adoptable
9.001	S65	1350	Manhole	Adoptable	S66	1350	Manhole	Adoptable
9.002	S66	1350	Manhole	Adoptable	S67	1350	Manhole	Adoptable
9.003	S67	1350	Manhole	Adoptable	S68	1350	Manhole	Adoptable

Pipeline Schedule

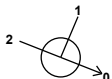
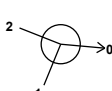
Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
9.004	38.724	36.3	225	Circular	140.706	139.267	1.214	139.550	138.200	1.125
9.005	15.951	7.3	225	Circular	139.550	138.200	1.125	137.500	136.000	1.275
1.014	43.371	299.1	300	Circular	137.500	135.500	1.700	138.358	135.355	2.703

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
9.004	S68	1350	Manhole	Adoptable	S69	1350	Manhole	Adoptable
9.005	S69	1350	Manhole	Adoptable	S70	1350	Manhole	Adoptable
1.014	S87	1350	Manhole	Adoptable	S88	1200	Manhole	Adoptable

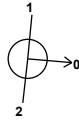
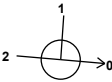
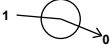
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
S25	538453.930	236173.954	141.955	1.350	1350				
						0	1.000	140.605	150
S26	538458.025	236189.474	142.393	1.895	1200		1	1.000	140.498
						0	1.001	140.498	150
S53	538483.784	236160.231	141.319	1.350	1350				
						0	2.000	139.969	150
S54	538489.310	236180.358	141.875	2.133	1200		1	2.000	139.817
						2	1.001	139.817	150
						0	1.002	139.742	225
S27	538515.923	236172.605	141.372	1.753	1200		1	1.002	139.619
						0	1.003	139.619	225
S28	538517.943	236178.555	141.206	1.615	1350		1	1.003	139.591
						0	1.004	139.591	225
S29	538527.619	236176.136	141.141	1.594	1350		1	1.004	139.547
						0	1.005	139.547	225
S40	538568.233	236174.754	140.584	1.350	1350		0	3.000	139.234
S30	538562.516	236161.215	140.204	1.500	1350		1	3.000	138.854
						2	1.005	138.779	225
						0	1.006	138.704	300

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
S55	538624.133	236207.296	139.898	1.500	1350		0	4.000	138.398	300
S56	538620.263	236170.216	139.372	1.500	1350		1	4.000	137.872	300
S57	538608.724	236143.003	138.930	1.575	1350		1	4.001	137.430	300
							2	1.006	137.430	300
							0	1.007	137.355	300
S37	538583.893	236125.743	138.974	1.350	1350		0	5.000	137.624	225
S38	538607.565	236115.556	137.990	1.515	1350		1	5.000	136.625	225
							0	5.001	136.475	375
S32	538617.410	236139.580	138.653	2.458	1200		1	5.001	136.345	375
							2	1.007	136.420	300
							0	1.008	136.195	525
S33	538636.967	236137.819	137.948	2.108	1350		1	1.008	135.840	525
							0	1.009	135.840	525
S34	538654.652	236138.661	137.700	1.977	1350		1	1.009	135.723	525
							0	1.010	135.723	525
S35	538665.471	236153.216	138.104	2.416	1200		1	1.010	135.688	525
							0	1.011	135.688	525
S62	538711.185	236207.335	138.653	3.100	1200		1	1.011	135.553	525
							0	1.012	135.553	525
S89	538723.194	236229.170	137.500	1.997	1200		1	1.012	135.503	525
S58	538570.351	236209.923	141.113	1.350	1350		0	6.000	139.763	150
S63	538575.460	236258.972	141.760	1.350	1350		0	7.000	140.410	150

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
S59	538573.189	236235.255	141.433	1.933	1200		1	7.000	139.650	150
						2	6.000	139.593	150	
						0	6.001	139.500	300	
S75	538643.950	236271.036	140.787	1.350	1350		0	8.000	139.437	150
S76	538635.438	236255.681	140.579	1.425	1350		1	8.000	139.229	150
S60	538633.686	236230.062	140.096	1.575	1350		1	8.001	138.671	225
						2	6.001	138.596	300	
						0	6.002	138.521	375	
S61	538661.333	236227.642	139.650	1.575	1350		1	6.002	138.075	375
S74	538701.767	236211.171	138.759	1.575	1350		0	6.003	138.075	375
						1	6.003	137.184	375	
						0	6.004	137.184	375	
S73	538708.716	236228.269	139.075	1.941	1200		1	6.004	137.134	375
S72	538710.601	236243.213	139.259	2.166	1200		0	6.005	137.134	375
						1	6.005	137.093	375	
						0	6.006	137.093	375	
S85	538724.467	236241.238	137.500	2.000	1350		1	6.006	135.500	375
S64	538621.249	236302.596	141.620	1.425	1350		0	9.000	140.195	225
S65	538645.079	236305.222	141.187	1.425	1350		1	9.000	139.762	225
S66	538662.935	236302.269	141.086	1.425	1350		0	9.001	139.762	225
						1	9.001	139.661	225	
						0	9.002	139.661	225	
S67	538672.437	236291.724	140.732	1.424	1350		1	9.002	139.308	225
							0	9.003	139.308	225

