

Network Details

Manhole Schedule

Manhole	Catchment Area (ha)	Diameter (m)	Type	CL (m)	IL (m)	Depth To Soffit (m)	Easting (m)	Northing (m)
S2-01	0.223	1.500	Type B	42.040	39.890	1.850	385913.920	156085.826
S2-02	0.131	1.500	Type B	41.590	39.722	1.568	385937.286	156130.545
S2-03	0.000	1.500	Type B	41.584	39.686	1.599	385928.109	156136.214
S2-04	0.071	1.500	Type C	41.320	39.619	1.401	385914.862	156151.303
S2-05	0.000	1.500	Type C	41.160	39.574	1.285	385903.595	156158.451
S2-HW1	0.000	0.000	Unknown	40.750	39.250	0.900	385897.170	156161.962
S2-06	0.124	1.500	Type C	41.330	40.016	1.014	385950.079	156145.658
S2-07	0.115	1.500	Type C	40.833	39.962	0.571	385991.112	156175.794
S2-08	0.093	1.500	Type C	40.991	39.754	0.787	385976.733	156166.073
S2-09	0.018	1.500	Type C	40.750	39.596	0.704	385944.943	156201.353
S2-HW2	0.000	0.000	Unknown	40.750	39.250	0.750	385931.605	156198.266
S2-HW3	0.000	0.000	Unknown	40.750	39.200	1.250	385930.525	156198.865
S2-10	0.000	1.800	Type B	40.702	38.904	1.648	385929.415	156204.893
S2-HW4	0.000	0.000	Type C	38.914	38.880	-0.116	385928.820	156207.786

Pipe Schedule

Pipe Number	US Manhole	US IL (m)	DS Manhole	DS IL (m)	Shape	Dimension (m)	Length (m)	Gradient (1:x)	Roughness (mm)	US Depth To Soffit (m)	DS Depth To Soffit (m)
1.000	S2-01	39.890	S2-02	39.722	Circ	0.3mØ	50.455	300.0	0.600	1.850	1.568
1.001	S2-02	39.722	S2-03	39.686	Circ	0.3mØ	10.787	300.0	0.600	1.568	1.599
1.002	S2-03	39.686	S2-04	39.619	Circ	0.3mØ	20.079	300.0	0.600	1.599	1.401
1.003	S2-04	39.619	S2-05	39.574	Circ	0.3mØ	13.344	300.0	0.600	1.401	1.285
1.004	S2-05	39.574	S2-HW1	39.550	Circ	0.3mØ	7.322	300.0	0.600	1.285	0.900
1.005	S2-HW1	39.250	S2-HW3	39.250	Circ	0.9mØ	49.743		0.600	0.600	0.600
2.000	S2-06	40.016	S2-08	39.904	Circ	0.3mØ	33.574	300.0	0.600	1.014	0.787
3.000	S2-07	39.962	S2-08	39.904	Circ	0.3mØ	17.356	300.0	0.600	0.571	0.787
2.001	S2-08	39.754	S2-09	39.596	Circ	0.45mØ	47.490	300.0	0.600	0.787	0.704
2.002	S2-09	39.596	S2-HW2	39.550	Circ	0.45mØ	13.691	300.0	0.600	0.704	0.750
2.003	S2-HW2	39.250	S2-HW3	39.250	Circ	0.9mØ	1.235		0.600	0.600	0.600
1.006	S2-HW3	39.200	S2-10	38.904	Circ	0.3mØ	6.129	20.7	0.600	1.250	1.498
1.007	S2-10	38.904	S2-HW4	38.880	Circ	0.15mØ	2.954	123.7	0.600	1.648	-0.116

Outfall Details

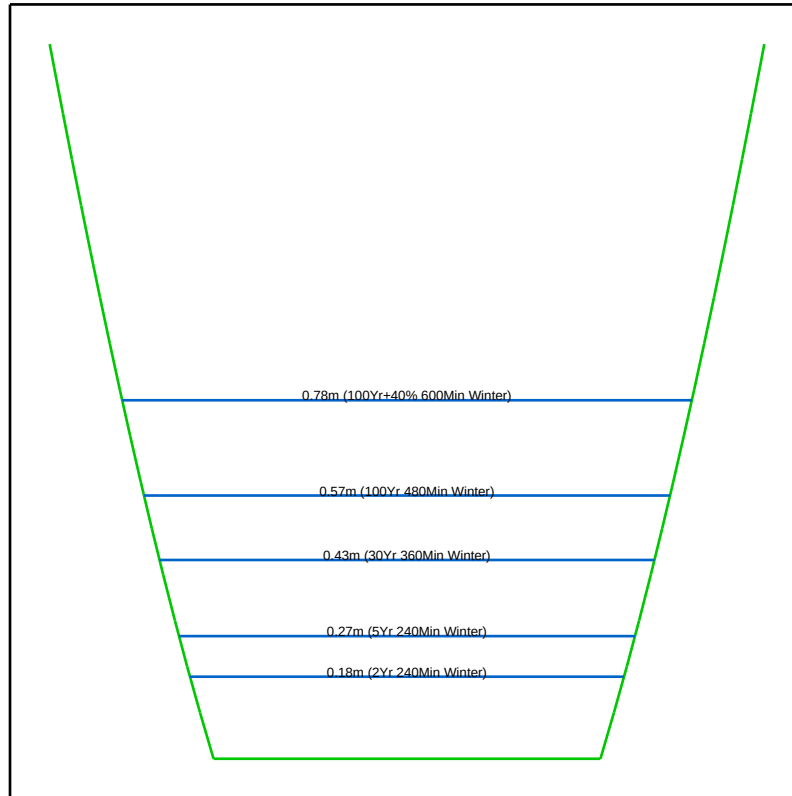
Outfall Manhole S2-HW4 (OUTFALL) : Free Discharge

