

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	0.750	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	x
Maximum Rainfall (mm/hr)	50.0		

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Depth (m)
S22L	0.094	5.00	102.125	600	0.675
S22	0.037	5.00	102.125	1350	1.200
S23	0.025	5.00	101.900	1350	1.200
S24L	0.096	5.00	101.750	600	0.846
S24	0.023	5.00	101.700	1350	1.200
S25L	0.071	5.00	102.000	600	1.197
S25	0.013	5.00	102.000	1200	1.617
S26	0.005	5.00	102.100	1350	1.781
S27L	0.028	5.00	102.200	600	1.408
S27			102.100	1350	1.801
S28L	0.040	5.00	101.800	600	1.133
S28	0.035	5.00	101.850	1350	1.676
S29	0.040	5.00	101.600	1350	1.537
S30L	0.056	5.00	101.250	600	0.860
S30	0.020	5.00	101.100	1350	1.213
S31	0.052	5.00	100.600	1500	1.200
S32LA	0.079	5.00	100.600	600	0.778
S32LB	0.056	5.00	100.600	600	0.785
S32	0.028	5.00	100.600	1500	1.347
S33L	0.092	5.00	101.000	600	1.315
S33	0.032	5.00	100.860	1500	1.757
S34	0.013	5.00	100.750	1500	1.780
S35L	0.046	5.00	102.000	600	1.135
S35	0.064	5.00	101.700	1350	1.200
S36	0.018	5.00	100.900	1500	1.988
S37	0.018	5.00	100.647	1500	1.834
S38L	0.094	5.00	100.550	600	0.964
S38	0.061	5.00	100.450	1350	1.200
S39L	0.087	5.00	100.500	600	1.203
S39	0.011	5.00	100.400	1500	1.680
S40L	0.072	5.00	100.300	600	1.071
S40	0.013	5.00	100.250	1500	1.587
S41L	0.068	5.00	100.000	600	0.846
S41	0.039	5.00	100.050	1500	1.450
S42L	0.048	5.00	99.850	600	0.767
S42	0.009	5.00	99.600	1500	1.145
S43L	0.094	5.00	99.500	600	0.750
S43			99.500	1500	1.300
Basin			99.400	10	1.400
S44++			99.100	1200	1.287
HW6			99.000	10	0.949