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
S68	538681.756	236292.092	140.706	1.439	1350	 1	9.003	139.267	225	
						0	9.004	139.267	225	
S69	538719.212	236282.265	139.550	1.350	1350	 1	9.004	138.200	225	
						0	9.005	138.200	225	
S70	538732.209	236273.018	137.500	1.992	1350	 1	9.005	136.000	225	
S87	538726.787	236229.383	137.500	2.000	1350	 0	0	1.014	135.500	300
S88	538704.892	236191.944	138.358	3.003	1200	 1	1	1.014	135.355	300

Simulation Settings

Rainfall Methodology	FSR	Analysis Speed	Detailed
FSR Region	England and Wales	Skip Steady State	x
M5-60 (mm)	20.000	Drain Down Time (mins)	2000
Ratio-R	0.400	Additional Storage (m³/ha)	0.0
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 %)
10	0	0	0
30	0	0	0
100	0	0	0
100	40	0	0

Node S87 Flow through Pond Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Main Channel Length (m)	75.000
Side Inf Coefficient (m/hr)	0.00000	Invert Level (m)	135.500	Main Channel Slope (1:X)	9999.0
Safety Factor	2.0	Time to half empty (mins)		Main Channel n	0.010

Inlets

S70 | S85 | S89

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	633.4	0.0	0.600	895.9	0.0	1.200	1185.9	0.0	1.800	1502.5	0.0
0.100	674.5	0.0	0.700	942.3	0.0	1.300	1236.8	0.0	1.900	1557.8	0.0
0.200	717.3	0.0	0.800	989.6	0.0	1.400	1288.4	0.0	2.000	2019.5	0.0
0.300	760.8	0.0	0.900	1037.6	0.0	1.500	1340.8	0.0			
0.400	805.1	0.0	1.000	1086.2	0.0	1.600	1394.0	0.0			
0.500	850.2	0.0	1.100	1135.7	0.0	1.700	1447.9	0.0			

Node S88 Deep Bore Soakaway Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	135.355	Borehole Diameter	0.300
Side Inf Coefficient (m/hr)	0.09000	Time to half empty (mins)	390	Borehole Depth (m)	22.000
Safety Factor	3.0	Diameter (m)	1.800	Inf Depth (m)	18.700
Porosity	1.00	Depth (m)		Number Required	18