Flow Control Details

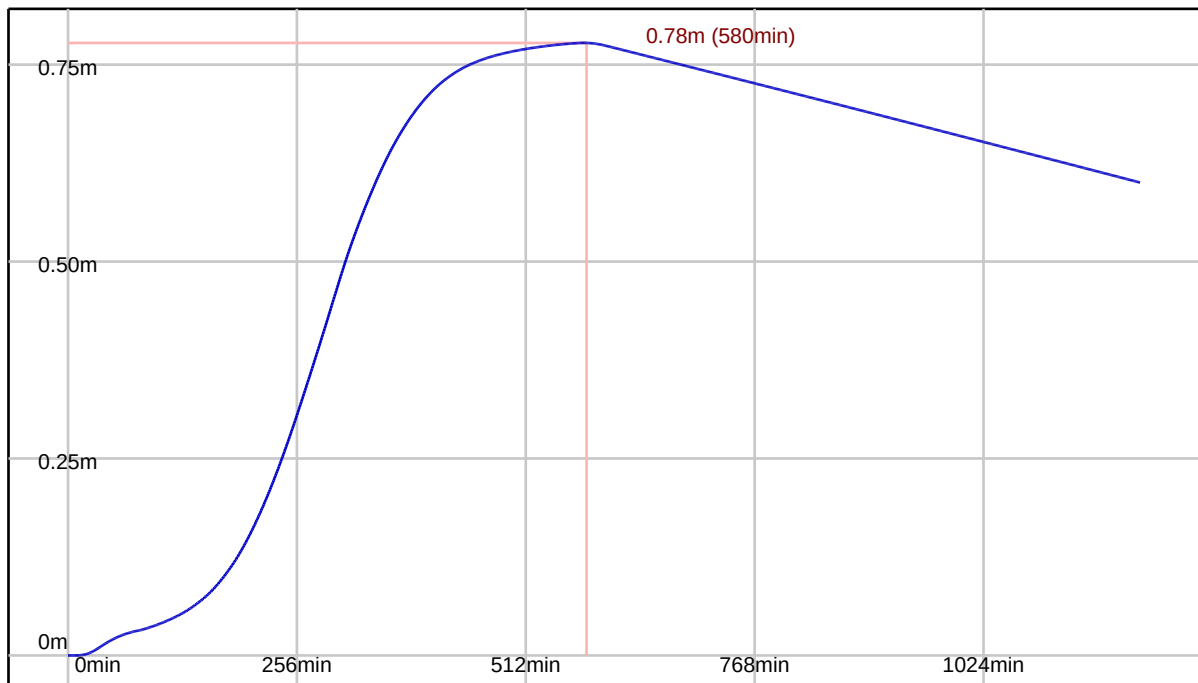
Pond Structure at Manhole S2-HW3

Pond Invert (m)	Max Depth (m)	Volume To Water Level (m3)	Water Level (m)	Freeboard (m)	Infil Base (m/hr)	Infil Side (m/hr)	Safety Factor
39.200	1.550	1039.177	40.450	0.300	0.00000000	0.00000000	2.00

Pond Depth/Area Diagram at S2-HW3



Pond at S2-HW3 (100Yr+40% 600Min Winter)