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.000	S22L	S22	14.806	0.600	101.450	101.300	0.150	98.7	225	5.19	50.0
1.001	S22	S23	19.845	0.600	100.925	100.700	0.225	88.2	600	5.32	50.0
1.002	S23	S24	28.026	0.600	100.700	100.500	0.200	140.1	600	5.54	50.0
2.000	S24L	S24	4.283	0.600	100.904	100.875	0.029	147.7	225	5.07	50.0
1.003	S24	S25	26.367	0.600	100.500	100.383	0.117	225.4	600	5.81	50.0
3.000	S25L	S25	6.748	0.600	100.803	100.758	0.045	150.0	225	5.11	50.0
1.004	S25	S26	14.444	0.600	100.383	100.319	0.064	225.7	600	5.96	50.0
1.005	S26	S27	4.500	0.600	100.319	100.299	0.020	225.0	600	6.01	50.0
4.000	S27L	S27	6.570	0.600	100.792	100.749	0.043	152.8	150	5.14	50.0
1.006	S27	S28	28.119	0.600	100.299	100.174	0.125	225.0	600	6.30	49.5
5.000	S28L	S28	6.570	0.600	100.667	100.624	0.043	152.8	150	5.14	50.0
1.007	S28	S29	24.861	0.600	100.174	100.063	0.111	224.0	600	6.55	48.6
1.008	S29	S30	39.580	0.600	100.063	99.887	0.176	224.9	600	6.96	47.2
6.000	S30L	S30	7.909	0.600	100.390	100.337	0.053	149.2	150	5.16	50.0
1.009	S30	S33	18.638	0.600	99.887	99.253	0.634	29.4	600	7.03	47.0
7.000	S31	S32	33.177	0.600	99.400	99.253	0.147	225.7	750	5.30	50.0
8.000	S32LA	S32	6.681	0.600	99.822	99.778	0.044	151.8	225	5.11	50.0
9.000	S32LB	S32	5.654	0.600	99.815	99.778	0.037	152.8	225	5.09	50.0
7.001	S32	S33	33.698	0.600	99.253	99.103	0.150	224.7	750	5.60	50.0
10.000	S33L	S33	8.651	0.600	99.685	99.628	0.057	151.8	225	5.14	50.0
1.010	S33	S34	29.772	0.600	99.103	98.970	0.133	223.8	750	7.30	46.2
1.011	S34	S36	13.203	0.600	98.970	98.912	0.058	227.6	750	7.42	45.8
11.000	S35L	S35	9.692	0.600	100.865	100.800	0.065	149.1	150	5.20	50.0
11.001	S35	S36	38.587	0.600	100.500	99.212	1.288	30.0	450	5.37	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
1.000	1.316	52.3	12.7	0.450	0.600	0.094	0.0	75	1.088
1.001	2.594	733.3	17.8	0.600	0.600	0.131	0.0	63	1.115
1.002	2.055	581.0	21.1	0.600	0.600	0.156	0.0	77	0.998
2.000	1.073	42.7	13.0	0.621	0.600	0.096	0.0	85	0.944
1.003	1.618	457.4	37.3	0.600	1.017	0.275	0.0	115	0.992
3.000	1.065	42.4	9.6	0.972	1.017	0.071	0.0	73	0.864
1.004	1.617	457.1	48.7	1.017	1.181	0.359	0.0	131	1.070
1.005	1.619	457.8	49.3	1.181	1.201	0.364	0.0	132	1.075
4.000	0.810	14.3	3.8	1.258	1.201	0.028	0.0	52	0.684
1.006	1.619	457.8	52.6	1.201	1.076	0.392	0.0	136	1.093
5.000	0.810	14.3	5.4	0.983	1.076	0.040	0.0	64	0.756
1.007	1.623	458.8	61.6	1.076	0.937	0.467	0.0	147	1.145
1.008	1.619	457.9	64.9	0.937	0.613	0.507	0.0	151	1.160
6.000	0.820	14.5	7.6	0.710	0.613	0.056	0.0	77	0.829
1.009	4.502	1272.9	74.2	0.613	1.007	0.583	0.0	97	2.515
7.000	1.858	821.0	7.0	0.450	0.597	0.052	0.0	48	0.586
8.000	1.058	42.1	10.7	0.553	0.597	0.079	0.0	77	0.885
9.000	1.055	41.9	7.6	0.560	0.597	0.056	0.0	65	0.804
7.001	1.863	822.9	29.1	0.597	1.007	0.215	0.0	95	0.900
10.000	1.059	42.1	12.5	1.090	1.007	0.092	0.0	84	0.926
1.010	1.866	824.4	115.4	1.007	1.030	0.922	0.0	188	1.337
1.011	1.850	817.4	116.1	1.030	1.238	0.935	0.0	189	1.331
11.000	0.820	14.5	6.2	0.985	0.750	0.046	0.0	69	0.791
11.001	3.725	592.4	14.9	0.750	1.238	0.110	0.0	49	1.625