Results for 10 year Critical Storm Duration. Lowest mass balance: 98.74%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S25	10	140.686	0.081	7.6	0.1153	0.0000	OK
15 minute winter	S26	11	140.553	0.055	7.5	0.0622	0.0000	OK
15 minute winter	S53	10	140.072	0.103	11.9	0.1476	0.0000	OK
15 minute winter	S54	11	139.895	0.153	26.1	0.1731	0.0000	OK
15 minute winter	S27	11	139.789	0.170	26.0	0.1920	0.0000	OK
15 minute winter	S28	11	139.747	0.156	29.7	0.2238	0.0000	OK
15 minute winter	S29	11	139.661	0.114	36.3	0.1636	0.0000	OK
15 minute winter	S40	10	139.315	0.081	14.9	0.1159	0.0000	OK
15 minute winter	S30	11	138.843	0.139	74.5	0.1995	0.0000	OK
15 minute winter	S55	10	138.528	0.130	49.9	0.1862	0.0000	OK
15 minute winter	S56	10	138.014	0.142	57.5	0.2029	0.0000	OK
15 minute winter	S57	11	137.507	0.152	134.3	0.2180	0.0000	OK
15 minute winter	S37	10	137.683	0.059	14.8	0.0840	0.0000	OK
15 minute winter	S38	10	136.575	0.100	21.3	0.1437	0.0000	OK
15 minute winter	S32	11	136.409	0.214	174.1	0.2420	0.0000	OK
15 minute winter	S33	12	136.193	0.353	181.1	0.5047	0.0000	OK
15 minute winter	S34	12	136.171	0.448	183.2	0.6404	0.0000	OK
15 minute winter	S35	12	136.131	0.443	207.1	0.5014	0.0000	OK
1440 minute winter	S62	1380	136.059	0.506	10.1	0.5726	0.0000	OK
1440 minute winter	S89	1380	136.063	0.560	9.6	0.6336	0.0000	OK
15 minute winter	S58	11	139.943	0.180	17.3	0.2574	0.0000	SURCHARGED
15 minute winter	S63	10	140.494	0.084	18.3	0.1208	0.0000	OK
15 minute winter	S59	11	139.640	0.140	58.6	0.1581	0.0000	OK
15 minute winter	S75	10	139.531	0.094	12.9	0.1340	0.0000	OK
15 minute winter	S76	10	139.242	0.088	22.0	0.1261	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
15 minute winter	S25	1.000	S26	7.5	0.972	0.518	0.1240
15 minute winter	S26	1.001	S54	7.4	1.137	0.288	0.2463
15 minute winter	S53	2.000	S54	11.5	0.926	0.763	0.2612
15 minute winter	S54	1.002	S27	26.0	0.859	0.755	0.8441
15 minute winter	S27	1.003	S28	26.0	0.844	0.754	0.1935
15 minute winter	S28	1.004	S29	29.7	1.190	0.864	0.2479
15 minute winter	S29	1.005	S30	35.9	1.822	0.485	0.7487
15 minute winter	S40	3.000	S30	14.7	1.577	0.513	0.1371
15 minute winter	S30	1.006	S57	74.6	2.389	0.418	1.5516
15 minute winter	S55	4.000	S56	49.4	1.593	0.374	1.1563
15 minute winter	S56	4.001	S57	56.5	1.799	0.415	0.9288
15 minute winter	S57	1.007	S32	134.5	4.184	0.380	0.3002
15 minute winter	S37	5.000	S38	14.6	1.813	0.142	0.2079
15 minute winter	S38	5.001	S32	21.0	0.914	0.148	0.5953
15 minute winter	S32	1.008	S33	174.9	1.575	0.268	2.3149
15 minute winter	S33	1.009	S34	177.9	1.061	0.452	3.1015
15 minute winter	S34	1.010	S35	179.7	0.957	0.850	3.5427
15 minute winter	S35	1.011	S62	197.3	1.069	0.939	14.0218
1440 minute winter	S62	1.012	S89	9.6	0.369	0.045	5.3529
1440 minute winter	S89	Flow through pond	S87	11.2	0.039	0.001	416.7058
15 minute winter	S58	6.000	S59	16.4	0.953	1.136	0.4148
15 minute winter	S63	7.000	S59	18.1	1.817	0.566	0.2368
15 minute winter	S59	6.001	S60	58.1	1.841	0.428	1.9151
15 minute winter	S75	8.000	S76	12.7	1.134	0.654	0.1960
15 minute winter	S76	8.001	S60	21.6	1.549	0.302	0.3591

Results for 10 year Critical Storm Duration. Lowest mass balance: 98.74%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S60	11	138.696	0.175	100.3	0.2500	0.0000	OK
15 minute winter	S61	11	138.240	0.165	116.7	0.2356	0.0000	OK
15 minute winter	S74	11	137.552	0.368	125.2	0.5271	0.0000	OK
15 minute winter	S73	11	137.436	0.302	141.1	0.3416	0.0000	OK
15 minute winter	S72	11	137.221	0.128	145.7	0.1452	0.0000	OK
1440 minute winter	S85	1380	136.058	0.558	7.1	0.7985	0.0000	OK
15 minute winter	S64	10	140.275	0.079	19.1	0.1137	0.0000	OK
15 minute winter	S65	10	139.904	0.142	27.2	0.2034	0.0000	OK
15 minute winter	S66	10	139.767	0.106	34.6	0.1511	0.0000	OK
15 minute winter	S67	11	139.509	0.201	44.3	0.2876	0.0000	OK
15 minute winter	S68	11	139.392	0.125	44.2	0.1794	0.0000	OK
15 minute winter	S69	11	138.282	0.082	49.4	0.1173	0.0000	OK
1440 minute winter	S70	1380	136.057	0.550	2.4	0.7869	0.0000	OK
1440 minute winter	S87	1380	136.058	0.558	11.2	0.7981	0.0000	SURCHARGED
1440 minute winter	S88	1380	136.058	0.703	6.0	61.2502	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
15 minute winter	S60	6.002	S61	100.7	2.081	0.397	1.3435
15 minute winter	S61	6.003	S74	117.2	1.425	0.409	3.4130
15 minute winter	S74	6.004	S73	125.3	1.205	1.211	1.8911
15 minute winter	S73	6.005	S72	141.1	2.172	1.360	0.9673
15 minute winter	S72	6.006	S85	145.8	4.593	0.215	0.6200
1440 minute winter	S85	Flow through pond	S87	11.2	0.039	0.001	416.7058
15 minute winter	S64	9.000	S65	18.9	0.973	0.270	0.4669
15 minute winter	S65	9.001	S66	26.7	1.199	0.690	0.4046
15 minute winter	S66	9.002	S67	34.3	1.194	0.417	0.3948
15 minute winter	S67	9.003	S68	44.2	1.435	1.290	0.2806
15 minute winter	S68	9.004	S69	44.5	2.491	0.514	0.6929
15 minute winter	S69	9.005	S70	49.5	3.951	0.254	0.1997
1440 minute winter	S70	Flow through pond	S87	11.2	0.039	0.001	416.7058
1440 minute winter	S87	1.014	S88	6.0	0.706	0.094	3.0542
1440 minute winter	S88	Infiltration		2.6			

