



Banners Gate Limited
10-11 Birmingham Street
Halesowen
B63 3HN

File: PHASE 1 - NETWORK 01 - 2022.07
Network: Storm Network 1
Oliver Bayley
17/07/2022

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20040 - Lower Road, Halewood
Phase 1
Surface Water

Design Settings

Rainfall Methodology	FEH-13	Minimum Velocity (m/s)	1.00
Return Period (years)	30	Connection Type	Level Soffits
Additional Flow (%)	0	Minimum Backdrop Height (m)	1.800
CV	1.000	Preferred Cover Depth (m)	1.200
Time of Entry (mins)	5.00	Include Intermediate Ground	✓
Maximum Time of Concentration (mins)	30.00	Enforce best practice design rules	✓
Maximum Rainfall (mm/hr)	500.0		

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Depth (m)
02	0.076	5.00	12.180	1350	1.430
04	0.127	5.00	12.311	1350	1.761
06	0.158	5.00	12.180	1350	1.960
08	0.162	5.00	13.000	1350	1.450
10	0.043	5.00	11.987	1500	1.987
12	0.050	5.00	11.843	1500	1.993
14	0.126	5.00	11.419	1500	1.919
16	0.061	5.00	10.969	1350	1.209
18	0.136	5.00	11.045	1500	1.389
20	0.140	5.00	11.212	1500	1.886
22	0.064	5.00	11.130	1350	1.430
24	0.098	5.00	11.112	2100	2.092
26	0.085	5.00	11.065	1800	2.196
28	0.098	5.00	10.893	1500	1.203
30	0.103	5.00	10.859	1500	1.359
32	0.051	5.00	11.064	1500	1.814
34	0.085	5.00	11.116	1800	2.266
36	0.158	5.00	10.941	1800	2.291
38	0.065	5.00	10.904	1350	1.504
40	0.079	5.00	10.840	1800	2.322

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Depth (m)
42	0.035	5.00	10.351	1800	1.904
44	0.152	5.00	10.287	1800	1.908
46	0.154	5.00	10.268	1800	1.431
48	0.128	5.00	10.190	1500	1.568
50	0.119	5.00	10.245	2100	1.948
52	0.140	5.00	10.009	1800	1.873
54	0.079	5.00	10.171	1800	2.074
56	0.054	5.00	10.157	1800	2.090
58	0.000		10.200	1800	2.188
60	0.000		9.900	1800	1.969
62	0.084	5.00	9.399	1800	1.532
64	0.068	5.00	9.538	1350	1.438
66	0.014	5.00	9.350	1350	1.450
BASIN 01	0.260	5.00	9.300	100	1.520
68	0.030	5.00	9.273	1350	1.533
70	0.058	5.00	14.062	1350	1.562
72	0.196	5.00	13.157	1350	1.557
74	0.129	5.00	11.571	1350	1.621
76	0.185	5.00	11.099	1500	1.599
78	0.024	5.00	10.946	1350	1.346
80	0.241	5.00	11.114	1500	1.834
82	0.029	5.00	10.986	1500	2.166
84	0.139	5.00	11.327	1350	1.427
86	0.083	5.00	10.966	1350	1.766
88	0.043	5.00	10.883	1350	1.883
90	0.022	5.00	10.830	1800	2.318
92	0.099	5.00	10.688	1800	2.240
94	0.239	5.00	10.528	1800	2.235
96	0.141	5.00	10.210	1800	2.028
98	0.141	5.00	10.320	1350	1.590

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Depth (m)
100	0.140	5.00	10.177	1350	1.487
102	0.152	5.00	10.265	2100	2.177
104	0.152	5.00	9.719	1800	1.792
106	0.071	5.00	9.880	1800	2.021
108	0.113	5.00	9.493	1800	1.739
110	0.107	5.00	10.127	1350	1.467
112	0.102	5.00	9.989	1500	1.499
114	0.081	5.00	9.882	1350	1.332
116	0.189	5.00	9.732	1500	1.532
118	0.141	5.00	9.455	1500	1.455
120	0.083	5.00	9.523	1350	1.613
122	0.025	5.00	9.157	1350	1.337
124	0.128	5.00	11.721	1350	1.501
126	0.110	5.00	12.397	1350	2.457
128	0.057	5.00	11.804	1350	2.004
130	0.098	5.00	11.339	1350	1.739
132	0.093	5.00	10.634	1350	1.314
134	0.147	5.00	10.690	1350	1.475
136	0.206	5.00	10.927	1800	1.949
138	0.081	5.00	10.676	1350	1.126
140	0.062	5.00	10.570	1350	1.420
142	0.095	5.00	10.555	1800	1.868
144	0.025	5.00	10.537	1800	1.886
146	0.021	5.00	11.073	1350	1.433
148	0.269	5.00	10.969	1500	1.619
150	0.065	5.00	10.677	1350	1.597
152	0.018	5.00	10.596	1800	2.046
154	0.114	5.00	10.687	1800	2.171
156	0.090	5.00	10.789	1350	1.189
158	0.110	5.00	10.938	1500	1.538

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Depth (m)
160	0.148	5.00	10.824	1350	1.614
162	0.037	5.00	10.787	1500	1.687
164	0.154	5.00	10.367	1350	1.217
166	0.032	5.00	10.421	1800	1.701
168	0.191	5.00	10.302	1800	1.739
170	0.228	5.00	10.383	1500	1.453
172	0.133	5.00	10.306	1500	1.598
174	0.156	5.00	10.475	2100	2.067
176	0.106	5.00	10.208	1500	1.418
178	0.163	5.00	10.417	1800	1.700
180	0.065	5.00	10.293	1800	1.793
182	0.052	5.00	10.031	1350	1.211
184	0.208	5.00	10.424	2100	2.169
186	0.241	5.00	10.123	1800	2.055
188	0.085	5.00	9.903	1800	1.893
190	0.070	5.00	9.717	1350	1.517
192	0.090	5.00	9.569	1350	1.519
BASIN 02	0.141	5.00	9.300	100	1.380
194	0.061	5.00	9.583	1800	1.703
BASIN 03	0.332	5.00	9.300	100	1.670
CC196	0.000		9.600	2700	1.990
OUTFALL			8.700	100	1.100

Links

Name	US Node	DS Node	Length (m)	US IL (m)	DS IL (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.000	02	04	18.638	10.750	10.625	149.1	225	5.31	121.4
1.001	04	06	41.807	10.550	10.295	163.9	300	6.01	115.8
1.002	06	10	24.189	10.220	10.075	166.8	375	6.41	112.8
2.000	08	10	56.420	11.550	10.225	42.6	225	5.64	118.8
1.003	10	12	12.247	10.000	9.850	81.6	450	6.61	111.3
1.004	12	14	33.032	9.850	9.500	94.4	450	7.16	107.3
1.005	14	24	24.587	9.500	9.245	96.4	450	7.42	105.7
3.000	16	18	6.538	9.760	9.731	225.4	300	5.17	122.5
3.001	18	20	77.123	9.656	9.401	302.4	375	6.45	112.5
3.002	20	24	31.005	9.326	9.245	382.8	450	6.97	108.6
4.000	22	24	14.335	9.700	9.470	62.3	225	5.75	117.9
1.006	24	26	60.224	9.020	8.869	398.8	675	8.42	99.5
1.007	26	34	7.379	8.869	8.850	388.4	675	8.55	98.8

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	Σ Area (ha)	Σ Add Inflow (l/s)
1.000	1.068	42.5	33.3	0.076	0.0
1.001	1.225	86.6	85.0	0.203	0.0
1.002	1.400	154.6	147.2	0.361	0.0
2.000	2.010	79.9	69.6	0.162	0.0
1.003	2.251	358.0	227.7	0.566	0.0
1.004	2.093	332.8	238.9	0.616	0.0
1.005	2.070	329.3	283.4	0.742	0.0
3.000	1.043	73.7	27.0	0.061	0.0
3.001	1.036	114.5	80.1	0.197	0.0
3.002	1.033	164.3	132.3	0.337	0.0
4.000	1.659	66.0	27.3	0.064	0.0
1.006	1.306	467.3	446.3	1.241	0.0
1.007	1.324	473.6	473.5	1.326	0.0

Links

Name	US Node	DS Node	Length (m)	US IL (m)	DS IL (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
5.000	28	30	35.744	9.690	9.500	188.1	300	5.60	119.1
5.001	30	32	23.717	9.500	9.325	135.5	300	5.99	115.9
5.002	32	34	18.901	9.250	9.150	189.0	375	6.11	115.0
1.008	34	36	65.195	8.850	8.650	326.0	675	9.63	93.0
1.009	36	40	19.188	8.650	8.593	336.6	675	9.95	91.4
6.000	38	40	11.530	9.400	8.968	26.7	300	5.38	120.8
1.010	40	42	28.200	8.518	8.447	397.2	750	10.42	89.2
1.011	42	44	26.825	8.447	8.379	394.5	750	10.87	87.2
1.012	44	50	32.733	8.379	8.297	399.2	750	11.41	85.0
7.000	46	48	53.686	8.837	8.697	383.5	450	5.89	116.7
7.001	48	50	39.881	8.622	8.522	398.8	525	6.56	111.7
1.013	50	52	63.586	8.297	8.136	394.9	750	12.47	80.9
1.014	52	54	15.557	8.136	8.097	398.9	750	12.73	80.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	Σ Area (ha)	Σ Add Inflow (l/s)
5.000	1.143	80.8	42.2	0.098	0.0
5.001	1.349	95.3	84.2	0.201	0.0
5.002	1.314	145.2	104.7	0.252	0.0
1.008	1.446	517.4	558.9	1.663	0.0
1.009	1.423	509.0	601.5	1.821	0.0
6.000	3.055	215.9	28.4	0.065	0.0
1.010	1.398	617.5	633.5	1.965	0.0
1.011	1.403	619.6	630.3	2.000	0.0
1.012	1.394	615.9	661.1	2.152	0.0
7.000	1.032	164.1	65.0	0.154	0.0
7.001	1.115	241.4	113.8	0.282	0.0
1.013	1.402	619.2	746.4	2.553	0.0
1.014	1.395	616.1	778.6	2.693	0.0