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.012	S36	S37	22.171	0.600	98.912	98.813	0.099	223.9	750	7.61	45.2
1.013	S37	S39	20.914	0.600	98.813	98.720	0.093	224.9	750	7.80	44.6
12.000	S38L	S38	16.595	0.600	99.586	99.475	0.111	149.5	225	5.26	50.0
12.001	S38	S39	45.000	0.600	99.250	99.020	0.230	195.7	450	5.78	50.0
13.000	S39L	S39	7.808	0.600	99.297	99.245	0.052	150.2	225	5.12	50.0
1.014	S39	S40	12.845	0.600	98.720	98.663	0.057	225.4	750	7.92	44.3
14.000	S40L	S40	6.178	0.600	99.229	99.188	0.041	150.7	225	5.10	50.0
1.015	S40	S41	14.232	0.600	98.663	98.600	0.063	225.9	750	8.04	43.9
15.000	S41L	S41	4.361	0.600	99.154	99.125	0.029	150.4	225	5.07	50.0
1.016	S41	S42	32.571	0.600	98.600	98.455	0.145	224.6	750	8.33	43.1
16.000	S42L	S42	15.438	0.600	99.083	98.980	0.103	149.9	225	5.24	50.0
1.017	S42	S43	40.000	0.600	98.455	98.200	0.255	156.9	750	8.63	42.3
17.000	S43L	S43	4.240	0.600	98.750	98.725	0.025	169.6	225	5.07	50.0
1.018	S43	Basin	38.406	0.600	98.200	98.000	0.200	192.0	750	8.95	41.5
1.019	Basin	S44++	8.373	0.600	98.150	97.813	0.337	24.8	600	8.98	41.4
1.020	S44++	HW6	13.974	0.600	98.113	98.051	0.062	225.4	300	9.20	40.9

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
1.012	1.866	824.2	130.2	1.238	1.084	1.063	0.0	200	1.381
1.013	1.862	822.5	130.8	1.084	0.930	1.081	0.0	200	1.380
12.000	1.067	42.4	12.7	0.739	0.750	0.094	0.0	85	0.938
12.001	1.450	230.6	21.0	0.750	0.930	0.155	0.0	91	0.915
13.000	1.064	42.3	11.8	0.978	0.930	0.087	0.0	81	0.916
1.014	1.860	821.6	160.1	0.930	0.837	1.334	0.0	222	1.457
14.000	1.063	42.2	9.8	0.846	0.837	0.072	0.0	73	0.868
1.015	1.857	820.6	168.9	0.837	0.700	1.419	0.0	229	1.477
15.000	1.064	42.3	9.2	0.621	0.700	0.068	0.0	71	0.852
1.016	1.863	822.9	178.4	0.700	0.395	1.526	0.0	235	1.503
16.000	1.065	42.4	6.5	0.542	0.395	0.048	0.0	59	0.775
1.017	2.232	985.9	181.7	0.395	0.550	1.583	0.0	216	1.724
17.000	1.001	39.8	12.7	0.525	0.550	0.094	0.0	87	0.893
1.018	2.016	890.5	188.6	0.550	0.650	1.677	0.0	233	1.616
1.019	4.898	1384.9	188.3	0.650	0.687	1.677	0.0	148	3.478
1.020	1.043	73.7	185.9	0.687	0.649	1.677	0.0	300	1.056

