

Network Details

Manhole Schedule

Manhole	Catchment Area (ha)	Diameter (m)	Type	CL (m)	IL (m)	Depth To Soffit (m)	Easting (m)	Northing (m)
S40	0.090	1.350	Type C	6.125	4.675	1.225	488763.155	98323.136
S34	0.055	1.200	Type B	5.823	3.900	1.623	488757.057	98345.163
S35	0.049	1.350	Type C	5.498	3.775	1.423	488751.536	98375.967
RWP130A	0.000	0.180	Type E	5.624	5.300	0.224	488733.805	98376.816
RE130B	0.000	0.250	250	5.623	5.000	0.523	488734.030	98375.773
YG130	0.000	0.180	Type E	5.530	4.950	0.480	488742.656	98373.599
PS76	0.000	0.450	450	5.578	4.700	0.778	488743.558	98379.634
RWP130B	0.000	0.180	Type E	5.624	5.300	0.224	488729.829	98386.576
RE130A	0.000	0.180	Type E	5.572	5.000	0.472	488724.099	98386.583
PS74	0.000	0.450	450	5.787	4.800	0.887	488724.635	98395.107
PS73	0.000	0.450	450	5.691	4.500	1.091	488737.144	98394.626
S41	0.000	0.450	Unknown	6.000	3.900	1.950	488750.755	98401.067
S36	0.005	1.200	Type B	5.629	3.690	1.639	488743.027	98397.430
RWP1-4A	0.000	0.180	Type E	5.900	5.400	0.400	488730.792	98420.045
PS90	0.000	0.450	450	5.826	5.150	0.576	488730.018	98429.115
PS91	0.000	0.450	450	6.013	5.000	0.913	488742.454	98430.072
S42 (D)	0.044	1.350	Type E	5.845	5.250	0.445	488755.932	98427.973
PS89	0.000	0.450	450	6.054	4.750	1.154	488746.831	98415.795
S37	0.000	1.200	Type B	5.715	3.650	1.765	488736.014	98406.897
S43	0.017	0.000	Type C	5.300	4.000	1.000	488722.610	98418.635
S48 (D)	0.005	1.350	Type E	5.741	5.150	0.441	488729.286	98401.670
S38	0.020	1.200	Type B	5.785	3.600	1.885	488723.866	98408.018
S47 (D)	0.005	1.350	Type E	5.638	5.000	0.488	488705.903	98398.527
S39	0.037	1.200	Type B	5.672	3.520	1.852	488701.939	98405.049
YG143	0.000	0.180	Type E	5.660	5.150	0.410	488719.079	98316.339
RWP143A	0.000	0.180	Type E	5.736	5.300	0.336	488717.333	98321.957
PS61	0.000	0.450	450	5.733	5.000	0.633	488718.354	98322.065
YG142	0.000	0.180	Type E	5.709	5.090	0.519	488718.372	98335.120
PS60	0.000	0.180	Type E	5.735	4.850	0.785	488718.036	98333.615
RWP143C	0.000	0.180	Type E	5.789	5.300	0.389	488708.007	98321.573
RE143A	0.000	0.180	Type E	5.930	5.000	0.830	488703.968	98322.871
PS59	0.000	0.450	450	5.877	4.700	1.077	488702.973	98333.134
S45	0.022	0.450	Unknown	5.550	3.950	1.450	488690.794	98320.106
S27	0.035	1.200	Type B	5.679	3.750	1.629	488696.906	98320.071
S28	0.023	1.350	Type B	5.583	3.700	1.583	488695.318	98335.482
S29	0.049	1.200	Type B	5.559	3.640	1.619	488690.300	98351.676
RWP137B	0.000	0.180	Type E	5.391	5.000	0.291	488708.156	98370.951
YG137	0.000	0.180	Type E	5.351	4.801	0.450	488713.551	98371.864
PS65	0.000	0.250	Unknown	5.360	4.650	0.610	488712.468	98372.054
YG141	0.000	0.180	Type E	5.609	4.980	0.529	488717.603	98341.649
RWP141A	0.000	0.180	Type E	5.649	5.200	0.349	488714.318	98342.154
PS62	0.000	0.450	450	5.628	4.900	0.628	488715.776	98342.265
PS63	0.000	0.450	450	5.565	4.500	0.965	488714.029	98357.564
RWP141C	0.000	0.180	Type E	5.668	5.200	0.368	488705.324	98340.726
RE141A	0.000	0.450	450	5.801	5.100	0.601	488701.938	98340.746
RWP137C	0.000	0.180	Type E	5.415	5.000	0.315	488702.914	98370.122
RE137A	0.000	0.180	Type E	5.494	4.800	0.594	488700.860	98369.128
YG139	0.000	0.180	Type E	5.389	4.900	0.389	488703.535	98360.679
PS72	0.000	0.450	450	5.500	4.300	1.100	488701.738	98361.095
PS64	0.000	1.200	Type E	5.569	4.200	1.269	488700.202	98356.121
S30	0.048	1.200	Type B	5.470	3.600	1.570	488694.875	98360.726
RWP136A	0.000	0.180	Type E	5.510	4.950	0.460	488710.739	98379.695
RE136A	0.000	0.180	Type E	5.515	4.900	0.515	488712.037	98379.943
PS67	0.000	0.450	450	5.652	4.625	0.927	488710.760	98392.626
PS68	0.000	0.450	450	5.574	4.475	0.999	488697.699	98391.205
RWP136F	0.000	0.180	Type E	5.538	5.000	0.438	488700.900	98378.408
RE136B	0.000	0.180	Type E	5.504	4.800	0.604	488697.801	98380.294
PS70	0.000	0.450	450	5.536	4.400	1.036	488696.755	98386.464
S44	0.000	0.450	Unknown	5.600	3.700	1.750	488685.127	98385.553
S31	0.000	1.200	Type B	5.474	3.505	1.669	488690.471	98386.603
S32	0.000	1.200	Type B	5.572	3.465	1.957	488692.131	98397.549
S33	0.000	0.000	Type C	3.770	3.400	0.220	488684.457	98403.457

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	S40	4.675	S34	3.975	Circ	0.225mØ	22.854	32.6	0.600	1.225	1.623
1.001	S34	3.900	S35	3.797	Circ	0.3mØ	31.295	302.7	0.600	1.623	1.401
1.002	S35	3.775	S36	3.690	Circ	0.3mØ	23.088	271.6	0.600	1.423	1.639
2.000	RWP130A	5.300	RE130B	5.000	Circ	0.1mØ	1.067	3.6	0.600	0.224	0.523
2.001	RE130B	5.000	PS76	4.700	Circ	0.1mØ	10.281	34.3	0.600	0.523	0.778
3.000	YG130	4.950	PS76	4.700	Circ	0.1mØ	6.102	24.4	0.600	0.480	0.778
2.002	PS76	4.700	PS73	4.500	Circ	0.1mØ	16.307	81.5	0.600	0.778	1.091
4.000	RWP130B	5.300	RE130A	5.000	Circ	0.1mØ	5.730	19.1	0.600	0.224	0.472
4.001	RE130A	5.000	PS74	4.800	Circ	0.1mØ	8.542	42.7	0.600	0.472	0.887
4.002	PS74	4.800	PS73	4.500	Circ	0.1mØ	12.517	41.7	0.600	0.887	1.091
2.003	PS73	4.500	S36	3.890	Circ	0.1mØ	6.518	10.7	0.600	1.091	1.639
5.000	S41	3.900	S36	3.840	Circ	0.15mØ	8.541	142.3	0.600	1.950	1.639
1.003	S36	3.690	S37	3.650	Circ	0.3mØ	11.781	294.5	0.600	1.639	1.765
6.000	RWP1-4A	5.400	PS90	5.150	Circ	0.1mØ	9.103	36.4	0.600	0.400	0.576
6.001	PS90	5.150	PS91	5.000	Circ	0.1mØ	12.472	83.1	0.600	0.576	0.913
6.002	PS91	5.000	PS89	4.800	Circ	0.1mØ	14.933	74.7	0.600	0.913	1.154
7.000	S42 (D)	5.250	PS89	4.750	Circ	0.15mØ	15.203	30.4	0.600	0.445	1.154
6.003	PS89	4.750	S37	3.800	Circ	0.15mØ	14.007	14.7	0.600	1.154	1.765
1.004	S37	3.650	S38	3.600	Circ	0.3mØ	12.200	244.0	0.600	1.765	1.885
8.000	S43	4.000	S38	3.600	Circ	0.3mØ	10.691	26.7	0.600	1.000	1.885
9.000	S48 (D)	5.150	S38	3.750	Circ	0.15mØ	8.348	6.0	0.600	0.441	1.885
1.005	S38	3.600	S39	3.520	Circ	0.3mØ	22.126	276.6	0.600	1.885	1.852
10.000	S47 (D)	5.000	S39	3.670	Circ	0.15mØ	7.632	5.7	0.600	0.488	1.852
1.006	S39	3.520	S32	3.465	Circ	0.3mØ	12.348	224.5	0.600	1.852	1.807
11.000	YG143	5.150	PS61	5.000	Circ	0.1mØ	5.772	38.5	0.600	0.410	0.633
12.000	RWP143A	5.300	PS61	5.000	Circ	0.1mØ	1.027	3.4	0.600	0.336	0.633
11.001	PS61	5.000	PS60	4.850	Circ	0.1mØ	11.554	77.0	0.600	0.633	0.785
13.000	YG142	5.090	PS60	4.850	Circ	0.1mØ	1.542	6.4	0.600	0.519	0.785
11.002	PS60	4.850	PS59	4.700	Circ	0.1mØ	15.070	100.5	0.600	0.785	1.077
14.000	RWP143C	5.300	RE143A	5.000	Circ	0.1mØ	4.242	14.1	0.600	0.389	0.830
14.001	RE143A	5.000	PS59	4.700	Circ	0.1mØ	10.311	34.4	0.600	0.830	1.077
11.003	PS59	4.700	S28	3.900	Circ	0.1mØ	8.007	10.0	0.600	1.077	1.583
15.000	S45	3.950	S27	3.900	Circ	0.15mØ	6.112	122.2	0.600	1.450	1.629
15.001	S27	3.750	S28	3.700	Circ	0.3mØ	15.492	309.8	0.600	1.629	1.583
11.004	S28	3.700	S29	3.640	Circ	0.3mØ	16.953	282.6	0.600	1.583	1.619
11.005	S29	3.640	S30	3.600	Circ	0.3mØ	10.141	253.5	0.600	1.619	1.570
16.000	RWP137B	5.000	PS65	4.650	Circ	0.1mØ	4.450	12.7	0.600	0.291	0.610
17.000	YG137	4.801	PS65	4.650	Circ	0.1mØ	1.100	7.3	0.600	0.450	0.610
16.001	PS65	4.650	PS63	4.500	Circ	0.1mØ	14.573	97.2	0.600	0.610	0.965
18.000	YG141	4.980	PS62	4.900	Circ	0.1mØ	1.929	24.1	0.600	0.529	0.628
19.000	RWP141A	5.200	PS62	4.900	Circ	0.1mØ	1.462	4.9	0.600	0.349	0.628
18.001	PS62	4.900	PS63	4.500	Circ	0.1mØ	15.398	38.5	0.600	0.628	0.965
16.002	PS63	4.500	PS64	4.200	Circ	0.1mØ	13.902	46.3	0.600	0.965	1.269
20.000	RWP141C	5.200	RE141A	5.100	Circ	0.1mØ	3.387	33.9	0.600	0.368	0.601
20.001	RE141A	5.100	PS64	4.200	Circ	0.1mØ	15.473	17.2	0.600	0.601	1.269
21.000	RWP137C	5.000	RE137A	4.800	Circ	0.1mØ	2.282	11.4	0.600	0.315	0.594
21.001	RE137A	4.800	PS72	4.300	Circ	0.1mØ	8.080	16.2	0.600	0.594	1.100
22.000	YG139	4.900	PS72	4.300	Circ	0.1mØ	1.845	3.1	0.600	0.389	1.100
21.002	PS72	4.300	PS64	4.200	Circ	0.1mØ	5.207	52.1	0.600	1.100	1.269
16.003	PS64	4.200	S30	3.800	Circ	0.1mØ	7.041	17.6	0.600	1.269	1.570
11.006	S30	3.600	S31	3.505	Circ	0.3mØ	26.249	276.3	0.600	1.570	1.669
23.000	RWP136A	4.950	RE136A	4.900	Circ	0.1mØ	1.322	26.4	0.600	0.460	0.515
23.001	RE136A	4.900	PS67	4.625	Circ	0.1mØ	12.747	46.4	0.600	0.515	0.927
23.002	PS67	4.625	PS68	4.475	Circ	0.1mØ	13.138	87.6	0.600	0.927	0.999
23.003	PS68	4.475	PS70	4.400	Circ	0.1mØ	4.834	64.5	0.600	0.999	1.036
24.000	RWP136F	5.000	RE136B	4.800	Circ	0.1mØ	3.628	18.1	0.600	0.438	0.604
24.001	RE136B	4.800	PS70	4.400	Circ	0.1mØ	6.257	15.6	0.600	0.604	1.036
23.004	PS70	4.400	S31	3.705	Circ	0.1mØ	6.285	9.0	0.600	1.036	1.669
25.000	S44	3.700	S31	3.655	Circ	0.15mØ	5.446	121.0	0.600	1.750	1.669
11.007	S31	3.505	S32	3.465	Circ	0.3mØ	11.071	276.8	0.600	1.669	1.807
1.007	S32	3.465	S33	3.400	Circ	0.15mØ	9.685	149.0	0.600	1.957	0.220

