

Design Settings

Rainfall Methodology	FEH-22	Minimum Velocity (m/s)	1.00
Return Period (years)	2	Connection Type	Level Soffits
Additional Flow (%)	0	Minimum Backdrop Height (m)	0.200
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)	50.0		

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Node Type	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)	Invert Level (m)	Notes
✓ 1	0.063	5.00	45.200	Manhole	1350	505876.700	119266.258	1.600	43.600	Auto-design is off
✓ 2	0.029	5.00	43.000	Manhole	1350	505821.069	119264.749	1.425	41.575	Auto-design is off
✓ 3	0.054	5.00	42.500	Manhole	1350	505805.117	119255.066	1.575	40.925	Auto-design is off
✓ 4	0.069	5.00	42.136	Manhole	1350	505797.314	119235.979	1.781	40.355	Auto-design is off
✓ 5	0.092	5.00	41.923	Manhole	1350	505810.127	119222.001	3.073	38.850	Auto-design is off
✓ 18	0.180	5.00	43.356	Manhole	1200	505872.052	119203.496	2.056	41.300	Auto-design is off
✓ 6	0.084	5.00	41.623	Manhole	1350	505817.769	119203.687	3.065	38.558	Auto-design is off
✓ 7	0.157	5.00	40.924	Manhole	1500	505818.407	119158.680	3.548	37.376	Auto-design is off
✓ 8	0.036	5.00	39.666	Manhole	1500	505788.050	119158.876	2.374	37.292	Auto-design is off
✓ 19	0.094	5.00	43.371	Manhole	1200	505848.682	119126.066	3.521	39.850	Auto-design is off
✓ 20	0.091	5.00	40.808	Manhole	1200	505820.858	119126.268	1.918	38.890	Auto-design is off
✓ S21A	0.089	5.00	38.900	Manhole	1350	505825.968	119073.198	1.250	37.650	Auto-design is off
✓ 21	0.022	5.00	38.750	Manhole	1350	505814.349	119082.961	1.335	37.415	Auto-design is off
✓ 22	0.045	5.00	39.050	Manhole	1350	505802.627	119100.011	2.170	36.880	Auto-design is off
✓ 9			38.900	Junction		505787.269	119134.693	2.300	36.600	Auto-design is off
✓ 10			38.900	Manhole	1500	505771.182	119135.431	2.325	36.575	Auto-design is off
✓ 11			38.000	Manhole	1350	505755.172	119137.227	1.475	36.525	Auto-design is off
✓ 12			38.000	Manhole	1350	505706.851	119158.641	2.600	35.400	Auto-design is off
✓ 13			38.000	Manhole	1350	505652.774	119182.702	3.800	34.200	Auto-design is off
✓ 23	0.239	5.00	48.085	Manhole	1200	505826.732	119366.800	2.088	45.997	Auto-design is off
✓ 23A	0.044	5.00	47.076	Manhole	1350	505826.020	119340.732	1.516	45.560	Auto-design is off
✓ 39	0.050	5.00	47.146	Manhole	1350	505873.175	119314.789	1.236	45.910	Auto-design is off
✓ 24	0.099	5.00	45.687	Manhole	1350	505825.771	119315.520	1.642	44.045	Auto-design is off
✓ 25	0.060	5.00	44.688	Manhole	1350	505825.876	119289.897	1.653	43.035	Auto-design is off
✓ 26	0.009	5.00	44.363	Manhole	1350	505815.640	119285.043	1.653	42.710	Auto-design is off
✓ 40	0.098	5.00	43.578	Manhole	1350	505766.949	119294.755	1.552	42.026	Auto-design is off
✓ 27	0.058	5.00	42.902	Manhole	1350	505770.097	119284.138	1.602	41.300	Auto-design is off
✓ 28	0.017	5.00	41.725	Manhole	1500	505758.450	119269.622	1.735	39.990	Auto-design is off
✓ 29	0.096	5.00	41.568	Manhole	1500	505732.361	119282.612	1.903	39.665	Auto-design is off
✓ 30	0.085	5.00	41.497	Manhole	1500	505701.064	119289.967	2.793	38.704	Auto-design is off
✓ 31	0.080	5.00	39.790	Manhole	1500	505694.943	119261.756	1.950	37.840	Auto-design is off
✓ 32	0.033	5.00	38.060	Manhole	1500	505686.523	119231.583	2.025	36.035	Auto-design is off
✓ 33	0.117	5.00	37.985	Manhole	1500	505722.523	119219.641	2.635	35.350	Auto-design is off
✓ 34	0.108	5.00	37.496	Manhole	1500	505714.503	119195.826	3.047	34.449	Auto-design is off
✓ 35			35.750	Junction		505701.184	119177.307	1.551	34.199	Auto-design is off
✓ 36			35.900	Manhole	1350	505649.836	119203.540	2.001	33.899	Auto-design is off
✓ 41	0.020	5.00	39.682	Manhole	1350	505629.262	119270.104	1.296	38.386	Auto-design is off
✓ 46	0.103	5.00	37.329	Manhole	1350	505565.423	119245.029	1.344	35.985	Auto-design is off
✓ 43	0.127	5.00	37.787	Manhole	1350	505622.338	119236.173	2.012	35.775	Auto-design is off
✓ 37			34.825	Junction		505603.426	119215.067	1.675	33.150	Auto-design is off
✓ 38			34.850	Manhole	1800	505579.833	119206.768	1.725	33.125	Auto-design is off
✓ 14			34.500	Manhole	1350	505577.244	119198.521	1.400	33.100	Auto-design is off
✓ 15			34.500	Manhole	1350	505539.193	119202.220	2.700	31.800	Auto-design is off
✓ 47	0.161	5.00	45.882	Manhole	1350	505696.886	119377.294	1.686	44.196	Auto-design is off
✓ 48	0.067	5.00	43.362	Manhole	1350	505695.476	119332.481	1.479	41.883	Auto-design is off
✓ 59	0.000	5.00	44.000	Manhole	1350	505678.714	119344.069	1.000	43.000	Auto-design is off
✓ 49	0.000	5.00	42.575	Manhole	1350	505681.209	119324.220	1.154	41.421	Auto-design is off
✓ 50	0.069	5.00	41.980	Manhole	1350	505677.172	119311.701	0.880	41.100	Auto-design is off
✓ 51	0.066	5.00	41.692	Manhole	1350	505672.996	119295.492	2.113	39.579	Auto-design is off

**Nodes**

	Name	Area (ha)	T of E (mins)	Cover Level (m)	Node Type	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)	Invert Level (m)	Notes
✓	52	0.078	5.00	41.735	Manhole	1350	505650.984	119298.794	2.633	39.102	Auto-design is off
✓	60	0.124	5.00	44.350	Manhole	1200	505608.042	119377.908	2.365	41.985	Auto-design is off
✓	61	0.081	5.00	44.562	Manhole	1200	505619.933	119377.895	2.712	41.850	Auto-design is off
✓	62	0.095	5.00	43.150	Manhole	1350	505620.801	119345.634	1.700	41.450	Auto-design is off
✓	53	0.067	5.00	41.421	Manhole	1500	505615.816	119303.977	2.816	38.605	Auto-design is off
✓	54	0.179	5.00	41.282	Manhole	1500	505587.337	119306.740	2.832	38.450	Auto-design is off
✓	55	0.066	5.00	40.742	Manhole	1500	505547.922	119310.592	2.817	37.925	Auto-design is off
✓	56	0.074	5.00	40.015	Manhole	1500	505522.806	119308.342	2.508	37.507	Auto-design is off
✓	63	0.101	5.00	39.082	Manhole	1350	505492.844	119305.349	2.025	37.057	Auto-design is off
✓	64	0.102	5.00	38.568	Manhole	1350	505467.664	119305.256	2.026	36.542	Auto-design is off
✓	65	0.034	5.00	36.100	Manhole	1350	505468.077	119273.837	1.878	34.222	Auto-design is off
✓	66	0.000	5.00	35.200	Manhole	1350	505468.690	119249.978	1.697	33.503	Auto-design is off
✓	67			36.000	Manhole	1350	505494.686	119250.220	2.935	33.065	Auto-design is off
✓	68			35.400	Manhole	1350	505500.934	119246.723	2.426	32.974	Auto-design is off
✓	57	0.045	5.00	35.890	Manhole	1800	505522.350	119243.609	3.305	32.585	Auto-design is off
✓	58			32.500	Junction		505503.949	119186.952	1.550	30.950	Auto-design is off
✓	69			32.500	Manhole	1800	505525.233	119163.940	1.650	30.850	Auto-design is off
✓	16			32.000	Manhole	1350	505535.198	119155.009	1.200	30.800	Auto-design is off
✓	17			32.000	Manhole	1350	505528.135	119137.438	1.300	30.700	
✓	GP1	0.054	5.00	37.825	Manhole	1350	505810.846	119063.747	1.425	36.400	
✓	GP2	0.010	5.00	38.500	Manhole	1200	505818.213	119057.825	2.220	36.280	
✓	GP3	0.048	5.00	35.775	Manhole	1350	505797.302	119044.766	0.950	34.825	
✓	GPP	0.000		36.475	Manhole	1350	505809.409	119044.589	1.759	34.716	

Links (Input)

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)
1.000	1	2	55.651	0.600	43.600	41.575	2.025	27.5	225	5.37
1.001	2	3	18.661	0.600	41.575	41.000	0.575	32.5	225	5.51
1.002	3	4	20.620	0.600	40.925	40.355	0.570	36.2	300	5.64
1.003	4	5	18.962	0.600	40.355	38.929	1.426	13.3	300	5.71
1.004	5	6	19.844	0.600	38.850	38.633	0.217	91.4	375	5.88
2.000	18	6	54.283	0.600	41.300	38.708	2.592	20.9	300	5.26
1.005	6	7	45.012	0.600	38.558	37.451	1.107	40.7	450	6.12
1.006	7	8	30.358	0.600	37.376	37.292	0.084	361.4	525	6.55
1.007	8	9	24.196	0.600	37.292	36.700	0.592	40.9	525	6.67
3.000	19	20	27.825	0.600	39.850	38.965	0.885	31.4	225	5.20
3.001	20	9	34.629	0.600	38.890	37.000	1.890	18.3	300	5.35
4.000	S21A	21	15.176	0.600	37.650	37.565	0.085	178.5	225	5.26
4.001	21	22	20.691	0.600	37.415	36.955	0.460	45.0	375	5.39
4.002	22	9	37.930	0.600	36.880	36.700	0.180	210.7	450	5.84
1.008	9	10	16.104	0.600	36.600	36.575	0.025	644.2	600	6.95
1.009	10	11	16.110	0.600	36.575	36.525	0.050	322.2	600	7.15
1.010	11	12	52.853	0.600	36.525	35.400	1.125	47.0	450	7.44
1.011	12	13	59.188	0.600	35.400	34.200	1.200	49.3	450	7.78
1.012	13	14	77.169	0.600	34.200	33.100	1.100	70.2	450	8.31
5.000	23	23A	26.078	0.600	45.997	45.560	0.437	59.7	300	5.21
5.001	23A	24	25.213	0.600	45.560	44.120	1.440	17.5	300	5.32
6.000	39	24	47.410	0.600	45.910	44.120	1.790	26.5	300	5.26
5.002	24	25	25.623	0.600	44.045	43.110	0.935	27.4	375	5.45
5.003	25	26	11.329	0.600	43.035	42.710	0.325	34.9	450	5.50
5.004	26	27	45.552	0.600	42.710	41.300	1.410	32.3	450	5.71
7.000	40	27	11.074	0.600	42.026	41.525	0.501	22.1	225	5.07
5.005	27	28	18.611	0.600	41.300	40.067	1.233	15.1	450	5.77
5.006	28	29	29.144	0.600	39.990	39.665	0.325	89.7	525	5.98
5.007	29	30	32.150	0.600	39.665	38.704	0.961	33.5	525	6.12
5.008	30	31	28.867	0.600	38.704	37.840	0.864	33.4	525	6.24

Links (Input)