Results for 30 year Critical Storm Duration. Lowest mass balance: 98.74%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S25	10	140.698	0.093	9.6	0.1329	0.0000	OK
15 minute winter	S26	11	140.561	0.062	9.5	0.0706	0.0000	OK
15 minute winter	S53	10	140.096	0.127	15.1	0.1816	0.0000	OK
15 minute winter	S54	11	139.933	0.191	33.0	0.2156	0.0000	OK
15 minute winter	S27	11	139.821	0.202	32.5	0.2283	0.0000	OK
15 minute winter	S28	11	139.773	0.182	37.0	0.2600	0.0000	OK
15 minute winter	S29	11	139.678	0.131	45.2	0.1880	0.0000	OK
15 minute winter	S40	10	139.329	0.095	18.8	0.1353	0.0000	OK
15 minute winter	S30	11	138.864	0.160	93.6	0.2293	0.0000	OK
15 minute winter	S55	10	138.548	0.150	63.3	0.2148	0.0000	OK
15 minute winter	S56	10	138.037	0.164	73.0	0.2354	0.0000	OK
15 minute winter	S57	11	137.534	0.179	169.6	0.2564	0.0000	OK
15 minute winter	S37	10	137.691	0.067	18.8	0.0953	0.0000	OK
15 minute winter	S38	10	136.589	0.114	27.1	0.1633	0.0000	OK
15 minute winter	S32	12	136.498	0.303	220.1	0.3427	0.0000	OK
15 minute winter	S33	12	136.483	0.643	225.0	0.9206	0.0000	SURCHARGED
15 minute winter	S34	12	136.426	0.703	218.4	1.0054	0.0000	SURCHARGED
15 minute winter	S35	12	136.363	0.675	246.8	0.7633	0.0000	SURCHARGED
1440 minute winter	S62	1410	136.223	0.670	12.2	0.7577	0.0000	SURCHARGED
1440 minute winter	S89	1410	136.226	0.723	11.6	0.8180	0.0000	OK
15 minute winter	S58	11	140.081	0.318	21.9	0.4555	0.0000	SURCHARGED
15 minute winter	S63	10	140.509	0.099	23.3	0.1423	0.0000	OK
15 minute winter	S59	11	139.661	0.161	73.9	0.1821	0.0000	OK
15 minute winter	S75	10	139.549	0.112	16.4	0.1600	0.0000	OK
15 minute winter	S76	10	139.255	0.101	27.8	0.1445	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
15 minute winter	S25	1.000	S26	9.5	1.031	0.655	0.1474
15 minute winter	S26	1.001	S54	9.4	1.122	0.363	0.3505
15 minute winter	S53	2.000	S54	14.5	0.964	0.960	0.3170
15 minute winter	S54	1.002	S27	32.5	0.888	0.942	1.0181
15 minute winter	S27	1.003	S28	32.3	0.896	0.935	0.2260
15 minute winter	S28	1.004	S29	36.9	1.251	1.074	0.2913
15 minute winter	S29	1.005	S30	44.8	1.917	0.604	0.8872
15 minute winter	S40	3.000	S30	18.6	1.658	0.647	0.1646
15 minute winter	S30	1.006	S57	93.9	2.524	0.526	1.8476
15 minute winter	S55	4.000	S56	62.7	1.676	0.474	1.3938
15 minute winter	S56	4.001	S57	71.6	1.902	0.526	1.1160
15 minute winter	S57	1.007	S32	169.9	4.374	0.480	0.3624
15 minute winter	S37	5.000	S38	18.6	1.936	0.181	0.2472
15 minute winter	S38	5.001	S32	26.6	0.976	0.188	0.8576
15 minute winter	S32	1.008	S33	216.7	1.587	0.332	3.3880
15 minute winter	S33	1.009	S34	211.6	1.089	0.538	3.8249
15 minute winter	S34	1.010	S35	217.5	1.009	1.028	3.9180
15 minute winter	S35	1.011	S62	246.0	1.139	1.171	15.3042
1440 minute winter	S62	1.012	S89	11.6	0.384	0.054	5.3835
1440 minute winter	S89	Flow through pond	S87	13.5	0.043	0.001	566.2237
15 minute winter	S58	6.000	S59	20.6	1.172	1.423	0.4319
15 minute winter	S63	7.000	S59	22.9	1.909	0.720	0.2863
15 minute winter	S59	6.001	S60	73.3	1.947	0.540	2.2868
15 minute winter	S75	8.000	S76	16.0	1.186	0.829	0.2378
15 minute winter	S76	8.001	S60	27.4	1.645	0.383	0.4286