Permeable Paving Schedule

Permeable Paving	Assigned Manhole	Effective Storage Volume (m3)	CL (m)	IL (m)	Storage Infil Rate (m/hr)	Safety Factor	Easting (m)	Northing (m)
S42	S42 (D)	37.478	5.845	5.265	0.00000000	2.00	488751.765	98424.182
S48	S48 (D)	6.863	5.741	5.161	0.00000000	2.00	488725.026	98399.217
S47	S47 (D)	6.889	5.638	5.058	0.00000000	2.00	488710.772	98397.337

Outfall Details

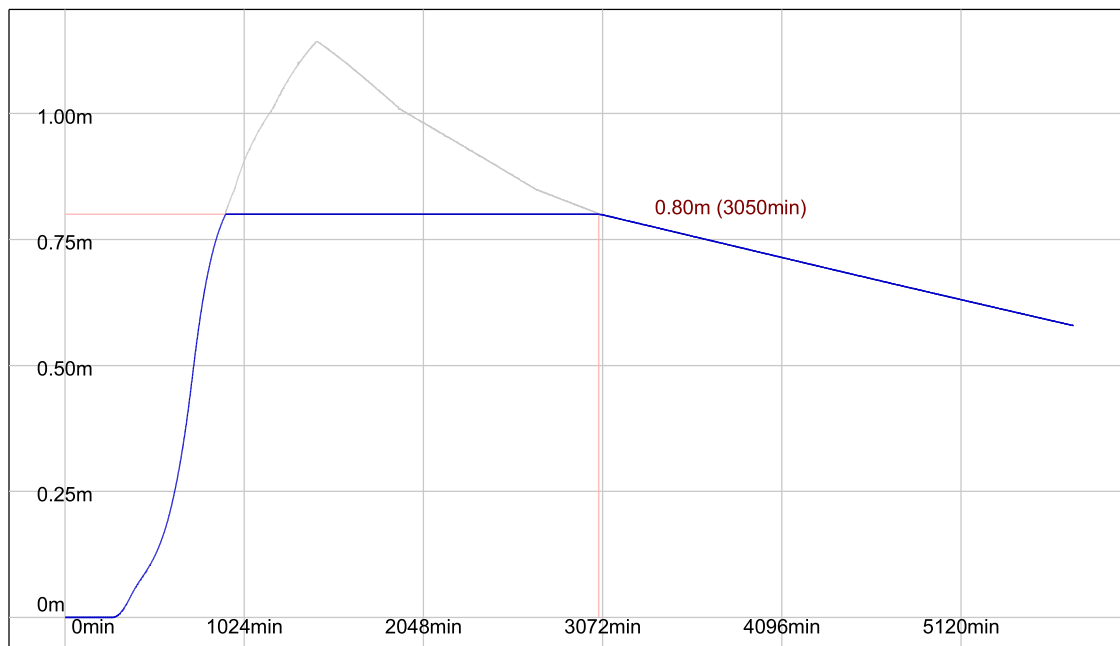
Outfall Manhole S33 : Free Discharge

Flow Control Details

Tank Structure at Manhole S41

Tank Invert (m)	Tank Height (m)	Porosity Ratio (%)	Area (m2)	Effective Area (m2) Area x Porosity Ratio	Max Storage (m3) Effective Area x Height	Infil Base (m/hr)	Infil Side (m/hr)	Safety Factor
3.900	0.800	95.00	250.000	237.500	190.000	0.00000000	0.00000000	2.00

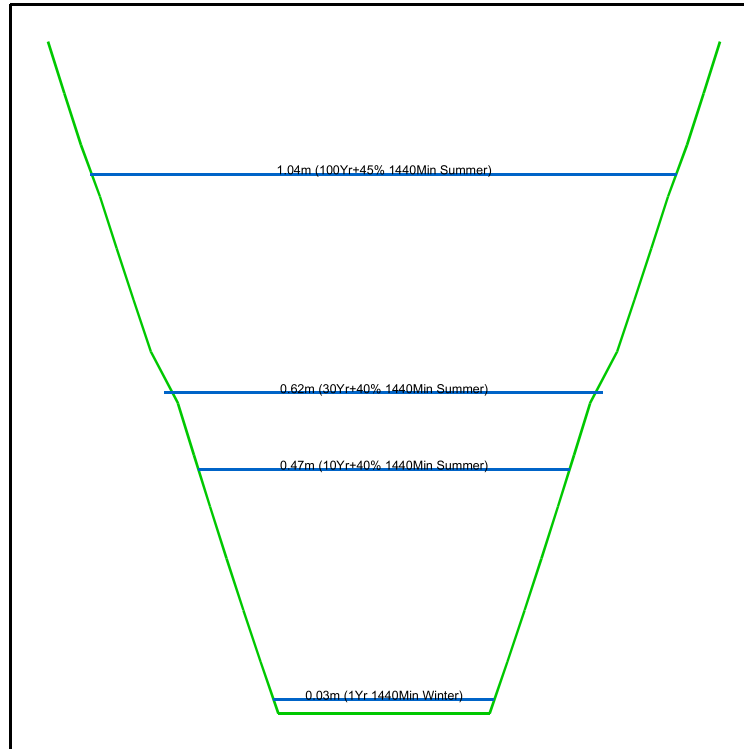
Tank at S41 (100Yr+45% 1440Min Summer)