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)
5.009	31	32	31.326	0.600	37.840	36.110	1.730	18.1	525	6.34
5.010	32	33	37.929	0.600	36.035	35.350	0.685	55.4	600	6.53
5.011	33	34	25.128	0.600	35.350	34.449	0.901	27.9	600	6.62
5.012	34	35	22.811	0.600	34.449	34.199	0.250	91.2	600	6.77
5.013	35	36	57.661	0.600	34.199	33.899	0.300	192.2	600	7.32
5.014	36	37	47.820	0.600	33.899	33.150	0.749	63.8	600	7.58
8.000	41	43	34.630	0.600	38.386	35.858	2.528	13.7	225	5.16
9.000	46	43	57.600	0.600	35.985	35.775	0.210	274.3	300	6.02
8.001	43	37	28.339	0.600	35.775	33.433	2.342	12.1	375	6.11
5.015	37	38	26.046	0.600	33.150	33.125	0.025	1041.8	675	8.12
5.016	38	14	8.644	0.600	33.125	33.100	0.025	345.8	600	8.23
1.013	14	15	38.230	0.600	33.100	31.800	1.300	29.4	450	8.48
1.014	15	16	47.380	0.600	31.800	30.800	1.000	47.4	450	8.75
10.000	47	48	44.835	0.600	44.196	41.883	2.313	19.4	300	5.21
10.001	48	49	16.486	0.600	41.883	41.500	0.383	43.0	300	5.32
11.000	59	49	20.005	0.600	43.000	41.496	1.504	13.3	300	5.08
10.002	49	50	13.154	0.600	41.421	41.100	0.321	41.0	375	5.40
10.003	50	51	16.739	0.600	41.100	39.657	1.443	11.6	450	5.45
10.004	51	52	22.258	0.600	39.579	39.102	0.477	46.7	525	5.56
10.005	52	53	35.548	0.600	39.102	38.605	0.497	71.5	525	5.78
12.000	60	61	11.891	0.600	41.985	41.850	0.135	88.1	300	5.12
12.001	61	62	32.273	0.600	41.850	41.525	0.325	99.3	300	5.46
12.002	62	53	41.954	0.600	41.450	38.755	2.695	15.6	375	5.61
10.006	53	54	28.613	0.600	38.605	38.450	0.155	184.6	525	6.07
10.007	54	55	39.603	0.600	38.450	38.000	0.450	88.0	525	6.35
10.008	55	56	25.217	0.600	37.925	37.507	0.418	60.3	600	6.48
10.009	56	57	64.735	0.600	37.507	32.735	4.772	13.6	600	6.65
13.000	63	64	25.180	0.600	37.057	36.542	0.515	48.9	450	5.14
13.001	64	65	31.422	0.600	36.542	34.222	2.320	13.5	450	5.24
13.002	65	66	23.867	0.600	34.222	33.503	0.719	33.2	450	5.35
13.003	66	67	25.997	0.600	33.503	33.065	0.438	59.4	450	5.51
13.004	67	68	7.160	0.600	33.065	32.974	0.091	78.7	450	5.57
13.005	68	57	21.641	0.600	32.974	32.885	0.089	243.2	450	5.84
10.010	57	58	59.570	0.600	32.585	30.950	1.635	36.4	750	6.86
10.011	58	69	31.346	0.600	30.950	30.850	0.100	313.5	750	7.19
10.012	69	16	13.381	0.600	30.850	30.800	0.050	267.6	750	7.32
1.015	16	17	18.937	0.600	30.800	30.700	0.100	189.4	750	8.90
14.000	GP1	GP2	9.452	0.600	36.400	36.280	0.120	78.8	225	5.11
14.001	GP2	GPP	14.235	0.600	36.280	34.716	1.564	9.1	225	5.16
15.000	GP3	GPP	14.497	0.600	34.825	34.720	0.105	138.1	225	5.22

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	55.651	27.5	225	Circular_Default Sewer Type	45.200	43.600	1.375	43.000	41.575	1.200
1.001	18.661	32.5	225	Circular_Default Sewer Type	43.000	41.575	1.200	42.500	41.000	1.275
1.002	20.620	36.2	300	Circular_Default Sewer Type	42.500	40.925	1.275	42.136	40.355	1.481
1.003	18.962	13.3	300	Circular_Default Sewer Type	42.136	40.355	1.481	41.923	38.929	2.694
1.004	19.844	91.4	375	Circular_Default Sewer Type	41.923	38.850	2.698	41.623	38.633	2.615

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	1	1350	Manhole	Adoptable	2	1350	Manhole	Adoptable
1.001	2	1350	Manhole	Adoptable	3	1350	Manhole	Adoptable
1.002	3	1350	Manhole	Adoptable	4	1350	Manhole	Adoptable
1.003	4	1350	Manhole	Adoptable	5	1350	Manhole	Adoptable
1.004	5	1350	Manhole	Adoptable	6	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)
2.000	54.283	20.9	300	Circular_Default Sewer Type	43.356	41.300	1.756	41.623	38.708	2.615
1.005	45.012	40.7	450	Circular_Default Sewer Type	41.623	38.558	2.615	40.924	37.451	3.023
1.006	30.358	361.4	525	Circular_Default Sewer Type	40.924	37.376	3.023	39.666	37.292	1.849
1.007	24.196	40.9	525	Circular_Default Sewer Type	39.666	37.292	1.849	38.900	36.700	1.675
3.000	27.825	31.4	225	Circular_Default Sewer Type	43.371	39.850	3.296	40.808	38.965	1.618
3.001	34.629	18.3	300	Circular_Default Sewer Type	40.808	38.890	1.618	38.900	37.000	1.600
4.000	15.176	178.5	225	Circular_Default Sewer Type	38.900	37.650	1.025	38.750	37.565	0.960
4.001	20.691	45.0	375	Circular_Default Sewer Type	38.750	37.415	0.960	39.050	36.955	1.720
4.002	37.930	210.7	450	Circular_Default Sewer Type	39.050	36.880	1.720	38.900	36.700	1.750
1.008	16.104	644.2	600	Circular_Default Sewer Type	38.900	36.600	1.700	38.900	36.575	1.725
1.009	16.110	322.2	600	Circular_Default Sewer Type	38.900	36.575	1.725	38.000	36.525	0.875
1.010	52.853	47.0	450	Circular_Default Sewer Type	38.000	36.525	1.025	38.000	35.400	2.150
1.011	59.188	49.3	450	Circular_Default Sewer Type	38.000	35.400	2.150	38.000	34.200	3.350
1.012	77.169	70.2	450	Circular_Default Sewer Type	38.000	34.200	3.350	34.500	33.100	0.950
5.000	26.078	59.7	300	Circular_Default Sewer Type	48.085	45.997	1.788	47.076	45.560	1.216
5.001	25.213	17.5	300	Circular_Default Sewer Type	47.076	45.560	1.216	45.687	44.120	1.267
6.000	47.410	26.5	300	Circular_Default Sewer Type	47.146	45.910	0.936	45.687	44.120	1.267
5.002	25.623	27.4	375	Circular_Default Sewer Type	45.687	44.045	1.267	44.688	43.110	1.203
5.003	11.329	34.9	450	Circular_Default Sewer Type	44.688	43.035	1.203	44.363	42.710	1.203
5.004	45.552	32.3	450	Circular_Default Sewer Type	44.363	42.710	1.203	42.902	41.300	1.152
7.000	11.074	22.1	225	Circular_Default Sewer Type	43.578	42.026	1.327	42.902	41.525	1.152
5.005	18.611	15.1	450	Circular_Default Sewer Type	42.902	41.300	1.152	41.725	40.067	1.208
5.006	29.144	89.7	525	Circular_Default Sewer Type	41.725	39.990	1.210	41.568	39.665	1.378
5.007	32.150	33.5	525	Circular_Default Sewer Type	41.568	39.665	1.378	41.497	38.704	2.268
5.008	28.867	33.4	525	Circular_Default Sewer Type	41.497	38.704	2.268	39.790	37.840	1.425
5.009	31.326	18.1	525	Circular_Default Sewer Type	39.790	37.840	1.425	38.060	36.110	1.425
5.010	37.929	55.4	600	Circular_Default Sewer Type	38.060	36.035	1.425	37.985	35.350	2.035
5.011	25.128	27.9	600	Circular_Default Sewer Type	37.985	35.350	2.035	37.496	34.449	2.447

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
2.000	18	1200	Manhole	Adoptable	6	1350	Manhole	Adoptable
1.005	6	1350	Manhole	Adoptable	7	1500	Manhole	Adoptable
1.006	7	1500	Manhole	Adoptable	8	1500	Manhole	Adoptable
1.007	8	1500	Manhole	Adoptable	9		Junction	
3.000	19	1200	Manhole	Adoptable	20	1200	Manhole	Adoptable
3.001	20	1200	Manhole	Adoptable	9		Junction	
4.000	S21A	1350	Manhole	Adoptable	21	1350	Manhole	Adoptable
4.001	21	1350	Manhole	Adoptable	22	1350	Manhole	Adoptable
4.002	22	1350	Manhole	Adoptable	9		Junction	
1.008	9		Junction		10	1500	Manhole	Adoptable
1.009	10	1500	Manhole	Adoptable	11	1350	Manhole	Adoptable
1.010	11	1350	Manhole	Adoptable	12	1350	Manhole	Adoptable
1.011	12	1350	Manhole	Adoptable	13	1350	Manhole	Adoptable
1.012	13	1350	Manhole	Adoptable	14	1350	Manhole	Adoptable
5.000	23	1200	Manhole	Adoptable	23A	1350	Manhole	Adoptable
5.001	23A	1350	Manhole	Adoptable	24	1350	Manhole	Adoptable
6.000	39	1350	Manhole	Adoptable	24	1350	Manhole	Adoptable
5.002	24	1350	Manhole	Adoptable	25	1350	Manhole	Adoptable
5.003	25	1350	Manhole	Adoptable	26	1350	Manhole	Adoptable
5.004	26	1350	Manhole	Adoptable	27	1350	Manhole	Adoptable
7.000	40	1350	Manhole	Adoptable	27	1350	Manhole	Adoptable
5.005	27	1350	Manhole	Adoptable	28	1500	Manhole	Adoptable
5.006	28	1500	Manhole	Adoptable	29	1500	Manhole	Adoptable
5.007	29	1500	Manhole	Adoptable	30	1500	Manhole	Adoptable
5.008	30	1500	Manhole	Adoptable	31	1500	Manhole	Adoptable
5.009	31	1500	Manhole	Adoptable	32	1500	Manhole	Adoptable
5.010	32	1500	Manhole	Adoptable	33	1500	Manhole	Adoptable
5.011	33	1500	Manhole	Adoptable	34	1500	Manhole	Adoptable

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
5.012	22.811	91.2	600	Circular_Default Sewer Type	37.496	34.449	2.447	35.750	34.199	0.951
5.013	57.661	192.2	600	Circular_Default Sewer Type	35.750	34.199	0.951	35.900	33.899	1.401
5.014	47.820	63.8	600	Circular_Default Sewer Type	35.900	33.899	1.401	34.825	33.150	1.075
8.000	34.630	13.7	225	Circular_Default Sewer Type	39.682	38.386	1.071	37.787	35.858	1.704
9.000	57.600	274.3	300	Circular_Default Sewer Type	37.329	35.985	1.044	37.787	35.775	1.712
8.001	28.339	12.1	375	Circular_Default Sewer Type	37.787	35.775	1.637	34.825	33.433	1.017
5.015	26.046	1041.8	675	Circular_Default Sewer Type	34.825	33.150	1.000	34.850	33.125	1.050
5.016	8.644	345.8	600	Circular_Default Sewer Type	34.850	33.125	1.125	34.500	33.100	0.800
1.013	38.230	29.4	450	Circular_Default Sewer Type	34.500	33.100	0.950	34.500	31.800	2.250
1.014	47.380	47.4	450	Circular_Default Sewer Type	34.500	31.800	2.250	32.000	30.800	0.750
10.000	44.835	19.4	300	Circular_Default Sewer Type	45.882	44.196	1.386	43.362	41.883	1.179
10.001	16.486	43.0	300	Circular_Default Sewer Type	43.362	41.883	1.179	42.575	41.500	0.775
11.000	20.005	13.3	300	Circular_Default Sewer Type	44.000	43.000	0.700	42.575	41.496	0.779
10.002	13.154	41.0	375	Circular_Default Sewer Type	42.575	41.421	0.779	41.980	41.100	0.505
10.003	16.739	11.6	450	Circular_Default Sewer Type	41.980	41.100	0.430	41.692	39.657	1.585
10.004	22.258	46.7	525	Circular_Default Sewer Type	41.692	39.579	1.588	41.735	39.102	2.108
10.005	35.548	71.5	525	Circular_Default Sewer Type	41.735	39.102	2.108	41.421	38.605	2.291
12.000	11.891	88.1	300	Circular_Default Sewer Type	44.350	41.985	2.065	44.562	41.850	2.412
12.001	32.273	99.3	300	Circular_Default Sewer Type	44.562	41.850	2.412	43.150	41.525	1.325
12.002	41.954	15.6	375	Circular_Default Sewer Type	43.150	41.450	1.325	41.421	38.755	2.291
10.006	28.613	184.6	525	Circular_Default Sewer Type	41.421	38.605	2.291	41.282	38.450	2.307
10.007	39.603	88.0	525	Circular_Default Sewer Type	41.282	38.450	2.307	40.742	38.000	2.217
10.008	25.217	60.3	600	Circular_Default Sewer Type	40.742	37.925	2.217	40.015	37.507	1.908
10.009	64.735	13.6	600	Circular_Default Sewer Type	40.015	37.507	1.908	35.890	32.735	2.555
13.000	25.180	48.9	450	Circular_Default Sewer Type	39.082	37.057	1.575	38.568	36.542	1.576
13.001	31.422	13.5	450	Circular_Default Sewer Type	38.568	36.542	1.576	36.100	34.222	1.428
13.002	23.867	33.2	450	Circular_Default Sewer Type	36.100	34.222	1.428	35.200	33.503	1.247
13.003	25.997	59.4	450	Circular_Default Sewer Type	35.200	33.503	1.247	36.000	33.065	2.485