Results for 30 year Critical Storm Duration. Lowest mass balance: 98.74%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S60	11	138.723	0.202	126.8	0.2893	0.0000	OK
15 minute winter	S61	11	138.263	0.188	147.6	0.2696	0.0000	OK
15 minute winter	S74	11	137.672	0.488	158.5	0.6979	0.0000	SURCHARGED
15 minute winter	S73	11	137.506	0.372	178.3	0.4209	0.0000	OK
15 minute winter	S72	11	137.239	0.146	183.9	0.1652	0.0000	OK
1440 minute winter	S85	1410	136.222	0.722	8.9	1.0329	0.0000	OK
15 minute winter	S64	10	140.285	0.090	24.2	0.1292	0.0000	OK
15 minute winter	S65	10	139.929	0.167	34.6	0.2384	0.0000	OK
15 minute winter	S66	11	139.785	0.124	43.9	0.1775	0.0000	OK
15 minute winter	S67	11	139.599	0.291	55.7	0.4163	0.0000	SURCHARGED
15 minute winter	S68	11	139.413	0.146	56.0	0.2091	0.0000	OK
15 minute winter	S69	11	138.294	0.094	62.3	0.1340	0.0000	OK
1440 minute winter	S70	1410	136.221	0.714	3.0	1.0214	0.0000	OK
1440 minute winter	S87	1410	136.222	0.722	13.5	1.0326	0.0000	SURCHARGED
1440 minute winter	S88	1410	136.221	0.866	5.8	68.9322	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
15 minute winter	S60	6.002	S61	127.4	2.197	0.501	1.6095
15 minute winter	S61	6.003	S74	148.3	1.565	0.518	3.6176
15 minute winter	S74	6.004	S73	158.2	1.435	1.529	2.0343
15 minute winter	S73	6.005	S72	178.0	2.280	1.716	1.1285
15 minute winter	S72	6.006	S85	184.7	4.707	0.272	0.7659
1440 minute winter	S85	Flow through pond	S87	13.5	0.043	0.001	566.2237
15 minute winter	S64	9.000	S65	24.0	1.026	0.343	0.5562
15 minute winter	S65	9.001	S66	33.9	1.269	0.875	0.4851
15 minute winter	S66	9.002	S67	43.5	1.240	0.529	0.4415
15 minute winter	S67	9.003	S68	56.0	1.518	1.632	0.3127
15 minute winter	S68	9.004	S69	56.1	2.609	0.648	0.8308
15 minute winter	S69	9.005	S70	62.3	4.184	0.320	0.2375
1440 minute winter	S70	Flow through pond	S87	13.5	0.043	0.001	566.2237
1440 minute winter	S87	1.014	S88	5.8	0.761	0.090	3.0542
1440 minute winter	S88	Infiltration		2.6			