Links

Name	US Node	DS Node	Length (m)	US IL (m)	DS IL (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.015	54	56	11.796	8.097	8.067	393.2	750	12.93	79.3
1.016	56	58	21.626	8.067	8.012	393.2	750	13.29	78.1
1.017	58	60	30.537	8.012	7.931	377.0	750	13.80	76.4
1.018	60	62	25.422	7.931	7.867	397.2	750	14.22	75.1
1.019	62	BASIN 01	10.769	7.867	7.840	398.9	750	14.92	73.0
8.000	64	66	16.689	8.100	7.975	133.5	225	5.17	122.5
8.001	66	BASIN 01	9.640	7.900	7.840	160.7	300	5.71	118.2
1.020	BASIN 01	68	11.434	7.780	7.740	285.9	750	15.52	71.4
1.021	68	BASIN 03	8.605	7.740	7.700	215.1	750	16.55	68.7
9.000	70	72	22.680	12.500	11.675	27.5	225	5.18	122.4
9.001	72	74	44.161	11.600	10.025	28.0	300	5.86	117.0
9.002	74	76	62.898	9.950	9.500	139.8	375	6.91	109.1
9.003	76	80	10.493	9.500	9.430	149.9	375	7.08	107.9

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	Σ Area (ha)	Σ Add Inflow (l/s)
1.015	1.405	620.6	794.4	2.772	0.0
1.016	1.405	620.6	797.6	2.826	0.0
1.017	1.435	633.9	780.3	2.826	0.0
1.018	1.398	617.5	767.0	2.826	0.0
1.019	1.395	616.2	767.7	2.910	0.0
8.000	1.130	44.9	30.1	0.068	0.0
8.001	1.237	87.5	35.0	0.082	0.0
1.020	1.650	728.9	839.1	3.252	0.0
1.021	1.904	841.0	814.9	3.282	0.0
9.000	2.505	99.6	25.7	0.058	0.0
9.001	2.980	210.6	107.4	0.254	0.0
9.002	1.530	169.0	151.0	0.383	0.0
9.003	1.477	163.2	221.5	0.568	0.0

Links

Name	US Node	DS Node	Length (m)	US IL (m)	DS IL (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
10.000	78	80	21.557	9.600	9.505	226.9	300	5.65	118.7
9.004	80	82	78.331	9.280	8.820	170.3	525	8.39	99.7
9.005	82	90	17.902	8.820	8.737	215.7	525	8.68	98.0
11.000	84	86	62.367	9.900	9.275	99.8	225	6.04	115.5
11.001	86	88	15.849	9.200	9.075	126.8	300	6.30	113.6
11.002	88	90	16.185	9.000	8.887	143.2	375	6.43	112.7
9.006	90	92	25.482	8.512	8.448	398.2	750	9.11	95.6
9.007	92	94	61.965	8.448	8.293	399.8	750	10.14	90.5
9.008	94	96	44.117	8.293	8.182	397.5	750	10.88	87.2
9.009	96	102	37.384	8.182	8.088	397.7	750	11.50	84.6
12.000	98	102	43.320	8.730	8.538	225.6	300	5.72	118.1
13.000	100	102	34.475	8.690	8.538	226.8	300	5.57	119.3
9.010	102	104	63.717	8.088	7.927	395.8	750	12.56	80.6

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	Σ Area (ha)	Σ Add Inflow (l/s)
10.000	1.039	73.5	10.3	0.024	0.0
9.004	1.713	370.9	300.1	0.833	0.0
9.005	1.521	329.2	305.3	0.862	0.0
11.000	1.309	52.0	58.0	0.139	0.0
11.001	1.395	98.6	91.1	0.222	0.0
11.002	1.512	167.0	107.9	0.265	0.0
9.006	1.396	616.7	397.0	1.149	0.0
9.007	1.393	615.5	408.2	1.248	0.0
9.008	1.397	617.3	468.6	1.487	0.0
9.009	1.397	617.1	497.8	1.628	0.0
12.000	1.042	73.7	60.2	0.141	0.0
13.000	1.040	73.5	60.4	0.140	0.0
9.010	1.400	618.6	600.3	2.061	0.0

Links

Name	US Node	DS Node	Length (m)	US IL (m)	DS IL (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
9.011	104	106	27.114	7.927	7.859	398.7	750	13.01	79.0
9.012	106	108	41.658	7.859	7.754	396.7	750	13.71	76.7
9.013	108	BASIN 03	71.963	7.754	7.700	1332.6	750	14.90	73.1
14.000	110	112	22.199	8.660	8.565	233.7	300	5.37	120.9
14.001	112	116	66.089	8.490	8.275	307.4	375	6.47	112.3
15.000	114	116	16.077	8.550	8.425	128.6	225	5.12	122.9
14.002	116	118	64.574	8.200	8.000	322.9	450	7.55	104.8
14.003	118	BASIN 03	12.400	8.000	7.950	248.0	450	7.97	102.1
16.000	120	122	15.809	7.910	7.820	175.7	300	5.14	122.7
16.001	122	BASIN 03	5.001	7.820	7.750	71.4	300	5.70	118.3
17.000	124	126	48.765	10.220	10.015	237.9	300	5.81	117.3
17.001	126	128	31.963	9.940	9.800	228.3	375	6.34	113.3
17.002	128	130	31.470	9.800	9.600	157.4	375	6.87	109.4

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	Σ Area (ha)	Σ Add Inflow (l/s)
9.011	1.395	616.3	631.8	2.213	0.0
9.012	1.398	617.8	633.1	2.284	0.0
9.013	0.758	334.7	633.2	2.397	0.0
14.000	1.024	72.4	46.8	0.107	0.0
14.001	1.028	113.5	84.8	0.209	0.0
15.000	1.151	45.8	36.0	0.081	0.0
14.002	1.126	179.0	181.4	0.479	0.0
14.003	1.286	204.6	228.8	0.620	0.0
16.000	1.183	83.6	36.8	0.083	0.0
16.001	1.862	131.6	46.2	0.108	0.0
17.000	1.015	71.7	54.3	0.128	0.0
17.001	1.195	131.9	97.5	0.238	0.0
17.002	1.442	159.2	116.6	0.295	0.0

Links

Name	US Node	DS Node	Length (m)	US IL (m)	DS IL (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
17.003	130	136	62.530	9.600	9.128	132.5	375	7.91	102.5
18.000	132	134	8.720	9.320	9.290	290.7	375	5.21	122.2
18.001	134	136	64.714	9.215	9.053	399.5	450	6.11	115.0
17.004	136	142	56.177	8.978	8.837	398.4	525	8.85	97.0
19.000	138	140	54.102	9.550	9.225	166.5	225	5.90	116.6
19.001	140	142	21.126	9.150	9.062	240.1	300	6.05	115.4
17.005	142	144	14.194	8.687	8.651	394.3	675	9.08	95.7
17.006	144	152	10.297	8.651	8.625	396.0	675	9.26	94.9
20.000	146	148	18.542	9.640	9.500	132.4	225	5.31	121.4
20.001	148	150	43.114	9.350	9.080	159.7	375	6.03	115.6
20.002	150	152	27.811	9.080	8.925	179.4	375	6.49	112.2
17.007	152	154	13.400	8.550	8.516	394.1	750	9.48	93.7
17.008	154	174	43.140	8.516	8.408	399.4	750	10.20	90.2

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	Σ Area (ha)	Σ Add Inflow (l/s)
17.003	1.572	173.6	145.6	0.393	0.0
18.000	1.057	116.8	41.1	0.093	0.0
18.001	1.011	160.8	99.7	0.240	0.0
17.004	1.116	241.5	294.1	0.839	0.0
19.000	1.010	40.2	34.1	0.081	0.0
19.001	1.010	71.4	59.6	0.143	0.0
17.005	1.313	470.0	372.5	1.077	0.0
17.006	1.311	469.0	378.0	1.102	0.0
20.000	1.134	45.1	9.2	0.021	0.0
20.001	1.431	158.0	121.2	0.290	0.0
20.002	1.349	149.0	143.9	0.355	0.0
17.007	1.403	619.9	499.5	1.475	0.0
17.008	1.394	615.7	518.0	1.589	0.0

Links

Name	US Node	DS Node	Length (m)	US IL (m)	DS IL (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
21.000	156	158	18.142	9.600	9.475	145.1	225	5.30	121.4
21.001	158	160	17.046	9.400	9.285	148.2	300	5.59	119.2
21.002	160	162	5.703	9.210	9.175	162.9	375	5.68	118.4
21.003	162	166	51.516	9.100	8.945	332.4	450	6.54	111.8
22.000	164	166	11.141	9.150	9.095	202.6	300	5.07	123.3
21.004	166	168	62.530	8.720	8.563	398.3	675	7.58	104.6
21.005	168	174	31.799	8.563	8.483	397.5	675	7.88	102.7
23.000	170	172	53.796	8.930	8.783	366.0	450	5.90	116.7
23.001	172	174	29.744	8.708	8.633	396.6	525	6.39	112.9
17.009	174	184	61.204	8.408	8.255	400.0	750	11.22	85.8
24.000	176	178	22.331	8.790	8.717	305.9	450	5.37	120.9
24.001	178	180	54.386	8.717	8.575	383.0	450	6.28	113.8
24.002	180	184	7.890	8.500	8.480	394.5	525	6.41	112.8