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	14.806	98.7	225	Circular	102.125	101.450	0.450	102.125	101.300	0.600
1.001	19.845	88.2	600	Circular	102.125	100.925	0.600	101.900	100.700	0.600
1.002	28.026	140.1	600	Circular	101.900	100.700	0.600	101.700	100.500	0.600
2.000	4.283	147.7	225	Circular	101.750	100.904	0.621	101.700	100.875	0.600
1.003	26.367	225.4	600	Circular	101.700	100.500	0.600	102.000	100.383	1.017
3.000	6.748	150.0	225	Circular	102.000	100.803	0.972	102.000	100.758	1.017
1.004	14.444	225.7	600	Circular	102.000	100.383	1.017	102.100	100.319	1.181
1.005	4.500	225.0	600	Circular	102.100	100.319	1.181	102.100	100.299	1.201
4.000	6.570	152.8	150	Circular	102.200	100.792	1.258	102.100	100.749	1.201
1.006	28.119	225.0	600	Circular	102.100	100.299	1.201	101.850	100.174	1.076
5.000	6.570	152.8	150	Circular	101.800	100.667	0.983	101.850	100.624	1.076
1.007	24.861	224.0	600	Circular	101.850	100.174	1.076	101.600	100.063	0.937
1.008	39.580	224.9	600	Circular	101.600	100.063	0.937	101.100	99.887	0.613
6.000	7.909	149.2	150	Circular	101.250	100.390	0.710	101.100	100.337	0.613
1.009	18.638	29.4	600	Circular	101.100	99.887	0.613	100.860	99.253	1.007
7.000	33.177	225.7	750	Circular	100.600	99.400	0.450	100.600	99.253	0.597
8.000	6.681	151.8	225	Circular	100.600	99.822	0.553	100.600	99.778	0.597
9.000	5.654	152.8	225	Circular	100.600	99.815	0.560	100.600	99.778	0.597
7.001	33.698	224.7	750	Circular	100.600	99.253	0.597	100.860	99.103	1.007
10.000	8.651	151.8	225	Circular	101.000	99.685	1.090	100.860	99.628	1.007
1.010	29.772	223.8	750	Circular	100.860	99.103	1.007	100.750	98.970	1.030
1.011	13.203	227.6	750	Circular	100.750	98.970	1.030	100.900	98.912	1.238
11.000	9.692	149.1	150	Circular	102.000	100.865	0.985	101.700	100.800	0.750
11.001	38.587	30.0	450	Circular	101.700	100.500	0.750	100.900	99.212	1.238
1.012	22.171	223.9	750	Circular	100.900	98.912	1.238	100.647	98.813	1.084

Link	US Node	Dia (mm)	Node Type	DS Node	Dia (mm)	Node Type
1.000	S22L	600	Manhole	S22	1350	Manhole
1.001	S22	1350	Manhole	S23	1350	Manhole
1.002	S23	1350	Manhole	S24	1350	Manhole
2.000	S24L	600	Manhole	S24	1350	Manhole
1.003	S24	1350	Manhole	S25	1200	Manhole
3.000	S25L	600	Manhole	S25	1200	Manhole
1.004	S25	1200	Manhole	S26	1350	Manhole
1.005	S26	1350	Manhole	S27	1350	Manhole
4.000	S27L	600	Manhole	S27	1350	Manhole
1.006	S27	1350	Manhole	S28	1350	Manhole
5.000	S28L	600	Manhole	S28	1350	Manhole
1.007	S28	1350	Manhole	S29	1350	Manhole
1.008	S29	1350	Manhole	S30	1350	Manhole
6.000	S30L	600	Manhole	S30	1350	Manhole
1.009	S30	1350	Manhole	S33	1500	Manhole
7.000	S31	1500	Manhole	S32	1500	Manhole
8.000	S32LA	600	Manhole	S32	1500	Manhole
9.000	S32LB	600	Manhole	S32	1500	Manhole
7.001	S32	1500	Manhole	S33	1500	Manhole
10.000	S33L	600	Manhole	S33	1500	Manhole
1.010	S33	1500	Manhole	S34	1500	Manhole
1.011	S34	1500	Manhole	S36	1500	Manhole
11.000	S35L	600	Manhole	S35	1350	Manhole
11.001	S35	1350	Manhole	S36	1500	Manhole
1.012	S36	1500	Manhole	S37	1500	Manhole