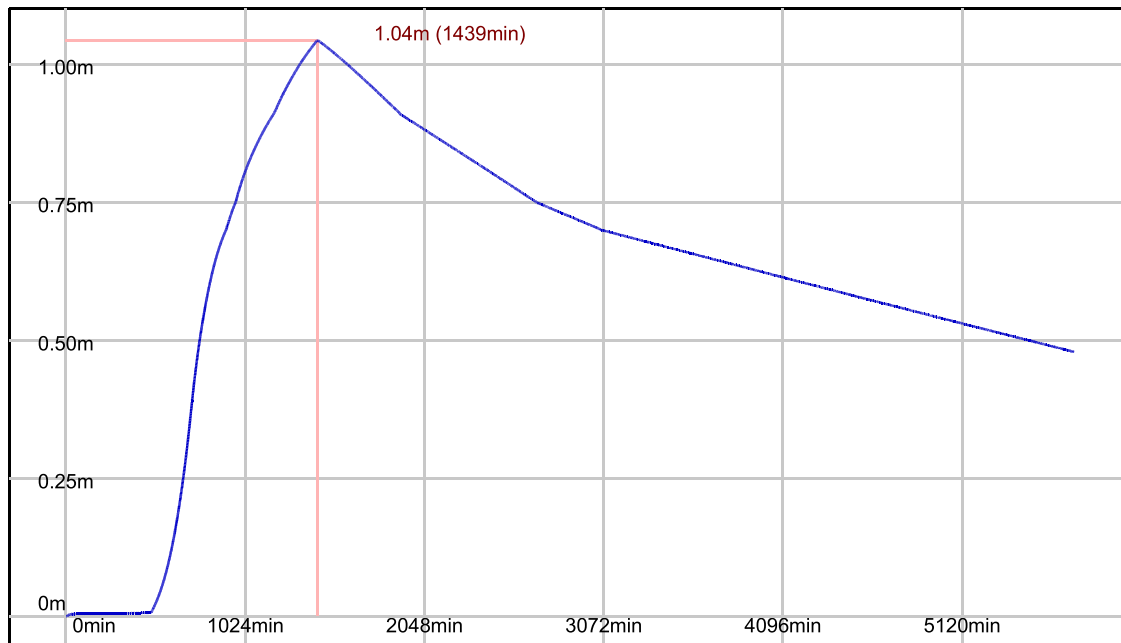
Pond Structure at Manhole S43

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
4.000	1.300	81.780	5.150	0.150	0.00000000	0.00000000	2.00

Pond Depth/Area Diagram at S43



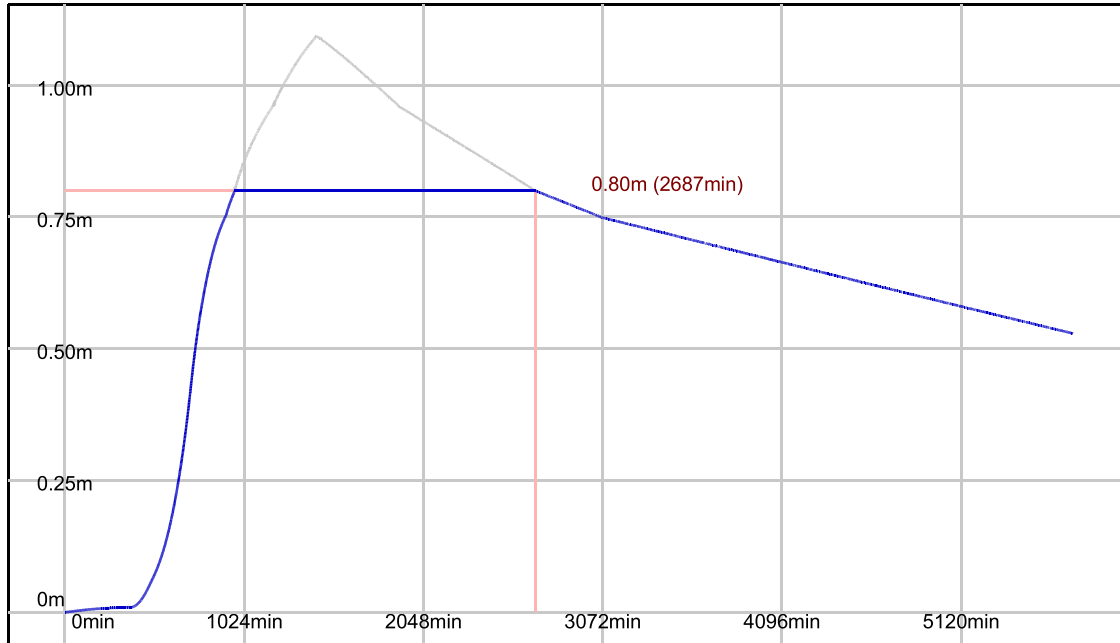
Pond at S43 (100Yr+45% 1440Min Summer)



Tank Structure at Manhole S45

Tank Invert (m)	Tank Height (m)	Porosity Ratio (%)	Area (m2)	Effective Area (m2) Area x Porosity Ratio	Max Storage (m3) Effective Area x Height	Infil Base (m/hr)	Infil Side (m/hr)	Safety Factor
3.950	0.800	95.00	150.000	142.500	114.000	0.00000000	0.00000000	2.00

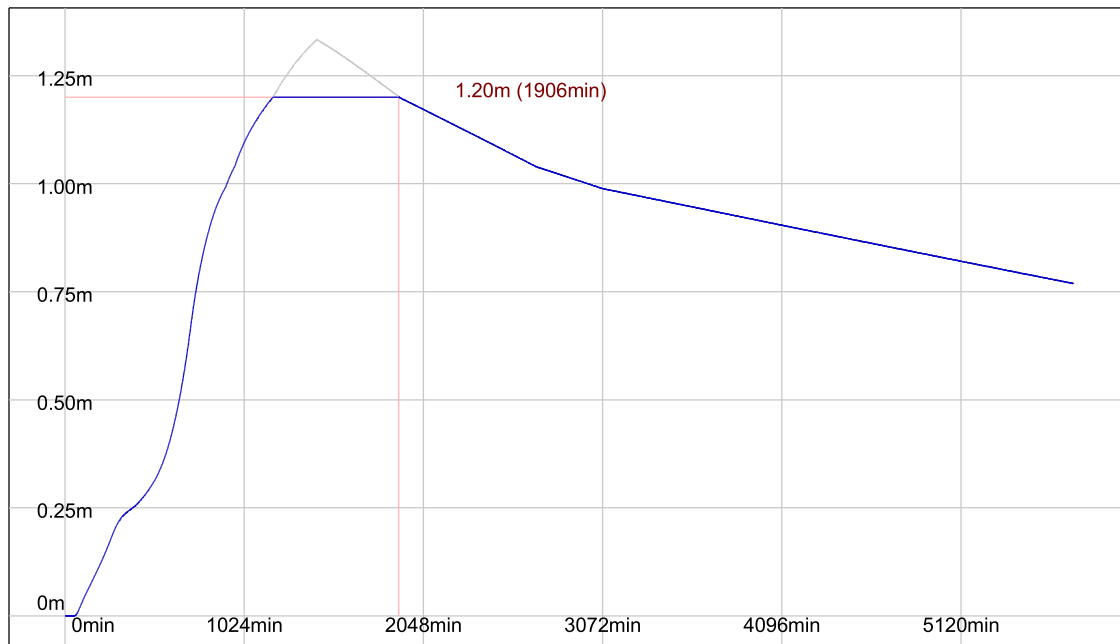
Tank at S45 (100Yr+45% 1440Min Summer)



Tank Structure at Manhole S44

Tank Invert (m)	Tank Height (m)	Porosity Ratio (%)	Area (m2)	Effective Area (m2) Area x Porosity Ratio	Max Storage (m3) Effective Area x Height	Infil Base (m/hr)	Infil Side (m/hr)	Safety Factor
3.700	1.200	95.00	100.000	95.000	114.000	0.00000000	0.00000000	2.00

Tank at S44 (100Yr+45% 1440Min Summer)

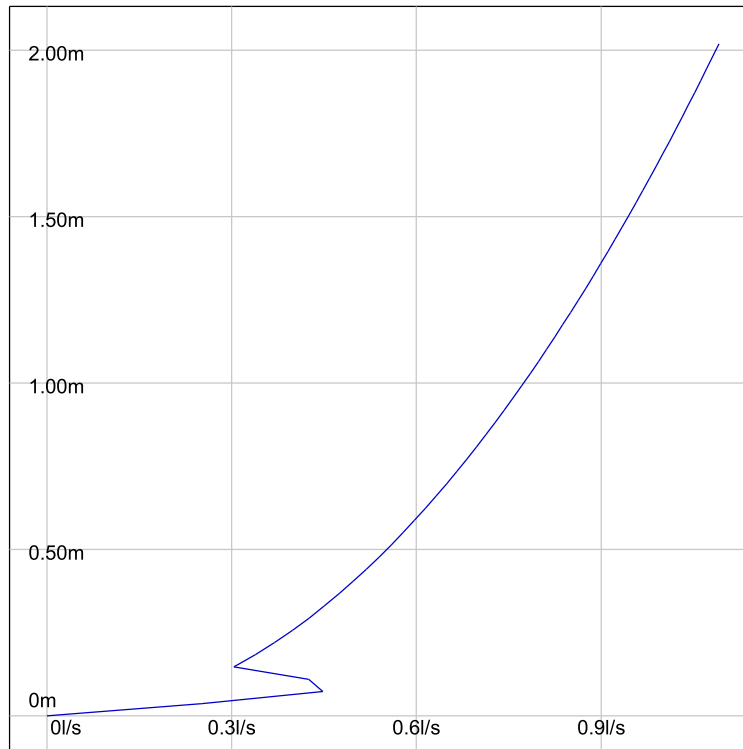


Controls within Manhole S32

Hydro-Brake® Optimum Control at Manhole S32

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)
CHE-0040-1000-1700-1000 ID:628776	1.700	1.000	0.000	0.095	0.498	0.136	0.299

Hydro-Brake® Optimum Control at S32



Simulation Settings

FEH2022 (point): Filename=FEH_Point_Descriptors_488693_97897_v5_0_1.xml

Summer (Cv: 1.00), Winter (Cv: 1.00)

Global Time of Entry: 5.0 mins

Durations (mins): 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440

Return Periods (yrs) + Climate Change: (1, +0%), (10, +40%), (30, +40%), (100, +45%)