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	Σ Area (ha)	Σ Add Inflow (l/s)
21.000	1.083	43.1	39.5	0.090	0.0
21.001	1.289	91.1	86.2	0.200	0.0
21.002	1.416	156.4	148.9	0.348	0.0
21.003	1.109	176.4	155.6	0.385	0.0
22.000	1.101	77.8	68.6	0.154	0.0
21.004	1.307	467.6	215.9	0.571	0.0
21.005	1.308	468.1	282.8	0.762	0.0
23.000	1.057	168.0	96.2	0.228	0.0
23.001	1.118	242.1	147.3	0.361	0.0
17.009	1.393	615.3	889.3	2.868	0.0
24.000	1.157	184.0	46.3	0.106	0.0
24.001	1.033	164.2	110.6	0.269	0.0
24.002	1.121	242.7	136.2	0.334	0.0

Links

Name	US Node	DS Node	Length (m)	US IL (m)	DS IL (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
25.000	182	184	26.174	8.820	8.705	227.6	300	5.44	120.4
17.010	184	186	74.439	8.255	8.068	398.1	750	12.46	81.0
17.011	186	188	22.905	8.068	8.010	394.9	750	12.84	79.6
17.012	188	BASIN 02	37.759	8.010	7.960	755.2	750	13.47	77.5
26.000	190	192	17.133	8.200	8.050	114.2	300	5.22	122.2
26.001	192	BASIN 02	7.912	8.050	8.000	158.2	300	5.64	118.7
17.013	BASIN 02	194	9.217	7.920	7.880	230.4	750	13.95	75.9
17.014	194	BASIN 03	11.990	7.880	7.850	399.7	750	15.18	72.3
1.022	BASIN 03	CC196	4.200	7.630	7.610	210.0	750	16.79	68.1
1.023	CC196	OUTFALL	3.800	7.610	7.600	380.0	450	16.86	67.9

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	Σ Area (ha)	Σ Add Inflow (l/s)
25.000	1.038	73.4	22.6	0.052	0.0
17.010	1.396	616.8	1013.4	3.462	0.0
17.011	1.402	619.3	1065.3	3.703	0.0
17.012	1.010	446.3	1061.0	3.788	0.0
26.000	1.470	103.9	30.9	0.070	0.0
26.001	1.247	88.1	68.6	0.160	0.0
17.013	1.839	812.4	1121.6	4.089	0.0
17.014	1.393	615.5	1084.4	4.150	0.0
1.022	1.927	851.3	2679.9	10.889	0.0
1.023	1.037	164.9	2672.1	10.889	0.0

Simulation Settings

Rainfall Methodology	FEH-13	Analysis Speed	Detailed	Additional Storage (m³/ha)	20.0
Summer CV	1.000	Skip Steady State	x	Check Discharge Rate(s)	x
Winter CV	1.000	Drain Down Time (mins)	1440	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 %)		Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)				
2	0	0	0		100	40	0	0				
30	0	0	0									

Node CC196 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	✓	Sump Available	✓
Invert Level (m)	7.610	Product Number	CTL-SHE-0409-1120-1400-1120
Design Depth (m)	1.400	Min Outlet Diameter (m)	0.450
Design Flow (l/s)	112.0	Min Node Diameter (mm)	-1

Node BASIN 01 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	7.780
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	592

Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	80.0	0.0	0.170	1857.3	0.0	1.520	2596.3	0.0

Node BASIN 02 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	7.930
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	536

Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	30.0	0.0	0.070	893.8	0.0	1.370	1405.5	0.0

Node BASIN 03 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	7.630
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	616

Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	50.0	0.0	0.270	2002.9	0.0	1.670	3317.2	0.0

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.39%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	02	10	10.839	0.089	13.3	0.2225	0.0000	OK
15 minute summer	04	11	10.686	0.136	35.3	0.3903	0.0000	OK
15 minute summer	06	11	10.394	0.174	61.5	0.5306	0.0000	OK
15 minute summer	08	10	11.643	0.093	28.4	0.3402	0.0000	OK
15 minute summer	10	11	10.183	0.183	96.6	0.4024	0.0000	OK
15 minute summer	12	11	10.032	0.182	105.2	0.4141	0.0000	OK
15 minute summer	14	11	9.710	0.210	126.8	0.6473	0.0000	OK
15 minute summer	16	10	9.842	0.082	10.7	0.2010	0.0000	OK
15 minute summer	18	11	9.794	0.138	34.4	0.5153	0.0000	OK
15 minute summer	20	11	9.511	0.185	55.6	0.6011	0.0000	OK
15 minute summer	22	10	9.765	0.065	11.2	0.1515	0.0000	OK
15 minute summer	24	11	9.355	0.335	208.7	1.4747	0.0000	OK
15 minute summer	26	12	9.262	0.393	218.5	1.3058	0.0000	OK
15 minute summer	28	10	9.782	0.092	17.2	0.3120	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 summer	02	1.000	04	13.0	0.923	0.307	0.2638	
15 minute summer	04	1.001	06	34.8	1.153	0.402	1.2636	
15 minute summer	06	1.002	10	61.8	1.291	0.400	1.1580	
15 minute summer	08	2.000	10	27.6	1.821	0.346	0.8567	
15 minute summer	10	1.003	12	96.8	1.604	0.270	0.7393	
15 minute summer	12	1.004	14	105.8	1.593	0.318	2.1942	
15 minute summer	14	1.005	24	126.8	1.861	0.385	1.6753	
15 minute summer	16	3.000	18	10.6	0.712	0.143	0.0970	
15 minute summer	18	3.001	20	32.2	0.922	0.281	2.7110	
15 minute summer	20	3.002	24	54.8	0.982	0.333	1.7380	
15 minute summer	22	4.000	24	11.1	1.203	0.168	0.1318	
15 minute summer	24	1.006	26	204.4	1.059	0.437	11.7850	
15 minute summer	26	1.007	34	217.4	1.049	0.459	1.5294	
15 minute summer	28	5.000	30	16.8	0.714	0.208	0.8500	

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.39%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	30	11	9.631	0.131	34.9	0.4287	0.0000	OK
15 minute summer	32	11	9.398	0.148	42.9	0.3451	0.0000	OK
15 minute summer	34	12	9.218	0.368	269.5	1.2116	0.0000	OK
15 minute summer	36	12	9.049	0.399	292.9	1.5642	0.0000	OK
15 minute summer	38	10	9.449	0.049	11.4	0.1115	0.0000	OK
15 minute summer	40	13	8.950	0.432	305.7	1.3938	0.0000	OK
15 minute summer	42	13	8.886	0.439	302.9	1.2792	0.0000	OK
15 minute summer	44	13	8.822	0.443	315.9	1.8348	0.0000	OK
15 minute summer	46	11	8.960	0.123	27.0	0.5774	0.0000	OK
15 minute summer	48	11	8.782	0.160	47.2	0.5451	0.0000	OK
15 minute summer	50	13	8.750	0.453	361.2	2.1202	0.0000	OK
15 minute summer	52	14	8.657	0.521	364.7	2.1036	0.0000	OK
15 minute summer	54	14	8.607	0.510	357.9	1.6864	0.0000	OK
15 minute summer	56	14	8.552	0.485	361.2	1.4851	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 summer	30	5.001	32	34.4	1.214	0.361	0.6717	
15 minute summer	32	5.002	34	43.1	1.117	0.297	0.7289	
15 minute summer	34	1.008	36	271.2	1.297	0.524	13.6258	
15 minute summer	36	1.009	40	285.5	1.398	0.561	3.9203	
15 minute summer	38	6.000	40	11.3	1.586	0.052	0.0823	
15 minute summer	40	1.010	42	298.1	1.149	0.483	7.4815	
15 minute summer	42	1.011	44	303.0	1.134	0.489	7.2280	
15 minute summer	44	1.012	50	314.6	1.160	0.511	8.9795	
15 minute summer	46	7.000	48	25.8	0.800	0.157	1.7317	
15 minute summer	48	7.001	50	46.7	0.894	0.193	2.6481	
15 minute summer	50	1.013	52	352.8	1.188	0.570	19.0846	
15 minute summer	52	1.014	54	353.7	1.115	0.574	5.0180	
15 minute summer	54	1.015	56	358.4	1.172	0.577	3.6574	
15 minute summer	56	1.016	58	360.7	1.237	0.581	6.3740	