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)
1.013	20.914	224.9	750	Circular	100.647	98.813	1.084	100.400	98.720	0.930
12.000	16.595	149.5	225	Circular	100.550	99.586	0.739	100.450	99.475	0.750
12.001	45.000	195.7	450	Circular	100.450	99.250	0.750	100.400	99.020	0.930
13.000	7.808	150.2	225	Circular	100.500	99.297	0.978	100.400	99.245	0.930
1.014	12.845	225.4	750	Circular	100.400	98.720	0.930	100.250	98.663	0.837
14.000	6.178	150.7	225	Circular	100.300	99.229	0.846	100.250	99.188	0.837
1.015	14.232	225.9	750	Circular	100.250	98.663	0.837	100.050	98.600	0.700
15.000	4.361	150.4	225	Circular	100.000	99.154	0.621	100.050	99.125	0.700
1.016	32.571	224.6	750	Circular	100.050	98.600	0.700	99.600	98.455	0.395
16.000	15.438	149.9	225	Circular	99.850	99.083	0.542	99.600	98.980	0.395
1.017	40.000	156.9	750	Circular	99.600	98.455	0.395	99.500	98.200	0.550
17.000	4.240	169.6	225	Circular	99.500	98.750	0.525	99.500	98.725	0.550
1.018	38.406	192.0	750	Circular	99.500	98.200	0.550	99.400	98.000	0.650
1.019	8.373	24.8	600	Circular	99.400	98.150	0.650	99.100	97.813	0.687
1.020	13.974	225.4	300	Circular	99.100	98.113	0.687	99.000	98.051	0.649

Link	US Node	Dia (mm)	Node Type	DS Node	Dia (mm)	Node Type
1.013	S37	1500	Manhole	S39	1500	Manhole
12.000	S38L	600	Manhole	S38	1350	Manhole
12.001	S38	1350	Manhole	S39	1500	Manhole
13.000	S39L	600	Manhole	S39	1500	Manhole
1.014	S39	1500	Manhole	S40	1500	Manhole
14.000	S40L	600	Manhole	S40	1500	Manhole
1.015	S40	1500	Manhole	S41	1500	Manhole
15.000	S41L	600	Manhole	S41	1500	Manhole
1.016	S41	1500	Manhole	S42	1500	Manhole
16.000	S42L	600	Manhole	S42	1500	Manhole
1.017	S42	1500	Manhole	S43	1500	Manhole
17.000	S43L	600	Manhole	S43	1500	Manhole
1.018	S43	1500	Manhole	Basin	10	Manhole
1.019	Basin	10	Manhole	S44++	1200	Manhole
1.020	S44++	1200	Manhole	HW6	10	Manhole

Manhole Schedule

Node	CL (m)	Depth (m)	Dia (mm)	MH Type	Connections	Link	IL (m)	Dia (mm)	
S22L	102.125	0.675	600	Adoptable					
					0	1.000	101.450	225	
S22	102.125	1.200	1350	Adoptable		1	1.000	101.300	225
					0	1.001	100.925	600	
S23	101.900	1.200	1350	Adoptable		1	1.001	100.700	600
					0	1.002	100.700	600	

Manhole Schedule

Node	CL (m)	Depth (m)	Dia (mm)	MH Type	Connections	Link	IL (m)	Dia (mm)	
S24L	101.750	0.846	600	Adoptable					
					0	2.000	100.904	225	
S24	101.700	1.200	1350	Adoptable		1	2.000	100.875	225
					2	1.002	100.500	600	
					0	1.003	100.500	600	
S25L	102.000	1.197	600	Adoptable					
					0	3.000	100.803	225	
S25	102.000	1.617	1200	Adoptable		1	3.000	100.758	225
					2	1.003	100.383	600	
					0	1.004	100.383	600	
S26	102.100	1.781	1350	Adoptable		1	1.004	100.319	600
					0	1.005	100.319	600	
S27L	102.200	1.408	600	Adoptable					
					0	4.000	100.792	150	
S27	102.100	1.801	1350	Adoptable		1	4.000	100.749	150
					2	1.005	100.299	600	
					0	1.006	100.299	600	
S28L	101.800	1.133	600	Adoptable					
					0	5.000	100.667	150	
S28	101.850	1.676	1350	Adoptable		1	5.000	100.624	150
					2	1.006	100.174	600	
					0	1.007	100.174	600	
S29	101.600	1.537	1350	Adoptable		1	1.007	100.063	600
					0	1.008	100.063	600	
S30L	101.250	0.860	600	Adoptable					
					0	6.000	100.390	150	
S30	101.100	1.213	1350	Adoptable		1	6.000	100.337	150
					2	1.008	99.887	600	
					0	1.009	99.887	600	
S31	100.600	1.200	1500	Adoptable					
					0	7.000	99.400	750	

