

Dixon Hurst Kemp		Page 1
Victoria Court 22 St Pancras West Sussex PO19 7GD	34 Hurst Road. Hassocks Surface Water Drainage Design Simulation Rev03	
Date Nov 25	Designed by JS	
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STORM SEWER DESIGN by the Modified Rational Method

Design Criteria for Storm

Pipe Sizes STANDARD Manhole Sizes STANDARD

FSR Rainfall Model - England and Wales

Return Period (years)	2	Add Flow / Climate Change (%)	45
M5-60 (mm)	20.000	Minimum Backdrop Height (m)	0.000
Ratio R	0.343	Maximum Backdrop Height (m)	0.000
Maximum Rainfall (mm/hr)	50	Min Design Depth for Optimisation (m)	0.000
Foul Sewage (l/s/ha)	0.00	Min Vel for Auto Design only (m/s)	0.76
Volumetric Runoff Coeff.	1.000	Min Slope for Optimisation (1:X)	500
PIMP (%)	100		

Designed with Level Soffits

Time Area Diagram for Storm

Time (mins)	Area (ha)	Time (mins)	Area (ha)
0-4	0.014	4-8	0.002

Total Area Contributing (ha) = 0.016

Total Pipe Volume (m³) = 0.381

Network Design Table for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)
1.000	16.200	1.906	8.5	0.004	5.00	0.0	0.600	o	110
1.001	5.000	0.050	100.0	0.004	0.00	0.0	0.600	o	110
2.000	3.600	0.379	9.5	0.004	5.00	0.0	0.600	o	110
2.001	9.200	1.533	6.0	0.004	0.00	0.0	0.600	o	110
1.002	3.600	0.045	80.0	0.000	0.00	0.0	0.600	o	110
1.003	1.000	0.010	100.0	0.000	0.00	0.0	0.600	o	110
1.004	1.500	0.015	100.0	0.000	0.00	0.0	0.600	o	110

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
1.000	50.00	5.10	65.400	0.004	0.0	0.0	0.3	2.84	27.0	1.0
1.001	50.00	5.20	63.494	0.008	0.0	0.0	0.6	0.82	7.8	2.1
2.000	50.00	5.02	65.400	0.004	0.0	0.0	0.3	2.69	25.5	1.0
2.001	50.00	5.07	65.000	0.008	0.0	0.0	0.6	3.38	32.2	2.1
1.002	50.00	5.26	63.444	0.016	0.0	0.0	1.3	0.92	8.7	4.2
1.003	50.00	5.28	63.250	0.016	0.0	0.0	1.3	0.82	7.8	4.2
1.004	50.00	5.31	63.100	0.016	0.0	0.0	1.3	0.82	7.8	4.2

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Manhole Schedules for Storm

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam.,L*W (mm)	PN	Pipe Out Invert Level (m)	Diameter (mm)	PN	Pipes In Invert Level (m)	Diameter (mm)	Backd (mm)
RE1	66.000	0.600	Open Manhole	110	1.000	65.400	110				
S1	64.100	0.606	Open Manhole	600	1.001	63.494	110	1.000	63.494	110	
RE2	66.000	0.600	Open Manhole	110	2.000	65.400	110				
S2	65.650	0.650	Open Manhole	600	2.001	65.000	110	2.000	65.021	110	
S3	64.100	0.656	Open Manhole	600	1.002	63.444	110	1.001	63.444	110	
								2.001	63.467	110	
S4	64.000	0.750	Open Manhole	600	1.003	63.250	110	1.002	63.399	110	
RAIN GARDEN	63.700	0.600	Open Manhole	600	1.004	63.100	110	1.003	63.240	110	
Dummy	63.800	0.715	Open Manhole	600		OUTFALL		1.004	63.085	110	

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PIPELINE SCHEDULES for Storm

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
1.000	o	110	RE1	66.000	65.400	0.490	Open Manhole	110
1.001	o	110	S1	64.100	63.494	0.496	Open Manhole	600
2.000	o	110	RE2	66.000	65.400	0.490	Open Manhole	110
2.001	o	110	S2	65.650	65.000	0.540	Open Manhole	600
1.002	o	110	S3	64.100	63.444	0.546	Open Manhole	600
1.003	o	110	S4	64.000	63.250	0.640	Open Manhole	600
1.004	o	110	RAIN GARDEN	63.700	63.100	0.490	Open Manhole	600

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
1.000	16.200	8.5	S1	64.100	63.494	0.496	Open Manhole	600
1.001	5.000	100.0	S3	64.100	63.444	0.546	Open Manhole	600
2.000	3.600	9.5	S2	65.650	65.021	0.519	Open Manhole	600
2.001	9.200	6.0	S3	64.100	63.467	0.523	Open Manhole	600
1.002	3.600	80.0	S4	64.000	63.399	0.491	Open Manhole	600
1.003	1.000	100.0	RAIN GARDEN	63.700	63.240	0.350	Open Manhole	600
1.004	1.500	100.0	Dummy	63.800	63.085	0.605	Open Manhole	600

Free Flowing Outfall Details for Storm

Outfall Pipe Number	Outfall Name	C. Level (m)	I. Level (m)	Min I. Level (m)	D,L (mm)	W (mm)
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1.004	Dummy	63.800	63.085	63.100	600	0
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Simulation Criteria for Storm

Volumetric Runoff Coeff	1.000	Foul Sewage per hectare (l/s)	0.000
Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	45.000
Hot Start (mins)	0	MADD Factor * 10m ³ /ha Storage	2.000
Hot Start Level (mm)	0	Run Time (mins)	960
Manhole Headloss Coeff (Global)	0.500	Output Interval (mins)	8

Number of Input Hydrographs	0	Number of Storage Structures	2
Number of Online Controls	2	Number of Time/Area Diagrams	0
Number of Offline Controls	0		

Synthetic Rainfall Details

Rainfall Model	FSR	Profile Type	Winter
Return Period (years)	100	Cv (Summer)	1.000
Region	England and Wales	Cv (Winter)	1.000
M5-60 (mm)	20.000	Storm Duration (mins)	480
Ratio R	0.343		

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Online Controls for Storm

Orifice Manhole: S4, DS/PN: 1.003, Volume (m³): 0.2

Diameter (m) 0.017 Discharge Coefficient 0.600 Invert Level (m) 63.250

Depth/Flow Relationship Manhole: RAIN GARDEN, DS/PN: 1.004, Volume (m³): 0.2

Invert Level (m) 63.100

Depth (m) Flow (l/s)

0.700 0.0400

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Storage Structures for Storm

cellular Storage Manhole: S4, DS/PN: 1.003

Invert Level (m) 63.250 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.00000

Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	30.0	30.0	0.500	0.0	43.6
0.400	30.0	43.6			

Infiltration Blanket Manhole: RAIN GARDEN, DS/PN: 1.004

Infiltration Coefficient Base (m/hr) 0.04461 Diameter/Width (m) 1.2
Safety Factor 2.0 Length (m) 7.7
Porosity 0.30 Cap Volume Depth (m) 0.000
Invert Level (m) 63.100

Manhole Headloss for Storm

PN	US/MH Name	US/MH Headloss
1.000	RE1	0.500
1.001	S1	0.500
2.000	RE2	0.500
2.001	S2	0.500
1.002	S3	0.500
1.003	S4	0.500
1.004	RAIN GARDEN	0.500

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Summary of Results for 480 minute 100 year Winter (Storm)

Margin for Flood Risk Warning (mm) 0.0 DVD Status OFF
Analysis Timestep Fine Inertia Status OFF
DTS Status ON