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.39%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	58	14	8.479	0.467	360.7	1.1886	0.0000	OK
15 minute summer	60	15	8.391	0.460	358.0	1.1711	0.0000	OK
15 minute summer	62	15	8.299	0.432	358.9	1.5734	0.0000	OK
15 minute summer	64	10	8.182	0.082	11.9	0.1945	0.0000	OK
240 minute summer	66	184	8.094	0.194	4.2	0.3158	0.0000	OK
240 minute summer	BASIN 01	184	8.094	0.314	175.4	439.8418	0.0000	OK
240 minute summer	68	184	8.094	0.354	41.1	0.6451	0.0000	OK
15 minute summer	70	10	12.549	0.049	10.2	0.1073	0.0000	OK
15 minute summer	72	10	11.695	0.095	44.4	0.3749	0.0000	OK
15 minute summer	74	11	10.110	0.159	66.3	0.4822	0.0000	OK
15 minute summer	76	11	9.734	0.234	97.7	0.9554	0.0000	OK
15 minute summer	78	11	9.649	0.049	4.2	0.0869	0.0000	OK
15 minute summer	80	11	9.509	0.229	141.5	1.0064	0.0000	OK
15 minute summer	82	11	9.084	0.264	147.6	0.5371	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 summer	58	1.017	60	358.0	1.255	0.565	8.7134	
15 minute summer	60	1.018	62	355.6	1.303	0.576	6.9386	
15 minute summer	62	1.019	BASIN 01	360.8	1.511	0.586	2.5706	
15 minute summer	64	8.000	66	11.7	0.930	0.260	0.2101	
240 minute summer	66	8.001	BASIN 01	4.2	0.396	0.048	0.5400	
240 minute summer	BASIN 01	1.020	68	40.5	0.677	0.056	2.1687	
240 minute summer	68	1.021	BASIN 03	40.7	0.691	0.048	1.8855	
15 minute summer	70	9.000	72	10.1	1.593	0.101	0.1433	
15 minute summer	72	9.001	74	43.8	2.338	0.208	0.8264	
15 minute summer	74	9.002	76	65.6	1.133	0.388	3.6785	
15 minute summer	76	9.003	80	97.1	1.452	0.595	0.7019	
15 minute summer	78	10.000	80	4.1	0.564	0.056	0.1562	
15 minute summer	80	9.004	82	142.7	1.436	0.385	7.7969	
15 minute summer	82	9.005	90	144.4	1.423	0.439	1.8177	

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.39%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	84	11	10.008	0.108	24.4	0.3645	0.0000	OK
15 minute summer	86	11	9.338	0.138	37.5	0.3277	0.0000	OK
15 minute summer	88	11	9.143	0.143	44.9	0.2691	0.0000	OK
15 minute summer	90	12	8.832	0.320	191.6	0.8741	0.0000	OK
15 minute summer	92	12	8.763	0.315	205.3	1.0804	0.0000	OK
15 minute summer	94	12	8.645	0.352	239.9	1.6476	0.0000	OK
15 minute summer	96	13	8.557	0.375	251.6	1.4763	0.0000	OK
15 minute summer	98	11	8.850	0.120	24.7	0.3851	0.0000	OK
15 minute summer	100	10	8.811	0.121	24.6	0.4004	0.0000	OK
15 minute summer	102	13	8.483	0.395	303.9	1.9217	0.0000	OK
15 minute summer	104	13	8.358	0.431	313.6	1.8300	0.0000	OK
15 minute summer	106	14	8.290	0.431	312.7	1.3999	0.0000	OK
15 minute summer	108	14	8.222	0.468	311.9	1.8006	0.0000	OK
15 minute summer	110	10	8.767	0.107	18.8	0.3096	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 summer	84	11.000	86	23.6	1.276	0.454	1.1556	
15 minute summer	86	11.001	88	37.7	1.255	0.383	0.4766	
15 minute summer	88	11.002	90	45.1	1.241	0.270	0.5883	
15 minute summer	90	9.006	92	191.4	1.089	0.310	4.5139	
15 minute summer	92	9.007	94	207.0	1.095	0.336	11.7182	
15 minute summer	94	9.008	96	232.2	1.107	0.376	9.2526	
15 minute summer	96	9.009	102	247.6	1.087	0.401	8.5159	
15 minute summer	98	12.000	102	24.1	0.933	0.327	1.1184	
15 minute summer	100	13.000	102	24.0	0.927	0.327	0.8926	
15 minute summer	102	9.010	104	300.7	1.213	0.486	15.8507	
15 minute summer	104	9.011	106	306.7	1.188	0.498	7.0769	
15 minute summer	106	9.012	108	303.8	1.147	0.492	11.4797	
15 minute summer	108	9.013	BASIN 03	303.5	1.272	0.907	17.2399	
15 minute summer	110	14.000	112	18.3	0.846	0.253	0.4836	

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.39%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	112	11	8.637	0.147	36.2	0.4612	0.0000	OK
15 minute summer	114	10	8.640	0.090	14.2	0.2373	0.0000	OK
15 minute summer	116	11	8.414	0.214	81.5	0.9062	0.0000	OK
15 minute summer	118	12	8.245	0.245	103.7	0.9087	0.0000	OK
240 minute summer	120	184	8.094	0.184	4.3	0.4519	0.0000	OK
240 minute summer	122	180	8.094	0.274	5.9	0.4953	0.0000	OK
15 minute summer	124	11	10.335	0.115	22.5	0.3611	0.0000	OK
15 minute summer	126	11	10.088	0.148	40.2	0.3442	0.0000	OK
15 minute summer	128	11	9.951	0.151	50.0	0.3019	0.0000	OK
15 minute summer	130	11	9.762	0.162	66.5	0.4139	0.0000	OK
15 minute summer	132	10	9.420	0.100	16.3	0.2834	0.0000	OK
15 minute summer	134	10	9.370	0.155	41.9	0.5312	0.0000	OK
15 minute summer	136	12	9.264	0.286	139.8	1.3339	0.0000	OK
15 minute summer	138	11	9.641	0.091	14.2	0.2626	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 summer	112	14.001	116	36.1	0.934	0.318	2.5542	
15 minute summer	114	15.000	116	14.0	0.986	0.305	0.2279	
15 minute summer	116	14.002	118	80.1	0.986	0.447	5.2427	
15 minute summer	118	14.003	BASIN 03	101.2	1.228	0.495	1.0218	
240 minute summer	120	16.000	122	4.3	0.535	0.051	0.8902	
240 minute summer	122	16.001	BASIN 03	12.0	0.513	0.091	0.3450	
15 minute summer	124	17.000	126	21.8	0.892	0.304	1.1904	
15 minute summer	126	17.001	128	40.5	0.989	0.307	1.3079	
15 minute summer	128	17.002	130	50.1	1.152	0.315	1.3684	
15 minute summer	130	17.003	136	64.5	1.462	0.371	2.7659	
15 minute summer	132	18.000	134	16.1	0.738	0.138	0.1902	
15 minute summer	134	18.001	136	42.0	0.781	0.261	3.8285	
15 minute summer	136	17.004	142	134.8	1.230	0.558	6.1570	
15 minute summer	138	19.000	140	13.7	0.914	0.340	0.8079	

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.39%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	140	11	9.276	0.126	24.0	0.2896	0.0000	OK
15 minute summer	142	12	9.034	0.347	170.6	1.2376	0.0000	OK
15 minute summer	144	12	8.998	0.347	173.5	0.9764	0.0000	OK
15 minute summer	146	10	9.684	0.044	3.7	0.0754	0.0000	OK
15 minute summer	148	10	9.499	0.149	50.8	0.7587	0.0000	OK
15 minute summer	150	11	9.256	0.176	61.4	0.3948	0.0000	OK
15 minute summer	152	12	8.961	0.411	231.7	1.1191	0.0000	OK
15 minute summer	154	13	8.931	0.415	244.5	1.4919	0.0000	OK
15 minute summer	156	10	9.698	0.098	15.8	0.2881	0.0000	OK
15 minute summer	158	10	9.536	0.136	34.8	0.4358	0.0000	OK
15 minute summer	160	10	9.392	0.182	60.2	0.5949	0.0000	OK
15 minute summer	162	11	9.296	0.196	66.1	0.4321	0.0000	OK
15 minute summer	164	10	9.280	0.130	27.0	0.5155	0.0000	OK
15 minute summer	166	11	8.924	0.204	97.6	0.5964	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 summer	140	19.001	142	24.1	0.895	0.337	0.5685	
15 minute summer	142	17.005	144	170.1	0.946	0.362	2.6269	
15 minute summer	144	17.006	152	171.8	0.984	0.366	1.8670	
15 minute summer	146	20.000	148	3.6	0.676	0.079	0.0984	
15 minute summer	148	20.001	150	50.0	1.107	0.316	1.9544	
15 minute summer	150	20.002	152	61.2	1.259	0.410	1.3516	
15 minute summer	152	17.007	154	228.9	0.978	0.369	3.3240	
15 minute summer	154	17.008	174	235.5	0.876	0.382	12.0118	
15 minute summer	156	21.000	158	15.5	0.973	0.360	0.2894	
15 minute summer	158	21.001	160	34.2	1.163	0.376	0.5039	
15 minute summer	160	21.002	162	59.6	1.230	0.381	0.2770	
15 minute summer	162	21.003	166	66.0	1.065	0.374	3.1977	
15 minute summer	164	22.000	166	26.6	0.960	0.342	0.3087	
15 minute summer	166	21.004	168	98.0	0.860	0.210	8.4406	

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.39%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	168	13	8.907	0.344	130.0	1.6314	0.0000	OK
15 minute summer	170	11	9.080	0.150	40.0	0.7343	0.0000	OK
15 minute summer	172	13	8.907	0.199	61.0	0.6826	0.0000	OK
15 minute summer	174	13	8.901	0.493	414.6	2.4522	0.0000	OK
15 minute summer	176	11	8.889	0.099	18.6	0.3231	0.0000	OK
15 minute summer	178	11	8.881	0.164	46.4	0.7308	0.0000	OK
15 minute summer	180	13	8.794	0.294	55.5	0.9607	0.0000	OK
15 minute summer	182	11	8.892	0.072	9.1	0.1640	0.0000	OK
15 minute summer	184	13	8.792	0.537	473.4	2.8877	0.0000	OK
15 minute summer	186	13	8.647	0.579	478.6	2.8313	0.0000	OK
15 minute summer	188	14	8.557	0.547	479.7	1.8830	0.0000	OK
15 minute summer	190	10	8.269	0.069	12.3	0.1618	0.0000	OK
60 minute summer	192	45	8.229	0.179	18.3	0.4673	0.0000	OK
60 minute summer	BASIN 02	45	8.228	0.308	400.6	247.3290	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 summer	168	21.005	174	105.4	0.721	0.225	6.5975	
15 minute summer	170	23.000	172	38.7	0.903	0.230	2.3059	
15 minute summer	172	23.001	174	60.2	0.911	0.249	2.7627	
15 minute summer	174	17.009	184	398.2	1.260	0.647	19.7084	
15 minute summer	176	24.000	178	17.8	0.517	0.097	0.8699	
15 minute summer	178	24.001	180	44.6	0.904	0.272	3.1663	
15 minute summer	180	24.002	184	47.3	0.849	0.195	1.0168	
15 minute summer	182	25.000	184	8.9	0.703	0.121	0.3359	
15 minute summer	184	17.010	186	458.0	1.304	0.743	26.1241	
15 minute summer	186	17.011	188	472.5	1.333	0.763	8.1168	
15 minute summer	188	17.012	BASIN 02	479.0	1.584	1.073	11.3797	
15 minute summer	190	26.000	192	12.2	0.612	0.117	0.3461	
60 minute summer	192	26.001	BASIN 02	18.3	0.940	0.207	0.4006	
60 minute summer	BASIN 02	17.013	194	185.1	1.106	0.228	1.5424	