Simulated Rainfall Events

Storm	Average Intensity (mm/hr)	Runoff Continuity %	Flow Continuity %	Storm	Average Intensity (mm/hr)	Runoff Continuity %	Flow Continuity %
1Yr 15Min Winter	16.942	0.00	0.20	30Yr+40% 15Min Summer	112.863	0.00	3.05
1Yr 15Min Summer	16.942	0.00	0.20	30Yr+40% 15Min Winter	112.863	0.00	3.03
1Yr 30Min Winter	10.755	0.00	0.70	30Yr+40% 30Min Summer	74.071	0.00	3.38
1Yr 30Min Summer	10.755	0.00	0.68	30Yr+40% 30Min Winter	74.071	0.00	3.41
1Yr 60Min Winter	6.786	0.00	1.03	30Yr+40% 60Min Summer	46.547	0.00	3.62
1Yr 60Min Summer	6.786	0.00	1.02	30Yr+40% 60Min Winter	46.547	0.00	3.62
1Yr 120Min Summer	5.246	0.00	1.52	30Yr+40% 120Min Summer	27.731	0.00	3.69
1Yr 120Min Winter	5.246	0.00	1.52	30Yr+40% 120Min Winter	27.731	0.00	3.68
1Yr 180Min Summer	4.383	0.00	1.51	30Yr+40% 180Min Summer	20.307	0.00	3.64
1Yr 180Min Winter	4.383	0.00	1.52	30Yr+40% 180Min Winter	20.307	0.00	3.64
1Yr 240Min Summer	3.631	0.00	1.35	30Yr+40% 240Min Summer	16.265	0.00	3.58
1Yr 240Min Winter	3.631	0.00	1.36	30Yr+40% 240Min Winter	16.265	0.00	3.57
1Yr 360Min Summer	2.818	0.00	1.06	30Yr+40% 360Min Summer	11.803	0.00	3.41
1Yr 360Min Winter	2.818	0.00	1.06	30Yr+40% 360Min Winter	11.803	0.00	3.41
1Yr 480Min Summer	2.343	0.00	0.77	30Yr+40% 480Min Summer	9.367	0.00	3.23
1Yr 480Min Winter	2.343	0.00	0.76	30Yr+40% 480Min Winter	9.367	0.00	3.22
1Yr 600Min Summer	2.004	0.00	0.39	30Yr+40% 600Min Summer	7.810	0.00	3.04
1Yr 600Min Winter	2.004	0.00	0.38	30Yr+40% 600Min Winter	7.810	0.00	3.03
1Yr 720Min Winter	1.752	0.00	0.09	30Yr+40% 720Min Summer	6.721	0.00	2.84
1Yr 720Min Summer	1.752	0.00	0.09	30Yr+40% 720Min Winter	6.721	0.00	2.84
1Yr 960Min Summer	1.420	0.00	-0.03	30Yr+40% 960Min Summer	5.302	0.00	2.48
1Yr 960Min Winter	1.420	0.00	-0.03	30Yr+40% 960Min Winter	5.302	0.00	2.47
1Yr 1440Min Summer	1.059	0.00	0.00	30Yr+40% 1440Min Summer	3.817	0.00	1.81
1Yr 1440Min Winter	1.059	0.00	0.00	30Yr+40% 1440Min Winter	3.817	0.00	1.80
10Yr+40% 15Min Summer	87.036	0.00	2.77	100Yr+45% 15Min Summer	146.276	0.00	3.36
10Yr+40% 15Min Winter	87.036	0.00	2.77	100Yr+45% 15Min Winter	146.276	0.00	3.33
10Yr+40% 30Min Summer	56.678	0.00	3.11	100Yr+45% 30Min Summer	96.982	0.00	3.72
10Yr+40% 30Min Winter	56.678	0.00	3.11	100Yr+45% 30Min Winter	96.982	0.00	3.72
10Yr+40% 60Min Summer	35.401	0.00	3.27	100Yr+45% 60Min Summer	61.530	0.00	3.96
10Yr+40% 60Min Winter	35.401	0.00	3.27	100Yr+45% 60Min Winter	61.530	0.00	3.97
10Yr+40% 120Min Winter	21.745	0.00	3.34	100Yr+45% 120Min Summer	35.946	0.00	4.00
10Yr+40% 120Min Summer	21.745	0.00	3.35	100Yr+45% 120Min Winter	35.946	0.00	4.00
10Yr+40% 180Min Summer	16.178	0.00	3.31	100Yr+45% 180Min Summer	26.053	0.00	3.95
10Yr+40% 180Min Winter	16.178	0.00	3.31	100Yr+45% 180Min Winter	26.053	0.00	3.95
10Yr+40% 240Min Summer	13.001	0.00	3.24	100Yr+45% 240Min Summer	20.923	0.00	3.90
10Yr+40% 240Min Winter	13.001	0.00	3.23	100Yr+45% 240Min Winter	20.923	0.00	3.89
10Yr+40% 360Min Summer	9.488	0.00	3.05	100Yr+45% 360Min Summer	15.176	0.00	3.75
10Yr+40% 360Min Winter	9.488	0.00	3.05	100Yr+45% 360Min Winter	15.176	0.00	3.75
10Yr+40% 480Min Summer	7.563	0.00	2.85	100Yr+45% 480Min Summer	12.028	0.00	3.60
10Yr+40% 480Min Winter	7.563	0.00	2.85	100Yr+45% 480Min Winter	12.028	0.00	3.59
10Yr+40% 600Min Winter	6.323	0.00	2.64	100Yr+45% 600Min Summer	10.033	0.00	3.43
10Yr+40% 600Min Summer	6.323	0.00	2.65	100Yr+45% 600Min Winter	10.033	0.00	3.43
10Yr+40% 720Min Summer	5.451	0.00	2.44	100Yr+45% 720Min Summer	8.641	0.00	3.26
10Yr+40% 720Min Winter	5.451	0.00	2.44	100Yr+45% 720Min Winter	8.641	0.00	3.25
10Yr+40% 960Min Summer	4.313	0.00	2.05	100Yr+45% 960Min Summer	6.827	0.00	2.93
10Yr+40% 960Min Winter	4.313	0.00	2.05	100Yr+45% 960Min Winter	6.827	0.00	2.93
10Yr+40% 1440Min Summer	3.111	0.00	1.36	100Yr+45% 1440Min Winter	4.922	0.00	2.37
10Yr+40% 1440Min Winter	3.111	0.00	1.36	100Yr+45% 1440Min Summer	4.922	0.00	2.40

Simulation Results

Return Period Yrs: 1.0

Climate Change %: 0

Manholes

Manhole	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
S40	15 min Summer	8	4.722	0.047	8.989		OK
S34	1440 min Winter	1286	4.027	0.127	0.153		OK
S35	1440 min Winter	1280	4.027	0.252	0.446		OK
RWP130A	-	0	5.300	0.000	0.000		OK
RE130B	-	0	5.000	0.000	0.000		OK
YG130	-	0	4.950	0.000	0.000		OK
PS76	-	0	4.700	0.000	0.000		OK
RWP130B	-	0	5.300	0.000	0.000		OK
RE130A	-	0	5.000	0.000	0.000		OK
PS74	-	0	4.800	0.000	0.000		OK
PS73	-	0	4.500	0.000	0.000		OK
S41	1440 min Winter	1273	4.026	0.126	0.076		OK
S36	1440 min Winter	1262	4.027	0.337	0.285		Surcharged
RWP1-4A	-	0	5.400	0.000	0.000		OK
PS90	-	0	5.150	0.000	0.000		OK
PS91	-	0	5.000	0.000	0.000		OK
S42 (D)	15 min Summer	8	5.286	0.036	4.431		OK
PS89	15 min Summer	8	4.779	0.029	3.771		OK
S37	1440 min Winter	1316	4.027	0.377	0.329		Surcharged
S43	1440 min Winter	1269	4.027	0.027	0.300		OK
S48 (D)	180 min Summer	102	5.155	0.005	0.158		OK
S38	1440 min Winter	1282	4.027	0.427	0.358		Surcharged
S47 (D)	180 min Summer	102	5.005	0.005	0.159		OK
S39	1440 min Winter	1257	4.027	0.507	0.128		Surcharged
YG143	-	0	5.150	0.000	0.000		OK
RWP143A	-	0	5.300	0.000	0.000		OK
PS61	-	0	5.000	0.000	0.000		OK
YG142	-	0	5.090	0.000	0.000		OK
PS60	-	0	4.850	0.000	0.000		OK
RWP143C	-	0	5.300	0.000	0.000		OK
RE143A	-	0	5.000	0.000	0.000		OK
PS59	-	0	4.700	0.000	0.000		OK
S45	1440 min Winter	1309	4.026	0.076	0.072		OK
S27	1440 min Winter	1251	4.027	0.277	0.118		OK
S28	1440 min Winter	1251	4.027	0.327	0.068		Surcharged
S29	1440 min Winter	1276	4.027	0.387	0.328		Surcharged
RWP137B	-	0	5.000	0.000	0.000		OK
YG137	-	0	4.801	0.000	0.000		OK
PS65	-	0	4.650	0.000	0.000		OK
YG141	-	0	4.980	0.000	0.000		OK
RWP141A	-	0	5.200	0.000	0.000		OK
PS62	-	0	4.900	0.000	0.000		OK
PS63	-	0	4.500	0.000	0.000		OK
RWP141C	-	0	5.200	0.000	0.000		OK
RE141A	-	0	5.100	0.000	0.000		OK
RWP137C	-	0	5.000	0.000	0.000		OK
RE137A	-	0	4.800	0.000	0.000		OK
YG139	-	0	4.900	0.000	0.000		OK
PS72	-	0	4.300	0.000	0.000		OK
PS64	-	0	4.200	0.000	0.000		OK
S30	1440 min Winter	1220	4.027	0.427	0.080		Surcharged
RWP136A	-	0	4.950	0.000	0.000		OK
RE136A	-	0	4.900	0.000	0.000		OK
PS67	-	0	4.625	0.000	0.000		OK
PS68	-	0	4.475	0.000	0.000		OK
RWP136F	-	0	5.000	0.000	0.000		OK
RE136B	-	0	4.800	0.000	0.000		OK
PS70	-	0	4.400	0.000	0.000		OK
S44	1440 min Winter	1286	4.026	0.316	0.169		Surcharged