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
5.012	34	1500	Manhole	Adoptable	35		Junction	
5.013	35		Junction		36	1350	Manhole	Adoptable
5.014	36	1350	Manhole	Adoptable	37		Junction	
8.000	41	1350	Manhole	Adoptable	43	1350	Manhole	Adoptable
9.000	46	1350	Manhole	Adoptable	43	1350	Manhole	Adoptable
8.001	43	1350	Manhole	Adoptable	37		Junction	
5.015	37		Junction		38	1800	Manhole	Adoptable
5.016	38	1800	Manhole	Adoptable	14	1350	Manhole	Adoptable
1.013	14	1350	Manhole	Adoptable	15	1350	Manhole	Adoptable
1.014	15	1350	Manhole	Adoptable	16	1350	Manhole	Adoptable
10.000	47	1350	Manhole	Adoptable	48	1350	Manhole	Adoptable
10.001	48	1350	Manhole	Adoptable	49	1350	Manhole	Adoptable
11.000	59	1350	Manhole	Adoptable	49	1350	Manhole	Adoptable
10.002	49	1350	Manhole	Adoptable	50	1350	Manhole	Adoptable
10.003	50	1350	Manhole	Adoptable	51	1350	Manhole	Adoptable
10.004	51	1350	Manhole	Adoptable	52	1350	Manhole	Adoptable
10.005	52	1350	Manhole	Adoptable	53	1500	Manhole	Adoptable
12.000	60	1200	Manhole	Adoptable	61	1200	Manhole	Adoptable
12.001	61	1200	Manhole	Adoptable	62	1350	Manhole	Adoptable
12.002	62	1350	Manhole	Adoptable	53	1500	Manhole	Adoptable
10.006	53	1500	Manhole	Adoptable	54	1500	Manhole	Adoptable
10.007	54	1500	Manhole	Adoptable	55	1500	Manhole	Adoptable
10.008	55	1500	Manhole	Adoptable	56	1500	Manhole	Adoptable
10.009	56	1500	Manhole	Adoptable	57	1800	Manhole	Adoptable
13.000	63	1350	Manhole	Adoptable	64	1350	Manhole	Adoptable
13.001	64	1350	Manhole	Adoptable	65	1350	Manhole	Adoptable
13.002	65	1350	Manhole	Adoptable	66	1350	Manhole	Adoptable
13.003	66	1350	Manhole	Adoptable	67	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)
13.004	7.160	78.7	450	Circular_Default Sewer Type	36.000	33.065	2.485	35.400	32.974	1.976
13.005	21.641	243.2	450	Circular_Default Sewer Type	35.400	32.974	1.976	35.890	32.885	2.555
10.010	59.570	36.4	750	Circular_Default Sewer Type	35.890	32.585	2.555	32.500	30.950	0.800
10.011	31.346	313.5	750	Circular_Default Sewer Type	32.500	30.950	0.800	32.500	30.850	0.900
10.012	13.381	267.6	750	Circular_Default Sewer Type	32.500	30.850	0.900	32.000	30.800	0.450
1.015	18.937	189.4	750	Circular_Default Sewer Type	32.000	30.800	0.450	32.000	30.700	0.550
14.000	9.452	78.8	225	Circular_Default Sewer Type	37.825	36.400	1.200	38.500	36.280	1.995
14.001	14.235	9.1	225	Circular_Default Sewer Type	38.500	36.280	1.995	36.475	34.716	1.534
15.000	14.497	138.1	225	Circular_Default Sewer Type	35.775	34.825	0.725	36.475	34.720	1.530

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
13.004	67	1350	Manhole	Adoptable	68	1350	Manhole	Adoptable
13.005	68	1350	Manhole	Adoptable	57	1800	Manhole	Adoptable
10.010	57	1800	Manhole	Adoptable	58		Junction	
10.011	58		Junction		69	1800	Manhole	Adoptable
10.012	69	1800	Manhole	Adoptable	16	1350	Manhole	Adoptable
1.015	16	1350	Manhole	Adoptable	17	1350	Manhole	Adoptable
14.000	GP1	1350	Manhole	Adoptable	GP2	1200	Manhole	Adoptable
14.001	GP2	1200	Manhole	Adoptable	GPP	1350	Manhole	Adoptable
15.000	GP3	1350	Manhole	Adoptable	GPP	1350	Manhole	Adoptable

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Node Type	Connections	Link	IL (m)	Dia (mm)	
1	505876.700	119266.258	45.200	1.600	1350	Manhole		0	1.000	43.600	225
2	505821.069	119264.749	43.000	1.425	1350	Manhole		1	1.000	41.575	225
							0	1.001	41.575	225	
3	505805.117	119255.066	42.500	1.575	1350	Manhole		1	1.001	41.000	225
							0	1.002	40.925	300	
4	505797.314	119235.979	42.136	1.781	1350	Manhole		1	1.002	40.355	300
							0	1.003	40.355	300	
5	505810.127	119222.001	41.923	3.073	1350	Manhole		1	1.003	38.929	300
							0	1.004	38.850	375	
18	505872.052	119203.496	43.356	2.056	1200	Manhole		0	2.000	41.300	300
6	505817.769	119203.687	41.623	3.065	1350	Manhole		1	2.000	38.708	300
							2	1.004	38.633	375	
							0	1.005	38.558	450	
7	505818.407	119158.680	40.924	3.548	1500	Manhole		1	1.005	37.451	450
							0	1.006	37.376	525	

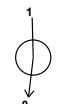
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Node Type	Connections	Link	IL (m)	Dia (mm)	
8	505788.050	119158.876	39.666	2.374	1500	Manhole		1	1.006	37.292	525
								0	1.007	37.292	525
19	505848.682	119126.066	43.371	3.521	1200	Manhole		0	3.000	39.850	225
20	505820.858	119126.268	40.808	1.918	1200	Manhole		1	3.000	38.965	225
								0	3.001	38.890	300
S21A	505825.968	119073.198	38.900	1.250	1350	Manhole		0	4.000	37.650	225
21	505814.349	119082.961	38.750	1.335	1350	Manhole		1	4.000	37.565	225
								0	4.001	37.415	375
22	505802.627	119100.011	39.050	2.170	1350	Manhole		1	4.001	36.955	375
								0	4.002	36.880	450
9	505787.269	119134.693	38.900	2.300		Junction		1	4.002	36.700	450
								2	3.001	37.000	300
								3	1.007	36.700	525
								0	1.008	36.600	600
10	505771.182	119135.431	38.900	2.325	1500	Manhole		1	1.008	36.575	600
								0	1.009	36.575	600
11	505755.172	119137.227	38.000	1.475	1350	Manhole		1	1.009	36.525	600
								0	1.010	36.525	450
12	505706.851	119158.641	38.000	2.600	1350	Manhole		1	1.010	35.400	450
								0	1.011	35.400	450
13	505652.774	119182.702	38.000	3.800	1350	Manhole		1	1.011	34.200	450
								0	1.012	34.200	450
23	505826.732	119366.800	48.085	2.088	1200	Manhole		0	5.000	45.997	300
23A	505826.020	119340.732	47.076	1.516	1350	Manhole		1	5.000	45.560	300
								0	5.001	45.560	300
39	505873.175	119314.789	47.146	1.236	1350	Manhole		0	6.000	45.910	300
24	505825.771	119315.520	45.687	1.642	1350	Manhole		1	6.000	44.120	300
								2	5.001	44.120	300
								0	5.002	44.045	375

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Node Type	Connections	Link	IL (m)	Dia (mm)	
25	505825.876	119289.897	44.688	1.653	1350	Manhole		1	5.002	43.110	375
								0	5.003	43.035	450
26	505815.640	119285.043	44.363	1.653	1350	Manhole		1	5.003	42.710	450
								0	5.004	42.710	450
40	505766.949	119294.755	43.578	1.552	1350	Manhole					
								0	7.000	42.026	225
27	505770.097	119284.138	42.902	1.602	1350	Manhole		1	7.000	41.525	225
								2	5.004	41.300	450
								0	5.005	41.300	450
28	505758.450	119269.622	41.725	1.735	1500	Manhole		1	5.005	40.067	450
								0	5.006	39.990	525
29	505732.361	119282.612	41.568	1.903	1500	Manhole		1	5.006	39.665	525
								0	5.007	39.665	525
30	505701.064	119289.967	41.497	2.793	1500	Manhole		1	5.007	38.704	525
								0	5.008	38.704	525
31	505694.943	119261.756	39.790	1.950	1500	Manhole		1	5.008	37.840	525
								0	5.009	37.840	525
32	505686.523	119231.583	38.060	2.025	1500	Manhole		1	5.009	36.110	525
								0	5.010	36.035	600
33	505722.523	119219.641	37.985	2.635	1500	Manhole		1	5.010	35.350	600
								0	5.011	35.350	600
34	505714.503	119195.826	37.496	3.047	1500	Manhole		1	5.011	34.449	600
								0	5.012	34.449	600
35	505701.184	119177.307	35.750	1.551		Junction		1	5.012	34.199	600
								0	5.013	34.199	600
36	505649.836	119203.540	35.900	2.001	1350	Manhole		1	5.013	33.899	600
								0	5.014	33.899	600
41	505629.262	119270.104	39.682	1.296	1350	Manhole					
								0	8.000	38.386	225
46	505565.423	119245.029	37.329	1.344	1350	Manhole					
								0	9.000	35.985	300

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Node Type	Connections		Link	IL (m)	Dia (mm)
43	505622.338	119236.173	37.787	2.012	1350	Manhole		1	9.000	35.775	300
								2	8.000	35.858	225
								0	8.001	35.775	375
37	505603.426	119215.067	34.825	1.675		Junction		1	8.001	33.433	375
								2	5.014	33.150	600
								0	5.015	33.150	675
38	505579.833	119206.768	34.850	1.725	1800	Manhole		1	5.015	33.125	675
								0	5.016	33.125	600
14	505577.244	119198.521	34.500	1.400	1350	Manhole		1	5.016	33.100	600
								2	1.012	33.100	450
								0	1.013	33.100	450
15	505539.193	119202.220	34.500	2.700	1350	Manhole		1	1.013	31.800	450
								0	1.014	31.800	450
47	505696.886	119377.294	45.882	1.686	1350	Manhole		0	10.000	44.196	300
								0	10.000	41.883	300
48	505695.476	119332.481	43.362	1.479	1350	Manhole		1	10.000	41.883	300
								0	10.001	41.883	300
59	505678.714	119344.069	44.000	1.000	1350	Manhole		0	11.000	43.000	300
								0	11.000	41.496	300
49	505681.209	119324.220	42.575	1.154	1350	Manhole		1	11.000	41.496	300
								2	10.001	41.500	300
								0	10.002	41.421	375
50	505677.172	119311.701	41.980	0.880	1350	Manhole		1	10.002	41.100	375
								0	10.003	41.100	450
51	505672.996	119295.492	41.692	2.113	1350	Manhole		1	10.003	39.657	450
								0	10.004	39.579	525
52	505650.984	119298.794	41.735	2.633	1350	Manhole		1	10.004	39.102	525
								0	10.005	39.102	525
60	505608.042	119377.908	44.350	2.365	1200	Manhole		0	12.000	41.985	300
								0	12.000	41.850	300
61	505619.933	119377.895	44.562	2.712	1200	Manhole		1	12.000	41.850	300
								0	12.001	41.850	300
62	505620.801	119345.634	43.150	1.700	1350	Manhole		1	12.001	41.525	300
								0	12.002	41.450	375

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Node Type	Connections		Link	IL (m)	Dia (mm)
53	505615.816	119303.977	41.421	2.816	1500	Manhole		1	12.002	38.755	375
								2	10.005	38.605	525
								0	10.006	38.605	525
54	505587.337	119306.740	41.282	2.832	1500	Manhole		1	10.006	38.450	525
								0	10.007	38.450	525
55	505547.922	119310.592	40.742	2.817	1500	Manhole		1	10.007	38.000	525
								0	10.008	37.925	600
56	505522.806	119308.342	40.015	2.508	1500	Manhole		1	10.008	37.507	600
								0	10.009	37.507	600
63	505492.844	119305.349	39.082	2.025	1350	Manhole		0	13.000	37.057	450
64	505467.664	119305.256	38.568	2.026	1350	Manhole		1	13.000	36.542	450
								0	13.001	36.542	450
65	505468.077	119273.837	36.100	1.878	1350	Manhole		1	13.001	34.222	450
								0	13.002	34.222	450
66	505468.690	119249.978	35.200	1.697	1350	Manhole		1	13.002	33.503	450
								0	13.003	33.503	450
67	505494.686	119250.220	36.000	2.935	1350	Manhole		1	13.003	33.065	450
								0	13.004	33.065	450
68	505500.934	119246.723	35.400	2.426	1350	Manhole		1	13.004	32.974	450
								0	13.005	32.974	450
57	505522.350	119243.609	35.890	3.305	1800	Manhole		1	13.005	32.885	450
								2	10.009	32.735	600
								0	10.010	32.585	750
58	505503.949	119186.952	32.500	1.550		Junction		1	10.010	30.950	750
								0	10.011	30.950	750
69	505525.233	119163.940	32.500	1.650	1800	Manhole		1	10.011	30.850	750
								0	10.012	30.850	750
16	505535.198	119155.009	32.000	1.200	1350	Manhole		1	10.012	30.800	750
								2	1.014	30.800	450
17	505528.135	119137.438	32.000	1.300	1350	Manhole		0	1.015	30.800	750
								1	1.015	30.700	750