Manhole Schedule

Node	CL (m)	Depth (m)	Dia (mm)	MH Type	Connections	Link	IL (m)	Dia (mm)
S32LA	100.600	0.778	600	Adoptable	0	8.000	99.822	225
S32LB	100.600	0.785	600	Adoptable	0	9.000	99.815	225
S32	100.600	1.347	1500	Adoptable	1	9.000	99.778	225
					2	8.000	99.778	225
					3	7.000	99.253	750
					0	7.001	99.253	750
S33L	101.000	1.315	600	Adoptable	0	10.000	99.685	225
S33	100.860	1.757	1500	Adoptable	1	10.000	99.628	225
					2	7.001	99.103	750
					3	1.009	99.253	600
					0	1.010	99.103	750
S34	100.750	1.780	1500	Adoptable	1	1.010	98.970	750
					0	1.011	98.970	750
S35L	102.000	1.135	600	Adoptable	0	11.000	100.865	150
S35	101.700	1.200	1350	Adoptable	1	11.000	100.800	150
					0	11.001	100.500	450
S36	100.900	1.988	1500	Adoptable	1	11.001	99.212	450
					2	1.011	98.912	750
					0	1.012	98.912	750
S37	100.647	1.834	1500	Adoptable	1	1.012	98.813	750
					0	1.013	98.813	750
S38L	100.550	0.964	600	Adoptable	0	12.000	99.586	225
S38	100.450	1.200	1350	Adoptable	1	12.000	99.475	225
					0	12.001	99.250	450
S39L	100.500	1.203	600	Adoptable	0	13.000	99.297	225

Manhole Schedule

Node	CL (m)	Depth (m)	Dia (mm)	MH Type	Connections	Link	IL (m)	Dia (mm)
S39	100.400	1.680	1500	Adoptable		1	13.000	99.245 225
						2	12.001	99.020 450
						3	1.013	98.720 750
						0	1.014	98.720 750
S40L	100.300	1.071	600	Adoptable				
						0	14.000	99.229 225
S40	100.250	1.587	1500	Adoptable		1	14.000	99.188 225
						2	1.014	98.663 750
						0	1.015	98.663 750
S41L	100.000	0.846	600	Adoptable				
						0	15.000	99.154 225
S41	100.050	1.450	1500	Adoptable		1	15.000	99.125 225
						2	1.015	98.600 750
						0	1.016	98.600 750
S42L	99.850	0.767	600	Adoptable				
						0	16.000	99.083 225
S42	99.600	1.145	1500	Adoptable		1	16.000	98.980 225
						2	1.016	98.455 750
						0	1.017	98.455 750
S43L	99.500	0.750	600	Adoptable				
						0	17.000	98.750 225
S43	99.500	1.300	1500	Adoptable		1	17.000	98.725 225
						2	1.017	98.200 750
						0	1.018	98.200 750
Basin	99.400	1.400	10	Adoptable		1	1.018	98.000 750
						0	1.019	98.150 600
S44++	99.100	1.287	1200	Adoptable		1	1.019	97.813 600
						0	1.020	98.113 300
HW6	99.000	0.949	10	Adoptable		1	1.020	98.051 300

Simulation Settings

Rainfall Methodology	FEH-22	Analysis Speed	Normal	Starting Level (m)	
Rainfall Events	Singular	Skip Steady State	x	Check Discharge Rate(s)	x
Summer CV	0.750	Drain Down Time (mins)	240	Check Discharge Volume	x
Winter CV	0.840	Additional Storage (m³/ha)	10.0		

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 %)
100	40	0	0

Node S44++ Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	x	Sump Available	✓
Invert Level (m)	98.113	Product Number	CTL-SHE-0108-5000-0858-5000
Design Depth (m)	0.858	Min Outlet Diameter (m)	0.150
Design Flow (l/s)	5.0	Min Node Diameter (mm)	1200