Manholes

Manhole	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
S31	1440 min Winter	1249	4.027	0.522	0.099		Surcharged
S32	1440 min Winter	1245	4.027	0.562	0.517		Surcharged
S33	1440 min Winter	1285	3.420	0.020	0.573		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 Summer	8	S40	S34	0.047	1.472	8.893	0.097	OK
1.001	1440 min Winter	1334	S34	S35	0.178	0.338	1.110	0.018	OK
1.002	1440 min Winter	1280	S35	S36	0.276	0.264	2.082	0.031	OK
2.000	15 min Winter	0	RWP130A	RE130B	0.000	0.000	0.000	0.000	OK
2.001	15 min Winter	0	RE130B	PS76	0.000	0.000	0.000	0.000	OK
3.000	15 min Winter	0	YG130	PS76	0.000	0.000	0.000	0.000	OK
2.002	15 min Winter	0	PS76	PS73	0.000	0.000	0.000	0.000	OK
4.000	15 min Winter	0	RWP130B	RE130A	0.000	0.000	0.000	0.000	OK
4.001	15 min Winter	0	RE130A	PS74	0.000	0.000	0.000	0.000	OK
4.002	15 min Winter	0	PS74	PS73	0.000	0.000	0.000	0.000	OK
2.003	360 min Summer	300	PS73	S36	0.050	0.000	0.000	0.000	OK
5.000	1440 min Winter	2198	S41	S36	0.138	0.191	1.276	0.086	OK
1.003	480 min Summer	323	S36	S37	0.300	0.271	3.220	0.050	Surcharged
6.000	15 min Winter	0	RWP1-4A	PS90	0.000	0.000	0.000	0.000	OK
6.001	15 min Winter	0	PS90	PS91	0.000	0.000	0.000	0.000	OK
6.002	15 min Winter	0	PS91	PS89	0.000	0.000	0.000	0.000	OK
7.000	15 min Summer	8	S42 (D)	PS89	0.032	1.355	3.771	0.117	OK
6.003	180 min Summer	101	PS89	S37	0.085	1.114	1.904	0.041	OK
1.004	180 min Summer	101	S37	S38	0.300	0.353	8.234	0.116	Surcharged
8.000	1440 min Winter	1269	S43	S38	0.163	0.036	0.590	0.003	OK
9.000	180 min Summer	102	S48 (D)	S38	0.078	0.017	0.158	0.002	OK
1.005	180 min Summer	92	S38	S39	0.300	0.356	9.258	0.139	Surcharged
10.000	180 min Summer	102	S47 (D)	S39	0.078	0.017	0.159	0.002	OK
1.006	15 min Summer	10	S39	S32	0.300	0.343	18.266	0.248	Surcharged
11.000	15 min Winter	0	YG143	PS61	0.000	0.000	0.000	0.000	OK
12.000	15 min Winter	0	RWP143A	PS61	0.000	0.000	0.000	0.000	OK
11.001	15 min Winter	0	PS61	PS60	0.000	0.000	0.000	0.000	OK
13.000	15 min Winter	0	YG142	PS60	0.000	0.000	0.000	0.000	OK
11.002	15 min Winter	0	PS60	PS59	0.000	0.000	0.000	0.000	OK
14.000	15 min Winter	0	RWP143C	RE143A	0.000	0.000	0.000	0.000	OK
14.001	15 min Winter	0	RE143A	PS59	0.000	0.000	0.000	0.000	OK
11.003	480 min Summer	380	PS59	S28	0.050	0.000	0.000	0.000	OK
15.000	1440 min Winter	2187	S45	S27	0.102	0.261	1.074	0.067	OK
15.001	1440 min Winter	2188	S27	S28	0.289	0.140	1.066	0.017	OK
11.004	1440 min Summer	860	S28	S29	0.300	0.136	1.263	0.019	Surcharged
11.005	180 min Summer	99	S29	S30	0.300	0.249	3.211	0.046	Surcharged
16.000	15 min Winter	0	RWP137B	PS65	0.000	0.000	0.000	0.000	OK
17.000	15 min Winter	0	YG137	PS65	0.000	0.000	0.000	0.000	OK
16.001	15 min Winter	0	PS65	PS63	0.000	0.000	0.000	0.000	OK
18.000	15 min Winter	0	YG141	PS62	0.000	0.000	0.000	0.000	OK
19.000	15 min Winter	0	RWP141A	PS62	0.000	0.000	0.000	0.000	OK
18.001	15 min Winter	0	PS62	PS63	0.000	0.000	0.000	0.000	OK
16.002	15 min Winter	0	PS63	PS64	0.000	0.000	0.000	0.000	OK
20.000	15 min Winter	0	RWP141C	RE141A	0.000	0.000	0.000	0.000	OK
20.001	15 min Winter	0	RE141A	PS64	0.000	0.000	0.000	0.000	OK
21.000	15 min Winter	0	RWP137C	RE137A	0.000	0.000	0.000	0.000	OK
21.001	15 min Winter	0	RE137A	PS72	0.000	0.000	0.000	0.000	OK
22.000	15 min Winter	0	YG139	PS72	0.000	0.000	0.000	0.000	OK
21.002	15 min Winter	0	PS72	PS64	0.000	0.000	0.000	0.000	OK
16.003	120 min Summer	66	PS64	S30	0.050	0.000	0.000	0.000	OK
11.006	180 min Summer	93	S30	S31	0.300	0.307	4.886	0.074	Surcharged
23.000	15 min Winter	0	RWP136A	RE136A	0.000	0.000	0.000	0.000	OK
23.001	15 min Winter	0	RE136A	PS67	0.000	0.000	0.000	0.000	OK
23.002	15 min Winter	0	PS67	PS68	0.000	0.000	0.000	0.000	OK
23.003	15 min Winter	0	PS68	PS70	0.000	0.000	0.000	0.000	OK
24.000	15 min Winter	0	RWP136F	RE136B	0.000	0.000	0.000	0.000	OK
24.001	15 min Winter	0	RE136B	PS70	0.000	0.000	0.000	0.000	OK
23.004	15 min Winter	10	PS70	S31	0.050	0.000	0.000	0.000	OK

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
25.000	960 min Winter	3577	S44	S31	0.150	0.294	2.130	0.132	Surcharged
11.007	15 min Summer	10	S31	S32	0.300	0.250	3.463	0.052	Surcharged
1.007	1440 min Winter	1285	S32	S33	0.020	0.402	0.573	0.040	OK

Permeable Paving Storage

Permeable Paving	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
S42	240 min Summer	145	5.282	0.017	0.474		OK
S48	180 min Summer	101	5.169	0.008	0.159		OK
S47	180 min Summer	101	5.066	0.008	0.160		OK