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Node Type	Connections	Link	IL (m)	Dia (mm)	
GP1	505810.846	119063.747	37.825	1.425	1350	Manhole		0	14.000	36.400	225
GP2	505818.213	119057.825	38.500	2.220	1200	Manhole		1	14.000	36.280	225
								0	14.001	36.280	225
GP3	505797.302	119044.766	35.775	0.950	1350	Manhole		0	15.000	34.825	225
GPP	505809.409	119044.589	36.475	1.759	1350	Manhole		1	15.000	34.720	225
								2	14.001	34.716	225

Simulation Settings

Rainfall Methodology	FEH-22	Analysis Speed	Normal	Starting Level (m)	
Rainfall Events	Singular	Skip Steady State	✓	Check Discharge Rate(s)	x
Summer CV	1.000	Drain Down Time (mins)	1440	Check Discharge Volume	x
Winter CV	1.000	Additional Storage (m³/ha)	0.0		

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	0	0	0
30	0	0	0	100	45	0	0
30	40	0	0				

Node 10 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	✓	Sump Available	✓
Invert Level (m)	36.575	Product Number	CTL-SHE-0124-8800-1929-8800
Design Depth (m)	1.929	Min Outlet Diameter (m)	0.150
Design Flow (l/s)	8.8	Min Node Diameter (mm)	1500

Node 38 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	✓	Sump Available	✓
Invert Level (m)	33.125	Product Number	CTL-SHE-0131-8500-1300-8500
Design Depth (m)	1.300	Min Outlet Diameter (m)	0.150
Design Flow (l/s)	8.5	Min Node Diameter (mm)	1500

Node 69 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	✓	Sump Available	✓
Invert Level (m)	30.850	Product Number	CTL-SHE-0102-5200-1400-5200
Design Depth (m)	1.400	Min Outlet Diameter (m)	0.150
Design Flow (l/s)	5.2	Min Node Diameter (mm)	1200

Node GPP Offline Pump Control

Flap Valve	x	Invert Level (m)	34.716	Design Flow (l/s)	12.5	Switch off depth (m)	0.400
Loop to Node	S21A	Design Depth (m)	0.900	Switch on depth (m)	0.900		

Depth (m)	Flow (l/s)
0.900	12.500

Node 3 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	40.925
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	0

Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	55.0	0.0	2.000	160.0	0.0

Node 9 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	36.600
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	1155

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)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	266.1	0.0	1.500	757.6	505.1	1.900	1027.3	778.1	2.300	1210.9	967.7

Node 58 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	30.950
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	

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)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	931.2	0.0	0.750	1378.0	0.0	1.150	1671.3	298.5	1.550	1859.4	495.8

Node 35 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	34.199
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	0

Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	296.0	0.0	1.550	1031.0	0.0

Node 37 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	33.150
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	

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	197.6	197.6	0.950	1379.7	1387.4	1.675	2058.2	2075.7
0.025	686.0	686.0	1.275	1796.2	1806.4			

Node 21 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	37.415	Slope (1:X)	100.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)		Depth (m)	0.400
Safety Factor	2.0	Width (m)	6.000	Inf Depth (m)	
Porosity	0.30	Length (m)	20.000		

Node GPP Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	34.716
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Time to half empty (mins)	132

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	113.0	113.0	0.800	113.0	143.1	0.801	0.0	143.1

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.93%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	1	10	43.654	0.054	12.6	0.0766	0.0000	OK
15 minute summer	2	11	41.645	0.070	18.2	0.1003	0.0000	OK
15 minute summer	3	12	41.000	0.075	28.5	4.3834	0.0000	OK
15 minute summer	4	12	40.426	0.071	34.5	0.1012	0.0000	OK
15 minute summer	5	11	38.985	0.135	51.5	0.1927	0.0000	OK
15 minute summer	18	10	41.378	0.078	35.8	0.0884	0.0000	OK
15 minute summer	6	11	38.692	0.134	101.8	0.1924	0.0000	OK
15 minute summer	7	11	37.631	0.255	131.6	0.4500	0.0000	OK
15 minute summer	8	11	37.448	0.156	138.7	0.2755	0.0000	OK
15 minute summer	19	10	39.920	0.070	18.7	0.0790	0.0000	OK
15 minute summer	20	10	38.966	0.076	36.5	0.0862	0.0000	OK
15 minute summer	S21A	10	37.762	0.112	17.7	0.1602	0.0000	OK
15 minute summer	21	11	37.485	0.070	21.8	0.5505	0.0000	OK
360 minute summer	22	272	37.156	0.276	8.5	0.3952	0.0000	OK
360 minute summer	9	272	37.156	0.556	58.9	198.6189	0.0000	OK
360 minute summer	10	272	37.156	0.581	9.1	1.0267	0.0000	OK
480 minute winter	11	448	36.567	0.042	8.5	0.0600	0.0000	OK
480 minute winter	12	448	35.442	0.042	8.5	0.0603	0.0000	OK
480 minute winter	13	448	34.246	0.046	8.5	0.0656	0.0000	OK
15 minute summer	23	10	46.125	0.128	47.6	0.1445	0.0000	OK
15 minute summer	23A	10	45.657	0.097	56.1	0.1389	0.0000	OK
15 minute summer	39	10	45.953	0.043	10.0	0.0621	0.0000	OK
15 minute summer	24	10	44.171	0.126	85.1	0.1807	0.0000	OK
15 minute summer	25	10	43.179	0.144	96.4	0.2065	0.0000	OK
15 minute summer	26	11	42.839	0.129	98.0	0.1842	0.0000	OK
15 minute summer	40	10	42.094	0.068	19.5	0.0969	0.0000	OK
15 minute summer	27	11	41.428	0.128	128.3	0.1838	0.0000	OK
15 minute summer	28	11	40.185	0.195	131.9	0.3453	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	1	1.000	2	12.4	1.409	0.125	0.4926	
15 minute summer	2	1.001	3	18.0	1.754	0.196	0.1910	
15 minute summer	3	1.002	4	23.5	1.812	0.127	0.2723	
15 minute summer	4	1.003	5	34.6	2.825	0.113	0.2326	
15 minute summer	5	1.004	6	51.0	1.515	0.244	0.6690	
15 minute summer	18	2.000	6	35.3	2.458	0.145	0.7799	
15 minute summer	6	1.005	7	101.7	2.070	0.200	2.2221	
15 minute summer	7	1.006	8	131.9	1.687	0.520	2.3895	
15 minute summer	8	1.007	9	138.5	2.665	0.182	1.2576	
15 minute summer	19	3.000	20	18.5	1.802	0.199	0.2854	
15 minute summer	20	3.001	9	36.3	2.606	0.139	0.4818	
15 minute summer	S21A	4.000	21	17.4	0.923	0.449	0.2868	
15 minute summer	21	4.001	22	21.6	1.561	0.072	0.2867	
360 minute summer	22	4.002	9	7.5	0.478	0.034	4.9393	
360 minute summer	9	1.008	10	9.1	0.183	0.034	4.4422	
360 minute summer	10	Hydro-Brake®	11	8.5				
480 minute winter	11	1.010	12	8.5	1.154	0.018	0.3916	
480 minute winter	12	1.011	13	8.5	1.078	0.019	0.4692	
480 minute winter	13	1.012	14	8.5	0.933	0.022	0.7126	
15 minute summer	23	5.000	23A	47.3	1.964	0.328	0.6299	
15 minute summer	23A	5.001	24	55.6	2.921	0.208	0.4800	
15 minute summer	39	6.000	24	9.9	1.472	0.046	0.3375	
15 minute summer	24	5.002	25	84.4	2.718	0.220	0.7975	
15 minute summer	25	5.003	26	96.2	2.374	0.175	0.4596	
15 minute summer	26	5.004	27	98.3	2.635	0.172	1.6993	
15 minute summer	40	7.000	27	19.4	2.019	0.174	0.1062	
15 minute summer	27	5.005	28	128.6	3.650	0.154	0.6561	
15 minute summer	28	5.006	29	132.5	2.104	0.259	1.8406	

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.93%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	29	11	39.820	0.155	150.9	0.2737	0.0000	OK
15 minute summer	30	11	38.875	0.171	167.7	0.3018	0.0000	OK
15 minute summer	31	11	37.990	0.150	183.5	0.2645	0.0000	OK
15 minute summer	32	11	36.232	0.197	190.0	0.3475	0.0000	OK
15 minute summer	33	11	35.516	0.166	212.3	0.2927	0.0000	OK
15 minute summer	34	11	34.690	0.241	232.4	0.4252	0.0000	OK
30 minute summer	35	22	34.395	0.196	209.6	66.9517	0.0000	OK
30 minute summer	36	23	34.056	0.157	111.9	0.2245	0.0000	OK
15 minute summer	41	10	38.412	0.026	4.0	0.0372	0.0000	OK
15 minute summer	46	10	36.102	0.117	20.5	0.1680	0.0000	OK
15 minute summer	43	10	35.849	0.074	49.2	0.1060	0.0000	OK
480 minute summer	37	400	33.531	0.381	59.3	302.9635	0.0000	OK
480 minute summer	38	400	33.531	0.406	8.9	1.0336	0.0000	OK
480 minute winter	14	448	33.152	0.052	17.0	0.0740	0.0000	OK
480 minute winter	15	448	31.858	0.058	17.0	0.0828	0.0000	OK
15 minute summer	47	10	44.267	0.071	32.0	0.1021	0.0000	OK
15 minute summer	48	10	41.996	0.113	45.2	0.1614	0.0000	OK
15 minute summer	59	1	43.000	0.000	0.0	0.0000	0.0000	OK
15 minute summer	49	10	41.526	0.105	44.5	0.1509	0.0000	OK
15 minute summer	50	10	41.179	0.079	58.0	0.1126	0.0000	OK
15 minute summer	51	10	39.694	0.115	70.9	0.1639	0.0000	OK
15 minute summer	52	11	39.237	0.135	86.1	0.1932	0.0000	OK
15 minute summer	60	10	42.087	0.102	24.7	0.1151	0.0000	OK
15 minute summer	61	10	41.979	0.129	40.7	0.1464	0.0000	OK
15 minute summer	62	10	41.535	0.085	58.8	0.1216	0.0000	OK
15 minute summer	53	11	38.867	0.262	157.3	0.4625	0.0000	OK
15 minute summer	54	11	38.686	0.236	192.7	0.4169	0.0000	OK
15 minute summer	55	11	38.146	0.221	205.4	0.3909	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	29	5.007	30	151.5	2.660	0.180	1.8326	
15 minute summer	30	5.008	31	168.3	3.021	0.200	1.6095	
15 minute summer	31	5.009	32	183.7	3.799	0.161	1.5144	
15 minute summer	32	5.010	33	190.0	2.653	0.205	2.7212	
15 minute summer	33	5.011	34	211.8	2.524	0.162	2.1210	
15 minute summer	34	5.012	35	231.7	3.533	0.321	1.7742	
30 minute summer	35	5.013	36	111.9	1.623	0.226	3.9846	
30 minute summer	36	5.014	37	112.9	2.936	0.131	2.0681	
15 minute summer	41	8.000	43	3.9	1.554	0.028	0.0873	
15 minute summer	46	9.000	43	20.1	1.045	0.301	1.1242	
15 minute summer	43	8.001	37	48.6	3.207	0.084	0.4295	
480 minute summer	37	5.015	38	8.9	0.169	0.031	5.6256	
480 minute summer	38	Hydro-Brake®	14	8.5				
480 minute winter	14	1.013	15	17.0	1.554	0.028	0.4188	
480 minute winter	15	1.014	16	17.0	1.073	0.036	0.7599	
15 minute summer	47	10.000	48	31.8	1.739	0.126	0.8294	
15 minute summer	48	10.001	49	44.5	1.946	0.262	0.3778	
15 minute summer	59	11.000	49	0.0	0.000	0.000	0.0373	
15 minute summer	49	10.002	50	44.5	2.125	0.142	0.2771	
15 minute summer	50	10.003	51	57.9	3.252	0.061	0.2981	
15 minute summer	51	10.004	52	70.9	1.813	0.100	0.8717	
15 minute summer	52	10.005	53	86.2	1.158	0.150	2.6900	
15 minute summer	60	12.000	61	24.5	0.980	0.207	0.2981	
15 minute summer	61	12.001	62	39.9	1.429	0.358	0.9070	
15 minute summer	62	12.002	53	58.5	2.898	0.115	0.9673	
15 minute summer	53	10.006	54	158.7	1.575	0.446	2.8834	
15 minute summer	54	10.007	55	192.8	2.162	0.373	3.5320	
15 minute summer	55	10.008	56	205.3	2.875	0.231	1.8188	