Results for 100 year Critical Storm Duration. Lowest mass balance: 98.74%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S25	10	140.716	0.111	12.5	0.1586	0.0000	OK
15 minute winter	S26	11	140.570	0.072	12.3	0.0819	0.0000	OK
15 minute winter	S53	11	140.327	0.358	19.6	0.5123	0.0000	SURCHARGED
15 minute winter	S54	11	140.086	0.344	40.8	0.3889	0.0000	SURCHARGED
15 minute winter	S27	12	139.892	0.273	39.5	0.3090	0.0000	SURCHARGED
15 minute winter	S28	12	139.830	0.239	45.1	0.3426	0.0000	SURCHARGED
15 minute winter	S29	11	139.698	0.151	55.4	0.2154	0.0000	OK
15 minute winter	S40	10	139.350	0.116	24.5	0.1663	0.0000	OK
15 minute winter	S30	11	138.891	0.187	118.2	0.2670	0.0000	OK
15 minute winter	S55	10	138.576	0.178	82.1	0.2542	0.0000	OK
15 minute winter	S56	10	138.068	0.196	94.6	0.2806	0.0000	OK
15 minute winter	S57	11	137.607	0.252	216.6	0.3606	0.0000	OK
15 minute winter	S37	10	137.701	0.077	24.4	0.1097	0.0000	OK
15 minute winter	S38	12	137.100	0.624	35.1	0.8936	0.0000	SURCHARGED
15 minute winter	S32	12	137.087	0.892	275.7	1.0091	0.0000	SURCHARGED
15 minute winter	S33	12	136.994	1.154	274.9	1.6511	0.0000	SURCHARGED
15 minute winter	S34	12	136.899	1.176	278.5	1.6829	0.0000	SURCHARGED
15 minute winter	S35	12	136.797	1.109	317.9	1.2538	0.0000	SURCHARGED
15 minute winter	S62	12	136.442	0.889	320.1	1.0050	0.0000	SURCHARGED
1440 minute winter	S89	1440	136.425	0.922	14.8	1.0429	0.0000	OK
15 minute winter	S58	11	140.369	0.606	28.5	0.8676	0.0000	SURCHARGED
15 minute winter	S63	10	140.534	0.124	30.2	0.1776	0.0000	OK
15 minute winter	S59	11	139.691	0.191	95.1	0.2159	0.0000	OK
15 minute winter	S75	11	139.614	0.177	21.3	0.2533	0.0000	SURCHARGED
15 minute winter	S76	11	139.271	0.117	35.2	0.1671	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
15 minute winter	S25	1.000	S26	12.3	1.094	0.852	0.1793
15 minute winter	S26	1.001	S54	12.1	1.099	0.472	0.4239
15 minute winter	S53	2.000	S54	17.4	0.989	1.151	0.3674
15 minute winter	S54	1.002	S27	39.5	0.992	1.145	1.1024
15 minute winter	S27	1.003	S28	39.4	0.991	1.141	0.2499
15 minute winter	S28	1.004	S29	44.9	1.317	1.308	0.3391
15 minute winter	S29	1.005	S30	54.8	2.003	0.740	1.0390
15 minute winter	S40	3.000	S30	24.1	1.731	0.842	0.2047
15 minute winter	S30	1.006	S57	118.5	2.650	0.664	2.2218
15 minute winter	S55	4.000	S56	81.3	1.762	0.615	1.7189
15 minute winter	S56	4.001	S57	92.8	2.009	0.682	1.3693
15 minute winter	S57	1.007	S32	214.6	4.416	0.607	0.6242
15 minute winter	S37	5.000	S38	24.1	2.077	0.235	0.6540
15 minute winter	S38	5.001	S32	36.3	0.996	0.257	2.8636
15 minute winter	S32	1.008	S33	264.7	1.597	0.405	4.2420
15 minute winter	S33	1.009	S34	270.8	1.254	0.688	3.8249
15 minute winter	S34	1.010	S35	280.6	1.299	1.327	3.9180
15 minute winter	S35	1.011	S62	320.1	1.482	1.523	15.3042
15 minute winter	S62	1.012	S89	320.9	1.486	1.488	5.3835
1440 minute winter	S89	Flow through pond	S87	17.3	0.036	0.001	766.3152
15 minute winter	S58	6.000	S59	26.5	1.505	1.833	0.4428
15 minute winter	S63	7.000	S59	29.6	1.980	0.929	0.3572
15 minute winter	S59	6.001	S60	94.9	2.059	0.699	2.7975
15 minute winter	S75	8.000	S76	20.4	1.193	1.053	0.2970
15 minute winter	S76	8.001	S60	35.1	1.747	0.491	0.5161