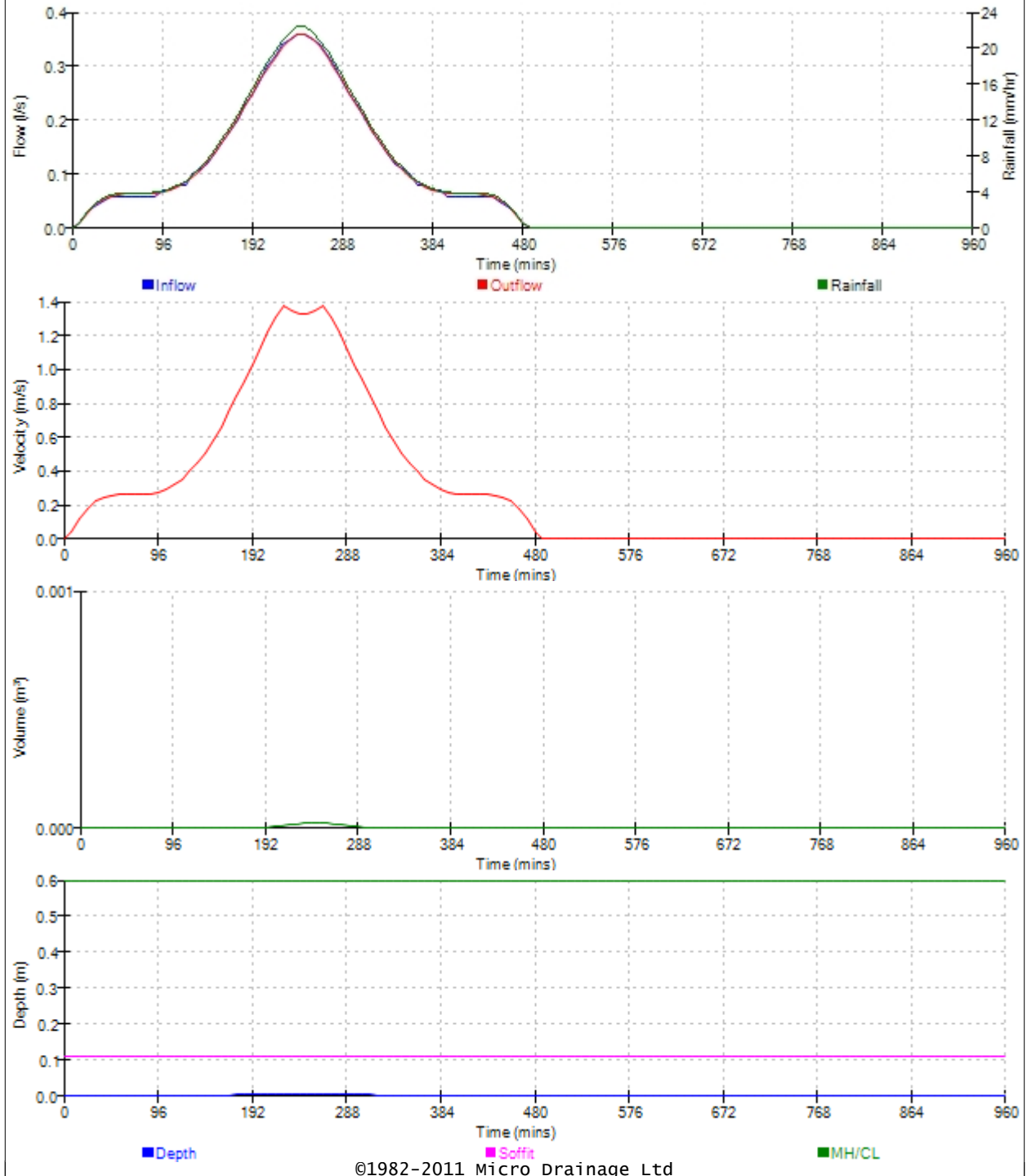
PN	US/MH Name	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status
1.000	RE1	65.407	-0.103	0.000	0.01	0.0	0.4	OK
1.001	S1	63.714	0.110	0.000	0.11	0.0	0.7	SURCHARGED
2.000	RE2	65.409	-0.101	0.000	0.02	0.0	0.4	OK
2.001	S2	65.012	-0.098	0.000	0.02	0.0	0.7	OK
1.002	S3	63.714	0.159	0.000	0.20	0.0	1.4	SURCHARGED
1.003	S4	63.713	0.353	0.000	0.05	0.0	0.2	SURCHARGED
1.004	RAIN GARDEN	63.647	0.437	0.000	0.01	0.0	0.0	SURCHARGED

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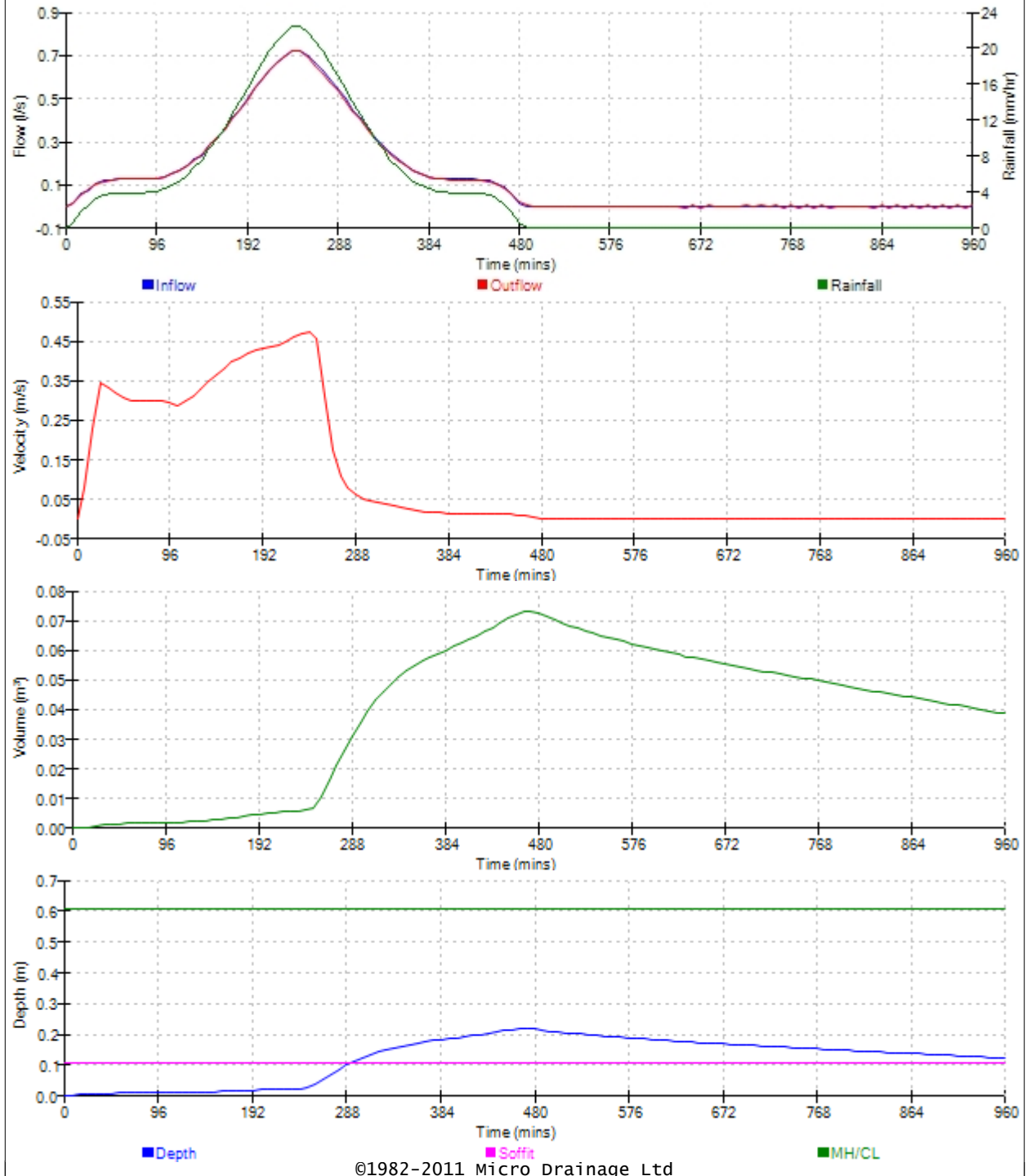
Rainfall Hyetograph for 480 minute 100 year winter (Storm)

Time (mins)	Rain (mm/hr)	Time (mins)	Rain (mm/hr)	Time (mins)	Rain (mm/hr)	Time (mins)	Rain (mm/hr)	Time (mins)	Rain (mm/hr)
8	0.632	104	4.417	200	17.051	296	15.475	392	4.154
16	1.818	112	4.773	208	18.394	304	14.062	400	4.025
24	2.689	120	5.247	216	19.645	312	12.669	408	3.965
32	3.332	128	5.943	224	20.874	320	11.166	416	3.956
40	3.673	136	6.709	232	21.745	328	9.917	424	3.964
48	3.867	144	7.601	240	22.373	336	8.760	432	3.953
56	3.953	152	8.760	248	22.373	344	7.601	440	3.867
64	3.964	160	9.917	256	21.745	352	6.709	448	3.673
72	3.956	168	11.166	264	20.874	360	5.943	456	3.332
80	3.965	176	12.669	272	19.645	368	5.247	464	2.689
88	4.025	184	14.062	280	18.394	376	4.773	472	1.818
96	4.154	192	15.475	288	17.051	384	4.417	480	0.632