Return Period Yrs: 10.0

Climate Change %: 40

Manholes

Manhole	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
S40	15 min Summer	9	4.820	0.145	44.328		OK
S34	15 min Summer	10	4.674	0.774	60.807		Surcharged
S35	15 min Summer	10	4.587	0.812	81.524		Surcharged
RWP130A	-	0	5.300	0.000	0.000		OK
RE130B	-	0	5.000	0.000	0.000		OK
YG130	-	0	4.950	0.000	0.000		OK
PS76	-	0	4.700	0.000	0.000		OK
RWP130B	-	0	5.300	0.000	0.000		OK
RE130A	-	0	5.000	0.000	0.000		OK
PS74	-	0	4.800	0.000	0.000		OK
PS73	-	0	4.500	0.000	0.000		OK
S41	1440 min Summer	1434	4.472	0.572	0.075		Surcharged
S36	15 min Summer	11	4.476	0.786	70.320		Surcharged
RWP1-4A	-	0	5.400	0.000	0.000		OK
PS90	-	0	5.150	0.000	0.000		OK
PS91	-	0	5.000	0.000	0.000		OK
S42 (D)	15 min Summer	8	5.335	0.085	22.812		OK
PS89	15 min Summer	9	4.819	0.069	18.303		OK
S37	1440 min Winter	1399	4.472	0.822	0.262		Surcharged
S43	1440 min Summer	1438	4.472	0.472	0.017		Surcharged
S48 (D)	30 min Summer	23	5.163	0.013	1.225		OK
S38	1440 min Summer	1437	4.472	0.872	0.614		Surcharged
S47 (D)	30 min Summer	23	5.013	0.013	1.235		OK
S39	1440 min Winter	1399	4.473	0.953	0.134		Surcharged
YG143	-	0	5.150	0.000	0.000		OK
RWP143A	-	0	5.300	0.000	0.000		OK
PS61	-	0	5.000	0.000	0.000		OK
YG142	-	0	5.090	0.000	0.000		OK
PS60	-	0	4.850	0.000	0.000		OK
RWP143C	-	0	5.300	0.000	0.000		OK
RE143A	-	0	5.000	0.000	0.000		OK
PS59	-	0	4.700	0.000	0.000		OK
S45	1440 min Summer	1440	4.472	0.522	0.008		Surcharged
S27	1440 min Summer	1440	4.473	0.723	0.077		Surcharged
S28	1440 min Summer	1435	4.473	0.773	0.100		Surcharged
S29	1440 min Summer	1439	4.472	0.832	0.284		Surcharged
RWP137B	-	0	5.000	0.000	0.000		OK
YG137	-	0	4.801	0.000	0.000		OK
PS65	-	0	4.650	0.000	0.000		OK
YG141	-	0	4.980	0.000	0.000		OK
RWP141A	-	0	5.200	0.000	0.000		OK
PS62	-	0	4.900	0.000	0.000		OK
PS63	-	0	4.500	0.000	0.000		OK
RWP141C	-	0	5.200	0.000	0.000		OK
RE141A	-	0	5.100	0.000	0.000		OK
RWP137C	-	0	5.000	0.000	0.000		OK
RE137A	-	0	4.800	0.000	0.000		OK
YG139	-	0	4.900	0.000	0.000		OK
PS72	1440 min Winter	1394	4.473	0.173	0.001		Surcharged
PS64	1440 min Winter	1404	4.472	0.272	0.068		Surcharged
S30	1440 min Summer	1437	4.472	0.872	0.138		Surcharged
RWP136A	-	0	4.950	0.000	0.000		OK
RE136A	-	0	4.900	0.000	0.000		OK
PS67	-	0	4.625	0.000	0.000		OK
PS68	-	0	4.475	0.000	0.000		OK
RWP136F	-	0	5.000	0.000	0.000		OK
RE136B	-	0	4.800	0.000	0.000		OK
PS70	1440 min Summer	1440	4.474	0.074	0.081		OK
S44	1440 min Summer	1436	4.472	0.762	0.064		Surcharged
S31	1440 min Summer	1437	4.473	0.968	0.123		Surcharged
S32	1440 min Winter	1429	4.473	1.008	1.803		Surcharged
S33	1440 min Summer	1439	3.423	0.023	0.768		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 Summer	9	S40	S34	0.185	1.822	44.529	0.488	OK
1.001	15 min Winter	9	S34	S35	0.300	0.911	60.624	0.956	Surcharged
1.002	15 min Winter	9	S35	S36	0.300	1.103	77.970	1.164	Surcharged
2.000	15 min Summer	0	RWP130A	RE130B	0.000	0.000	0.000	0.000	OK
2.001	15 min Summer	0	RE130B	PS76	0.000	0.000	0.000	0.000	OK
3.000	15 min Summer	0	YG130	PS76	0.000	0.000	0.000	0.000	OK
2.002	15 min Summer	0	PS76	PS73	0.000	0.000	0.000	0.000	OK
4.000	15 min Summer	0	RWP130B	RE130A	0.000	0.000	0.000	0.000	OK
4.001	15 min Summer	0	RE130A	PS74	0.000	0.000	0.000	0.000	OK
4.002	15 min Summer	0	PS74	PS73	0.000	0.000	0.000	0.000	OK
2.003	15 min Summer	6	PS73	S36	0.050	0.000	0.000	0.000	OK
5.000	120 min Summer	135	S41	S36	0.150	0.062	1.092	0.074	Surcharged
1.003	15 min Winter	9	S36	S37	0.300	0.787	51.343	0.799	Surcharged
6.000	15 min Summer	0	RWP1-4A	PS90	0.000	0.000	0.000	0.000	OK
6.001	15 min Summer	0	PS90	PS91	0.000	0.000	0.000	0.000	OK
6.002	15 min Summer	9	PS91	PS89	0.010	0.000	0.000	0.000	OK
7.000	15 min Summer	9	S42 (D)	PS89	0.076	2.114	18.796	0.581	OK
6.003	15 min Summer	9	PS89	S37	0.110	1.736	18.631	0.400	OK
1.004	15 min Winter	9	S37	S38	0.300	0.906	64.050	0.906	Surcharged
8.000	15 min Winter	15	S43	S38	0.300	0.520	36.781	0.170	Surcharged
9.000	30 min Summer	23	S48 (D)	S38	0.082	0.124	1.224	0.017	OK
1.005	15 min Winter	13	S38	S39	0.300	0.654	46.213	0.696	Surcharged
10.000	30 min Summer	23	S47 (D)	S39	0.082	0.126	1.235	0.016	OK
1.006	15 min Winter	13	S39	S32	0.300	0.761	53.817	0.730	Surcharged
11.000	15 min Summer	0	YG143	PS61	0.000	0.000	0.000	0.000	OK
12.000	15 min Summer	0	RWP143A	PS61	0.000	0.000	0.000	0.000	OK
11.001	15 min Summer	0	PS61	PS60	0.000	0.000	0.000	0.000	OK
13.000	15 min Summer	0	YG142	PS60	0.000	0.000	0.000	0.000	OK
11.002	15 min Summer	0	PS60	PS59	0.000	0.000	0.000	0.000	OK
14.000	15 min Summer	0	RWP143C	RE143A	0.000	0.000	0.000	0.000	OK
14.001	15 min Summer	0	RE143A	PS59	0.000	0.000	0.000	0.000	OK
11.003	15 min Summer	6	PS59	S28	0.050	0.000	0.000	0.000	OK
15.000	15 min Winter	22	S45	S27	0.150	0.744	13.143	0.821	Surcharged
15.001	15 min Winter	22	S27	S28	0.300	0.497	13.356	0.213	Surcharged
11.004	15 min Winter	22	S28	S29	0.300	0.506	13.596	0.207	Surcharged
11.005	15 min Winter	8	S29	S30	0.300	0.627	18.603	0.268	Surcharged
16.000	15 min Summer	0	RWP137B	PS65	0.000	0.000	0.000	0.000	OK
17.000	15 min Summer	0	YG137	PS65	0.000	0.000	0.000	0.000	OK
16.001	15 min Summer	0	PS65	PS63	0.000	0.000	0.000	0.000	OK
18.000	15 min Summer	0	YG141	PS62	0.000	0.000	0.000	0.000	OK
19.000	15 min Summer	0	RWP141A	PS62	0.000	0.000	0.000	0.000	OK
18.001	15 min Summer	0	PS62	PS63	0.000	0.000	0.000	0.000	OK
16.002	15 min Summer	9	PS63	PS64	0.050	0.000	0.000	0.000	OK
20.000	15 min Summer	0	RWP141C	RE141A	0.000	0.000	0.000	0.000	OK
20.001	15 min Summer	9	RE141A	PS64	0.050	0.000	0.000	0.000	OK
21.000	15 min Summer	0	RWP137C	RE137A	0.000	0.000	0.000	0.000	OK
21.001	480 min Summer	473	RE137A	PS72	0.050	0.000	0.000	0.000	OK
22.000	480 min Summer	473	YG139	PS72	0.050	0.000	0.000	0.000	OK
21.002	1440 min Summer	3124	PS72	PS64	0.100	0.038	0.222	0.026	Surcharged
16.003	15 min Winter	15	PS64	S30	0.100	0.345	2.015	0.139	Surcharged
11.006	15 min Winter	8	S30	S31	0.300	0.680	33.452	0.504	Surcharged
23.000	15 min Summer	0	RWP136A	RE136A	0.000	0.000	0.000	0.000	OK
23.001	15 min Summer	0	RE136A	PS67	0.000	0.000	0.000	0.000	OK
23.002	15 min Summer	0	PS67	PS68	0.000	0.000	0.000	0.000	OK
23.003	1440 min Summer	1439	PS68	PS70	0.037	0.000	0.000	0.000	OK
24.000	15 min Summer	0	RWP136F	RE136B	0.000	0.000	0.000	0.000	OK
24.001	1440 min Summer	1439	RE136B	PS70	0.037	0.000	0.000	0.000	OK
23.004	1440 min Summer	1440	PS70	S31	0.087	0.055	0.371	0.018	OK
25.000	60 min Summer	46	S44	S31	0.150	0.357	6.313	0.392	Surcharged
11.007	30 min Winter	32	S31	S32	0.300	0.283	15.306	0.231	Surcharged
1.007	1440 min Summer	1439	S32	S33	0.023	0.439	0.768	0.053	OK

Permeable Paving Storage

Permeable Paving	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
S42	60 min Summer	42	5.343	0.077	2.994		OK
S48	30 min Summer	23	5.192	0.032	1.253		OK
S47	30 min Summer	23	5.090	0.031	1.257		OK