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.93%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	56	11	37.647	0.140	219.4	0.2478	0.0000	OK
15 minute summer	63	10	37.122	0.065	20.1	0.0924	0.0000	OK
15 minute summer	64	10	36.606	0.064	40.2	0.0923	0.0000	OK
15 minute summer	65	10	34.310	0.088	46.7	0.1259	0.0000	OK
15 minute summer	66	10	33.604	0.101	46.4	0.1444	0.0000	OK
15 minute summer	67	11	33.197	0.132	46.5	0.1884	0.0000	OK
15 minute summer	68	11	33.127	0.153	46.8	0.2185	0.0000	OK
15 minute summer	57	11	32.798	0.213	273.2	0.5421	0.0000	OK
480 minute winter	58	472	31.280	0.330	47.6	340.2398	0.0000	OK
480 minute winter	69	464	31.295	0.445	21.9	1.1329	0.0000	OK
480 minute winter	16	448	30.884	0.083	22.2	0.1195	0.0000	OK
480 minute winter	17	448	30.780	0.080	22.2	0.0000	0.0000	OK
15 minute summer	GP1	10	36.472	0.072	10.8	0.1025	0.0000	OK
15 minute summer	GP2	9	36.324	0.044	12.7	0.0498	0.0000	OK
1440 minute summer	GP3	1590	35.126	0.301	0.9	0.4313	0.0000	SURCHARGED
1440 minute summer	GPP	1620	35.126	0.410	2.0	44.6311	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	56	10.009	57	217.9	4.469	0.116	3.1560	
15 minute summer	63	13.000	64	19.9	1.432	0.043	0.3505	
15 minute summer	64	13.001	65	40.0	2.255	0.045	0.5608	
15 minute summer	65	13.002	66	46.4	1.923	0.082	0.5762	
15 minute summer	66	13.003	67	46.5	1.445	0.111	0.8441	
15 minute summer	67	13.004	68	46.8	1.092	0.128	0.3075	
15 minute summer	68	13.005	57	46.7	1.032	0.226	0.9794	
15 minute summer	57	10.010	58	273.2	5.419	0.133	3.4703	
480 minute winter	58	10.011	69	21.9	0.275	0.032	7.1933	
480 minute winter	69	Hydro-Brake®	16	5.2				
480 minute winter	16	1.015	17	22.2	0.864	0.025	0.4877	1297.4
15 minute summer	GP1	14.000	GP2	10.7	1.364	0.182	0.0765	
15 minute summer	GP2	14.001	GPP	12.8	3.047	0.074	0.1042	
1440 minute summer	GP3	15.000	GPP	0.8	0.258	0.019	0.5766	
1440 minute summer	GPP	Pump	S21A	0.0				0.0

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.91%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	1	10	43.689	0.089	33.8	0.1280	0.0000	OK
15 minute summer	2	10	41.700	0.125	49.1	0.1793	0.0000	OK
15 minute summer	3	12	41.064	0.139	77.2	8.3280	0.0000	OK
15 minute summer	4	11	40.474	0.119	103.8	0.1705	0.0000	OK
15 minute summer	5	11	39.114	0.264	150.6	0.3781	0.0000	OK
15 minute summer	18	10	41.434	0.134	96.5	0.1517	0.0000	OK
15 minute summer	6	11	38.801	0.243	286.4	0.3479	0.0000	OK
15 minute summer	7	11	37.858	0.482	367.2	0.8517	0.0000	OK
360 minute winter	8	352	37.754	0.462	57.3	0.8159	0.0000	OK
15 minute summer	19	10	39.974	0.124	50.4	0.1400	0.0000	OK
15 minute summer	20	10	39.020	0.130	98.8	0.1471	0.0000	OK
15 minute summer	S21A	10	37.913	0.263	47.7	0.3758	0.0000	SURCHARGED
360 minute winter	21	352	37.754	0.339	8.4	9.0893	0.0000	OK
360 minute winter	22	352	37.754	0.874	11.8	1.2503	0.0000	SURCHARGED
360 minute winter	9	352	37.754	1.154	82.0	525.1052	0.0000	SURCHARGED
360 minute winter	10	352	37.754	1.179	9.2	2.0828	0.0000	SURCHARGED
15 minute summer	11	13	36.567	0.042	8.5	0.0600	0.0000	OK
30 minute summer	12	305	35.442	0.042	8.5	0.0603	0.0000	OK
15 minute winter	13	12	34.246	0.046	8.5	0.0660	0.0000	OK
15 minute summer	23	10	46.246	0.249	128.1	0.2819	0.0000	OK
15 minute summer	23A	10	45.735	0.175	150.8	0.2510	0.0000	OK
15 minute summer	39	10	45.980	0.070	26.8	0.1008	0.0000	OK
15 minute summer	24	10	44.277	0.232	229.3	0.3321	0.0000	OK
15 minute summer	25	10	43.304	0.269	259.5	0.3845	0.0000	OK
15 minute summer	26	10	42.936	0.226	263.8	0.3239	0.0000	OK
15 minute summer	40	10	42.148	0.122	52.5	0.1748	0.0000	OK
15 minute summer	27	10	41.520	0.220	346.1	0.3155	0.0000	OK
15 minute summer	28	11	40.349	0.359	354.8	0.6336	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	1	1.000	2	33.5	1.792	0.336	1.0404	
15 minute summer	2	1.001	3	48.2	2.241	0.526	0.4026	
15 minute summer	3	1.002	4	69.8	2.440	0.377	0.5922	
15 minute summer	4	1.003	5	103.4	3.210	0.338	0.6798	
15 minute summer	5	1.004	6	150.0	1.946	0.717	1.5280	
15 minute summer	18	2.000	6	95.4	3.209	0.391	1.6143	
15 minute summer	6	1.005	7	286.7	2.349	0.564	5.3603	
15 minute summer	7	1.006	8	369.2	2.200	1.455	4.9421	
360 minute winter	8	1.007	9	57.3	1.332	0.075	5.0481	
15 minute summer	19	3.000	20	50.0	2.317	0.537	0.5999	
15 minute summer	20	3.001	9	98.1	3.416	0.376	1.0047	
15 minute summer	S21A	4.000	21	47.1	1.206	1.215	0.5617	
360 minute winter	21	4.001	22	8.4	1.057	0.028	2.2254	
360 minute winter	22	4.002	9	11.0	0.468	0.049	6.0098	
360 minute winter	9	1.008	10	9.2	0.202	0.034	4.5361	
360 minute winter	10	Hydro-Brake®	11	8.5				
15 minute summer	11	1.010	12	8.5	1.247	0.018	0.3916	
30 minute summer	12	1.011	13	8.5	1.079	0.019	0.4692	
15 minute winter	13	1.012	14	8.6	1.074	0.022	0.7122	
15 minute summer	23	5.000	23A	127.2	2.390	0.883	1.3737	
15 minute summer	23A	5.001	24	149.6	3.708	0.561	1.0175	
15 minute summer	39	6.000	24	26.6	1.412	0.123	1.1831	
15 minute summer	24	5.002	25	227.3	3.425	0.593	1.7048	
15 minute summer	25	5.003	26	259.0	2.906	0.472	1.0114	
15 minute summer	26	5.004	27	264.1	3.374	0.463	3.5763	
15 minute summer	40	7.000	27	52.3	2.562	0.471	0.2260	
15 minute summer	27	5.005	28	346.1	3.814	0.414	1.6878	
15 minute summer	28	5.006	29	356.4	2.602	0.696	3.9828	

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.91%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	29	11	39.943	0.278	405.7	0.4917	0.0000	OK
15 minute summer	30	11	39.015	0.311	450.4	0.5504	0.0000	OK
15 minute summer	31	11	38.100	0.260	493.2	0.4592	0.0000	OK
15 minute summer	32	11	36.389	0.354	511.5	0.6253	0.0000	OK
15 minute summer	33	11	35.661	0.311	572.6	0.5488	0.0000	OK
15 minute summer	34	11	34.879	0.430	628.4	0.7590	0.0000	OK
30 minute summer	35	22	34.585	0.386	574.4	149.6230	0.0000	OK
30 minute summer	36	22	34.186	0.287	374.7	0.4106	0.0000	OK
15 minute summer	41	10	38.428	0.042	10.7	0.0603	0.0000	OK
15 minute summer	46	10	36.194	0.209	55.2	0.2987	0.0000	OK
15 minute summer	43	10	35.899	0.124	133.0	0.1781	0.0000	OK
480 minute winter	37	488	33.951	0.801	85.0	769.0335	0.0000	SURCHARGED
480 minute winter	38	488	33.951	0.826	9.3	2.1018	0.0000	SURCHARGED
60 minute summer	14	507	33.152	0.052	17.0	0.0740	0.0000	OK
60 minute summer	15	507	31.858	0.058	17.0	0.0828	0.0000	OK
15 minute summer	47	10	44.315	0.119	86.3	0.1708	0.0000	OK
15 minute summer	48	10	42.097	0.214	121.8	0.3069	0.0000	OK
15 minute summer	59	1	43.000	0.000	0.0	0.0000	0.0000	OK
15 minute summer	49	10	41.608	0.187	120.2	0.2680	0.0000	OK
15 minute summer	50	10	41.234	0.134	156.5	0.1924	0.0000	OK
15 minute summer	51	10	39.781	0.202	191.5	0.2886	0.0000	OK
15 minute summer	52	11	39.335	0.233	232.5	0.3332	0.0000	OK
15 minute summer	60	10	42.182	0.197	66.5	0.2234	0.0000	OK
15 minute summer	61	10	42.111	0.261	109.6	0.2951	0.0000	OK
15 minute summer	62	10	41.591	0.141	158.1	0.2023	0.0000	OK
15 minute summer	53	11	39.257	0.652	424.2	1.1518	0.0000	SURCHARGED
15 minute summer	54	11	38.950	0.500	513.5	0.8827	0.0000	OK
15 minute summer	55	11	38.327	0.402	546.0	0.7105	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	29	5.007	30	406.9	3.260	0.484	4.0127	
15 minute summer	30	5.008	31	452.1	3.767	0.538	3.4636	
15 minute summer	31	5.009	32	494.6	4.436	0.433	3.4933	
15 minute summer	32	5.010	33	512.6	3.212	0.553	6.0707	
15 minute summer	33	5.011	34	573.1	3.142	0.438	4.5616	
15 minute summer	34	5.012	35	627.2	4.035	0.870	4.2404	
30 minute summer	35	5.013	36	374.7	2.305	0.756	9.3606	
30 minute summer	36	5.014	37	376.9	3.554	0.437	6.3894	
15 minute summer	41	8.000	43	10.6	2.082	0.075	0.1757	
15 minute summer	46	9.000	43	54.3	1.366	0.814	2.3021	
15 minute summer	43	8.001	37	131.9	4.229	0.228	0.8839	
480 minute winter	37	5.015	38	9.3	0.155	0.032	9.2979	
480 minute winter	38	Hydro-Brake®	14	8.5				
60 minute summer	14	1.013	15	17.0	1.554	0.028	0.4188	
60 minute summer	15	1.014	16	17.0	1.073	0.036	0.7599	
15 minute summer	47	10.000	48	85.9	2.143	0.339	1.7937	
15 minute summer	48	10.001	49	120.2	2.424	0.708	0.8180	
15 minute summer	59	11.000	49	0.0	0.000	0.000	0.2405	
15 minute summer	49	10.002	50	119.6	2.664	0.382	0.5949	
15 minute summer	50	10.003	51	156.1	4.194	0.164	0.6280	
15 minute summer	51	10.004	52	190.7	2.305	0.268	1.8670	
15 minute summer	52	10.005	53	230.7	1.367	0.402	5.4820	
15 minute summer	60	12.000	61	66.1	1.161	0.558	0.6792	
15 minute summer	61	12.001	62	107.6	1.744	0.965	1.9912	
15 minute summer	62	12.002	53	157.6	2.888	0.309	3.1105	
15 minute summer	53	10.006	54	421.6	1.952	1.184	6.1260	
15 minute summer	54	10.007	55	512.2	2.620	0.991	7.7772	
15 minute summer	55	10.008	56	545.8	3.566	0.615	3.8506	