Node Basin Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	98.000
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	1000.0	0.0	1.300	1360.0	0.0

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.81%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S22L	10	101.698	0.248	55.7	0.4161	0.0000	SURCHARGED
15 minute winter	S22	10	101.063	0.138	75.7	0.2398	0.0000	OK
15 minute winter	S23	11	100.856	0.156	89.3	0.2553	0.0000	OK
15 minute winter	S24L	10	101.185	0.281	56.8	0.3975	0.0000	SURCHARGED
15 minute winter	S24	11	100.792	0.292	157.9	0.4737	0.0000	OK
15 minute winter	S25L	10	101.012	0.209	42.0	0.1827	0.0000	OK
15 minute winter	S25	11	100.748	0.365	204.8	0.4423	0.0000	OK
15 minute winter	S26	11	100.696	0.377	207.9	0.5495	0.0000	OK
15 minute winter	S27L	10	100.954	0.162	16.6	0.0781	0.0000	SURCHARGED
15 minute winter	S27	11	100.644	0.345	223.6	0.4933	0.0000	OK
15 minute winter	S28L	10	100.924	0.257	23.7	0.1635	0.0000	SURCHARGED
15 minute winter	S28	11	100.545	0.370	265.6	0.6076	0.0000	OK
15 minute winter	S29	11	100.411	0.348	287.2	0.5885	0.0000	OK
15 minute winter	S30L	10	100.841	0.451	33.2	0.4210	0.0000	SURCHARGED
15 minute winter	S30	12	100.156	0.269	328.7	0.4297	0.0000	OK
15 minute winter	S31	12	100.139	0.739	69.7	1.6258	0.0000	OK
15 minute winter	S32LA	11	100.258	0.436	46.8	0.5654	0.0000	SURCHARGED
15 minute winter	S32LB	11	100.202	0.387	33.2	0.3852	0.0000	SURCHARGED
15 minute winter	S32	11	100.149	0.896	372.6	1.7699	0.0000	SURCHARGED
15 minute winter	S33L	11	100.293	0.608	54.5	0.5974	0.0000	SURCHARGED
15 minute winter	S33	12	100.128	1.025	506.6	1.9978	0.0000	SURCHARGED
15 minute winter	S34	12	100.047	1.077	526.4	1.9821	0.0000	SURCHARGED
15 minute winter	S35L	10	101.225	0.360	27.2	0.2477	0.0000	SURCHARGED
15 minute winter	S35	10	100.599	0.098	64.4	0.1935	0.0000	OK
15 minute winter	S36	12	99.986	1.074	581.7	1.9950	0.0000	SURCHARGED