Return Period Yrs: 30.0

Climate Change %: 40

Manholes

Manhole	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
S40	15 min Summer	10	5.187	0.512	47.809		Surcharged
S34	15 min Summer	10	4.992	1.092	78.781		Surcharged
S35	15 min Summer	10	4.848	1.073	104.743		Surcharged
RWP130A	-	0	5.300	0.000	0.000		OK
RE130B	-	0	5.000	0.000	0.000		OK
YG130	-	0	4.950	0.000	0.000		OK
PS76	-	0	4.700	0.000	0.000		OK
RWP130B	-	0	5.300	0.000	0.000		OK
RE130A	-	0	5.000	0.000	0.000		OK
PS74	-	0	4.800	0.000	0.000		OK
PS73	15 min Summer	11	4.675	0.175	0.000		Surcharged
S41	1440 min Summer	1436	4.620	0.720	0.000		Surcharged
S36	15 min Summer	11	4.670	0.980	94.049		Surcharged
RWP1-4A	-	0	5.400	0.000	0.000		OK
PS90	-	0	5.150	0.000	0.000		OK
PS91	-	0	5.000	0.000	0.000		OK
S42 (D)	15 min Summer	8	5.348	0.098	29.582		OK
PS89	15 min Summer	10	4.851	0.101	20.358		OK
S37	15 min Summer	11	4.643	0.993	73.835		Surcharged
S43	1440 min Summer	1438	4.620	0.620	0.043		Surcharged
S48 (D)	30 min Summer	22	5.165	0.015	1.650		OK
S38	1440 min Summer	1438	4.620	1.020	0.706		Surcharged
S47 (D)	30 min Summer	22	5.015	0.015	1.669		OK
S39	1440 min Summer	1443	4.621	1.101	0.494		Surcharged
YG143	-	0	5.150	0.000	0.000		OK
RWP143A	-	0	5.300	0.000	0.000		OK
PS61	-	0	5.000	0.000	0.000		OK
YG142	-	0	5.090	0.000	0.000		OK
PS60	-	0	4.850	0.000	0.000		OK
RWP143C	-	0	5.300	0.000	0.000		OK
RE143A	-	0	5.000	0.000	0.000		OK
PS59	-	0	4.700	0.000	0.000		OK
S45	1440 min Summer	1440	4.620	0.670	0.135		Surcharged
S27	1440 min Summer	1447	4.620	0.870	0.115		Surcharged
S28	1440 min Summer	1433	4.620	0.920	0.182		Surcharged
S29	1440 min Summer	1431	4.620	0.980	0.193		Surcharged
RWP137B	-	0	5.000	0.000	0.000		OK
YG137	-	0	4.801	0.000	0.000		OK
PS65	-	0	4.650	0.000	0.000		OK
YG141	-	0	4.980	0.000	0.000		OK
RWP141A	-	0	5.200	0.000	0.000		OK
PS62	-	0	4.900	0.000	0.000		OK
PS63	1440 min Summer	1434	4.620	0.120	0.000		Surcharged
RWP141C	-	0	5.200	0.000	0.000		OK
RE141A	-	0	5.100	0.000	0.000		OK
RWP137C	-	0	5.000	0.000	0.000		OK
RE137A	-	0	4.800	0.000	0.000		OK
YG139	-	0	4.900	0.000	0.000		OK
PS72	1440 min Summer	1439	4.620	0.320	0.000		Surcharged
PS64	1440 min Summer	1436	4.620	0.420	0.052		Surcharged
S30	1440 min Summer	1431	4.620	1.020	0.502		Surcharged
RWP136A	-	0	4.950	0.000	0.000		OK
RE136A	-	0	4.900	0.000	0.000		OK
PS67	-	0	4.625	0.000	0.000		OK
PS68	1440 min Summer	1432	4.621	0.146	0.076		Surcharged
RWP136F	-	0	5.000	0.000	0.000		OK
RE136B	-	0	4.800	0.000	0.000		OK
PS70	1440 min Summer	1432	4.621	0.221	0.008		Surcharged
S44	1440 min Summer	1440	4.620	0.910	0.107		Surcharged
S31	1440 min Winter	1415	4.621	1.116	0.278		Surcharged
S32	1440 min Summer	1428	4.621	1.156	0.591		Surcharged
S33	1440 min Summer	1442	3.424	0.024	0.822		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	S40	S34	0.225	1.830	49.340	0.540	OK
1.001	15 min Winter	9	S34	S35	0.300	1.050	74.215	1.171	Surcharged
1.002	15 min Winter	9	S35	S36	0.300	1.354	95.737	1.429	Surcharged
2.000	15 min Summer	0	RWP130A	RE130B	0.000	0.000	0.000	0.000	OK
2.001	15 min Summer	0	RE130B	PS76	0.000	0.000	0.000	0.000	OK
3.000	15 min Summer	0	YG130	PS76	0.000	0.000	0.000	0.000	OK
2.002	15 min Summer	10	PS76	PS73	0.050	0.000	0.000	0.000	OK
4.000	15 min Summer	0	RWP130B	RE130A	0.000	0.000	0.000	0.000	OK
4.001	15 min Summer	0	RE130A	PS74	0.000	0.000	0.000	0.000	OK
4.002	15 min Summer	10	PS74	PS73	0.050	0.000	0.000	0.000	OK
2.003	15 min Winter	13	PS73	S36	0.100	0.216	1.243	0.067	Surcharged
5.000	60 min Summer	97	S41	S36	0.150	0.059	1.041	0.070	Surcharged
1.003	15 min Winter	9	S36	S37	0.300	0.875	61.845	0.962	Surcharged
6.000	15 min Summer	0	RWP1-4A	PS90	0.000	0.000	0.000	0.000	OK
6.001	15 min Summer	0	PS90	PS91	0.000	0.000	0.000	0.000	OK
6.002	15 min Summer	10	PS91	PS89	0.025	0.000	0.000	0.000	OK
7.000	15 min Summer	9	S42 (D)	PS89	0.098	2.194	24.412	0.754	OK
6.003	15 min Summer	10	PS89	S37	0.125	1.872	23.707	0.509	OK
1.004	15 min Winter	9	S37	S38	0.300	1.122	79.315	1.122	Surcharged
8.000	15 min Winter	15	S43	S38	0.300	0.718	50.736	0.235	Surcharged
9.000	30 min Summer	22	S48 (D)	S38	0.083	0.165	1.648	0.022	OK
1.005	15 min Winter	13	S38	S39	0.300	0.761	53.760	0.810	Surcharged
10.000	30 min Summer	22	S47 (D)	S39	0.083	0.167	1.668	0.022	OK
1.006	15 min Winter	13	S39	S32	0.300	0.883	62.431	0.846	Surcharged
11.000	15 min Summer	0	YG143	PS61	0.000	0.000	0.000	0.000	OK
12.000	15 min Summer	0	RWP143A	PS61	0.000	0.000	0.000	0.000	OK
11.001	15 min Summer	0	PS61	PS60	0.000	0.000	0.000	0.000	OK
13.000	15 min Summer	0	YG142	PS60	0.000	0.000	0.000	0.000	OK
11.002	15 min Summer	0	PS60	PS59	0.000	0.000	0.000	0.000	OK
14.000	15 min Summer	0	RWP143C	RE143A	0.000	0.000	0.000	0.000	OK
14.001	15 min Summer	0	RE143A	PS59	0.000	0.000	0.000	0.000	OK
11.003	15 min Summer	6	PS59	S28	0.050	0.000	0.000	0.000	OK
15.000	15 min Winter	24	S45	S27	0.150	0.663	11.712	0.731	Surcharged
15.001	15 min Winter	24	S27	S28	0.300	0.534	11.764	0.188	Surcharged
11.004	15 min Winter	23	S28	S29	0.300	0.507	12.416	0.189	Surcharged
11.005	15 min Winter	8	S29	S30	0.300	0.635	23.767	0.343	Surcharged
16.000	15 min Summer	0	RWP137B	PS65	0.000	0.000	0.000	0.000	OK
17.000	15 min Summer	0	YG137	PS65	0.000	0.000	0.000	0.000	OK
16.001	1440 min Summer	1260	PS65	PS63	0.050	0.000	0.000	0.000	OK
18.000	15 min Summer	0	YG141	PS62	0.000	0.000	0.000	0.000	OK
19.000	15 min Summer	0	RWP141A	PS62	0.000	0.000	0.000	0.000	OK
18.001	1440 min Summer	1260	PS62	PS63	0.050	0.000	0.000	0.000	OK
16.002	1440 min Winter	1461	PS63	PS64	0.100	0.021	0.167	0.019	Surcharged
20.000	15 min Summer	0	RWP141C	RE141A	0.000	0.000	0.000	0.000	OK
20.001	15 min Summer	8	RE141A	PS64	0.050	0.000	0.000	0.000	OK
21.000	15 min Summer	0	RWP137C	RE137A	0.000	0.000	0.000	0.000	OK
21.001	15 min Summer	9	RE137A	PS72	0.050	0.000	0.000	0.000	OK
22.000	15 min Summer	9	YG139	PS72	0.050	0.000	0.000	0.000	OK
21.002	15 min Winter	16	PS72	PS64	0.100	0.120	0.776	0.092	Surcharged
16.003	15 min Winter	16	PS64	S30	0.100	0.324	2.371	0.163	Surcharged
11.006	15 min Winter	8	S30	S31	0.300	0.717	43.326	0.652	Surcharged
23.000	15 min Summer	0	RWP136A	RE136A	0.000	0.000	0.000	0.000	OK
23.001	15 min Summer	0	RE136A	PS67	0.000	0.000	0.000	0.000	OK
23.002	960 min Summer	876	PS67	PS68	0.050	0.000	0.000	0.000	OK
23.003	1440 min Summer	1116	PS68	PS70	0.100	0.040	0.245	0.032	Surcharged
24.000	15 min Summer	0	RWP136F	RE136B	0.000	0.000	0.000	0.000	OK
24.001	15 min Summer	10	RE136B	PS70	0.050	0.000	0.000	0.000	OK
23.004	30 min Summer	21	PS70	S31	0.100	0.099	0.756	0.037	Surcharged
25.000	30 min Summer	34	S44	S31	0.150	0.584	10.323	0.641	Surcharged
11.007	15 min Winter	24	S31	S32	0.300	0.307	18.427	0.278	Surcharged
1.007	1440 min Summer	1442	S32	S33	0.024	0.449	0.822	0.057	OK

Permeable Paving Storage

Permeable Paving	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
S42	60 min Summer	43	5.362	0.097	5.717		OK
S48	30 min Summer	22	5.199	0.039	1.720		OK
S47	30 min Summer	22	5.097	0.038	1.726		OK