Graphs for Pipe 1.000 US/MH RE1 (Storm)
480 minute 100 year Winter
Status: OK

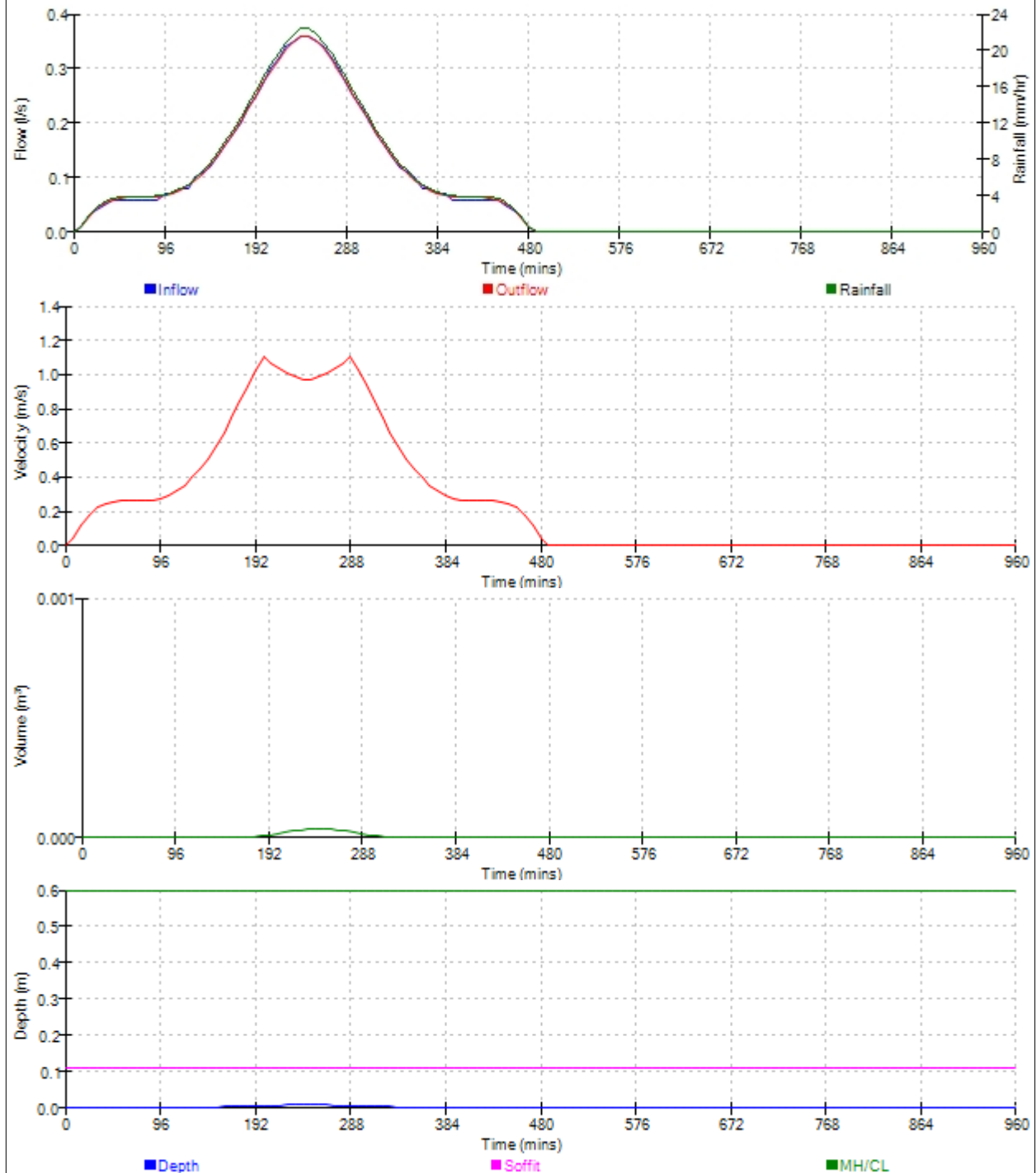


Graphs for Pipe 1.001 US/MH S1 (Storm)
480 minute 100 year winter
Status: SURCHARGED

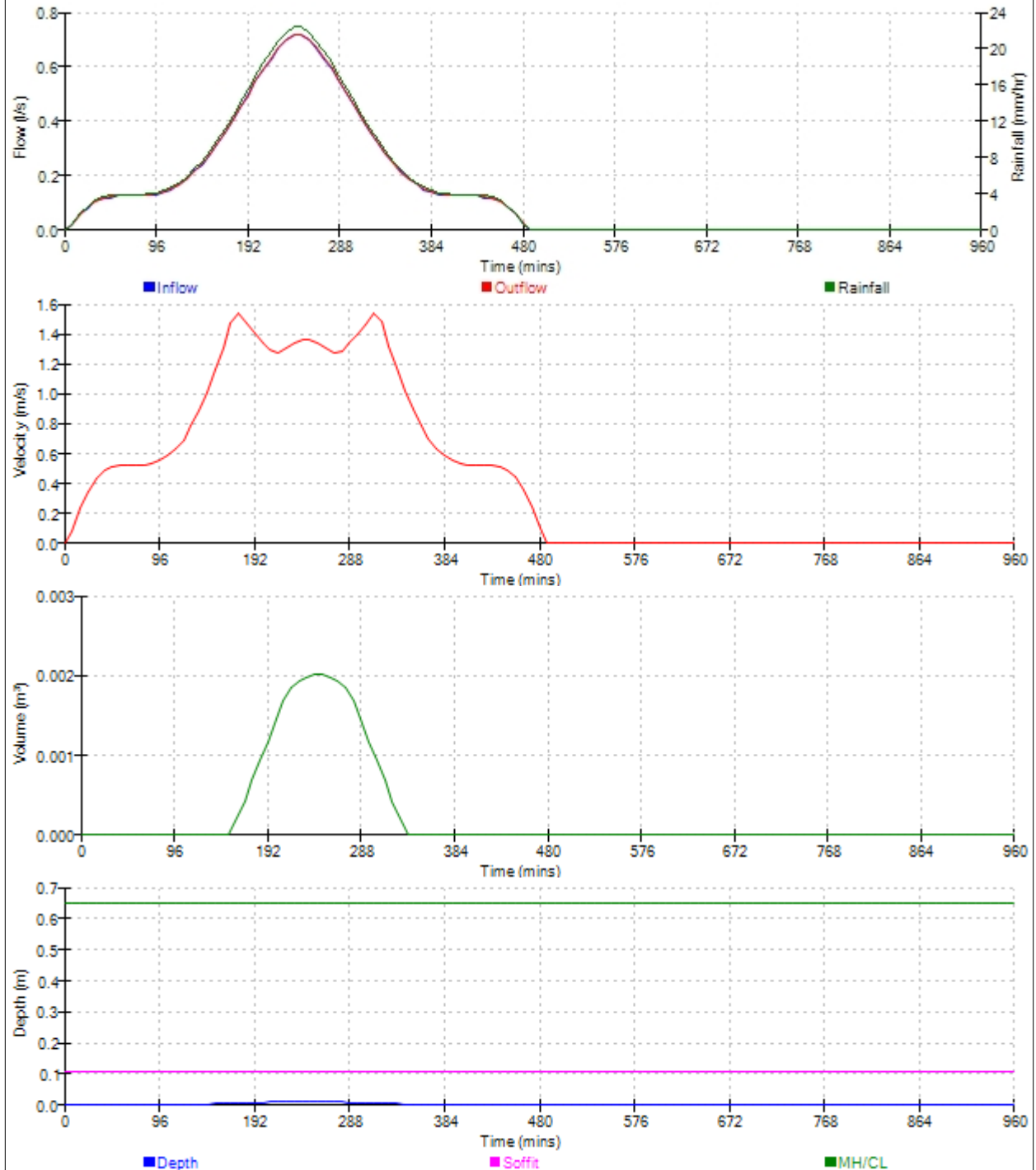


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Graphs for Pipe 2.000 US/MH RE2 (Storm)
480 minute 100 year Winter
Status: OK