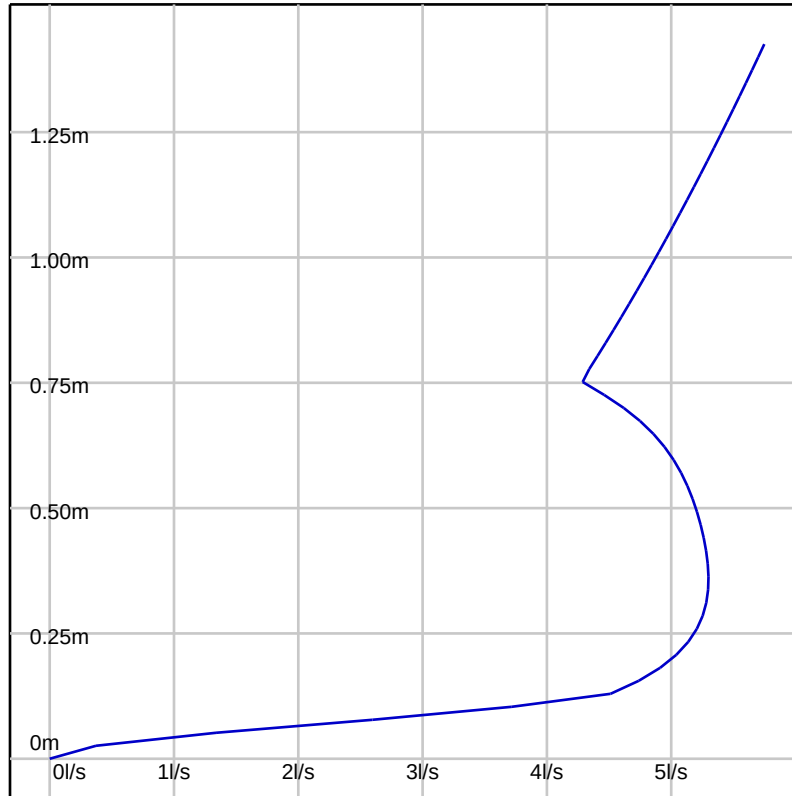


Controls within Manhole S2-10

Hydro-Brake® Optimum Control at Manhole S2-10

Model Ref	Design Depth (m)	Design Flow (l/s)	Depth Above Invert (m)	FF Head (m)	FF Flow (l/s)	KF Head (m)	KF Flow (l/s)
SHE-0106-5300-1200-5300 ID:615427	1.200	5.300	0.000	0.358	5.300	0.751	4.272

Hydro-Brake® Optimum Control at S2-10



Simulation Settings

FEH2013 (point): Filename=FEH_Point_Descriptors_386055_156308.xml

Summer (Cv: 0.75), Winter (Cv: 0.84)

Global Time of Entry: 5.0 mins

Durations (mins): 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080

Return Periods (yrs) + Climate Change: (2, +0%), (5, +0%), (30, +0%), (100, +0%), (100, +40%)