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	S22L	1.000	S22	53.8	1.440	1.028	0.5614	
15 minute winter	S22	1.001	S23	74.6	1.411	0.102	1.0523	
15 minute winter	S23	1.002	S24	89.4	0.948	0.154	2.7170	
15 minute winter	S24L	2.000	S24	56.4	1.422	1.321	0.1636	
15 minute winter	S24	1.003	S25	157.6	1.004	0.345	4.1601	
15 minute winter	S25L	3.000	S25	41.6	1.165	0.983	0.2389	
15 minute winter	S25	1.004	S26	205.1	1.121	0.449	2.6416	
15 minute winter	S26	1.005	S27	207.8	1.175	0.454	0.7958	
15 minute winter	S27L	4.000	S27	16.4	0.958	1.145	0.1069	
15 minute winter	S27	1.006	S28	223.4	1.276	0.488	4.9229	
15 minute winter	S28L	5.000	S28	23.3	1.324	1.627	0.1130	
15 minute winter	S28	1.007	S29	264.9	1.505	0.577	4.3752	
15 minute winter	S29	1.008	S30	285.7	2.236	0.624	5.7677	
15 minute winter	S30L	6.000	S30	32.4	1.841	2.236	0.1378	
15 minute winter	S30	1.009	S33	326.1	2.562	0.256	3.7663	
15 minute winter	S31	7.000	S32	59.4	0.436	0.072	14.5795	
15 minute winter	S32LA	8.000	S32	46.4	1.208	1.102	0.2657	
15 minute winter	S32LB	9.000	S32	32.9	1.090	0.784	0.2249	
15 minute winter	S32	7.001	S33	-276.7	-0.747	-0.336	14.8312	
15 minute winter	S33L	10.000	S33	53.0	1.341	1.259	0.3441	
15 minute winter	S33	1.010	S34	522.0	1.314	0.633	13.1033	
15 minute winter	S34	1.011	S36	534.5	1.215	0.654	5.8109	
15 minute winter	S35L	11.000	S35	26.6	1.509	1.832	0.1684	
15 minute winter	S35	11.001	S36	63.9	2.198	0.108	3.5507	
15 minute winter	S36	1.012	S37	606.7	1.379	0.736	9.7579	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.81%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S37	12	99.887	1.074	612.9	2.0029	0.0000	SURCHARGED
15 minute winter	S38L	10	100.192	0.606	55.7	0.7619	0.0000	SURCHARGED
15 minute winter	S38	12	99.816	0.566	90.4	1.0974	0.0000	SURCHARGED
15 minute winter	S39L	12	99.873	0.576	51.5	0.5799	0.0000	SURCHARGED
15 minute winter	S39	12	99.791	1.071	732.5	1.9627	0.0000	SURCHARGED
15 minute winter	S40L	10	99.750	0.521	42.6	0.4975	0.0000	SURCHARGED
15 minute winter	S40	10	99.679	1.016	771.6	1.8791	0.0000	SURCHARGED
15 minute winter	S41L	10	99.684	0.530	40.3	0.5758	0.0000	SURCHARGED
15 minute winter	S41	10	99.573	0.973	825.7	1.9808	0.0000	SURCHARGED
15 minute winter	S42L	10	99.619	0.536	28.4	0.4871	0.0000	FLOOD RISK
15 minute winter	S42	9	99.526	1.071	859.5	1.9762	0.0000	FLOOD RISK
15 minute summer	S43L	10	99.500	0.750	52.9	1.1520	0.0000	FLOOD RISK
15 minute winter	S43	9	99.414	1.214	915.0	2.1448	0.0000	FLOOD RISK
960 minute winter	Basin	945	99.035	1.035	60.6	1183.0710	0.0000	SURCHARGED
960 minute winter	S44++	960	99.035	1.222	9.9	1.3824	0.0000	FLOOD RISK
960 minute winter	HW6	945	98.104	0.053	5.0	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)
15 minute winter	S37	1.013	S39	618.6	1.406	0.752	9.2047	
15 minute winter	S38L	12.000	S38	54.3	1.366	1.281	0.6600	
15 minute winter	S38	12.001	S39	123.1	1.175	0.534	7.1300	
15 minute winter	S39L	13.000	S39	58.2	1.463	1.374	0.3105	
15 minute winter	S39	1.014	S40	739.8	1.681	0.900	5.6534	
15 minute winter	S40L	14.000	S40	52.3	1.314	1.237	0.2457	
15 minute winter	S40	1.015	S41	775.9	1.763	0.946	6.2638	
15 minute winter	S41L	15.000	S41	55.3	1.391	1.308	0.1734	
15 minute winter	S41	1.016	S42	829.8	1.927	1.008	14.3352	
15 minute winter	S42L	16.000	S42	31.1	1.013	0.733	0.6140	
15 minute winter	S42	1.017	S43	879.0	2.168	0.892	17.6048	
15 minute summer	S43L	17.000	S43	56.3	1.416	1.415	0.1686	
15 minute winter	S43	1.018	Basin	951.6	3.694	1.069	9.5636	
960 minute winter	Basin	1.019	S44++	9.9	0.196	0.007	2.3585	
960 minute winter	S44++	1.020	HW6	5.0	0.592	0.068	0.1186	254.6