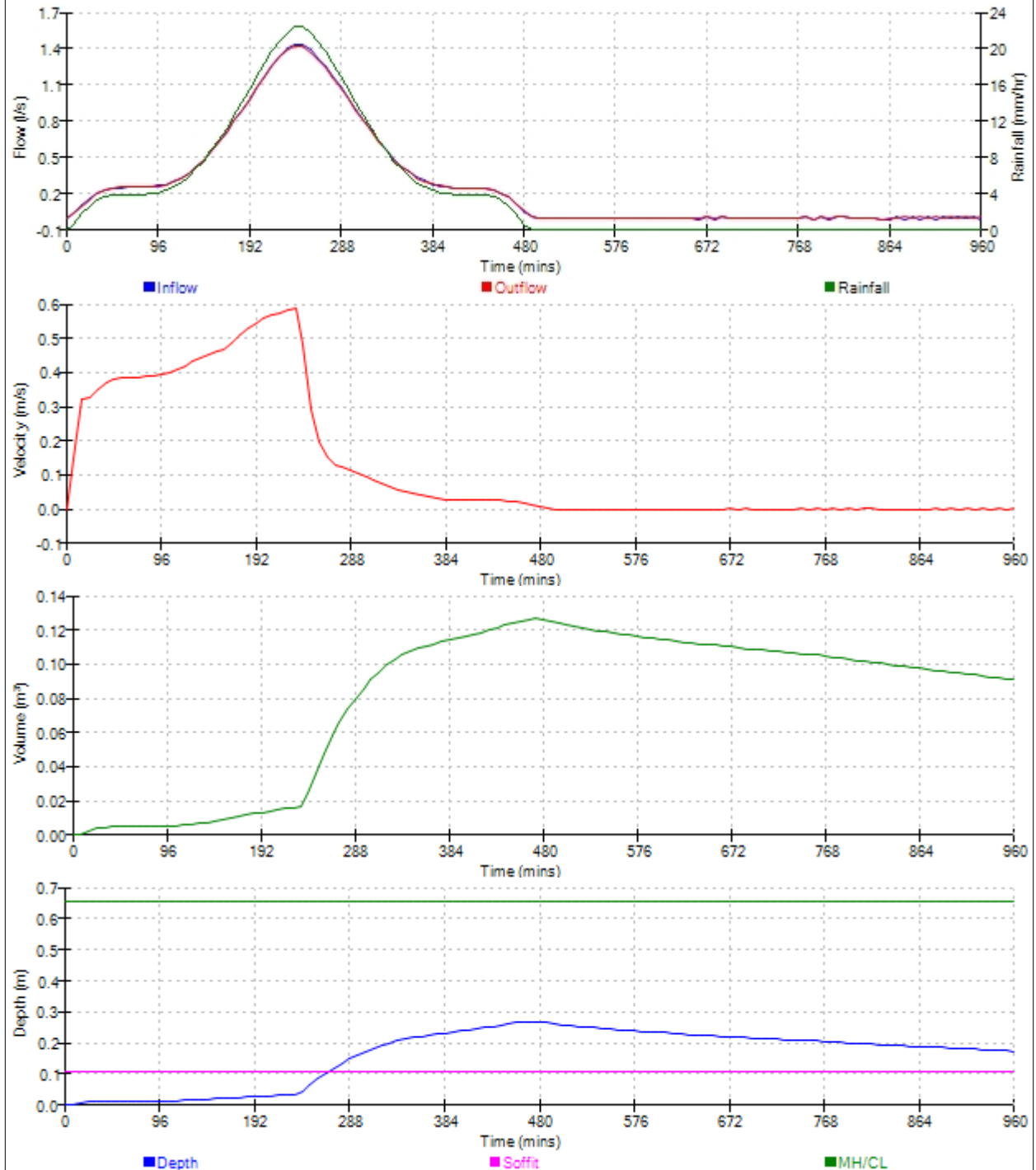


Graphs for Pipe 2.001 US/MH S2 (Storm)
480 minute 100 year winter
Status: OK

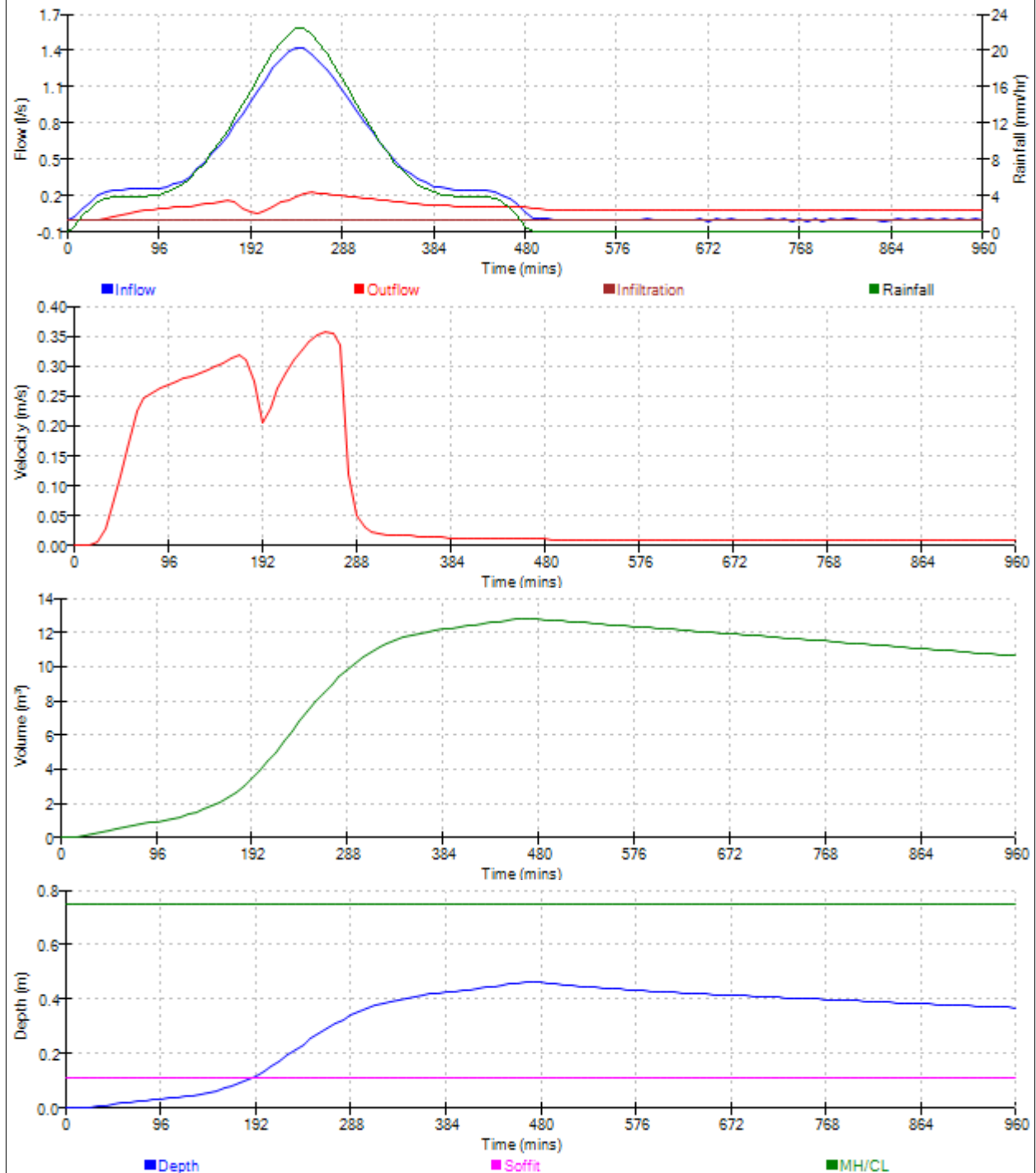


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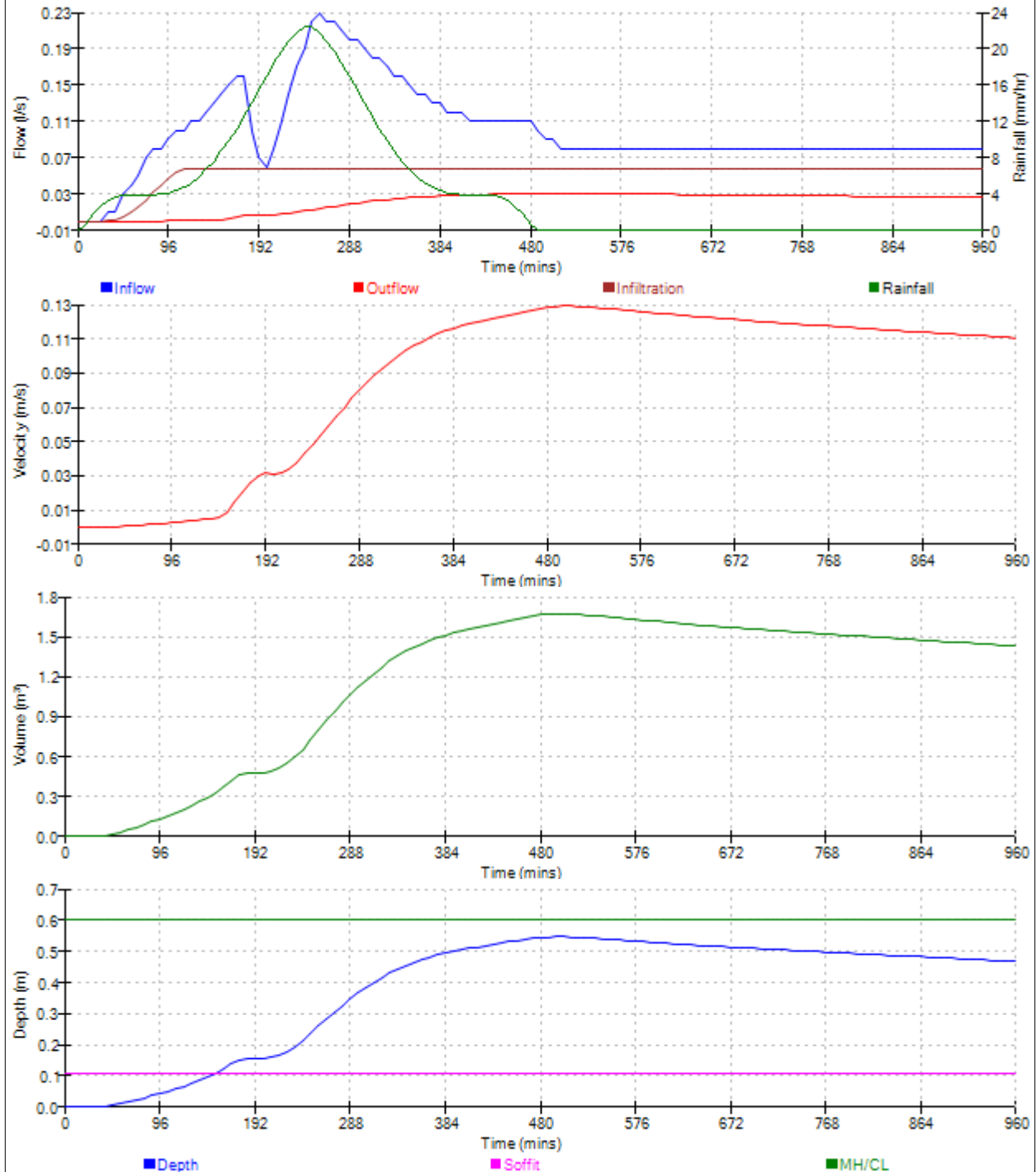
Graphs for Pipe 1.002 US/MH S3 (Storm)
480 minute 100 year winter
Status: SURCHARGED



Graphs for Pipe 1.003 US/MH S4 (Storm)
480 minute 100 year winter
Status: SURCHARGED



Graphs for Pipe 1.004 US/MH RAIN GARDEN (Storm)
480 minute 100 year winter
Status: SURCHARGED



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Flows and Levels for Pipe 1.000 US/MH RE1 (Storm)
480 minute 100 year winter
Average Rainfall Intensity 8.895 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total (l/s)	O/F Velocity (m/s)	Pipe Flow (l/s)
8	65.400	63.496	-0.110	0.0	0.0	0.0
16	65.401	63.499	-0.109	0.0	0.1	0.0
24	65.401	63.501	-0.109	0.0	0.2	0.0
32	65.401	63.502	-0.109	0.0	0.2	0.1
40	65.401	63.503	-0.109	0.0	0.2	0.1
48	65.401	63.504	-0.109	0.0	0.3	0.1
56	65.401	63.504	-0.109	0.0	0.3	0.1
64	65.401	63.504	-0.109	0.0	0.3	0.1
72	65.401	63.504	-0.109	0.0	0.3	0.1
80	65.401	63.504	-0.109	0.0	0.3	0.1
88	65.401	63.504	-0.109	0.0	0.3	0.1
96	65.401	63.505	-0.109	0.0	0.3	0.1
104	65.401	63.505	-0.109	0.0	0.3	0.1
112	65.402	63.505	-0.108	0.0	0.3	0.1