Simulated Rainfall Events

Storm	Average Intensity (mm/hr)	Runoff Continuity %	Flow Continuity %	Storm	Average Intensity (mm/hr)	Runoff Continuity %	Flow Continuity %
2Yr 15Min Winter	29.538	0.00	1.01	30Yr 720Min Winter	5.260	0.00	-0.31
2Yr 15Min Summer	29.538	0.00	0.86	30Yr 960Min Summer	4.178	0.00	-0.20
2Yr 30Min Winter	18.969	0.00	0.97	30Yr 960Min Winter	4.178	0.00	-0.26
2Yr 30Min Summer	18.969	0.00	1.00	30Yr 1440Min Summer	2.994	0.00	-0.15
2Yr 60Min Summer	11.785	0.00	0.94	30Yr 1440Min Winter	2.994	0.00	-0.18
2Yr 60Min Winter	11.785	0.00	0.80	30Yr 2160Min Summer	2.136	0.00	-0.07
2Yr 120Min Winter	8.325	0.00	0.61	30Yr 2160Min Winter	2.136	0.00	-0.09
2Yr 120Min Summer	8.325	0.00	0.63	30Yr 2880Min Summer	1.679	0.00	0.07
2Yr 180Min Winter	6.684	0.00	0.38	30Yr 2880Min Winter	1.679	0.00	0.05
2Yr 180Min Summer	6.684	0.00	0.55	30Yr 4320Min Summer	1.205	0.00	0.01
2Yr 240Min Summer	5.505	0.00	0.49	30Yr 4320Min Winter	1.205	0.00	0.00
2Yr 240Min Winter	5.505	0.00	0.28	30Yr 5760Min Summer	0.961	0.00	0.00
2Yr 360Min Summer	4.214	0.00	0.55	30Yr 5760Min Winter	0.961	0.00	0.00
2Yr 360Min Winter	4.214	0.00	0.18	30Yr 7200Min Summer	0.814	0.00	0.00
2Yr 480Min Winter	3.469	0.00	0.13	30Yr 7200Min Winter	0.814	0.00	0.00
2Yr 480Min Summer	3.469	0.00	0.57	30Yr 8640Min Summer	0.715	0.00	0.00
2Yr 600Min Summer	2.951	0.00	0.49	30Yr 8640Min Winter	0.715	0.00	0.00
2Yr 600Min Winter	2.951	0.00	0.36	30Yr 10080Min Summer	0.645	0.00	0.00
2Yr 720Min Summer	2.572	0.00	0.30	30Yr 10080Min Winter	0.645	0.00	0.00
2Yr 720Min Winter	2.572	0.00	0.36	100Yr 15Min Summer	102.719	0.00	0.65
2Yr 960Min Summer	2.072	0.00	0.17	100Yr 15Min Winter	102.719	0.00	0.66
2Yr 960Min Winter	2.072	0.00	0.11	100Yr 30Min Summer	68.128	0.00	0.48
2Yr 1440Min Summer	1.524	0.00	0.03	100Yr 30Min Winter	68.128	0.00	0.48
2Yr 1440Min Winter	1.524	0.00	0.00	100Yr 60Min Summer	43.099	0.00	0.30
2Yr 2160Min Summer	1.126	0.00	0.00	100Yr 60Min Winter	43.099	0.00	0.21
2Yr 2160Min Winter	1.126	0.00	0.00	100Yr 120Min Summer	26.078	0.00	0.14
2Yr 2880Min Summer	0.914	0.00	0.00	100Yr 120Min Winter	26.078	0.00	-0.06
2Yr 2880Min Winter	0.914	0.00	0.00	100Yr 180Min Summer	19.393	0.00	-0.02
2Yr 4320Min Summer	0.692	0.00	0.00	100Yr 180Min Winter	19.393	0.00	-0.26
2Yr 4320Min Winter	0.692	0.00	0.00	100Yr 240Min Summer	15.792	0.00	-0.13
2Yr 5760Min Summer	0.577	0.00	0.00	100Yr 240Min Winter	15.792	0.00	-0.34
2Yr 5760Min Winter	0.577	0.00	0.00	100Yr 360Min Summer	11.762	0.00	-0.24
2Yr 7200Min Summer	0.505	0.00	0.00	100Yr 360Min Winter	11.762	0.00	-0.40
2Yr 7200Min Winter	0.505	0.00	0.00	100Yr 480Min Summer	9.515	0.00	-0.27
2Yr 8640Min Summer	0.457	0.00	0.00	100Yr 480Min Winter	9.515	0.00	-0.38
2Yr 8640Min Winter	0.457	0.00	0.00	100Yr 600Min Summer	8.047	0.00	-0.28
2Yr 10080Min Summer	0.422	0.00	0.00	100Yr 600Min Winter	8.047	0.00	-0.34
2Yr 10080Min Winter	0.422	0.00	0.00	100Yr 720Min Summer	6.994	0.00	-0.29
5Yr 15Min Winter	47.029	0.00	0.96	100Yr 720Min Winter	6.994	0.00	-0.32
5Yr 15Min Summer	47.029	0.00	0.92	100Yr 960Min Summer	5.571	0.00	-0.29
5Yr 30Min Summer	30.675	0.00	0.88	100Yr 960Min Winter	5.571	0.00	-0.29
5Yr 30Min Winter	30.675	0.00	0.77	100Yr 1440Min Summer	3.985	0.00	-0.24
5Yr 60Min Summer	19.136	0.00	0.64	100Yr 1440Min Winter	3.985	0.00	-0.23
5Yr 60Min Winter	19.136	0.00	0.64	100Yr 2160Min Summer	2.814	0.00	-0.17
5Yr 120Min Winter	12.421	0.00	0.30	100Yr 2160Min Winter	2.814	0.00	-0.15
5Yr 120Min Summer	12.421	0.00	0.39	100Yr 2880Min Summer	2.178	0.00	-0.11
5Yr 180Min Summer	9.561	0.00	0.29	100Yr 2880Min Winter	2.178	0.00	-0.10
5Yr 180Min Winter	9.561	0.00	0.16	100Yr 4320Min Summer	1.517	0.00	-0.13
5Yr 240Min Summer	7.802	0.00	0.20	100Yr 4320Min Winter	1.517	0.00	0.02
5Yr 240Min Winter	7.802	0.00	0.03	100Yr 5760Min Summer	1.178	0.00	0.01
5Yr 360Min Summer	5.847	0.00	0.09	100Yr 5760Min Winter	1.178	0.00	0.00
5Yr 360Min Winter	5.847	0.00	-0.09	100Yr 7200Min Summer	0.976	0.00	0.00
5Yr 480Min Summer	4.742	0.00	0.04	100Yr 7200Min Winter	0.976	0.00	0.00
5Yr 480Min Winter	4.742	0.00	-0.13	100Yr 8640Min Summer	0.842	0.00	0.00
5Yr 600Min Summer	4.002	0.00	0.04	100Yr 8640Min Winter	0.842	0.00	0.00