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.91%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	56	11	37.746	0.239	583.8	0.4224	0.0000	OK
15 minute summer	63	10	37.165	0.108	54.1	0.1541	0.0000	OK
15 minute summer	64	10	36.647	0.105	108.6	0.1502	0.0000	OK
15 minute summer	65	10	34.372	0.150	126.3	0.2149	0.0000	OK
15 minute summer	66	10	33.680	0.177	125.4	0.2534	0.0000	OK
15 minute summer	67	11	33.316	0.251	124.8	0.3592	0.0000	OK
15 minute summer	68	11	33.250	0.276	125.7	0.3943	0.0000	OK
15 minute summer	57	11	32.928	0.343	731.6	0.8729	0.0000	OK
720 minute winter	58	720	31.666	0.716	66.4	819.2816	0.0000	OK
720 minute winter	69	720	31.666	0.816	24.9	2.0764	0.0000	SURCHARGED
60 minute summer	16	511	30.884	0.083	22.2	0.1195	0.0000	OK
60 minute summer	17	507	30.780	0.080	22.2	0.0000	0.0000	OK
15 minute summer	GP1	10	36.526	0.126	29.0	0.1796	0.0000	OK
15 minute summer	GP2	10	36.347	0.067	34.2	0.0762	0.0000	OK
1440 minute summer	GP3	1440	35.600	0.775	1.7	1.1085	0.0000	FLOOD RISK
1440 minute summer	GPP	1440	35.600	0.884	3.9	87.1980	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	56	10.009	57	582.3	5.803	0.310	6.4975	
15 minute summer	63	13.000	64	53.8	1.887	0.116	0.7187	
15 minute summer	64	13.001	65	108.1	2.929	0.123	1.1675	
15 minute summer	65	13.002	66	125.4	2.409	0.223	1.2431	
15 minute summer	66	13.003	67	124.8	1.697	0.297	1.9247	
15 minute summer	67	13.004	68	125.7	1.310	0.345	0.6895	
15 minute summer	68	13.005	57	126.3	1.319	0.611	2.0712	
15 minute summer	57	10.010	58	734.0	6.334	0.358	7.9370	
720 minute winter	58	10.011	69	24.9	0.222	0.036	13.6858	
720 minute winter	69	Hydro-Brake®	16	5.2				
60 minute summer	16	1.015	17	22.2	0.864	0.025	0.4877	1447.9
15 minute summer	GP1	14.000	GP2	28.8	1.774	0.492	0.1547	
15 minute summer	GP2	14.001	GPP	34.1	3.262	0.197	0.3032	
1440 minute summer	GP3	15.000	GPP	1.6	0.282	0.037	0.5766	
1440 minute summer	GPP	Pump	S21A	9.2				40.3

Results for 30 year +40% CC Critical Storm Duration. Lowest mass balance: 99.86%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	1	10	43.708	0.108	47.3	0.1547	0.0000	OK
15 minute summer	2	10	41.734	0.159	68.8	0.2276	0.0000	OK
15 minute summer	3	12	41.097	0.172	108.0	10.5066	0.0000	OK
15 minute summer	4	11	40.500	0.145	147.2	0.2075	0.0000	OK
15 minute summer	5	11	39.254	0.404	212.9	0.5775	0.0000	SURCHARGED
15 minute summer	18	10	41.458	0.158	135.1	0.1784	0.0000	OK
15 minute summer	6	11	38.922	0.364	399.6	0.5210	0.0000	OK
480 minute winter	7	472	38.210	0.834	60.6	1.4736	0.0000	SURCHARGED
480 minute winter	8	472	38.209	0.917	63.2	1.6210	0.0000	SURCHARGED
15 minute summer	19	10	40.006	0.156	70.6	0.1769	0.0000	OK
15 minute summer	20	10	39.049	0.159	138.3	0.1796	0.0000	OK
480 minute winter	S21A	472	38.221	0.571	13.8	0.8172	0.0000	SURCHARGED
480 minute winter	21	472	38.217	0.802	13.6	11.9760	0.0000	SURCHARGED
480 minute winter	22	472	38.214	1.334	14.8	1.9090	0.0000	SURCHARGED
480 minute winter	9	472	38.209	1.609	86.6	854.2361	0.0000	SURCHARGED
480 minute winter	10	472	38.209	1.634	9.1	2.8870	0.0000	SURCHARGED
30 minute summer	11	18	36.567	0.042	8.5	0.0600	0.0000	OK
60 minute winter	12	912	35.442	0.042	8.5	0.0603	0.0000	OK
15 minute winter	13	11	34.246	0.046	8.5	0.0660	0.0000	OK
15 minute summer	23	10	46.681	0.684	179.5	0.7733	0.0000	SURCHARGED
15 minute summer	23A	10	45.779	0.219	209.3	0.3139	0.0000	OK
15 minute summer	39	10	45.994	0.084	37.6	0.1196	0.0000	OK
15 minute summer	24	10	44.347	0.302	319.8	0.4318	0.0000	OK
15 minute summer	25	11	43.379	0.344	361.2	0.4926	0.0000	OK
15 minute summer	26	11	42.992	0.282	368.3	0.4028	0.0000	OK
15 minute summer	40	10	42.181	0.155	73.6	0.2221	0.0000	OK
15 minute summer	27	11	41.578	0.278	482.5	0.3975	0.0000	OK
15 minute summer	28	11	40.469	0.479	496.7	0.8468	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	1	1.000	2	47.0	1.919	0.472	1.3596	
15 minute summer	2	1.001	3	67.5	2.395	0.737	0.5273	
15 minute summer	3	1.002	4	98.5	2.647	0.532	0.7771	
15 minute summer	4	1.003	5	146.8	3.217	0.479	0.9874	
15 minute summer	5	1.004	6	209.4	2.014	1.001	2.1143	
15 minute summer	18	2.000	6	134.8	3.399	0.553	2.4495	
15 minute summer	6	1.005	7	398.2	2.554	0.784	6.6579	
480 minute winter	7	1.006	8	60.2	1.336	0.237	6.5583	
480 minute winter	8	1.007	9	60.0	1.295	0.079	5.2271	
15 minute summer	19	3.000	20	69.9	2.480	0.751	0.7845	
15 minute summer	20	3.001	9	137.4	3.712	0.527	1.5347	
480 minute winter	S21A	4.000	21	12.9	0.740	0.334	0.6036	
480 minute winter	21	4.001	22	13.5	0.994	0.045	2.2822	
480 minute winter	22	4.002	9	14.7	0.474	0.066	6.0098	
480 minute winter	9	1.008	10	9.1	0.204	0.034	4.5361	
480 minute winter	10	Hydro-Brake®	11	8.5				
30 minute summer	11	1.010	12	8.5	1.156	0.018	0.3916	
60 minute winter	12	1.011	13	8.5	1.079	0.019	0.4692	
15 minute winter	13	1.012	14	8.6	1.074	0.022	0.7125	
15 minute summer	23	5.000	23A	176.3	2.608	1.223	1.6381	
15 minute summer	23A	5.001	24	208.2	3.754	0.780	1.4161	
15 minute summer	39	6.000	24	37.3	1.411	0.172	1.7338	
15 minute summer	24	5.002	25	317.2	3.567	0.827	2.3024	
15 minute summer	25	5.003	26	361.8	3.075	0.659	1.3280	
15 minute summer	26	5.004	27	370.1	3.576	0.649	4.7151	
15 minute summer	40	7.000	27	73.3	2.735	0.659	0.2962	
15 minute summer	27	5.005	28	484.4	3.863	0.580	2.3469	
15 minute summer	28	5.006	29	498.8	2.739	0.974	5.2775	

Results for 30 year +40% CC Critical Storm Duration. Lowest mass balance: 99.86%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	29	11	40.020	0.355	567.7	0.6273	0.0000	OK
15 minute summer	30	11	39.106	0.402	630.0	0.7103	0.0000	OK
15 minute summer	31	11	38.162	0.322	688.4	0.5685	0.0000	OK
15 minute summer	32	11	36.487	0.452	712.2	0.7994	0.0000	OK
15 minute summer	33	11	35.759	0.409	798.8	0.7220	0.0000	OK
15 minute summer	34	12	35.068	0.619	878.0	1.0942	0.0000	SURCHARGED
30 minute summer	35	22	34.687	0.488	803.2	201.1482	0.0000	OK
30 minute summer	36	22	34.247	0.348	521.7	0.4977	0.0000	OK
15 minute summer	41	10	38.435	0.049	15.0	0.0704	0.0000	OK
15 minute summer	46	10	36.259	0.274	77.3	0.3914	0.0000	OK
15 minute summer	43	10	35.925	0.150	185.7	0.2140	0.0000	OK
720 minute winter	37	720	34.226	1.076	85.7	1150.3320	0.0000	SURCHARGED
720 minute winter	38	720	34.226	1.101	9.1	2.8018	0.0000	SURCHARGED
1440 minute winter	14	630	33.152	0.052	17.0	0.0740	0.0000	OK
1440 minute winter	15	630	31.858	0.058	17.0	0.0828	0.0000	OK
15 minute summer	47	10	44.340	0.144	120.9	0.2064	0.0000	OK
15 minute summer	48	11	42.281	0.398	170.7	0.5699	0.0000	SURCHARGED
15 minute summer	59	1	43.000	0.000	0.0	0.0000	0.0000	OK
15 minute summer	49	11	41.656	0.235	169.7	0.3357	0.0000	OK
15 minute winter	50	10	41.255	0.155	203.6	0.2222	0.0000	OK
15 minute summer	51	11	40.369	0.790	261.7	1.1308	0.0000	SURCHARGED
15 minute summer	52	11	40.280	1.178	309.6	1.6858	0.0000	SURCHARGED
15 minute summer	60	10	42.651	0.666	93.1	0.7529	0.0000	SURCHARGED
15 minute summer	61	10	42.523	0.673	152.1	0.7607	0.0000	SURCHARGED
15 minute summer	62	11	41.630	0.180	221.9	0.2571	0.0000	OK
15 minute summer	53	11	40.093	1.488	566.2	2.6285	0.0000	SURCHARGED
15 minute summer	54	11	39.533	1.083	687.2	1.9143	0.0000	SURCHARGED
15 minute summer	55	11	38.431	0.506	731.9	0.8942	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	29	5.007	30	569.0	3.415	0.677	5.3497	
15 minute summer	30	5.008	31	630.9	3.981	0.750	4.5628	
15 minute summer	31	5.009	32	688.5	4.531	0.602	4.7748	
15 minute summer	32	5.010	33	714.8	3.337	0.772	8.1996	
15 minute summer	33	5.011	34	800.5	3.209	0.612	6.0837	
15 minute summer	34	5.012	35	869.1	4.186	1.206	5.6528	
30 minute summer	35	5.013	36	521.7	2.489	1.053	11.9656	
30 minute summer	36	5.014	37	523.1	3.653	0.606	8.6354	
15 minute summer	41	8.000	43	14.9	2.070	0.105	0.2805	
15 minute summer	46	9.000	43	75.8	1.463	1.135	2.9513	
15 minute summer	43	8.001	37	184.2	4.620	0.319	1.1299	
720 minute winter	37	5.015	38	9.1	0.155	0.032	9.2979	
720 minute winter	38	Hydro-Brake®	14	8.5				
1440 minute winter	14	1.013	15	17.0	1.554	0.028	0.4188	
1440 minute winter	15	1.014	16	17.0	1.086	0.036	0.7599	
15 minute summer	47	10.000	48	120.4	2.230	0.475	2.3294	
15 minute summer	48	10.001	49	169.7	2.464	0.999	1.1437	
15 minute summer	59	11.000	49	0.0	0.000	0.000	0.3809	
15 minute summer	49	10.002	50	166.4	2.971	0.531	0.7365	
15 minute winter	50	10.003	51	203.0	4.311	0.213	1.6598	
15 minute summer	51	10.004	52	253.6	2.233	0.357	4.8085	
15 minute summer	52	10.005	53	306.9	1.421	0.535	7.6795	
15 minute summer	60	12.000	61	91.3	1.297	0.771	0.8374	
15 minute summer	61	12.001	62	150.6	2.138	1.350	2.2429	
15 minute summer	62	12.002	53	220.0	2.852	0.432	3.4073	
15 minute summer	53	10.006	54	562.5	2.604	1.579	6.1813	
15 minute summer	54	10.007	55	684.6	3.169	1.324	8.4690	
15 minute summer	55	10.008	56	728.3	3.749	0.821	4.8398	

Results for 30 year +40% CC Critical Storm Duration. Lowest mass balance: 99.86%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	56	11	37.789	0.282	781.5	0.4988	0.0000	OK
15 minute summer	63	10	37.186	0.129	75.8	0.1848	0.0000	OK
15 minute summer	64	10	36.666	0.124	152.1	0.1780	0.0000	OK
15 minute summer	65	10	34.405	0.183	177.0	0.2613	0.0000	OK
15 minute summer	66	10	33.725	0.222	175.7	0.3176	0.0000	OK
15 minute summer	67	11	33.388	0.323	174.7	0.4624	0.0000	OK
15 minute summer	68	11	33.320	0.346	175.6	0.4947	0.0000	OK
15 minute summer	57	11	32.981	0.396	973.3	1.0089	0.0000	OK
960 minute winter	58	945	31.951	1.001	77.3	1234.6760	0.0000	SURCHARGED
960 minute winter	69	945	31.951	1.101	26.1	2.8016	0.0000	SURCHARGED
1440 minute winter	16	630	30.884	0.083	22.2	0.1195	0.0000	OK
1440 minute winter	17	630	30.780	0.080	22.2	0.0000	0.0000	OK
15 minute summer	GP1	10	36.555	0.155	40.6	0.2222	0.0000	OK
15 minute summer	GP2	10	36.360	0.080	47.8	0.0908	0.0000	OK
240 minute summer	GP3	220	35.563	0.738	10.4	1.0554	0.0000	FLOOD RISK
240 minute summer	GPP	220	35.562	0.846	23.9	87.1439	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	56	10.009	57	771.9	6.230	0.412	8.0220	
15 minute summer	63	13.000	64	75.5	2.063	0.163	0.9210	
15 minute summer	64	13.001	65	151.4	3.176	0.172	1.5072	
15 minute summer	65	13.002	66	175.7	2.545	0.312	1.6488	
15 minute summer	66	13.003	67	174.7	1.761	0.416	2.5842	
15 minute summer	67	13.004	68	175.6	1.394	0.481	0.9041	
15 minute summer	68	13.005	57	176.7	1.461	0.855	2.6121	
15 minute summer	57	10.010	58	976.3	6.588	0.476	10.5074	
960 minute winter	58	10.011	69	26.1	0.198	0.037	13.7960	
960 minute winter	69	Hydro-Brake®	16	5.2				
1440 minute winter	16	1.015	17	22.2	0.864	0.025	0.4877	3186.3
15 minute summer	GP1	14.000	GP2	40.4	1.919	0.688	0.1981	
15 minute summer	GP2	14.001	GPP	47.7	3.266	0.275	0.3612	
240 minute summer	GP3	15.000	GPP	10.1	0.457	0.228	0.5766	
240 minute summer	GPP	Pump	S21A	10.9				46.9