120	65.402	63.506	-0.108	0.0	0.3	0.1
128	65.402	63.506	-0.108	0.0	0.4	0.1
136	65.402	63.507	-0.108	0.0	0.4	0.1
144	65.402	63.508	-0.108	0.0	0.5	0.1
152	65.403	63.509	-0.107	0.0	0.6	0.1
160	65.403	63.509	-0.107	0.0	0.7	0.2
168	65.404	63.510	-0.106	0.0	0.7	0.2
176	65.404	63.512	-0.106	0.0	0.8	0.2
184	65.405	63.513	-0.105	0.0	0.9	0.2
192	65.405	63.514	-0.105	0.0	1.0	0.2
200	65.406	63.515	-0.104	0.0	1.1	0.3
208	65.406	63.516	-0.104	0.0	1.2	0.3
216	65.406	63.517	-0.104	0.0	1.3	0.3
224	65.407	63.517	-0.103	0.0	1.4	0.3
232	65.407	63.518	-0.103	0.0	1.3	0.4
240	65.407	63.518	-0.103	0.0	1.3	0.4
248	65.407	63.521	-0.103	0.0	1.3	0.4
256	65.407	63.532	-0.103	0.0	1.3	0.4
264	65.407	63.550	-0.103	0.0	1.4	0.3
272	65.406	63.566	-0.104	0.0	1.3	0.3
280	65.406	63.582	-0.104	0.0	1.2	0.3
288	65.406	63.596	-0.104	0.0	1.1	0.3
296	65.405	63.609	-0.105	0.0	1.0	0.2
304	65.405	63.620	-0.105	0.0	0.9	0.2
312	65.404	63.630	-0.106	0.0	0.8	0.2
320	65.404	63.639	-0.106	0.0	0.7	0.2
328	65.403	63.646	-0.107	0.0	0.7	0.2
336	65.403	63.652	-0.107	0.0	0.6	0.1
344	65.402	63.658	-0.108	0.0	0.5	0.1
352	65.402	63.662	-0.108	0.0	0.4	0.1
360	65.402	63.667	-0.108	0.0	0.4	0.1
368	65.402	63.671	-0.108	0.0	0.3	0.1
376	65.402	63.674	-0.108	0.0	0.3	0.1
384	65.401	63.677	-0.109	0.0	0.3	0.1
392	65.401	63.680	-0.109	0.0	0.3	0.1
400	65.401	63.684	-0.109	0.0	0.3	0.1