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.39%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	194	45	8.180	0.300	186.4	0.9775	0.0000	OK
240 minute summer	BASIN 03	184	8.093	0.463	306.0	684.1120	0.0000	OK
240 minute summer	CC196	184	8.090	0.480	110.4	2.7476	0.0000	SURCHARGED
15 minute summer	OUTFALL	1	7.600	0.000	90.6	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)
60 minute summer	194	17.014	BASIN 03	186.6	1.243	0.303	1.8004	
240 minute summer	BASIN 03	1.022	CC196	110.4	0.495	0.130	1.2246	
240 minute summer	CC196	Hydro-Brake®	OUTFALL	110.4				2144.5

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.39%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	02	10	10.908	0.158	31.9	0.3946	0.0000	OK
15 minute summer	04	11	10.804	0.254	84.7	0.7297	0.0000	OK
15 minute summer	06	12	10.558	0.338	148.8	1.0274	0.0000	OK
15 minute summer	08	10	11.712	0.162	68.0	0.5956	0.0000	OK
15 minute summer	10	12	10.486	0.486	230.9	1.0689	0.0000	SURCHARGED
15 minute summer	12	12	10.414	0.564	246.5	1.2806	0.0000	SURCHARGED
15 minute summer	14	13	10.255	0.755	294.6	2.3248	0.0000	SURCHARGED
15 minute summer	16	13	10.207	0.447	27.7	1.0895	0.0000	SURCHARGED
15 minute summer	18	13	10.197	0.541	82.3	2.0168	0.0000	SURCHARGED
15 minute summer	20	13	10.151	0.825	139.5	2.6813	0.0000	SURCHARGED
15 minute summer	22	13	10.123	0.423	26.9	0.9830	0.0000	SURCHARGED
15 minute summer	24	13	10.113	1.093	459.4	4.8094	0.0000	SURCHARGED
15 minute summer	26	13	10.021	1.152	441.4	3.8240	0.0000	SURCHARGED
15 minute summer	28	13	10.060	0.370	41.2	1.2551	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 summer	02	1.000	04	31.5	1.033	0.741	0.5915	
15 minute summer	04	1.001	06	83.1	1.326	0.960	2.6471	
15 minute summer	06	1.002	10	147.5	1.537	0.954	2.5981	
15 minute summer	08	2.000	10	66.2	2.222	0.828	1.8450	
15 minute summer	10	1.003	12	226.6	1.799	0.633	1.9405	
15 minute summer	12	1.004	14	241.8	1.786	0.726	5.2337	
15 minute summer	14	1.005	24	279.0	2.095	0.847	3.8956	
15 minute summer	16	3.000	18	25.2	0.813	0.342	0.4604	
15 minute summer	18	3.001	20	80.7	1.052	0.705	8.5064	
15 minute summer	20	3.002	24	112.6	1.069	0.685	4.9125	
15 minute summer	22	4.000	24	26.7	1.469	0.404	0.5701	
15 minute summer	24	1.006	26	405.7	1.189	0.868	21.4986	
15 minute summer	26	1.007	34	409.3	1.172	0.864	2.6341	
15 minute summer	28	5.000	30	40.6	0.867	0.502	2.5171	

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.39%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	30	13	10.053	0.553	83.8	1.8161	0.0000	SURCHARGED
15 minute summer	32	13	10.004	0.754	102.1	1.7553	0.0000	SURCHARGED
15 minute summer	34	13	9.987	1.137	542.5	3.7478	0.0000	SURCHARGED
15 minute summer	36	13	9.819	1.169	558.5	4.5890	0.0000	SURCHARGED
30 minute summer	38	20	9.753	0.353	24.3	0.8107	0.0000	SURCHARGED
15 minute summer	40	13	9.728	1.210	570.7	3.9021	0.0000	SURCHARGED
15 minute summer	42	13	9.657	1.210	572.3	3.5224	0.0000	SURCHARGED
15 minute summer	44	13	9.572	1.193	604.3	4.9368	0.0000	SURCHARGED
15 minute summer	46	12	9.615	0.778	64.7	3.6533	0.0000	SURCHARGED
15 minute summer	48	12	9.596	0.974	183.3	3.3128	0.0000	SURCHARGED
15 minute summer	50	13	9.449	1.152	661.4	5.3984	0.0000	SURCHARGED
15 minute summer	52	13	9.216	1.080	686.9	4.3622	0.0000	SURCHARGED
15 minute summer	54	13	9.107	1.010	708.5	3.3395	0.0000	SURCHARGED
15 minute summer	56	13	9.004	0.937	723.4	2.8673	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 summer	30	5.001	32	80.7	1.457	0.846	1.6701	
15 minute summer	32	5.002	34	97.5	1.298	0.672	2.0847	
15 minute summer	34	1.008	36	492.1	1.416	0.951	23.2732	
15 minute summer	36	1.009	40	510.3	1.501	1.002	6.8497	
30 minute summer	38	6.000	40	24.3	1.883	0.113	0.8119	
15 minute summer	40	1.010	42	560.8	1.299	0.908	12.4114	
15 minute summer	42	1.011	44	554.3	1.260	0.895	11.8062	
15 minute summer	44	1.012	50	595.9	1.354	0.968	14.4065	
15 minute summer	46	7.000	48	63.9	0.945	0.390	8.5062	
15 minute summer	48	7.001	50	97.0	0.937	0.402	8.6156	
15 minute summer	50	1.013	52	658.3	1.496	1.063	27.9855	
15 minute summer	52	1.014	54	692.4	1.573	1.124	6.8470	
15 minute summer	54	1.015	56	712.4	1.619	1.148	5.1917	
15 minute summer	56	1.016	58	726.5	1.651	1.171	9.5181	

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.39%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	58	13	8.865	0.853	726.5	2.1711	0.0000	SURCHARGED
15 minute summer	60	13	8.700	0.769	728.6	1.9573	0.0000	SURCHARGED
15 minute summer	62	13	8.547	0.680	748.9	2.4751	0.0000	OK
180 minute winter	64	180	8.431	0.331	6.0	0.7876	0.0000	SURCHARGED
180 minute winter	66	180	8.431	0.531	7.2	0.8630	0.0000	SURCHARGED
180 minute winter	BASIN 01	180	8.431	0.651	343.2	1124.4580	0.0000	OK
180 minute winter	68	180	8.431	0.691	70.9	1.2600	0.0000	OK
15 minute summer	70	10	12.578	0.078	24.4	0.1704	0.0000	OK
15 minute summer	72	10	11.749	0.149	106.4	0.5882	0.0000	OK
15 minute summer	74	11	10.437	0.487	159.9	1.4709	0.0000	SURCHARGED
15 minute summer	76	11	10.016	0.516	224.7	2.1076	0.0000	SURCHARGED
15 minute summer	78	11	9.687	0.087	10.1	0.1553	0.0000	OK
15 minute summer	80	11	9.682	0.402	330.6	1.7673	0.0000	OK
15 minute summer	82	13	9.410	0.590	337.0	1.1999	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 summer	58	1.017	60	728.6	1.656	1.149	13.4400	
15 minute summer	60	1.018	62	731.7	1.680	1.185	10.9270	
15 minute summer	62	1.019	BASIN 01	758.7	1.977	1.231	4.0895	
180 minute winter	64	8.000	66	6.0	0.752	0.134	0.6637	
180 minute winter	66	8.001	BASIN 01	6.5	0.449	0.075	0.6788	
180 minute winter	BASIN 01	1.020	68	-69.4	0.722	-0.095	4.7474	
180 minute winter	68	1.021	BASIN 03	-68.5	0.780	-0.081	3.7064	
15 minute summer	70	9.000	72	24.2	2.023	0.243	0.2708	
15 minute summer	72	9.001	74	105.7	2.565	0.502	2.3079	
15 minute summer	74	9.002	76	150.7	1.366	0.891	6.9375	
15 minute summer	76	9.003	80	223.3	2.027	1.369	1.1265	
15 minute summer	78	10.000	80	10.8	0.618	0.146	0.6486	
15 minute summer	80	9.004	82	325.4	1.704	0.877	15.0905	
15 minute summer	82	9.005	90	335.1	1.741	1.018	3.8674	