Simulated Rainfall Events

Storm	Average Intensity (mm/hr)	Runoff Continuity %	Flow Continuity %	Storm	Average Intensity (mm/hr)	Runoff Continuity %	Flow Continuity %
5Yr 600Min Winter	4.002	0.00	-0.13	100Yr 10080Min Summer	0.749	0.00	0.00
5Yr 720Min Summer	3.471	0.00	0.04	100Yr 10080Min Winter	0.749	0.00	0.00
5Yr 720Min Winter	3.471	0.00	-0.11	100Yr+40% 15Min Summer	143.806	0.00	0.61
5Yr 960Min Summer	2.771	0.00	0.13	100Yr+40% 15Min Winter	143.806	0.00	0.63
5Yr 960Min Winter	2.771	0.00	-0.12	100Yr+40% 30Min Summer	95.380	0.00	0.37
5Yr 1440Min Summer	2.006	0.00	0.21	100Yr+40% 30Min Winter	95.380	0.00	0.30
5Yr 1440Min Winter	2.006	0.00	0.13	100Yr+40% 60Min Summer	60.339	0.00	0.16
5Yr 2160Min Summer	1.458	0.00	0.04	100Yr+40% 60Min Winter	60.339	0.00	0.00
5Yr 2160Min Winter	1.458	0.00	0.00	100Yr+40% 120Min Summer	36.510	0.00	-0.07
5Yr 2880Min Summer	1.170	0.00	0.00	100Yr+40% 120Min Winter	36.510	0.00	-0.19
5Yr 2880Min Winter	1.170	0.00	0.00	100Yr+40% 180Min Summer	27.150	0.00	-0.19
5Yr 4320Min Summer	0.870	0.00	0.00	100Yr+40% 180Min Winter	27.150	0.00	-0.29
5Yr 4320Min Winter	0.870	0.00	0.00	100Yr+40% 240Min Summer	22.108	0.00	-0.27
5Yr 5760Min Summer	0.713	0.00	0.00	100Yr+40% 240Min Winter	22.108	0.00	-0.43
5Yr 5760Min Winter	0.713	0.00	0.00	100Yr+40% 360Min Summer	16.467	0.00	-0.37
5Yr 7200Min Summer	0.617	0.00	0.00	100Yr+40% 360Min Winter	16.467	0.00	-0.49
5Yr 7200Min Winter	0.617	0.00	0.00	100Yr+40% 480Min Summer	13.320	0.00	-0.43
5Yr 8640Min Summer	0.553	0.00	0.00	100Yr+40% 480Min Winter	13.320	0.00	-0.46
5Yr 8640Min Winter	0.553	0.00	0.00	100Yr+40% 600Min Summer	11.265	0.00	-0.42
5Yr 10080Min Summer	0.506	0.00	0.00	100Yr+40% 600Min Winter	11.265	0.00	-0.42
5Yr 10080Min Winter	0.506	0.00	0.00	100Yr+40% 720Min Summer	9.791	0.00	-0.41
30Yr 15Min Summer	79.881	0.00	0.70	100Yr+40% 720Min Winter	9.791	0.00	-0.38
30Yr 15Min Winter	79.881	0.00	0.74	100Yr+40% 960Min Summer	7.799	0.00	-0.36
30Yr 30Min Summer	52.294	0.00	0.61	100Yr+40% 960Min Winter	7.799	0.00	-0.28
30Yr 30Min Winter	52.294	0.00	0.59	100Yr+40% 1440Min Summer	5.580	0.00	-0.34
30Yr 60Min Summer	32.782	0.00	0.35	100Yr+40% 1440Min Winter	5.580	0.00	-0.20
30Yr 60Min Winter	32.782	0.00	0.32	100Yr+40% 2160Min Summer	3.940	0.00	-0.25
30Yr 120Min Summer	20.016	0.00	0.24	100Yr+40% 2160Min Winter	3.940	0.00	-0.16
30Yr 120Min Winter	20.016	0.00	0.06	100Yr+40% 2880Min Summer	3.050	0.00	-0.20
30Yr 180Min Summer	14.968	0.00	0.10	100Yr+40% 2880Min Winter	3.050	0.00	-0.12
30Yr 180Min Winter	14.968	0.00	-0.11	100Yr+40% 4320Min Summer	2.124	0.00	-0.12
30Yr 240Min Summer	12.150	0.00	0.00	100Yr+40% 4320Min Winter	2.124	0.00	-0.08
30Yr 240Min Winter	12.150	0.00	-0.21	100Yr+40% 5760Min Summer	1.649	0.00	-0.07
30Yr 360Min Summer	8.987	0.00	-0.13	100Yr+40% 5760Min Winter	1.649	0.00	-0.05
30Yr 360Min Winter	8.987	0.00	-0.29	100Yr+40% 7200Min Summer	1.366	0.00	-0.05
30Yr 480Min Summer	7.224	0.00	-0.20	100Yr+40% 7200Min Winter	1.366	0.00	0.00
30Yr 480Min Winter	7.224	0.00	-0.31	100Yr+40% 8640Min Summer	1.179	0.00	0.02
30Yr 600Min Summer	6.076	0.00	-0.22	100Yr+40% 8640Min Winter	1.179	0.00	0.00
30Yr 600Min Winter	6.076	0.00	-0.31	100Yr+40% 10080Min Winter	1.048	0.00	0.00
30Yr 720Min Summer	5.260	0.00	-0.21	100Yr+40% 10080Min Summer	1.048	0.00	0.00