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Flows and Levels for Pipe 1.000 US/MH RE1 (Storm)
480 minute 100 year winter
Average Rainfall Intensity 8.895 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total (l/s)	O/F Velocity (m/s)	Pipe Flow (l/s)
408	65.401	63.687	-0.109	0.0	0.3	0.1
416	65.401	63.691	-0.109	0.0	0.3	0.1
424	65.401	63.694	-0.109	0.0	0.3	0.1
432	65.401	63.698	-0.109	0.0	0.3	0.1
440	65.401	63.703	-0.109	0.0	0.3	0.1
448	65.401	63.707	-0.109	0.0	0.2	0.1
456	65.401	63.711	-0.109	0.0	0.2	0.1
464	65.401	63.713	-0.109	0.0	0.2	0.0
472	65.401	63.714	-0.109	0.0	0.1	0.0
480	65.400	63.712	-0.110	0.0	0.0	0.0
488	65.400	63.709	-0.110	0.0	0.0	0.0
496	65.400	63.705	-0.110	0.0	0.0	0.0
504	65.400	63.702	-0.110	0.0	0.0	0.0
512	65.400	63.700	-0.110	0.0	0.0	0.0
520	65.400	63.697	-0.110	0.0	0.0	0.0
528	65.400	63.695	-0.110	0.0	0.0	0.0
536	65.400	63.693	-0.110	0.0	0.0	0.0
544	65.400	63.691	-0.110	0.0	0.0	0.0
552	65.400	63.689	-0.110	0.0	0.0	0.0
560	65.400	63.687	-0.110	0.0	0.0	0.0
568	65.400	63.685	-0.110	0.0	0.0	0.0
576	65.400	63.683	-0.110	0.0	0.0	0.0
584	65.400	63.682	-0.110	0.0	0.0	0.0
592	65.400	63.679	-0.110	0.0	0.0	0.0
600	65.400	63.678	-0.110	0.0	0.0	0.0
608	65.400	63.677	-0.110	0.0	0.0	0.0
616	65.400	63.674	-0.110	0.0	0.0	0.0
624	65.400	63.673	-0.110	0.0	0.0	0.0
632	65.400	63.671	-0.110	0.0	0.0	0.0
640	65.400	63.670	-0.110	0.0	0.0	0.0
648	65.400	63.668	-0.110	0.0	0.0	0.0
656	65.400	63.667	-0.110	0.0	0.0	0.0
664	65.400	63.666	-0.110	0.0	0.0	0.0
672	65.400	63.664	-0.110	0.0	0.0	0.0
680	65.400	63.663	-0.110	0.0	0.0	0.0
688	65.400	63.661	-0.110	0.0	0.0	0.0
696	65.400	63.660	-0.110	0.0	0.0	0.0
704	65.400	63.659	-0.110	0.0	0.0	0.0
712	65.400	63.657	-0.110	0.0	0.0	0.0
720	65.400	63.656	-0.110	0.0	0.0	0.0
728	65.400	63.655	-0.110	0.0	0.0	0.0
736	65.400	63.653	-0.110	0.0	0.0	0.0
744	65.400	63.652	-0.110	0.0	0.0	0.0
752	65.400	63.651	-0.110	0.0	0.0	0.0
760	65.400	63.651	-0.110	0.0	0.0	0.0
768	65.400	63.649	-0.110	0.0	0.0	0.0
776	65.400	63.647	-0.110	0.0	0.0	0.0
784	65.400	63.646	-0.110	0.0	0.0	0.0
792	65.400	63.645	-0.110	0.0	0.0	0.0
800	65.400	63.643	-0.110	0.0	0.0	0.0

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Flows and Levels for Pipe 1.000 US/MH RE1 (Storm)
480 minute 100 year winter
Average Rainfall Intensity 8.895 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total (l/s)	O/F Velocity (m/s)	Pipe Flow (l/s)
808	65.400	63.641	-0.110	0.0	0.0	0.0
816	65.400	63.640	-0.110	0.0	0.0	0.0
824	65.400	63.639	-0.110	0.0	0.0	0.0
832	65.400	63.638	-0.110	0.0	0.0	0.0
840	65.400	63.637	-0.110	0.0	0.0	0.0
848	65.400	63.635	-0.110	0.0	0.0	0.0
856	65.400	63.634	-0.110	0.0	0.0	0.0
864	65.400	63.633	-0.110	0.0	0.0	0.0
872	65.400	63.631	-0.110	0.0	0.0	0.0
880	65.400	63.630	-0.110	0.0	0.0	0.0
888	65.400	63.629	-0.110	0.0	0.0	0.0
896	65.400	63.628	-0.110	0.0	0.0	0.0
904	65.400	63.626	-0.110	0.0	0.0	0.0
912	65.400	63.625	-0.110	0.0	0.0	0.0
920	65.400	63.624	-0.110	0.0	0.0	0.0
928	65.400	63.623	-0.110	0.0	0.0	0.0
936	65.400	63.622	-0.110	0.0	0.0	0.0
944	65.400	63.620	-0.110	0.0	0.0	0.0
952	65.400	63.619	-0.110	0.0	0.0	0.0
960	65.400	63.618	-0.110	0.0	0.0	0.0

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Flows and Levels for Pipe 1.001 US/MH S1 (Storm)
480 minute 100 year winter
Average Rainfall Intensity 8.895 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total (l/s)	O/F Velocity (m/s)	Pipe Flow (l/s)
408	63.687	63.687	0.083	0.0	0.0	0.1
416	63.691	63.690	0.087	0.0	0.0	0.1
424	63.694	63.694	0.090	0.0	0.0	0.1
432	63.698	63.698	0.094	0.0	0.0	0.1
440	63.703	63.702	0.099	0.0	0.0	0.1
448	63.707	63.706	0.103	0.0	0.0	0.1
456	63.711	63.710	0.106	0.0	0.0	0.1
464	63.713	63.713	0.109	0.0	0.0	0.1
472	63.714	63.714	0.110	0.0	0.0	0.1
480	63.712	63.712	0.108	0.0	0.0	0.0
488	63.709	63.709	0.104	0.0	0.0	0.0
496	63.705	63.706	0.101	0.0	0.0	0.0
504	63.702	63.703	0.098	0.0	0.0	0.0
512	63.700	63.700	0.096	0.0	0.0	0.0
520	63.697	63.697	0.093	0.0	0.0	0.0
528	63.695	63.695	0.091	0.0	0.0	0.0
536	63.693	63.693	0.089	0.0	0.0	0.0
544	63.691	63.691	0.086	0.0	0.0	0.0
552	63.689	63.689	0.084	0.0	0.0	0.0
560	63.687	63.687	0.082	0.0	0.0	0.0
568	63.685	63.685	0.081	0.0	0.0	0.0
576	63.683	63.683	0.079	0.0	0.0	0.0
584	63.682	63.681	0.078	0.0	0.0	0.0
592	63.679	63.679	0.075	0.0	0.0	0.0
600	63.678	63.678	0.073	0.0	0.0	0.0
608	63.677	63.677	0.072	0.0	0.0	0.0
616	63.674	63.675	0.070	0.0	0.0	0.0
624	63.673	63.673	0.069	0.0	0.0	0.0
632	63.671	63.671	0.067	0.0	0.0	0.0
640	63.670	63.670	0.066	0.0	0.0	0.0
648	63.668	63.668	0.064	0.0	0.0	0.0
656	63.667	63.668	0.063	0.0	0.0	0.0
664	63.666	63.666	0.062	0.0	0.0	0.0
672	63.664	63.665	0.060	0.0	0.0	0.0
680	63.663	63.663	0.059	0.0	0.0	0.0
688	63.661	63.661	0.057	0.0	0.0	0.0
696	63.660	63.660	0.056	0.0	0.0	0.0
704	63.659	63.659	0.054	0.0	0.0	0.0
712	63.657	63.658	0.053	0.0	0.0	0.0
720	63.656	63.656	0.052	0.0	0.0	0.0
728	63.655	63.655	0.051	0.0	0.0	0.0
736	63.653	63.654	0.049	0.0	0.0	0.0
744	63.652	63.652	0.048	0.0	0.0	0.0
752	63.651	63.651	0.047	0.0	0.0	0.0
760	63.651	63.651	0.047	0.0	0.0	0.0
768	63.649	63.649	0.045	0.0	0.0	0.0
776	63.647	63.647	0.043	0.0	0.0	0.0
784	63.646	63.646	0.042	0.0	0.0	0.0
792	63.645	63.645	0.040	0.0	0.0	0.0
800	63.643	63.643	0.039	0.0	0.0	0.0

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Flows and Levels for Pipe 1.001 US/MH S1 (Storm)
480 minute 100 year winter
Average Rainfall Intensity 8.895 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Velocity (m/s)	Pipe Flow (l/s)
808	63.641	63.642	0.037	0.0	0.0	0.0
816	63.640	63.640	0.036	0.0	0.0	0.0
824	63.639	63.639	0.035	0.0	0.0	0.0
832	63.638	63.638	0.034	0.0	0.0	0.0
840	63.637	63.637	0.032	0.0	0.0	0.0
848	63.635	63.635	0.031	0.0	0.0	0.0
856	63.634	63.634	0.030	0.0	0.0	0.0
864	63.633	63.633	0.029	0.0	0.0	0.0
872	63.631	63.632	0.027	0.0	0.0	0.0
880	63.630	63.630	0.026	0.0	0.0	0.0
888	63.629	63.629	0.025	0.0	0.0	0.0
896	63.628	63.628	0.024	0.0	0.0	0.0
904	63.626	63.627	0.022	0.0	0.0	0.0
912	63.625	63.626	0.021	0.0	0.0	0.0
920	63.624	63.624	0.020	0.0	0.0	0.0
928	63.623	63.623	0.019	0.0	0.0	0.0
936	63.622	63.622	0.018	0.0	0.0	0.0
944	63.620	63.620	0.016	0.0	0.0	0.0
952	63.619	63.619	0.015	0.0	0.0	0.0
960	63.618	63.618	0.014	0.0	0.0	0.0