Results for 100 year Critical Storm Duration. Lowest mass balance: 98.74%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S60	11	138.761	0.240	164.0	0.3439	0.0000	OK
15 minute winter	S61	11	138.353	0.278	190.8	0.3974	0.0000	OK
15 minute winter	S74	11	137.944	0.760	201.4	1.0872	0.0000	SURCHARGED
15 minute winter	S73	11	137.672	0.538	225.3	0.6081	0.0000	SURCHARGED
15 minute winter	S72	11	137.258	0.165	232.0	0.1865	0.0000	OK
1440 minute winter	S85	1410	136.422	0.922	11.3	1.3197	0.0000	OK
15 minute winter	S64	10	140.300	0.104	31.4	0.1495	0.0000	OK
15 minute winter	S65	11	140.040	0.278	44.9	0.3978	0.0000	SURCHARGED
15 minute winter	S66	11	139.894	0.233	55.2	0.3339	0.0000	SURCHARGED
15 minute winter	S67	11	139.697	0.389	69.0	0.5566	0.0000	SURCHARGED
15 minute winter	S68	11	139.437	0.169	68.5	0.2425	0.0000	OK
15 minute winter	S69	11	138.306	0.106	76.3	0.1514	0.0000	OK
1440 minute winter	S70	1410	136.422	0.914	6.1	1.3082	0.0000	OK
1440 minute winter	S87	1410	136.422	0.922	17.3	1.3196	0.0000	SURCHARGED
1440 minute winter	S88	1410	136.422	1.067	6.2	78.3479	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
15 minute winter	S60	6.002	S61	164.5	2.229	0.648	2.2495
15 minute winter	S61	6.003	S74	188.2	1.772	0.657	4.3182
15 minute winter	S74	6.004	S73	199.2	1.806	1.925	2.0356
15 minute winter	S73	6.005	S72	224.4	2.468	2.164	1.1819
15 minute winter	S72	6.006	S85	232.4	4.826	0.343	0.9260
1440 minute winter	S85	Flow through pond	S87	17.3	0.036	0.001	766.3152
15 minute winter	S64	9.000	S65	31.2	1.069	0.445	0.6929
15 minute winter	S65	9.001	S66	42.2	1.219	1.090	0.7198
15 minute winter	S66	9.002	S67	53.3	1.341	0.648	0.5646
15 minute winter	S67	9.003	S68	68.5	1.780	1.996	0.3351
15 minute winter	S68	9.004	S69	68.3	2.692	0.788	0.9763
15 minute winter	S69	9.005	S70	76.4	4.393	0.393	0.2773
1440 minute winter	S70	Flow through pond	S87	17.3	0.036	0.001	766.3152
1440 minute winter	S87	1.014	S88	6.2	0.796	0.097	3.0542
1440 minute winter	S88	Infiltration		2.6			

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 98.74%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S25	12	140.792	0.186	17.5	0.2669	0.0000	SURCHARGED
15 minute winter	S26	13	140.703	0.205	16.9	0.2322	0.0000	SURCHARGED
15 minute winter	S53	12	140.898	0.929	27.5	1.3294	0.0000	SURCHARGED
15 minute winter	S54	12	140.533	0.791	54.0	0.8946	0.0000	SURCHARGED
15 minute winter	S27	13	140.287	0.668	49.6	0.7552	0.0000	SURCHARGED
15 minute winter	S28	12	140.210	0.619	57.1	0.8854	0.0000	SURCHARGED
15 minute winter	S29	12	140.081	0.534	71.8	0.7635	0.0000	SURCHARGED
15 minute winter	S40	12	139.911	0.677	34.2	0.9693	0.0000	SURCHARGED
15 minute winter	S30	12	139.501	0.797	160.6	1.1409	0.0000	SURCHARGED
15 minute winter	S55	12	139.337	0.939	115.0	1.3433	0.0000	SURCHARGED
15 minute winter	S56	12	139.030	1.158	122.4	1.6565	0.0000	SURCHARGED
15 minute winter	S57	12	138.676	1.320	256.8	1.8896	0.0000	FLOOD RISK
15 minute winter	S37	12	137.971	0.347	34.2	0.4965	0.0000	SURCHARGED
15 minute winter	S38	12	137.886	1.411	118.7	2.0198	0.0000	FLOOD RISK
15 minute winter	S32	12	137.875	1.679	323.2	1.8995	0.0000	SURCHARGED
15 minute winter	S33	12	137.732	1.892	334.9	2.7071	0.0000	FLOOD RISK
15 minute winter	S34	12	137.587	1.864	344.8	2.6676	0.0000	FLOOD RISK
15 minute winter	S35	12	137.431	1.743	396.6	1.9712	0.0000	SURCHARGED
15 minute winter	S62	12	136.875	1.322	396.1	1.4949	0.0000	SURCHARGED
1440 minute winter	S89	1440	136.782	1.279	25.9	1.4464	0.0000	OK
15 minute winter	S58	12	141.111	1.348	39.8	1.9296	0.0000	FLOOD RISK
15 minute winter	S63	12	141.259	0.849	42.3	1.2154	0.0000	SURCHARGED
15 minute winter	S59	11	140.145	0.645	128.1	0.7298	0.0000	SURCHARGED
15 minute winter	S75	12	140.034	0.597	29.8	0.8546	0.0000	SURCHARGED
15 minute winter	S76	12	139.623	0.469	49.0	0.6708	0.0000	SURCHARGED