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.39%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	84	11	10.118	0.218	58.4	0.7378	0.0000	OK
15 minute summer	86	11	9.448	0.248	88.5	0.5886	0.0000	OK
15 minute summer	88	13	9.355	0.355	105.5	0.6694	0.0000	OK
15 minute summer	90	13	9.321	0.809	449.8	2.2114	0.0000	SURCHARGED
15 minute summer	92	13	9.248	0.800	481.9	2.7422	0.0000	SURCHARGED
15 minute summer	94	13	9.171	0.878	544.6	4.1130	0.0000	SURCHARGED
15 minute summer	96	13	9.102	0.920	537.4	3.6192	0.0000	SURCHARGED
15 minute summer	98	13	9.041	0.311	59.2	0.9975	0.0000	SURCHARGED
15 minute summer	100	12	9.037	0.347	58.8	1.1483	0.0000	SURCHARGED
15 minute summer	102	12	9.007	0.919	671.8	4.4687	0.0000	SURCHARGED
15 minute summer	104	12	8.800	0.873	645.5	3.7029	0.0000	SURCHARGED
15 minute summer	106	13	8.685	0.826	637.9	2.6806	0.0000	SURCHARGED
15 minute summer	108	12	8.539	0.785	669.4	3.0172	0.0000	SURCHARGED
15 minute summer	110	10	8.841	0.181	44.9	0.5237	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 summer	84	11.000	86	54.6	1.483	1.049	2.3595	
15 minute summer	86	11.001	88	88.3	1.504	0.896	0.9379	
15 minute summer	88	11.002	90	105.9	1.526	0.635	1.7660	
15 minute summer	90	9.006	92	442.2	1.265	0.717	11.2152	
15 minute summer	92	9.007	94	448.9	1.210	0.729	27.2721	
15 minute summer	94	9.008	96	481.0	1.189	0.779	19.4168	
15 minute summer	96	9.009	102	493.7	1.150	0.800	16.4535	
15 minute summer	98	12.000	102	59.3	1.160	0.805	3.0506	
15 minute summer	100	13.000	102	57.8	1.157	0.787	2.4277	
15 minute summer	102	9.010	104	584.6	1.347	0.945	28.0432	
15 minute summer	104	9.011	106	623.5	1.417	1.012	11.9334	
15 minute summer	106	9.012	108	646.4	1.469	1.046	18.3345	
15 minute summer	108	9.013	BASIN 03	669.4	1.666	2.000	27.2481	
15 minute summer	110	14.000	112	44.3	1.044	0.612	0.9419	

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.39%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	112	12	8.736	0.246	87.1	0.7696	0.0000	OK
15 minute summer	114	11	8.709	0.159	34.0	0.4197	0.0000	OK
15 minute summer	116	11	8.656	0.456	197.3	1.9312	0.0000	SURCHARGED
15 minute summer	118	11	8.443	0.443	236.8	1.6410	0.0000	OK
180 minute winter	120	180	8.431	0.521	7.3	1.2819	0.0000	SURCHARGED
180 minute winter	122	180	8.431	0.611	12.1	1.1027	0.0000	SURCHARGED
15 minute summer	124	10	10.420	0.200	53.8	0.6266	0.0000	OK
15 minute summer	126	13	10.331	0.391	98.8	0.9096	0.0000	SURCHARGED
15 minute summer	128	13	10.305	0.505	120.9	1.0096	0.0000	SURCHARGED
15 minute summer	130	13	10.247	0.647	161.4	1.6554	0.0000	SURCHARGED
15 minute summer	132	13	10.113	0.793	49.8	2.2570	0.0000	SURCHARGED
15 minute summer	134	12	10.105	0.890	99.1	3.0478	0.0000	SURCHARGED
15 minute summer	136	13	10.084	1.106	319.1	5.1550	0.0000	SURCHARGED
15 minute summer	138	13	10.144	0.594	34.0	1.7053	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 summer	112	14.001	116	84.8	0.982	0.747	6.1654	
15 minute summer	114	15.000	116	33.2	1.179	0.725	0.5600	
15 minute summer	116	14.002	118	181.9	1.159	1.016	10.2140	
15 minute summer	118	14.003	BASIN 03	236.1	1.609	1.154	1.7815	
180 minute winter	120	16.000	122	7.3	0.561	0.088	1.1133	
180 minute winter	122	16.001	BASIN 03	13.8	0.636	0.105	0.3522	
15 minute summer	124	17.000	126	52.6	1.108	0.733	2.4983	
15 minute summer	126	17.001	128	98.1	1.169	0.743	3.5254	
15 minute summer	128	17.002	130	122.1	1.338	0.767	3.4710	
15 minute summer	130	17.003	136	150.4	1.527	0.866	6.8969	
15 minute summer	132	18.000	134	37.4	0.804	0.321	0.9618	
15 minute summer	134	18.001	136	86.2	0.846	0.536	10.2535	
15 minute summer	136	17.004	142	270.3	1.307	1.119	12.1361	
15 minute summer	138	19.000	140	31.7	1.107	0.788	2.1517	

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.39%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	140	12	10.032	0.882	57.7	2.0339	0.0000	SURCHARGED
15 minute summer	142	13	9.980	1.293	365.6	4.6048	0.0000	SURCHARGED
15 minute summer	144	13	9.958	1.307	335.7	3.6722	0.0000	SURCHARGED
15 minute summer	146	13	10.104	0.464	8.8	0.7998	0.0000	SURCHARGED
15 minute summer	148	13	10.105	0.755	121.7	3.8412	0.0000	SURCHARGED
15 minute summer	150	13	10.022	0.942	147.3	2.1137	0.0000	SURCHARGED
15 minute summer	152	13	9.937	1.387	452.4	3.7747	0.0000	SURCHARGED
15 minute summer	154	13	9.909	1.393	449.0	5.0086	0.0000	SURCHARGED
15 minute summer	156	13	10.085	0.485	37.8	1.4271	0.0000	SURCHARGED
15 minute summer	158	13	10.032	0.632	83.2	2.0212	0.0000	SURCHARGED
15 minute summer	160	13	9.976	0.766	143.3	2.5012	0.0000	SURCHARGED
15 minute summer	162	13	9.948	0.848	156.7	1.8704	0.0000	SURCHARGED
15 minute summer	164	13	9.904	0.754	64.7	2.9893	0.0000	SURCHARGED
15 minute summer	166	13	9.884	1.164	225.2	3.3986	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 summer	140	19.001	142	55.5	1.063	0.777	1.4877	
15 minute summer	142	17.005	144	325.2	0.989	0.692	5.0669	
15 minute summer	144	17.006	152	305.0	0.979	0.650	3.6758	
15 minute summer	146	20.000	148	14.0	0.710	0.310	0.7374	
15 minute summer	148	20.001	150	120.0	1.316	0.760	4.7553	
15 minute summer	150	20.002	152	139.8	1.428	0.938	3.0675	
15 minute summer	152	17.007	154	401.1	1.043	0.647	5.8976	
15 minute summer	154	17.008	174	402.5	0.942	0.654	18.9868	
15 minute summer	156	21.000	158	37.0	1.094	0.860	0.7215	
15 minute summer	158	21.001	160	82.5	1.259	0.906	1.2004	
15 minute summer	160	21.002	162	141.2	1.489	0.903	0.6290	
15 minute summer	162	21.003	166	148.0	1.318	0.839	8.1624	
15 minute summer	164	22.000	166	63.8	1.193	0.820	0.7845	
15 minute summer	166	21.004	168	164.7	0.872	0.352	22.3218	

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.39%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	168	13	9.867	1.304	241.2	6.1814	0.0000	SURCHARGED
15 minute summer	170	13	9.880	0.950	95.8	4.6593	0.0000	SURCHARGED
15 minute summer	172	13	9.889	1.181	154.5	4.0540	0.0000	SURCHARGED
15 minute summer	174	13	9.848	1.440	709.2	7.1620	0.0000	SURCHARGED
15 minute summer	176	13	9.603	0.813	44.5	2.6528	0.0000	SURCHARGED
15 minute summer	178	12	9.606	0.889	110.8	3.9648	0.0000	SURCHARGED
15 minute summer	180	12	9.617	1.117	114.4	3.6539	0.0000	SURCHARGED
15 minute summer	182	12	9.591	0.771	39.6	1.7648	0.0000	SURCHARGED
15 minute summer	184	12	9.597	1.342	847.5	7.2206	0.0000	SURCHARGED
15 minute summer	186	12	9.165	1.097	910.1	5.3632	0.0000	SURCHARGED
15 minute summer	188	12	8.929	0.919	937.1	3.1642	0.0000	SURCHARGED
60 minute summer	190	46	8.491	0.291	19.4	0.6856	0.0000	OK
60 minute summer	192	46	8.491	0.441	44.4	1.1538	0.0000	SURCHARGED
60 minute summer	BASIN 02	46	8.490	0.570	814.1	519.1442	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 summer	168	21.005	174	192.5	0.724	0.411	11.3515	
15 minute summer	170	23.000	172	98.6	1.041	0.587	8.5236	
15 minute summer	172	23.001	174	108.4	0.952	0.448	6.4257	
15 minute summer	174	17.009	184	705.7	1.604	1.147	26.9371	
15 minute summer	176	24.000	178	42.3	0.563	0.230	3.5382	
15 minute summer	178	24.001	180	88.4	0.951	0.538	8.6171	
15 minute summer	180	24.002	184	99.2	0.860	0.409	1.7045	
15 minute summer	182	25.000	184	34.5	0.766	0.470	1.8432	
15 minute summer	184	17.010	186	859.3	1.953	1.393	32.7621	
15 minute summer	186	17.011	188	909.7	2.067	1.469	10.0810	
15 minute summer	188	17.012	BASIN 02	936.6	2.169	2.099	15.4203	
60 minute summer	190	26.000	192	19.4	0.598	0.187	1.2016	
60 minute summer	192	26.001	BASIN 02	41.6	0.847	0.472	0.5572	
60 minute summer	BASIN 02	17.013	194	503.6	1.460	0.620	3.1786	