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Flows and Levels for Pipe 2.000 US/MH RE2 (Storm)
480 minute 100 year winter
Average Rainfall Intensity 8.895 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total (l/s)	O/F Velocity (m/s)	Pipe Flow (l/s)
8	65.400	65.000	-0.110	0.0	0.0	0.0
16	65.401	65.001	-0.109	0.0	0.1	0.0
24	65.401	65.002	-0.109	0.0	0.2	0.0
32	65.401	65.002	-0.109	0.0	0.2	0.1
40	65.401	65.002	-0.109	0.0	0.2	0.1
48	65.402	65.002	-0.108	0.0	0.3	0.1
56	65.402	65.002	-0.108	0.0	0.3	0.1
64	65.402	65.002	-0.108	0.0	0.3	0.1
72	65.402	65.002	-0.108	0.0	0.3	0.1
80	65.402	65.002	-0.108	0.0	0.3	0.1
88	65.402	65.002	-0.108	0.0	0.3	0.1
96	65.402	65.002	-0.108	0.0	0.3	0.1
104	65.402	65.003	-0.108	0.0	0.3	0.1
112	65.402	65.003	-0.108	0.0	0.3	0.1
120	65.402	65.003	-0.108	0.0	0.3	0.1
128	65.402	65.003	-0.108	0.0	0.4	0.1
136	65.403	65.004	-0.107	0.0	0.4	0.1
144	65.403	65.004	-0.107	0.0	0.5	0.1
152	65.404	65.005	-0.106	0.0	0.6	0.1
160	65.404	65.006	-0.106	0.0	0.7	0.2
168	65.405	65.006	-0.105	0.0	0.7	0.2
176	65.405	65.007	-0.105	0.0	0.8	0.2
184	65.406	65.008	-0.104	0.0	0.9	0.2
192	65.406	65.009	-0.104	0.0	1.0	0.2
200	65.407	65.010	-0.103	0.0	1.1	0.3
208	65.407	65.010	-0.103	0.0	1.1	0.3
216	65.408	65.011	-0.102	0.0	1.0	0.3
224	65.408	65.011	-0.102	0.0	1.0	0.3
232	65.409	65.011	-0.101	0.0	1.0	0.4
240	65.409	65.012	-0.101	0.0	1.0	0.4
248	65.409	65.012	-0.101	0.0	1.0	0.4
256	65.409	65.011	-0.101	0.0	1.0	0.4
264	65.408	65.011	-0.102	0.0	1.0	0.3
272	65.408	65.011	-0.102	0.0	1.0	0.3
280	65.407	65.010	-0.103	0.0	1.1	0.3
288	65.407	65.010	-0.103	0.0	1.1	0.3
296	65.406	65.009	-0.104	0.0	1.0	0.2
304	65.406	65.008	-0.104	0.0	0.9	0.2
312	65.405	65.007	-0.105	0.0	0.8	0.2
320	65.405	65.006	-0.105	0.0	0.7	0.2
328	65.404	65.006	-0.106	0.0	0.7	0.2
336	65.404	65.005	-0.106	0.0	0.6	0.1
344	65.403	65.004	-0.107	0.0	0.5	0.1
352	65.403	65.004	-0.107	0.0	0.4	0.1
360	65.402	65.003	-0.108	0.0	0.4	0.1
368	65.402	65.003	-0.108	0.0	0.3	0.1
376	65.402	65.003	-0.108	0.0	0.3	0.1
384	65.402	65.003	-0.108	0.0	0.3	0.1
392	65.402	65.002	-0.108	0.0	0.3	0.1
400	65.402	65.002	-0.108	0.0	0.3	0.1

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Flows and Levels for Pipe 2.000 US/MH RE2 (Storm)
480 minute 100 year winter
Average Rainfall Intensity 8.895 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Velocity (m/s)	Pipe Flow (l/s)
808	65.400	65.000	-0.110	0.0	0.0	0.0
816	65.400	65.000	-0.110	0.0	0.0	0.0
824	65.400	65.000	-0.110	0.0	0.0	0.0
832	65.400	65.000	-0.110	0.0	0.0	0.0
840	65.400	65.000	-0.110	0.0	0.0	0.0
848	65.400	65.000	-0.110	0.0	0.0	0.0
856	65.400	65.000	-0.110	0.0	0.0	0.0
864	65.400	65.000	-0.110	0.0	0.0	0.0
872	65.400	65.000	-0.110	0.0	0.0	0.0
880	65.400	65.000	-0.110	0.0	0.0	0.0
888	65.400	65.000	-0.110	0.0	0.0	0.0
896	65.400	65.000	-0.110	0.0	0.0	0.0
904	65.400	65.000	-0.110	0.0	0.0	0.0
912	65.400	65.000	-0.110	0.0	0.0	0.0
920	65.400	65.000	-0.110	0.0	0.0	0.0
928	65.400	65.000	-0.110	0.0	0.0	0.0
936	65.400	65.000	-0.110	0.0	0.0	0.0
944	65.400	65.000	-0.110	0.0	0.0	0.0
952	65.400	65.000	-0.110	0.0	0.0	0.0
960	65.400	65.000	-0.110	0.0	0.0	0.0

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Flows and Levels for Pipe 2.001 US/MH S2 (Storm)
480 minute 100 year winter
Average Rainfall Intensity 8.895 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total (l/s)	O/F Velocity (m/s)	Pipe Flow (l/s)
808	65.000	63.642	-0.110	0.0	0.0	0.0
816	65.000	63.640	-0.110	0.0	0.0	0.0
824	65.000	63.639	-0.110	0.0	0.0	0.0
832	65.000	63.638	-0.110	0.0	0.0	0.0
840	65.000	63.637	-0.110	0.0	0.0	0.0
848	65.000	63.635	-0.110	0.0	0.0	0.0
856	65.000	63.634	-0.110	0.0	0.0	0.0
864	65.000	63.633	-0.110	0.0	0.0	0.0
872	65.000	63.632	-0.110	0.0	0.0	0.0
880	65.000	63.630	-0.110	0.0	0.0	0.0
888	65.000	63.629	-0.110	0.0	0.0	0.0
896	65.000	63.628	-0.110	0.0	0.0	0.0
904	65.000	63.627	-0.110	0.0	0.0	0.0
912	65.000	63.626	-0.110	0.0	0.0	0.0
920	65.000	63.624	-0.110	0.0	0.0	0.0
928	65.000	63.623	-0.110	0.0	0.0	0.0
936	65.000	63.622	-0.110	0.0	0.0	0.0
944	65.000	63.620	-0.110	0.0	0.0	0.0
952	65.000	63.619	-0.110	0.0	0.0	0.0
960	65.000	63.618	-0.110	0.0	0.0	0.0

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Flows and Levels for Pipe 1.002 US/MH S3 (Storm)
480 minute 100 year winter
Average Rainfall Intensity 8.895 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Velocity (m/s)	Pipe Flow (l/s)
808	63.642	63.642	0.087	0.0	0.0	0.0
816	63.640	63.641	0.086	0.0	0.0	0.0
824	63.639	63.639	0.085	0.0	0.0	0.0
832	63.638	63.638	0.084	0.0	0.0	0.0
840	63.637	63.637	0.083	0.0	0.0	0.0
848	63.635	63.636	0.081	0.0	0.0	0.0
856	63.634	63.634	0.080	0.0	0.0	0.0
864	63.633	63.633	0.079	0.0	0.0	0.0
872	63.632	63.632	0.078	0.0	0.0	0.0
880	63.630	63.631	0.076	0.0	0.0	0.0
888	63.629	63.629	0.075	0.0	0.0	0.0
896	63.628	63.628	0.074	0.0	0.0	0.0
904	63.627	63.627	0.073	0.0	0.0	0.0
912	63.626	63.626	0.072	0.0	0.0	0.0
920	63.624	63.624	0.070	0.0	0.0	0.0
928	63.623	63.623	0.069	0.0	0.0	0.0
936	63.622	63.622	0.068	0.0	0.0	0.0
944	63.620	63.621	0.066	0.0	0.0	0.0
952	63.619	63.620	0.065	0.0	0.0	0.0
960	63.618	63.618	0.064	0.0	0.0	0.0