Return Period Yrs: 100.0

Climate Change %: 45

Manholes

Manhole	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
S40	15 min Summer	10	5.774	1.099	61.937		Surcharged
S34	15 min Summer	10	5.446	1.546	101.744		Surcharged
S35	15 min Summer	10	5.204	1.429	134.834		Surcharged
RWP130A	-	0	5.300	0.000	0.000		OK
RE130B	1440 min Summer	1437	5.043	0.043	0.031		OK
YG130	1440 min Summer	1438	5.043	0.093	0.001		OK
PS76	1440 min Summer	1438	5.043	0.343	0.020		Surcharged
RWP130B	-	0	5.300	0.000	0.000		OK
RE130A	1440 min Summer	1437	5.043	0.043	0.000		OK
PS74	1440 min Summer	1437	5.043	0.243	0.015		Surcharged
PS73	1440 min Summer	1437	5.043	0.543	0.029		Surcharged
S41	1440 min Summer	1442	5.043	1.143	0.022		Surcharged
S36	1440 min Summer	1438	5.043	1.353	0.356		Surcharged
RWP1-4A	-	0	5.400	0.000	0.000		OK
PS90	-	0	5.150	0.000	0.000		OK
PS91	15 min Summer	10	5.067	0.067	1.351		OK
S42 (D)	15 min Summer	9	5.377	0.127	36.718		OK
PS89	15 min Summer	10	5.067	0.317	25.155		Surcharged
S37	1440 min Summer	1437	5.043	1.393	0.646		Surcharged
S43	1440 min Summer	1438	5.043	1.043	0.035		Surcharged
S48 (D)	30 min Summer	22	5.168	0.018	2.301		OK
S38	1440 min Summer	1437	5.043	1.443	0.728		Surcharged
S47 (D)	1440 min Summer	1438	5.044	0.044	0.038		OK
S39	1440 min Summer	1438	5.043	1.523	0.724		Surcharged
YG143	-	0	5.150	0.000	0.000		OK
RWP143A	-	0	5.300	0.000	0.000		OK
PS61	1440 min Summer	1442	5.043	0.043	0.000		OK
YG142	-	0	5.090	0.000	0.000		OK
PS60	1440 min Summer	1438	5.043	0.193	0.000		Surcharged
RWP143C	-	0	5.300	0.000	0.000		OK
RE143A	1440 min Summer	1439	5.043	0.043	0.011		OK
PS59	1440 min Summer	1439	5.043	0.343	0.000		Surcharged
S45	1440 min Summer	1440	5.043	1.093	0.017		Surcharged
S27	1440 min Summer	1440	5.043	1.293	0.034		Surcharged
S28	1440 min Summer	1438	5.043	1.343	0.133		Surcharged
S29	1440 min Summer	1438	5.043	1.403	0.208		Surcharged
RWP137B	1440 min Summer	1435	5.043	0.043	0.037		OK
YG137	1440 min Summer	1437	5.043	0.242	0.082		Surcharged
PS65	1440 min Summer	1437	5.043	0.393	0.082		Surcharged
YG141	1440 min Summer	1438	5.043	0.063	0.014		OK
RWP141A	-	0	5.200	0.000	0.000		OK
PS62	1440 min Summer	1441	5.043	0.143	0.030		Surcharged
PS63	1440 min Summer	1441	5.044	0.544	0.003		Surcharged
RWP141C	-	0	5.200	0.000	0.000		OK
RE141A	-	0	5.100	0.000	0.000		OK
RWP137C	1440 min Summer	1440	5.043	0.043	0.011		OK
RE137A	1440 min Summer	1440	5.043	0.243	0.030		Surcharged
YG139	1440 min Summer	1442	5.043	0.143	0.043		Surcharged
PS72	1440 min Summer	1437	5.043	0.743	0.029		Surcharged
PS64	1440 min Summer	1437	5.043	0.843	0.020		Surcharged
S30	1440 min Summer	1438	5.043	1.443	0.286		Surcharged
RWP136A	1440 min Summer	1440	5.043	0.093	0.150		OK
RE136A	1440 min Summer	1440	5.043	0.143	0.017		Surcharged
PS67	1440 min Summer	1439	5.043	0.418	0.001		Surcharged
PS68	1440 min Summer	1439	5.043	0.568	0.001		Surcharged
RWP136F	1440 min Summer	1439	5.044	0.044	0.014		OK
RE136B	1440 min Summer	1439	5.043	0.243	0.026		Surcharged
PS70	1440 min Summer	1440	5.043	0.643	0.065		Surcharged
S44	1440 min Summer	1440	5.043	1.333	0.000		Surcharged
S31	1440 min Summer	1440	5.043	1.538	0.161		Surcharged
S32	1440 min Summer	1440	5.043	1.578	0.883		Surcharged
S33	1440 min Summer	1437	3.426	0.026	0.960		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	S40	S34	0.225	1.808	62.211	0.681	OK
1.001	15 min Winter	9	S34	S35	0.300	1.331	94.079	1.484	Surcharged
1.002	30 min Summer	17	S35	S36	0.300	1.735	122.654	1.831	Surcharged
2.000	1440 min Summer	1437	RWP130A	RE130B	0.022	0.000	0.000	0.000	OK
2.001	1440 min Summer	1568	RE130B	PS76	0.072	0.011	0.051	0.005	OK
3.000	1440 min Summer	1716	YG130	PS76	0.097	0.013	0.060	0.005	OK
2.002	15 min Winter	13	PS76	PS73	0.100	0.224	1.435	0.215	Surcharged
4.000	1440 min Summer	1437	RWP130B	RE130A	0.022	0.000	0.000	0.000	OK
4.001	1440 min Summer	1504	RE130A	PS74	0.072	0.012	0.055	0.006	OK
4.002	1440 min Winter	1163	PS74	PS73	0.100	0.018	0.138	0.015	Surcharged
2.003	15 min Winter	12	PS73	S36	0.100	0.354	2.779	0.149	Surcharged
5.000	60 min Summer	106	S41	S36	0.150	0.062	1.101	0.074	Surcharged
1.003	15 min Winter	9	S36	S37	0.300	1.107	78.219	1.217	Surcharged
6.000	15 min Summer	0	RWP1-4A	PS90	0.000	0.000	0.000	0.000	OK
6.001	15 min Summer	10	PS90	PS91	0.034	0.000	0.000	0.000	OK
6.002	15 min Summer	11	PS91	PS89	0.084	0.220	1.474	0.211	OK
7.000	15 min Summer	9	S42 (D)	PS89	0.139	2.231	31.270	0.966	OK
6.003	15 min Winter	9	PS89	S37	0.150	1.879	27.564	0.592	Surcharged
1.004	15 min Winter	10	S37	S38	0.300	1.392	98.416	1.392	Surcharged
8.000	15 min Winter	16	S43	S38	0.300	0.955	67.486	0.313	Surcharged
9.000	30 min Summer	22	S48 (D)	S38	0.084	0.226	2.304	0.031	OK
1.005	15 min Winter	15	S38	S39	0.300	0.825	58.288	0.878	Surcharged
10.000	1440 min Summer	1438	S47 (D)	S39	0.097	0.029	0.274	0.004	OK
1.006	15 min Winter	14	S39	S32	0.300	0.948	66.976	0.908	Surcharged
11.000	1440 min Summer	1442	YG143	PS61	0.022	0.000	0.000	0.000	OK
12.000	1440 min Summer	1442	RWP143A	PS61	0.022	0.000	0.000	0.000	OK
11.001	1440 min Summer	1501	PS61	PS60	0.072	0.012	0.063	0.009	OK
13.000	1440 min Winter	1210	YG142	PS60	0.050	0.000	0.000	0.000	OK
11.002	1440 min Summer	1246	PS60	PS59	0.100	0.041	0.289	0.048	Surcharged
14.000	1440 min Summer	1439	RWP143C	RE143A	0.022	0.000	0.000	0.000	OK
14.001	1440 min Summer	1439	RE143A	PS59	0.072	0.012	0.066	0.006	OK
11.003	1440 min Winter	1030	PS59	S28	0.100	0.063	0.409	0.021	Surcharged
15.000	15 min Winter	27	S45	S27	0.150	0.573	10.128	0.632	Surcharged
15.001	15 min Winter	6	S27	S28	0.300	0.512	10.324	0.165	Surcharged
11.004	15 min Winter	27	S28	S29	0.300	0.513	10.625	0.162	Surcharged
11.005	15 min Winter	8	S29	S30	0.300	0.679	29.189	0.421	Surcharged
16.000	1440 min Summer	1436	RWP137B	PS65	0.072	0.019	0.095	0.006	OK
17.000	1440 min Summer	1874	YG137	PS65	0.100	0.092	0.719	0.032	Surcharged
16.001	1440 min Winter	998	PS65	PS63	0.100	0.030	0.229	0.038	Surcharged
18.000	1440 min Summer	1471	YG141	PS62	0.082	0.013	0.083	0.007	OK
19.000	1440 min Winter	1295	RWP141A	PS62	0.050	0.000	0.000	0.000	OK
18.001	1440 min Summer	1685	PS62	PS63	0.100	0.014	0.090	0.009	Surcharged
16.002	15 min Winter	16	PS63	PS64	0.100	0.229	1.321	0.148	Surcharged
20.000	15 min Summer	0	RWP141C	RE141A	0.000	0.000	0.000	0.000	OK
20.001	15 min Summer	7	RE141A	PS64	0.050	0.000	0.000	0.000	OK
21.000	1440 min Summer	1519	RWP137C	RE137A	0.072	0.014	0.071	0.004	OK
21.001	1440 min Winter	1880	RE137A	PS72	0.100	0.021	0.127	0.008	Surcharged
22.000	1440 min Summer	1908	YG139	PS72	0.100	0.032	0.142	0.004	Surcharged
21.002	15 min Winter	17	PS72	PS64	0.100	0.132	1.037	0.124	Surcharged
16.003	15 min Winter	16	PS64	S30	0.100	0.448	3.518	0.242	Surcharged
11.006	15 min Winter	8	S30	S31	0.300	0.722	51.029	0.768	Surcharged
23.000	1440 min Summer	1507	RWP136A	RE136A	0.097	0.025	0.118	0.010	OK
23.001	1440 min Summer	1337	RE136A	PS67	0.100	0.050	0.234	0.026	Surcharged
23.002	1440 min Summer	3052	PS67	PS68	0.100	0.042	0.222	0.035	Surcharged
23.003	30 min Summer	20	PS68	PS70	0.100	0.145	1.141	0.152	Surcharged
24.000	1440 min Summer	1517	RWP136F	RE136B	0.072	0.013	0.069	0.005	OK
24.001	1440 min Summer	1192	RE136B	PS70	0.100	0.028	0.219	0.014	Surcharged
23.004	15 min Winter	13	PS70	S31	0.100	0.215	1.692	0.083	Surcharged
25.000	30 min Summer	37	S44	S31	0.150	0.730	12.905	0.802	Surcharged
11.007	15 min Winter	26	S31	S32	0.300	0.346	19.717	0.297	Surcharged
1.007	1440 min Summer	1437	S32	S33	0.026	0.470	0.960	0.066	OK

Permeable Paving Storage

Permeable Paving	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
S42	60 min Summer	41	5.388	0.122	8.183		OK
S48	30 min Summer	21	5.209	0.048	2.480		OK
S47	30 min Summer	21	5.106	0.048	2.489		OK