Simulation Results

Return Period Yrs: 2.0

Climate Change %: 0

Manholes

Manhole	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
S2-01	15 min Winter	8	40.031	0.141	30.416		OK
S2-02	15 min Winter	9	39.910	0.188	46.024		OK
S2-03	15 min Winter	9	39.877	0.191	46.510		OK
S2-04	15 min Winter	9	39.821	0.202	55.817		OK
S2-05	15 min Winter	9	39.767	0.192	55.748		OK
S2-HW1	15 min Winter	10	39.451	0.201	54.256		OK
S2-06	15 min Winter	8	40.118	0.102	16.965		OK
S2-07	15 min Winter	8	40.060	0.098	15.646		OK
S2-08	15 min Winter	9	39.900	0.146	43.541		OK
S2-09	15 min Winter	9	39.745	0.149	46.544		OK
S2-HW2	240 min Winter	194	39.378	0.128	2.269		OK
S2-HW3	240 min Winter	194	39.378	0.178	5.696		OK
S2-10	180 min Winter	122	39.449	0.545	9.927		Surcharged
S2-HW4	1440 min Winter	870	38.939	0.059	5.301		Outfall

Conduits

Pipe No.	Critical Storm	Peak (mins)	US Manhole	DS Manhole	Flow Depth (m)	Max Velocity (m/s)	Max Flow (l/s)	Flow / Capacity	Status
1.000	15 min Winter	9	S2-01	S2-02	0.164	0.753	29.480	0.463	OK
1.001	15 min Winter	9	S2-02	S2-03	0.190	0.990	46.510	0.730	OK
1.002	15 min Winter	9	S2-03	S2-04	0.197	0.950	46.666	0.733	OK
1.003	15 min Winter	9	S2-04	S2-05	0.197	1.131	55.748	0.875	OK
1.004	15 min Winter	9	S2-05	S2-HW1	0.188	1.193	55.468	0.871	OK
1.005	15 min Winter	10	S2-HW1	S2-HW3	0.166	0.674	54.214		OK
2.000	15 min Winter	9	S2-06	S2-08	0.099	0.805	16.483	0.259	OK
3.000	15 min Winter	8	S2-07	S2-08	0.096	0.790	15.314	0.240	OK
2.001	15 min Winter	9	S2-08	S2-09	0.148	0.974	44.196	0.238	OK
2.002	15 min Winter	9	S2-09	S2-HW2	0.149	1.020	46.720	0.252	OK
2.003	240 min Winter	194	S2-HW2	S2-HW3	0.128	0.632	11.244		OK
1.006	240 min Winter	194	S2-HW3	S2-10	0.239	0.893	46.012	0.188	OK
1.007	240 min Summer	377	S2-10	S2-HW4	0.059	0.818	5.301	0.333	OK

Return Period Yrs: 5.0

Climate Change %: 0

Manholes

Manhole	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
S2-01	15 min Winter	8	40.078	0.188	48.428		OK
S2-02	15 min Winter	9	40.013	0.291	73.230		OK
S2-03	15 min Winter	9	39.974	0.289	72.440		OK
S2-04	15 min Winter	9	39.904	0.285	86.669		OK
S2-05	15 min Winter	9	39.825	0.251	86.487		OK
S2-HW1	15 min Winter	10	39.491	0.241	84.884		OK
S2-06	15 min Winter	8	40.148	0.132	27.012		OK
S2-07	15 min Winter	8	40.087	0.125	24.910		OK
S2-08	15 min Winter	8	39.942	0.188	70.836		OK
S2-09	15 min Winter	9	39.787	0.191	74.079		OK
S2-HW2	240 min Winter	215	39.466	0.216	2.352		OK
S2-HW3	240 min Winter	215	39.466	0.266	5.207		OK
S2-10	240 min Winter	191	39.467	0.563	5.289		Surcharged
S2-HW4	15 min Summer	10	38.939	0.059	5.302		Outfall