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.39%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute winter	194	180	8.431	0.551	288.0	1.7978	0.0000	OK
180 minute winter	BASIN 03	180	8.431	0.801	572.5	1476.0520	0.0000	SURCHARGED
180 minute winter	CC196	180	8.429	0.819	113.1	4.6897	0.0000	SURCHARGED
15 minute summer	OUTFALL	1	7.600	0.000	111.7	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)
180 minute winter	194	17.014	BASIN 03	287.1	1.408	0.466	4.2741	
180 minute winter	BASIN 03	1.022	CC196	113.1	0.495	0.133	1.8485	
180 minute winter	CC196	Hydro-Brake®	OUTFALL	112.0				4149.1

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.39%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	02	10	12.180	1.430	93.5	3.5664	13.1275	FLOOD
15 minute summer	04	11	12.304	1.754	122.4	5.0408	0.0000	FLOOD RISK
15 minute summer	06	11	12.180	1.960	201.8	5.9662	0.4171	FLOOD
15 minute summer	08	10	13.000	1.450	125.2	5.3157	8.0975	FLOOD
30 minute summer	10	18	11.958	1.958	260.5	4.3075	0.0000	FLOOD RISK
30 minute summer	12	18	11.806	1.956	295.6	4.4391	0.0000	FLOOD RISK
15 minute summer	14	11	11.419	1.919	392.6	5.9105	12.0313	FLOOD
30 minute summer	16	17	10.969	1.209	127.0	2.9500	37.4536	FLOOD
30 minute summer	18	17	11.045	1.389	137.8	5.1740	7.3786	FLOOD
15 minute summer	20	10	11.146	1.820	173.3	5.9188	0.0000	FLOOD RISK
15 minute summer	22	10	11.130	1.430	55.3	3.3262	5.7810	FLOOD
15 minute summer	24	10	11.112	2.092	508.4	9.2069	7.0383	FLOOD
15 minute summer	26	10	10.977	2.108	485.2	6.9949	0.0000	FLOOD RISK
15 minute summer	28	10	10.893	1.203	75.8	4.0854	7.6269	FLOOD

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 summer	02	1.000	04	-37.5	1.052	-0.884	0.7413	
15 minute summer	04	1.001	06	90.4	1.284	1.044	2.9440	
15 minute summer	06	1.002	10	165.8	1.507	1.073	2.6680	
15 minute summer	08	2.000	10	79.0	2.068	0.988	2.2439	
30 minute summer	10	1.003	12	260.7	1.794	0.728	1.9405	
30 minute summer	12	1.004	14	295.5	1.865	0.888	5.2337	
15 minute summer	14	1.005	24	316.9	2.046	0.963	3.8956	
30 minute summer	16	3.000	18	-84.4	-1.199	-1.145	0.4604	
30 minute summer	18	3.001	20	82.7	1.060	0.723	8.5064	
15 minute summer	20	3.002	24	127.8	1.135	0.778	4.9125	
15 minute summer	22	4.000	24	35.6	1.529	0.540	0.5701	
15 minute summer	24	1.006	26	420.7	1.203	0.900	21.4986	
15 minute summer	26	1.007	34	467.2	1.309	0.987	2.6341	
15 minute summer	28	5.000	30	51.8	0.918	0.641	2.5171	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.39%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	30	18	10.859	1.359	135.9	4.4616	27.7482	FLOOD
15 minute summer	32	10	10.921	1.671	120.1	3.8914	0.0000	FLOOD RISK
15 minute summer	34	10	10.918	2.068	570.6	6.8126	0.0000	FLOOD RISK
15 minute summer	36	11	10.660	2.010	654.5	7.8878	0.0000	FLOOD RISK
60 minute summer	38	33	10.546	1.146	42.5	2.6303	0.0000	SURCHARGED
60 minute summer	40	33	10.510	1.992	663.1	6.4242	0.0000	SURCHARGED
30 minute summer	42	18	10.351	1.904	737.5	5.5444	44.0774	FLOOD
15 minute summer	44	11	10.287	1.908	719.8	7.8953	5.8901	FLOOD
15 minute summer	46	10	10.268	1.431	119.0	6.7214	3.3214	FLOOD
15 minute summer	48	10	10.190	1.568	306.4	5.3312	14.5169	FLOOD
15 minute summer	50	11	10.176	1.879	833.1	8.8045	0.0000	FLOOD RISK
15 minute summer	52	11	9.866	1.730	885.8	6.9884	0.0000	FLOOD RISK
15 minute summer	54	11	9.698	1.601	907.1	5.2941	0.0000	SURCHARGED
15 minute summer	56	11	9.527	1.460	950.6	4.4678	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)
30 minute summer	30	5.001	32	83.2	1.445	0.873	1.6701	
15 minute summer	32	5.002	34	109.0	1.250	0.751	2.0847	
15 minute summer	34	1.008	36	532.4	1.492	1.029	23.2732	
15 minute summer	36	1.009	40	615.0	1.723	1.208	6.8497	
60 minute summer	38	6.000	40	35.7	1.781	0.166	0.8119	
60 minute summer	40	1.010	42	663.7	1.508	1.075	12.4114	
30 minute summer	42	1.011	44	619.8	1.408	1.000	11.8062	
15 minute summer	44	1.012	50	671.2	1.525	1.090	14.4065	
15 minute summer	46	7.000	48	107.3	0.956	0.654	8.5062	
15 minute summer	48	7.001	50	128.2	0.971	0.531	8.6156	
15 minute summer	50	1.013	52	800.3	1.818	1.292	27.9855	
15 minute summer	52	1.014	54	860.0	1.954	1.396	6.8470	
15 minute summer	54	1.015	56	910.8	2.070	1.468	5.1917	
15 minute summer	56	1.016	58	954.8	2.170	1.538	9.5181	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.39%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	58	11	9.284	1.272	954.8	3.2367	0.0000	SURCHARGED
360 minute winter	60	352	8.995	1.064	262.4	2.7075	0.0000	SURCHARGED
360 minute winter	62	352	8.995	1.128	267.7	4.1060	0.0000	SURCHARGED
360 minute winter	64	352	8.995	0.895	6.7	2.1264	0.0000	SURCHARGED
360 minute winter	66	352	8.995	1.095	7.7	1.7776	0.0000	SURCHARGED
360 minute winter	BASIN 01	352	8.995	1.215	332.3	2407.5330	0.0000	SURCHARGED
360 minute winter	68	352	8.994	1.254	41.5	2.2866	0.0000	FLOOD RISK
15 minute summer	70	12	12.966	0.466	44.8	1.0127	0.0000	SURCHARGED
15 minute summer	72	11	12.819	1.219	186.5	4.8133	0.0000	SURCHARGED
15 minute summer	74	10	11.571	1.621	265.5	4.9003	18.7140	FLOOD
15 minute summer	76	10	11.099	1.599	334.2	6.5255	25.0276	FLOOD
15 minute summer	78	10	10.946	1.346	69.4	2.4066	9.0219	FLOOD
15 minute summer	80	11	11.006	1.726	464.0	7.5859	0.0000	FLOOD RISK
30 minute summer	82	18	10.754	1.934	378.8	3.9364	0.0000	FLOOD RISK

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 summer	58	1.017	60	958.3	2.178	1.512	13.4400	
360 minute winter	60	1.018	62	259.5	1.005	0.420	11.1887	
360 minute winter	62	1.019	BASIN 01	265.6	1.122	0.431	4.7397	
360 minute winter	64	8.000	66	6.3	0.630	0.141	0.6637	
360 minute winter	66	8.001	BASIN 01	7.5	0.457	0.086	0.6788	
360 minute winter	BASIN 01	1.020	68	41.5	0.724	0.057	5.0323	
360 minute winter	68	1.021	BASIN 03	41.7	0.741	0.050	3.7872	
15 minute summer	70	9.000	72	43.9	1.992	0.441	0.9020	
15 minute summer	72	9.001	74	170.4	2.578	0.809	3.1098	
15 minute summer	74	9.002	76	197.8	1.794	1.170	6.9375	
15 minute summer	76	9.003	80	277.5	2.516	1.701	1.1573	
15 minute summer	78	10.000	80	-51.8	-0.735	-0.704	1.5180	
15 minute summer	80	9.004	82	406.1	1.880	1.095	16.9221	
30 minute summer	82	9.005	90	381.3	1.826	1.158	3.8674	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.39%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	84	10	11.327	1.427	107.5	4.8233	9.5706	FLOOD
15 minute summer	86	11	10.958	1.758	127.4	4.1672	0.0000	FLOOD RISK
15 minute summer	88	11	10.746	1.746	152.9	3.2956	0.0000	FLOOD RISK
30 minute summer	90	18	10.636	2.124	521.7	5.8082	0.0000	FLOOD RISK
30 minute summer	92	18	10.572	2.124	554.8	7.2833	0.0000	FLOOD RISK
15 minute summer	94	11	10.423	2.130	705.5	9.9728	0.0000	FLOOD RISK
15 minute summer	96	11	10.210	2.028	818.1	7.9802	19.7614	FLOOD
15 minute summer	98	11	10.320	1.590	109.0	5.0960	2.1504	FLOOD
30 minute summer	100	18	10.177	1.487	97.7	4.9279	5.0105	FLOOD
15 minute summer	102	11	10.081	1.993	860.1	9.6883	0.0000	FLOOD RISK
15 minute summer	104	11	9.708	1.781	951.8	7.5516	0.0000	FLOOD RISK
15 minute summer	106	11	9.434	1.575	1001.1	5.1130	0.0000	SURCHARGED
15 minute summer	108	11	9.033	1.279	1084.4	4.9161	0.0000	SURCHARGED
15 minute summer	110	11	10.087	1.427	82.7	4.1236	0.0000	FLOOD RISK