Results for 100 year Critical Storm Duration. Lowest mass balance: 99.89%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	1	10	43.702	0.102	42.4	0.1453	0.0000	OK
15 minute summer	2	10	41.722	0.147	61.7	0.2097	0.0000	OK
15 minute summer	3	12	41.085	0.160	96.9	9.7235	0.0000	OK
15 minute summer	4	11	40.491	0.136	131.7	0.1947	0.0000	OK
15 minute summer	5	11	39.173	0.323	190.6	0.4624	0.0000	OK
15 minute summer	18	10	41.454	0.154	121.2	0.1741	0.0000	OK
15 minute summer	6	11	38.873	0.315	360.7	0.4502	0.0000	OK
15 minute summer	7	11	38.072	0.696	462.9	1.2290	0.0000	SURCHARGED
600 minute winter	8	585	38.037	0.745	46.4	1.3172	0.0000	SURCHARGED
15 minute summer	19	10	39.994	0.144	63.3	0.1632	0.0000	OK
15 minute summer	20	10	39.039	0.149	124.1	0.1682	0.0000	OK
600 minute winter	S21A	585	38.041	0.391	12.1	0.5591	0.0000	SURCHARGED
600 minute winter	21	585	38.038	0.623	11.1	11.7193	0.0000	SURCHARGED
600 minute winter	22	585	38.038	1.158	11.6	1.6565	0.0000	SURCHARGED
600 minute winter	9	585	38.037	1.437	65.1	721.0236	0.0000	SURCHARGED
600 minute winter	10	585	38.037	1.462	9.0	2.5841	0.0000	SURCHARGED
15 minute summer	11	12	36.567	0.042	8.5	0.0601	0.0000	OK
15 minute summer	12	262	35.442	0.042	8.5	0.0603	0.0000	OK
15 minute summer	13	12	34.246	0.046	8.5	0.0660	0.0000	OK
15 minute summer	23	10	46.509	0.512	161.0	0.5786	0.0000	SURCHARGED
15 minute summer	23A	10	45.762	0.202	187.7	0.2898	0.0000	OK
15 minute summer	39	10	45.989	0.079	33.7	0.1132	0.0000	OK
15 minute summer	24	10	44.320	0.275	286.9	0.3932	0.0000	OK
15 minute summer	25	10	43.351	0.316	324.4	0.4520	0.0000	OK
15 minute summer	26	11	42.972	0.262	330.4	0.3743	0.0000	OK
15 minute summer	40	10	42.169	0.143	66.0	0.2047	0.0000	OK
15 minute summer	27	11	41.556	0.256	432.9	0.3667	0.0000	OK
15 minute summer	28	11	40.418	0.428	445.3	0.7557	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	1	1.000	2	42.1	1.877	0.423	1.2453	
15 minute summer	2	1.001	3	60.6	2.349	0.661	0.4825	
15 minute summer	3	1.002	4	88.2	2.583	0.476	0.7123	
15 minute summer	4	1.003	5	131.3	3.236	0.429	0.8764	
15 minute summer	5	1.004	6	190.0	2.021	0.908	1.8568	
15 minute summer	18	2.000	6	121.0	3.348	0.496	2.0007	
15 minute summer	6	1.005	7	361.8	2.409	0.712	6.2297	
15 minute summer	7	1.006	8	464.0	2.341	1.829	5.4371	
600 minute winter	8	1.007	9	44.9	1.186	0.059	5.2271	
15 minute summer	19	3.000	20	62.8	2.432	0.674	0.7179	
15 minute summer	20	3.001	9	123.3	3.617	0.473	1.4123	
600 minute winter	S21A	4.000	21	10.9	0.679	0.281	0.6036	
600 minute winter	21	4.001	22	11.1	0.951	0.037	2.2822	
600 minute winter	22	4.002	9	11.5	0.437	0.052	6.0098	
600 minute winter	9	1.008	10	9.0	0.197	0.033	4.5361	
600 minute winter	10	Hydro-Brake®	11	8.5				
15 minute summer	11	1.010	12	8.5	1.199	0.018	0.3916	
15 minute summer	12	1.011	13	8.5	1.207	0.019	0.4705	
15 minute summer	13	1.012	14	8.6	1.071	0.022	0.7125	
15 minute summer	23	5.000	23A	158.1	2.392	1.097	1.5779	
15 minute summer	23A	5.001	24	186.8	3.735	0.700	1.2659	
15 minute summer	39	6.000	24	33.4	1.469	0.154	1.5321	
15 minute summer	24	5.002	25	284.5	3.537	0.742	2.0667	
15 minute summer	25	5.003	26	324.6	3.024	0.591	1.2138	
15 minute summer	26	5.004	27	332.1	3.519	0.582	4.2994	
15 minute summer	40	7.000	27	65.7	2.682	0.591	0.2711	
15 minute summer	27	5.005	28	434.4	3.840	0.520	2.1007	
15 minute summer	28	5.006	29	447.1	2.699	0.873	4.8006	

Results for 100 year Critical Storm Duration. Lowest mass balance: 99.89%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	29	11	39.991	0.326	509.0	0.5767	0.0000	OK
15 minute summer	30	11	39.073	0.369	566.8	0.6523	0.0000	OK
15 minute summer	31	11	38.141	0.301	621.5	0.5319	0.0000	OK
15 minute summer	32	11	36.452	0.417	644.0	0.7369	0.0000	OK
15 minute summer	33	11	35.718	0.368	715.8	0.6506	0.0000	OK
15 minute summer	34	11	34.961	0.512	781.4	0.9043	0.0000	OK
30 minute summer	35	22	34.653	0.454	723.0	183.2216	0.0000	OK
30 minute summer	36	22	34.228	0.329	475.5	0.4704	0.0000	OK
15 minute summer	41	10	38.433	0.047	13.5	0.0668	0.0000	OK
15 minute summer	46	10	36.232	0.247	69.4	0.3533	0.0000	OK
15 minute summer	43	10	35.916	0.141	167.1	0.2017	0.0000	OK
600 minute winter	37	600	34.118	0.968	87.2	991.8657	0.0000	SURCHARGED
600 minute winter	38	600	34.118	0.993	9.2	2.5278	0.0000	SURCHARGED
30 minute summer	14	495	33.152	0.052	17.0	0.0740	0.0000	OK
30 minute winter	15	496	31.858	0.058	17.0	0.0828	0.0000	OK
15 minute summer	47	10	44.332	0.136	108.5	0.1940	0.0000	OK
15 minute summer	48	10	42.148	0.265	153.1	0.3797	0.0000	OK
15 minute summer	59	1	43.000	0.000	0.0	0.0000	0.0000	OK
15 minute summer	49	11	41.640	0.219	150.4	0.3128	0.0000	OK
15 minute summer	50	10	41.249	0.149	196.0	0.2130	0.0000	OK
15 minute summer	51	11	39.948	0.369	240.5	0.5276	0.0000	OK
15 minute summer	52	11	39.885	0.783	294.8	1.1200	0.0000	SURCHARGED
15 minute summer	60	10	42.459	0.474	83.5	0.5359	0.0000	SURCHARGED
15 minute summer	61	10	42.356	0.506	135.7	0.5719	0.0000	SURCHARGED
15 minute summer	62	10	41.610	0.160	197.4	0.2283	0.0000	OK
15 minute summer	53	11	39.746	1.141	499.1	2.0159	0.0000	SURCHARGED
15 minute summer	54	11	39.311	0.861	611.3	1.5221	0.0000	SURCHARGED
15 minute summer	55	11	38.380	0.455	652.5	0.8048	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	29	5.007	30	512.0	3.373	0.609	4.8759	
15 minute summer	30	5.008	31	570.0	3.919	0.678	4.1898	
15 minute summer	31	5.009	32	622.7	4.509	0.545	4.3378	
15 minute summer	32	5.010	33	640.4	3.305	0.691	7.4036	
15 minute summer	33	5.011	34	711.8	3.229	0.545	5.4950	
15 minute summer	34	5.012	35	778.1	4.161	1.079	5.1146	
30 minute summer	35	5.013	36	475.5	2.443	0.959	11.1505	
30 minute summer	36	5.014	37	477.6	3.637	0.554	7.8583	
15 minute summer	41	8.000	43	13.4	2.031	0.095	0.2425	
15 minute summer	46	9.000	43	68.1	1.433	1.021	2.7224	
15 minute summer	43	8.001	37	165.6	4.494	0.287	1.0446	
600 minute winter	37	5.015	38	9.2	0.153	0.032	9.2979	
600 minute winter	38	Hydro-Brake®	14	8.5				
30 minute summer	14	1.013	15	17.0	1.554	0.028	0.4188	
30 minute winter	15	1.014	16	17.0	1.073	0.036	0.7599	
15 minute summer	47	10.000	48	108.0	2.208	0.426	2.1704	
15 minute summer	48	10.001	49	150.4	2.493	0.886	0.9920	
15 minute summer	59	11.000	49	0.0	0.000	0.000	0.3331	
15 minute summer	49	10.002	50	150.2	2.931	0.479	0.7013	
15 minute summer	50	10.003	51	196.0	4.120	0.206	1.2436	
15 minute summer	51	10.004	52	242.3	2.327	0.341	4.2074	
15 minute summer	52	10.005	53	281.9	1.365	0.491	7.6795	
15 minute summer	60	12.000	61	81.2	1.184	0.686	0.8374	
15 minute summer	61	12.001	62	134.5	1.910	1.206	2.2250	
15 minute summer	62	12.002	53	196.5	2.911	0.386	3.2504	
15 minute summer	53	10.006	54	503.1	2.329	1.413	6.1813	
15 minute summer	54	10.007	55	609.9	2.824	1.180	8.4426	
15 minute summer	55	10.008	56	653.1	3.684	0.736	4.4248	

Results for 100 year Critical Storm Duration. Lowest mass balance: 99.89%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	56	11	37.774	0.267	700.8	0.4725	0.0000	OK
15 minute summer	63	10	37.179	0.122	68.0	0.1742	0.0000	OK
15 minute summer	64	10	36.660	0.118	136.4	0.1684	0.0000	OK
15 minute summer	65	10	34.393	0.171	158.7	0.2449	0.0000	OK
15 minute summer	66	10	33.709	0.206	157.5	0.2942	0.0000	OK
15 minute summer	67	11	33.362	0.296	156.7	0.4243	0.0000	OK
15 minute summer	68	11	33.294	0.320	157.7	0.4581	0.0000	OK
15 minute summer	57	11	32.966	0.381	890.0	0.9689	0.0000	OK
960 minute winter	58	945	31.836	0.886	68.4	1060.6730	0.0000	SURCHARGED
960 minute winter	69	945	31.836	0.986	24.6	2.5103	0.0000	SURCHARGED
30 minute summer	16	496	30.884	0.083	22.2	0.1195	0.0000	OK
30 minute winter	17	497	30.780	0.080	22.2	0.0000	0.0000	OK
15 minute summer	GP1	10	36.545	0.145	36.3	0.2069	0.0000	OK
15 minute summer	GP2	10	36.356	0.076	42.9	0.0857	0.0000	OK
480 minute summer	GP3	424	35.617	0.792	5.3	1.1335	0.0000	FLOOD RISK
480 minute summer	GPP	424	35.610	0.894	12.2	87.2128	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	56	10.009	57	702.3	6.066	0.374	7.4961	
15 minute summer	63	13.000	64	67.7	2.005	0.146	0.8501	
15 minute summer	64	13.001	65	135.8	3.097	0.154	1.3868	
15 minute summer	65	13.002	66	157.5	2.506	0.280	1.5015	
15 minute summer	66	13.003	67	156.7	1.741	0.373	2.3460	
15 minute summer	67	13.004	68	157.7	1.364	0.432	0.8284	
15 minute summer	68	13.005	57	158.6	1.413	0.768	2.4271	
15 minute summer	57	10.010	58	885.0	6.517	0.431	9.5522	
960 minute winter	58	10.011	69	24.6	0.230	0.035	13.7960	
960 minute winter	69	Hydro-Brake®	16	5.2				
30 minute summer	16	1.015	17	22.2	0.864	0.025	0.4877	1434.1
15 minute summer	GP1	14.000	GP2	36.2	1.873	0.617	0.1828	
15 minute summer	GP2	14.001	GPP	42.8	3.268	0.246	0.3483	
480 minute summer	GP3	15.000	GPP	5.1	0.371	0.116	0.5766	
480 minute summer	GPP	Pump	S21A	12.3				51.8

Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 99.82%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	1	10	43.727	0.127	61.5	0.1811	0.0000	OK
15 minute summer	2	11	41.789	0.214	89.5	0.3058	0.0000	OK
15 minute summer	3	12	41.152	0.227	139.3	14.1593	0.0000	OK
15 minute summer	4	11	40.888	0.533	183.5	0.7633	0.0000	SURCHARGED
15 minute summer	5	11	40.290	1.440	258.7	2.0602	0.0000	SURCHARGED
15 minute summer	18	11	41.503	0.203	175.8	0.2293	0.0000	OK
15 minute summer	6	11	39.832	1.274	499.2	1.8231	0.0000	SURCHARGED
30 minute summer	7	19	38.546	1.170	606.3	2.0667	0.0000	SURCHARGED
600 minute winter	8	585	38.530	1.238	65.3	2.1884	0.0000	SURCHARGED
15 minute summer	19	10	40.054	0.204	91.8	0.2302	0.0000	OK
15 minute summer	20	10	39.078	0.188	179.3	0.2129	0.0000	OK
480 minute winter	S21A	464	38.539	0.889	18.9	1.2719	0.0000	SURCHARGED
480 minute winter	21	464	38.536	1.121	21.3	12.4316	0.0000	FLOOD RISK
480 minute winter	22	464	38.533	1.653	25.5	2.3653	0.0000	SURCHARGED
600 minute winter	9	585	38.530	1.930	94.6	1156.2110	0.0000	SURCHARGED
600 minute winter	10	585	38.530	1.955	9.0	3.4551	0.0000	SURCHARGED
600 minute winter	11	585	36.568	0.043	8.9	0.0611	0.0000	OK
600 minute winter	12	585	35.443	0.043	8.9	0.0613	0.0000	OK
600 minute winter	13	600	34.247	0.047	8.9	0.0667	0.0000	OK
15 minute summer	23	11	47.999	2.002	233.6	2.2641	0.0000	FLOOD RISK
15 minute summer	23A	11	46.651	1.091	263.9	1.5617	0.0000	SURCHARGED
15 minute summer	39	10	46.006	0.096	48.8	0.1371	0.0000	OK
15 minute summer	24	11	44.831	0.786	401.7	1.1251	0.0000	SURCHARGED
15 minute summer	25	11	43.503	0.468	451.8	0.6703	0.0000	SURCHARGED
15 minute summer	26	11	43.035	0.325	459.5	0.4654	0.0000	OK
15 minute summer	40	10	42.225	0.199	95.7	0.2844	0.0000	OK
15 minute summer	27	11	41.700	0.400	605.0	0.5724	0.0000	OK
15 minute summer	28	11	40.807	0.817	620.2	1.4444	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	1	1.000	2	61.1	1.997	0.613	1.7099	
15 minute summer	2	1.001	3	87.6	2.462	0.956	0.6716	
15 minute summer	3	1.002	4	131.3	2.726	0.708	1.3156	
15 minute summer	4	1.003	5	187.8	3.232	0.613	1.3353	
15 minute summer	5	1.004	6	265.2	2.405	1.267	2.1887	
15 minute summer	18	2.000	6	171.8	3.380	0.704	3.2864	
15 minute summer	6	1.005	7	495.7	3.129	0.975	7.1319	
30 minute summer	7	1.006	8	602.1	2.814	2.373	6.5583	
600 minute winter	8	1.007	9	64.8	1.319	0.085	5.2271	
15 minute summer	19	3.000	20	90.4	2.544	0.971	0.9914	
15 minute summer	20	3.001	9	178.2	3.931	0.683	1.8800	
480 minute winter	S21A	4.000	21	19.4	0.775	0.500	0.6036	
480 minute winter	21	4.001	22	21.6	0.950	0.072	2.2822	
480 minute winter	22	4.002	9	25.6	0.498	0.115	6.0098	
600 minute winter	9	1.008	10	9.0	0.191	0.033	4.5361	
600 minute winter	10	Hydro-Brake®	11	8.9				
600 minute winter	11	1.010	12	8.9	1.166	0.019	0.4018	
600 minute winter	12	1.011	13	8.9	1.090	0.019	0.4812	
600 minute winter	13	1.012	14	8.9	0.960	0.023	0.7243	
15 minute summer	23	5.000	23A	222.8	3.165	1.546	1.8364	
15 minute summer	23A	5.001	24	262.3	3.725	0.983	1.7755	
15 minute summer	39	6.000	24	48.5	1.445	0.224	2.1280	
15 minute summer	24	5.002	25	395.8	3.645	1.032	2.8261	
15 minute summer	25	5.003	26	451.1	3.173	0.822	1.5925	
15 minute summer	26	5.004	27	458.9	3.703	0.805	6.1851	
15 minute summer	40	7.000	27	95.1	2.810	0.856	0.3789	
15 minute summer	27	5.005	28	604.3	3.947	0.723	2.8597	
15 minute summer	28	5.006	29	619.8	2.873	1.210	6.2694	

Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 99.82%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	29	12	40.175	0.510	709.5	0.9008	0.0000	OK
15 minute summer	30	11	39.357	0.653	775.4	1.1530	0.0000	SURCHARGED
15 minute summer	31	11	38.246	0.406	840.7	0.7169	0.0000	OK
15 minute summer	32	12	36.957	0.922	857.2	1.6286	0.0000	SURCHARGED
15 minute summer	33	12	36.140	0.790	952.1	1.3958	0.0000	SURCHARGED
15 minute summer	34	12	35.381	0.932	1050.3	1.6462	0.0000	SURCHARGED
30 minute summer	35	22	34.809	0.610	1000.7	268.6808	0.0000	SURCHARGED
720 minute winter	36	720	34.417	0.518	90.4	0.7414	0.0000	OK
15 minute summer	41	10	38.442	0.056	19.6	0.0805	0.0000	OK
15 minute summer	46	11	36.523	0.538	100.6	0.7695	0.0000	SURCHARGED
15 minute summer	43	10	35.947	0.172	237.8	0.2468	0.0000	OK
720 minute winter	37	705	34.418	1.268	109.3	1469.4440	0.0000	SURCHARGED
720 minute winter	38	705	34.418	1.293	9.1	3.2899	0.0000	SURCHARGED
600 minute winter	14	600	33.152	0.052	17.2	0.0744	0.0000	OK
600 minute winter	15	600	31.858	0.058	17.2	0.0833	0.0000	OK
15 minute summer	47	10	44.369	0.173	157.3	0.2471	0.0000	OK
15 minute summer	48	12	42.730	0.847	221.3	1.2120	0.0000	SURCHARGED
15 minute summer	59	1	43.000	0.000	0.0	0.0000	0.0000	OK
15 minute summer	49	12	42.013	0.592	214.4	0.8469	0.0000	SURCHARGED
15 minute summer	50	12	41.784	0.684	279.1	0.9791	0.0000	FLOOD RISK
15 minute summer	51	11	41.610	2.031	323.9	2.9066	0.0000	FLOOD RISK
15 minute summer	52	11	41.479	2.377	378.1	3.4012	0.0000	FLOOD RISK
15 minute summer	60	11	43.360	1.375	121.2	1.5549	0.0000	SURCHARGED
15 minute summer	61	11	43.172	1.322	197.4	1.4956	0.0000	SURCHARGED
15 minute summer	62	11	42.093	0.643	287.7	0.9194	0.0000	SURCHARGED
15 minute summer	53	11	41.177	2.572	695.4	4.5451	0.0000	FLOOD RISK
15 minute summer	54	11	40.340	1.890	854.3	3.3390	0.0000	SURCHARGED
15 minute summer	55	11	38.710	0.785	915.4	1.3866	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	29	5.007	30	696.0	3.482	0.828	6.9161	
15 minute summer	30	5.008	31	766.1	4.134	0.911	5.7030	
15 minute summer	31	5.009	32	824.9	4.549	0.722	6.1887	
15 minute summer	32	5.010	33	857.3	3.346	0.925	10.6837	
15 minute summer	33	5.011	34	949.5	3.371	0.727	7.0780	
15 minute summer	34	5.012	35	1047.6	4.148	1.453	6.3016	
30 minute summer	35	5.013	36	602.5	2.514	1.216	13.5804	
720 minute winter	36	5.014	37	90.4	1.271	0.105	12.9202	
15 minute summer	41	8.000	43	19.5	2.007	0.138	0.3884	
15 minute summer	46	9.000	43	97.4	1.559	1.459	3.2349	
15 minute summer	43	8.001	37	235.8	4.926	0.408	1.4721	
720 minute winter	37	5.015	38	9.1	0.156	0.032	9.2979	
720 minute winter	38	Hydro-Brake®	14	8.5				
600 minute winter	14	1.013	15	17.2	1.560	0.029	0.4225	
600 minute winter	15	1.014	16	17.2	1.082	0.037	0.7626	
15 minute summer	47	10.000	48	155.9	2.474	0.615	2.5193	
15 minute summer	48	10.001	49	214.4	3.045	1.262	1.1609	
15 minute summer	59	11.000	49	0.0	0.000	0.000	0.7044	
15 minute summer	49	10.002	50	211.7	2.960	0.676	1.4508	
15 minute summer	50	10.003	51	269.6	4.041	0.283	2.6522	
15 minute summer	51	10.004	52	339.5	2.338	0.477	4.8085	
15 minute summer	52	10.005	53	396.2	1.834	0.691	7.6795	
15 minute summer	60	12.000	61	118.3	1.680	0.998	0.8374	
15 minute summer	61	12.001	62	194.9	2.768	1.748	2.2726	
15 minute summer	62	12.002	53	275.1	2.919	0.540	4.6274	
15 minute summer	53	10.006	54	702.6	3.253	1.973	6.1813	
15 minute summer	54	10.007	55	853.7	3.952	1.651	8.5555	
15 minute summer	55	10.008	56	910.3	3.780	1.026	5.5179	

Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 99.82%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	56	11	37.832	0.325	979.4	0.5747	0.0000	OK
15 minute summer	63	10	37.207	0.150	98.7	0.2140	0.0000	OK
15 minute summer	64	10	36.685	0.142	198.0	0.2039	0.0000	OK
15 minute summer	65	10	34.437	0.215	230.5	0.3074	0.0000	OK
15 minute summer	66	10	33.777	0.274	228.8	0.3920	0.0000	OK
15 minute summer	67	11	33.488	0.423	227.7	0.6056	0.0000	OK
15 minute summer	68	11	33.407	0.433	228.4	0.6203	0.0000	OK
15 minute summer	57	11	33.045	0.460	1248.3	1.1709	0.0000	OK
960 minute winter	58	960	32.195	1.245	89.1	1636.6910	0.0000	SURCHARGED
960 minute winter	69	960	32.195	1.345	22.9	3.4230	0.0000	SURCHARGED
720 minute winter	16	720	30.884	0.084	22.3	0.1196	0.0000	OK
720 minute winter	17	720	30.780	0.080	22.3	0.0000	0.0000	OK
15 minute summer	GP1	10	36.588	0.188	52.7	0.2695	0.0000	OK
15 minute summer	GP2	10	36.373	0.093	62.3	0.1047	0.0000	OK
360 minute summer	GP3	208	35.661	0.836	10.0	1.1966	0.0000	FLOOD RISK
240 minute summer	GPP	148	35.663	0.947	30.6	87.2884	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	56	10.009	57	976.4	6.550	0.521	9.8020	
15 minute summer	63	13.000	64	98.3	2.207	0.212	1.1212	
15 minute summer	64	13.001	65	197.2	3.367	0.224	1.8490	
15 minute summer	65	13.002	66	228.8	2.629	0.407	2.0961	
15 minute summer	66	13.003	67	227.7	1.801	0.542	3.2767	
15 minute summer	67	13.004	68	228.4	1.472	0.626	1.1144	
15 minute summer	68	13.005	57	229.9	1.589	1.113	3.0781	
15 minute summer	57	10.010	58	1255.3	6.714	0.612	13.5029	
960 minute winter	58	10.011	69	22.9	0.190	0.033	13.7960	
960 minute winter	69	Hydro-Brake®	16	5.2				
720 minute winter	16	1.015	17	22.3	0.864	0.025	0.4883	2577.4
15 minute summer	GP1	14.000	GP2	52.5	2.014	0.895	0.2405	
15 minute summer	GP2	14.001	GPP	62.1	3.309	0.358	0.3899	
360 minute summer	GP3	15.000	GPP	9.7	0.443	0.219	0.5766	
240 minute summer	GPP	Pump	S21A	12.5				73.8