Conduits

Pipe No.	Critical Storm	Peak (mins)	US Manhole	DS Manhole	Flow Depth (m)	Max Velocity (m/s)	Max Flow (l/s)	Flow / Capacity	Status
1.000	15 min Winter	9	S2-01	S2-02	0.238	0.825	47.104	0.740	OK
1.001	15 min Winter	9	S2-02	S2-03	0.290	1.064	72.440	1.137	OK
1.002	15 min Winter	9	S2-03	S2-04	0.287	1.043	72.099	1.132	OK
1.003	15 min Winter	9	S2-04	S2-05	0.268	1.299	86.487	1.358	OK
1.004	15 min Winter	9	S2-05	S2-HW1	0.240	1.426	86.318	1.355	OK
1.005	240 min Winter	215	S2-HW1	S2-HW3	0.216	0.438	19.228		OK
2.000	15 min Winter	9	S2-06	S2-08	0.127	0.922	26.255	0.412	OK
3.000	15 min Winter	8	S2-07	S2-08	0.122	0.905	24.464	0.384	OK
2.001	15 min Winter	9	S2-08	S2-09	0.189	1.108	70.339	0.379	OK
2.002	15 min Winter	9	S2-09	S2-HW2	0.190	1.173	74.921	0.404	OK
2.003	240 min Winter	215	S2-HW2	S2-HW3	0.216	0.655	15.948		OK
1.006	240 min Winter	215	S2-HW3	S2-10	0.283	0.890	46.529	0.190	OK
1.007	1440 min Winter	1209	S2-10	S2-HW4	0.059	0.818	5.301	0.333	OK

Return Period Yrs: 30.0

Climate Change %: 0

Manholes

Manhole	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
S2-01	15 min Winter	9	40.606	0.716	77.290		Surcharged
S2-02	15 min Winter	10	40.409	0.687	107.988		Surcharged
S2-03	15 min Winter	10	40.308	0.622	111.323		Surcharged
S2-04	15 min Winter	10	40.112	0.493	133.455		Surcharged
S2-05	15 min Winter	10	39.927	0.353	134.446		Surcharged
S2-HW1	360 min Winter	344	39.631	0.381	2.652		OK
S2-06	15 min Winter	8	40.196	0.180	45.881		OK
S2-07	15 min Winter	8	40.130	0.169	42.311		OK
S2-08	15 min Winter	8	40.011	0.257	120.711		OK
S2-09	15 min Winter	9	39.851	0.256	125.503		OK
S2-HW2	360 min Winter	344	39.631	0.381	2.153		OK
S2-HW3	360 min Winter	344	39.631	0.431	4.806		Surcharged
S2-10	360 min Winter	344	39.631	0.727	4.760		Surcharged
S2-HW4	960 min Summer	1333	38.939	0.059	5.301		Outfall

Conduits

Pipe No.	Critical Storm	Peak (mins)	US Manhole	DS Manhole	Flow Depth (m)	Max Velocity (m/s)	Max Flow (l/s)	Flow / Capacity	Status
1.000	15 min Winter	9	S2-01	S2-02	0.300	1.026	72.523	1.139	Surcharged
1.001	15 min Winter	9	S2-02	S2-03	0.300	1.595	112.746	1.770	Surcharged
1.002	15 min Winter	10	S2-03	S2-04	0.300	1.596	112.821	1.772	Surcharged
1.003	15 min Winter	10	S2-04	S2-05	0.300	1.902	134.446	2.111	Surcharged
1.004	15 min Winter	10	S2-05	S2-HW1	0.287	1.936	134.737	2.116	OK
1.005	360 min Winter	344	S2-HW1	S2-HW3	0.381	0.414	21.320		OK
2.000	15 min Winter	8	S2-06	S2-08	0.171	1.078	44.571	0.700	OK
3.000	15 min Winter	8	S2-07	S2-08	0.163	1.062	41.659	0.654	OK
2.001	15 min Winter	9	S2-08	S2-09	0.255	1.282	119.152	0.642	OK
2.002	15 min Winter	9	S2-09	S2-HW2	0.252	1.387	127.443	0.687	OK
2.003	360 min Winter	344	S2-HW2	S2-HW3	0.381	0.640	18.307		OK
1.006	240 min Winter	136	S2-HW3	S2-10	0.300	0.889	46.594	0.190	Surcharged
1.007	720 min Summer	1205	S2-10	S2-HW4	0.059	0.818	5.301	0.333	OK

Return Period Yrs: 100.0

Climate Change %: 0

Manholes

Manhole	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
S2-01	15 min Winter	10	41.047	1.157	82.870		Surcharged
S2-02	15 min Winter	10	40.749	1.028	137.397		Surcharged
S2-03	15 min Winter	10	40.588	0.903	139.887		Surcharged
S2-04	15 min Winter	10	40.283	0.664	167.213		Surcharged
S2-05	15 min Winter	10	39.994	0.420	167.849		Surcharged
S2-HW1	480 min Winter	461	39.771	0.521	2.383		OK
S2-06	15 min Winter	8	40.228	0.212	58.998		OK
S2-07	15 min Winter	8	40.158	0.196	54.408		OK
S2-08	15 min Winter	8	40.057	0.303	155.305		OK
S2-09	15 min Winter	9	39.891	0.296	162.105		OK
S2-HW2	480 min Winter	461	39.771	0.521	2.077		OK
S2-HW3	480 min Winter	461	39.771	0.571	4.460		Surcharged
S2-10	480 min Winter	461	39.771	0.867	4.432		Surcharged
S2-HW4	2160 min Summer	2295	38.939	0.059	5.301		Outfall