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 summer	84	11.000	86	66.2	1.665	1.273	2.4804	
15 minute summer	86	11.001	88	121.2	1.724	1.230	1.1161	
15 minute summer	88	11.002	90	145.4	1.524	0.871	1.7852	
30 minute summer	90	9.006	92	491.9	1.234	0.798	11.2152	
30 minute summer	92	9.007	94	508.7	1.156	0.827	27.2721	
15 minute summer	94	9.008	96	714.2	1.623	1.157	19.4168	
15 minute summer	96	9.009	102	658.7	1.497	1.067	16.4535	
15 minute summer	98	12.000	102	78.7	1.166	1.068	3.0506	
30 minute summer	100	13.000	102	67.5	1.157	0.919	2.4277	
15 minute summer	102	9.010	104	873.5	1.985	1.412	28.0432	
15 minute summer	104	9.011	106	954.0	2.168	1.548	11.9334	
15 minute summer	106	9.012	108	1001.1	2.275	1.620	18.3345	
15 minute summer	108	9.013	BASIN 03	1101.4	2.517	3.291	30.2718	
15 minute summer	110	14.000	112	73.9	1.073	1.021	1.5632	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.39%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	112	11	9.962	1.472	146.6	4.6036	0.0000	FLOOD RISK
15 minute summer	114	11	9.815	1.265	62.6	3.3488	0.0000	FLOOD RISK
15 minute summer	116	11	9.581	1.381	333.1	5.8479	0.0000	FLOOD RISK
360 minute winter	118	352	8.994	0.994	56.1	3.6832	0.0000	SURCHARGED
360 minute winter	120	352	8.994	1.084	8.1	2.6679	0.0000	SURCHARGED
360 minute winter	122	352	8.994	1.174	10.1	2.1192	0.0000	FLOOD RISK
15 minute summer	124	10	11.721	1.501	98.9	4.7086	9.8153	FLOOD
15 minute summer	126	10	11.692	1.752	130.0	4.0763	0.0000	SURCHARGED
15 minute summer	128	10	11.571	1.771	147.3	3.5413	0.0000	FLOOD RISK
15 minute summer	130	10	11.339	1.739	216.9	4.4484	5.0533	FLOOD
30 minute winter	132	17	10.634	1.314	165.7	3.7410	53.4628	FLOOD
15 minute summer	134	10	10.690	1.475	188.0	5.0519	10.0043	FLOOD
15 minute summer	136	10	10.790	1.812	379.7	8.4428	0.0000	FLOOD RISK
30 minute summer	138	17	10.676	1.126	56.5	3.2316	7.9755	FLOOD

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 summer	112	14.001	116	145.2	1.316	1.279	7.2894	
15 minute summer	114	15.000	116	56.6	1.423	1.236	0.6394	
15 minute summer	116	14.002	118	327.3	2.066	1.828	10.2313	
360 minute winter	118	14.003	BASIN 03	54.7	0.893	0.267	1.9647	
360 minute winter	120	16.000	122	7.7	0.475	0.092	1.1133	
360 minute winter	122	16.001	BASIN 03	9.8	0.645	0.075	0.3522	
15 minute summer	124	17.000	126	63.4	1.092	0.884	3.4340	
15 minute summer	126	17.001	128	106.5	1.180	0.807	3.5254	
15 minute summer	128	17.002	130	144.6	1.316	0.908	3.4710	
15 minute summer	130	17.003	136	185.0	1.677	1.065	6.8969	
30 minute winter	132	18.000	134	-113.8	-1.032	-0.975	0.9618	
15 minute summer	134	18.001	136	106.4	0.832	0.662	10.2535	
15 minute summer	136	17.004	142	301.7	1.397	1.249	12.1361	
30 minute summer	138	19.000	140	32.7	1.089	0.814	2.1517	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.39%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	140	17	10.570	1.420	64.9	3.2731	8.2106	FLOOD
15 minute summer	142	10	10.555	1.868	398.0	6.6538	11.8741	FLOOD
60 minute summer	144	32	10.533	1.882	335.6	5.2876	0.0000	FLOOD RISK
15 minute winter	146	10	11.073	1.433	28.3	2.4705	0.6251	FLOOD
15 minute summer	148	10	10.969	1.619	218.1	8.2407	10.0359	FLOOD
30 minute summer	150	17	10.677	1.597	194.5	3.5853	9.8537	FLOOD
15 minute summer	152	10	10.516	1.966	496.7	5.3500	0.0000	FLOOD RISK
15 minute summer	154	10	10.462	1.946	566.6	6.9953	0.0000	FLOOD RISK
15 minute summer	156	10	10.789	1.189	91.5	3.5016	13.3206	FLOOD
15 minute summer	158	10	10.901	1.501	127.0	4.8008	0.0000	FLOOD RISK
15 minute summer	160	10	10.815	1.605	182.0	5.2419	0.0000	FLOOD RISK
15 minute summer	162	10	10.692	1.592	209.8	3.5115	0.0000	FLOOD RISK
30 minute summer	164	17	10.367	1.217	107.5	4.8218	18.0476	FLOOD
15 minute winter	166	10	10.405	1.685	256.2	4.9214	0.0000	FLOOD RISK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	140	19.001	142	58.6	1.027	0.821	1.4877	
15 minute summer	142	17.005	144	323.4	1.005	0.688	5.0669	
60 minute summer	144	17.006	152	333.7	1.007	0.711	3.6758	
15 minute winter	146	20.000	148	14.1	0.739	0.313	0.7374	
15 minute summer	148	20.001	150	149.2	1.398	0.944	4.7553	
30 minute summer	150	20.002	152	155.8	1.413	1.046	3.0675	
15 minute summer	152	17.007	154	497.6	1.131	0.803	5.8976	
15 minute summer	154	17.008	174	567.1	1.289	0.921	18.9868	
15 minute summer	156	21.000	158	45.9	1.154	1.066	0.7215	
15 minute summer	158	21.001	160	87.6	1.244	0.962	1.2004	
15 minute summer	160	21.002	162	181.2	1.643	1.158	0.6290	
15 minute summer	162	21.003	166	209.6	1.323	1.188	8.1624	
30 minute summer	164	22.000	166	72.1	1.233	0.927	0.7845	
15 minute winter	166	21.004	168	244.7	0.897	0.523	22.3218	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.39%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	168	17	10.302	1.739	388.2	8.2446	98.4836	FLOOD
15 minute summer	170	10	10.383	1.453	176.2	7.1270	9.5369	FLOOD
30 minute summer	172	17	10.306	1.598	204.4	5.4843	41.4122	FLOOD
60 minute summer	174	32	10.329	1.921	797.9	9.5533	0.0000	FLOOD RISK
15 minute summer	176	10	10.208	1.418	132.0	4.6255	13.4802	FLOOD
30 minute summer	178	17	10.269	1.552	145.6	6.9265	0.0000	FLOOD RISK
30 minute summer	180	17	10.157	1.657	177.5	5.4177	0.0000	FLOOD RISK
30 minute summer	182	17	10.031	1.211	74.5	2.7732	15.0035	FLOOD
30 minute summer	184	17	10.118	1.863	1000.5	10.0285	0.0000	SURCHARGED
15 minute summer	186	10	9.590	1.522	1154.0	7.4408	0.0000	SURCHARGED
15 minute summer	188	10	9.215	1.205	1225.6	4.1490	0.0000	SURCHARGED
360 minute winter	190	352	8.995	0.795	6.8	1.8709	0.0000	SURCHARGED
360 minute winter	192	352	8.995	0.945	15.2	2.4716	0.0000	SURCHARGED
360 minute winter	BASIN 02	352	8.995	1.075	386.0	1118.4480	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)
30 minute summer	168	21.005	174	219.9	0.719	0.470	11.3515	
15 minute summer	170	23.000	172	115.7	1.035	0.688	8.5236	
30 minute summer	172	23.001	174	144.5	0.842	0.597	6.4257	
60 minute summer	174	17.009	184	798.4	1.814	1.298	26.9371	
15 minute summer	176	24.000	178	56.1	0.539	0.305	3.5382	
30 minute summer	178	24.001	180	144.0	0.909	0.877	8.6171	
30 minute summer	180	24.002	184	178.6	0.827	0.736	1.7045	
30 minute summer	182	25.000	184	-38.2	0.702	-0.521	1.8432	
30 minute summer	184	17.010	186	986.3	2.241	1.599	32.7621	
15 minute summer	186	17.011	188	1160.0	2.636	1.873	10.0810	
15 minute summer	188	17.012	BASIN 02	1226.1	2.789	2.747	16.1273	
360 minute winter	190	26.000	192	6.4	0.357	0.062	1.2065	
360 minute winter	192	26.001	BASIN 02	14.9	0.554	0.169	0.5572	
360 minute winter	BASIN 02	17.013	194	226.7	1.059	0.279	4.0566	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.39%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute winter	194	352	8.994	1.114	232.5	3.6342	0.0000	SURCHARGED
360 minute winter	BASIN 03	352	8.994	1.364	534.8	3035.8070	0.0000	SURCHARGED
360 minute winter	CC196	352	8.992	1.382	112.9	7.9141	0.0000	SURCHARGED
15 minute summer	OUTFALL	1	7.600	0.000	112.0	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)
360 minute winter	194	17.014	BASIN 03	231.0	1.194	0.375	5.2770	
360 minute winter	BASIN 03	1.022	CC196	112.9	0.493	0.133	1.8485	
360 minute winter	CC196	Hydro-Brake®	OUTFALL	112.0				9095.3