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
15 minute winter	S25	1.000	S26	16.9	1.126	1.172	0.2826
15 minute winter	S26	1.001	S54	15.7	1.095	0.610	0.5737
15 minute winter	S53	2.000	S54	23.4	1.331	1.549	0.3674
15 minute winter	S54	1.002	S27	49.6	1.246	1.438	1.1024
15 minute winter	S27	1.003	S28	48.3	1.215	1.399	0.2499
15 minute winter	S28	1.004	S29	58.2	1.463	1.693	0.3967
15 minute winter	S29	1.005	S30	72.3	2.071	0.975	1.5094
15 minute winter	S40	3.000	S30	31.8	1.805	1.108	0.2587
15 minute winter	S30	1.006	S57	147.2	2.700	0.825	3.4975
15 minute winter	S55	4.000	S56	104.9	1.842	0.794	2.6253
15 minute winter	S56	4.001	S57	113.9	2.053	0.837	2.0815
15 minute winter	S57	1.007	S32	255.1	4.460	0.722	0.6574
15 minute winter	S37	5.000	S38	32.8	2.093	0.319	1.0249
15 minute winter	S38	5.001	S32	-71.4	0.997	-0.506	2.8636
15 minute winter	S32	1.008	S33	323.1	1.610	0.495	4.2420
15 minute winter	S33	1.009	S34	334.5	1.548	0.850	3.8249
15 minute winter	S34	1.010	S35	344.3	1.594	1.628	3.9180
15 minute winter	S35	1.011	S62	396.1	1.834	1.885	15.3042
15 minute winter	S62	1.012	S89	394.8	1.828	1.831	5.3835
1440 minute winter	S89	Flow through pond	S87	24.2	0.041	0.001	1168.8390
15 minute winter	S58	6.000	S59	34.1	1.939	2.360	0.4487
15 minute winter	S63	7.000	S59	37.0	2.100	1.159	0.4194
15 minute winter	S59	6.001	S60	119.4	2.077	0.880	4.2758
15 minute winter	S75	8.000	S76	27.5	1.562	1.422	0.3091
15 minute winter	S76	8.001	S60	45.5	1.793	0.637	1.0213

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 98.74%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S60	12	139.400	0.879	213.6	1.2584	0.0000	SURCHARGED
15 minute winter	S61	12	139.033	0.958	234.8	1.3706	0.0000	SURCHARGED
15 minute winter	S74	12	138.315	1.131	249.8	1.6184	0.0000	SURCHARGED
15 minute winter	S73	12	137.891	0.757	283.8	0.8557	0.0000	SURCHARGED
15 minute summer	S72	10	137.280	0.187	283.2	0.2113	0.0000	OK
1440 minute winter	S85	1440	136.777	1.277	15.8	1.8278	0.0000	OK
15 minute winter	S64	12	140.744	0.549	44.0	0.7854	0.0000	SURCHARGED
15 minute winter	S65	12	140.605	0.843	56.6	1.2067	0.0000	SURCHARGED
15 minute winter	S66	12	140.372	0.711	70.6	1.0173	0.0000	SURCHARGED
15 minute winter	S67	12	140.054	0.746	89.4	1.0680	0.0000	SURCHARGED
15 minute winter	S68	12	139.677	0.410	86.6	0.5869	0.0000	SURCHARGED
15 minute winter	S69	10	138.321	0.121	94.1	0.1724	0.0000	OK
1440 minute winter	S70	1440	136.777	1.269	5.2	1.8164	0.0000	OK
1440 minute winter	S87	1440	136.777	1.277	24.2	1.8276	0.0000	SURCHARGED
1440 minute winter	S88	1440	136.777	1.422	8.1	95.0070	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
15 minute winter	S60	6.002	S61	200.4	2.224	0.789	3.0611
15 minute winter	S61	6.003	S74	233.4	2.116	0.815	4.8156
15 minute winter	S74	6.004	S73	250.2	2.269	2.418	2.0356
15 minute winter	S73	6.005	S72	282.0	3.017	2.718	1.2433
15 minute summer	S72	6.006	S85	283.3	5.022	0.418	1.0732
1440 minute winter	S85	Flow through pond	S87	24.2	0.041	0.001	1168.8390
15 minute winter	S64	9.000	S65	38.5	1.086	0.549	0.9535
15 minute winter	S65	9.001	S66	53.5	1.345	1.382	0.7198
15 minute winter	S66	9.002	S67	67.5	1.699	0.821	0.5646
15 minute winter	S67	9.003	S68	86.6	2.177	2.525	0.3709
15 minute winter	S68	9.004	S69	83.4	2.728	0.963	1.1851
15 minute winter	S69	9.005	S70	93.6	4.595	0.482	0.3250
1440 minute winter	S70	Flow through pond	S87	24.2	0.041	0.001	1168.8390
1440 minute winter	S87	1.014	S88	8.1	0.869	0.126	3.0542
1440 minute winter	S88	Infiltration		2.6			