Conduits

Pipe No.	Critical Storm	Peak (mins)	US Manhole	DS Manhole	Flow Depth (m)	Max Velocity (m/s)	Max Flow (l/s)	Flow / Capacity	Status
1.000	15 min Winter	9	S2-01	S2-02	0.300	1.287	90.968	1.428	Surcharged
1.001	15 min Winter	9	S2-02	S2-03	0.300	1.988	140.525	2.207	Surcharged
1.002	15 min Winter	10	S2-03	S2-04	0.300	1.990	140.680	2.209	Surcharged
1.003	15 min Winter	10	S2-04	S2-05	0.300	2.375	167.849	2.636	Surcharged
1.004	15 min Winter	10	S2-05	S2-HW1	0.294	2.388	167.970	2.638	OK
1.005	480 min Winter	461	S2-HW1	S2-HW3	0.521	0.386	22.432		OK
2.000	15 min Winter	8	S2-06	S2-08	0.199	1.163	57.359	0.901	OK
3.000	15 min Winter	8	S2-07	S2-08	0.188	1.152	53.608	0.842	OK
2.001	15 min Winter	9	S2-08	S2-09	0.297	1.382	153.938	0.829	OK
2.002	15 min Winter	9	S2-09	S2-HW2	0.290	1.515	164.213	0.885	OK
2.003	480 min Winter	461	S2-HW2	S2-HW3	0.521	0.619	19.384		OK
1.006	120 min Summer	66	S2-HW3	S2-10	0.300	0.840	47.627	0.194	Surcharged
1.007	960 min Summer	1758	S2-10	S2-HW4	0.059	0.818	5.300	0.333	OK

Return Period Yrs: 100.0

Climate Change %: 40

Manholes

Manhole	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
S2-01	15 min Winter	10	42.003	2.113	116.017		Flood Risk
S2-02	15 min Winter	10	41.453	1.731	188.174		Flood Risk
S2-03	15 min Winter	10	41.164	1.478	186.993		Surcharged
S2-04	15 min Winter	10	40.632	1.013	222.398		Surcharged
S2-05	15 min Winter	10	40.127	0.552	221.728		Surcharged
S2-HW1	600 min Winter	577	39.978	0.728	2.640		OK
S2-06	15 min Winter	8	40.309	0.294	82.597		OK
S2-07	15 min Winter	8	40.223	0.261	76.171		OK
S2-08	15 min Winter	9	40.147	0.393	210.394		OK
S2-09	600 min Winter	576	39.978	0.382	2.271		OK
S2-HW2	600 min Winter	574	39.981	0.731	2.511		OK
S2-HW3	600 min Winter	577	39.978	0.778	2.656		Surcharged
S2-10	600 min Winter	577	39.977	1.074	4.914		Surcharged
S2-HW4	7200 min Winter	4522	38.939	0.059	5.301		Outfall

Conduits

Pipe No.	Critical Storm	Peak (mins)	US Manhole	DS Manhole	Flow Depth (m)	Max Velocity (m/s)	Max Flow (l/s)	Flow / Capacity	Status
1.000	15 min Winter	9	S2-01	S2-02	0.300	1.719	121.509	1.908	Surcharged
1.001	15 min Winter	10	S2-02	S2-03	0.300	2.645	186.993	2.936	Surcharged
1.002	15 min Winter	10	S2-03	S2-04	0.300	2.621	185.251	2.909	Surcharged
1.003	15 min Winter	10	S2-04	S2-05	0.300	3.137	221.728	3.482	Surcharged
1.004	15 min Winter	10	S2-05	S2-HW1	0.300	3.132	221.361	3.476	Surcharged
1.005	600 min Winter	577	S2-HW1	S2-HW3	0.728	0.354	26.571		OK
2.000	15 min Winter	8	S2-06	S2-08	0.268	1.245	80.157	1.259	OK
3.000	15 min Winter	8	S2-07	S2-08	0.252	1.228	74.496	1.170	OK
2.001	15 min Winter	9	S2-08	S2-09	0.377	1.506	214.083	1.153	OK
2.002	600 min Winter	574	S2-09	S2-HW2	0.407	0.836	22.998	0.124	OK
2.003	600 min Winter	574	S2-HW2	S2-HW3	0.729	0.573	32.724		OK
1.006	15 min Winter	12	S2-HW3	S2-10	0.300	0.903	49.004	0.200	Surcharged
1.007	4320 min Summer	3778	S2-10	S2-HW4	0.059	0.818	5.301	0.333	OK