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Flows and Levels for Pipe 1.003 US/MH S4 (Storm)
480 minute 100 year winter
Average Rainfall Intensity 8.895 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total (l/s)	O/F Velocity (m/s)	Pipe Flow (l/s)
8	63.251	63.100	-0.109	0.0	0.0	0.0
16	63.252	63.100	-0.108	0.0	0.0	0.0
24	63.254	63.100	-0.106	0.0	0.0	0.0
32	63.257	63.101	-0.103	0.0	0.0	0.0
40	63.261	63.103	-0.099	0.0	0.1	0.0
48	63.264	63.106	-0.096	0.0	0.1	0.0
56	63.268	63.111	-0.092	0.0	0.2	0.0
64	63.271	63.117	-0.089	0.0	0.2	0.1
72	63.274	63.123	-0.086	0.0	0.2	0.1
80	63.277	63.131	-0.083	0.0	0.3	0.1
88	63.280	63.138	-0.080	0.0	0.3	0.1
96	63.283	63.144	-0.077	0.0	0.3	0.1
104	63.286	63.151	-0.074	0.0	0.3	0.1
112	63.289	63.158	-0.071	0.0	0.3	0.1
120	63.293	63.165	-0.067	0.0	0.3	0.1
128	63.297	63.174	-0.063	0.0	0.3	0.1
136	63.302	63.185	-0.058	0.0	0.3	0.1
144	63.308	63.197	-0.052	0.0	0.3	0.1
152	63.315	63.209	-0.045	0.0	0.3	0.1
160	63.323	63.222	-0.037	0.0	0.3	0.1
168	63.332	63.237	-0.028	0.0	0.3	0.2
176	63.342	63.252	-0.018	0.0	0.3	0.1
184	63.355	63.257	-0.005	0.0	0.3	0.1
192	63.370	63.258	0.010	0.0	0.2	0.1
200	63.387	63.257	0.027	0.0	0.2	0.1
208	63.405	63.260	0.045	0.0	0.3	0.1
216	63.424	63.267	0.064	0.0	0.3	0.1
224	63.445	63.280	0.085	0.0	0.3	0.1
232	63.465	63.295	0.105	0.0	0.3	0.2
240	63.486	63.315	0.126	0.0	0.3	0.2
248	63.505	63.337	0.145	0.0	0.4	0.2
256	63.524	63.361	0.164	0.0	0.4	0.2
264	63.543	63.385	0.183	0.0	0.4	0.2
272	63.560	63.407	0.200	0.0	0.3	0.2
280	63.576	63.428	0.216	0.0	0.1	0.2
288	63.590	63.448	0.230	0.0	0.1	0.2
296	63.603	63.467	0.243	0.0	0.0	0.2
304	63.615	63.485	0.255	0.0	0.0	0.2
312	63.626	63.501	0.266	0.0	0.0	0.2
320	63.635	63.516	0.275	0.0	0.0	0.2
328	63.643	63.530	0.283	0.0	0.0	0.2
336	63.649	63.543	0.289	0.0	0.0	0.2
344	63.655	63.554	0.295	0.0	0.0	0.2
352	63.660	63.565	0.300	0.0	0.0	0.1
360	63.665	63.574	0.305	0.0	0.0	0.1
368	63.669	63.581	0.309	0.0	0.0	0.1
376	63.673	63.589	0.313	0.0	0.0	0.1
384	63.676	63.594	0.316	0.0	0.0	0.1
392	63.679	63.600	0.319	0.0	0.0	0.1
400	63.682	63.605	0.322	0.0	0.0	0.1

Flows and Levels for Pipe 1.003 US/MH S4 (Storm)
480 minute 100 year winter
Average Rainfall Intensity 8.895 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Velocity (m/s)	Pipe Flow (l/s)
408	63.686	63.610	0.326	0.0	0.0	0.1
416	63.689	63.614	0.329	0.0	0.0	0.1
424	63.693	63.618	0.333	0.0	0.0	0.1
432	63.697	63.622	0.337	0.0	0.0	0.1
440	63.701	63.626	0.341	0.0	0.0	0.1
448	63.706	63.630	0.346	0.0	0.0	0.1
456	63.709	63.634	0.349	0.0	0.0	0.1
464	63.712	63.638	0.352	0.0	0.0	0.1
472	63.713	63.642	0.353	0.0	0.0	0.1
480	63.712	63.644	0.352	0.0	0.0	0.1
488	63.709	63.646	0.349	0.0	0.0	0.1
496	63.706	63.647	0.346	0.0	0.0	0.1
504	63.703	63.647	0.343	0.0	0.0	0.1
512	63.700	63.646	0.340	0.0	0.0	0.1
520	63.698	63.645	0.338	0.0	0.0	0.1
528	63.695	63.643	0.335	0.0	0.0	0.1
536	63.693	63.642	0.333	0.0	0.0	0.1
544	63.691	63.640	0.331	0.0	0.0	0.1
552	63.689	63.638	0.329	0.0	0.0	0.1
560	63.687	63.636	0.327	0.0	0.0	0.1
568	63.685	63.635	0.325	0.0	0.0	0.1
576	63.683	63.633	0.323	0.0	0.0	0.1
584	63.682	63.631	0.322	0.0	0.0	0.1
592	63.680	63.629	0.320	0.0	0.0	0.1
600	63.678	63.627	0.318	0.0	0.0	0.1
608	63.676	63.626	0.316	0.0	0.0	0.1
616	63.675	63.624	0.315	0.0	0.0	0.1
624	63.673	63.622	0.313	0.0	0.0	0.1
632	63.672	63.621	0.312	0.0	0.0	0.1
640	63.670	63.619	0.310	0.0	0.0	0.1
648	63.668	63.618	0.308	0.0	0.0	0.1
656	63.668	63.617	0.308	0.0	0.0	0.1
664	63.666	63.615	0.306	0.0	0.0	0.1
672	63.665	63.614	0.305	0.0	0.0	0.1
680	63.663	63.612	0.303	0.0	0.0	0.1
688	63.662	63.611	0.302	0.0	0.0	0.1
696	63.660	63.609	0.300	0.0	0.0	0.1
704	63.659	63.608	0.299	0.0	0.0	0.1
712	63.658	63.606	0.298	0.0	0.0	0.1
720	63.656	63.605	0.296	0.0	0.0	0.1
728	63.655	63.604	0.295	0.0	0.0	0.1
736	63.654	63.602	0.294	0.0	0.0	0.1
744	63.652	63.601	0.292	0.0	0.0	0.1
752	63.651	63.600	0.291	0.0	0.0	0.1
760	63.650	63.598	0.290	0.0	0.0	0.1
768	63.649	63.597	0.289	0.0	0.0	0.1
776	63.647	63.596	0.287	0.0	0.0	0.1
784	63.646	63.595	0.286	0.0	0.0	0.1
792	63.645	63.593	0.285	0.0	0.0	0.1
800	63.644	63.592	0.284	0.0	0.0	0.1

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Elstree Computing Ltd	Network W.12.6	

Flows and Levels for Pipe 1.003 US/MH S4 (Storm)
480 minute 100 year winter
Average Rainfall Intensity 8.895 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total O/F (l/s)	Velocity (m/s)	Pipe Flow (l/s)
808	63.642	63.591	0.282	0.0	0.0	0.1
816	63.641	63.589	0.281	0.0	0.0	0.1
824	63.639	63.588	0.279	0.0	0.0	0.1
832	63.638	63.587	0.278	0.0	0.0	0.1
840	63.637	63.586	0.277	0.0	0.0	0.1
848	63.636	63.584	0.276	0.0	0.0	0.1
856	63.634	63.584	0.274	0.0	0.0	0.1
864	63.633	63.582	0.273	0.0	0.0	0.1
872	63.632	63.581	0.272	0.0	0.0	0.1
880	63.631	63.580	0.271	0.0	0.0	0.1
888	63.629	63.579	0.269	0.0	0.0	0.1
896	63.628	63.577	0.268	0.0	0.0	0.1
904	63.627	63.576	0.267	0.0	0.0	0.1
912	63.626	63.575	0.266	0.0	0.0	0.1
920	63.624	63.574	0.264	0.0	0.0	0.1
928	63.623	63.572	0.263	0.0	0.0	0.1
936	63.622	63.571	0.262	0.0	0.0	0.1
944	63.621	63.570	0.261	0.0	0.0	0.1
952	63.620	63.569	0.260	0.0	0.0	0.1
960	63.618	63.568	0.258	0.0	0.0	0.1

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Flows and Levels for Pipe 1.004 US/MH RAIN GARDEN (Storm)
480 minute 100 year Winter
Average Rainfall Intensity 8.895 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total (l/s)	O/F Velocity (m/s)	Pipe Flow (l/s)
8	63.100	63.096	-0.110	0.0	0.0	0.0
16	63.100	63.096	-0.110	0.0	0.0	0.0
24	63.100	63.096	-0.110	0.0	0.0	0.0
32	63.101	63.096	-0.109	0.0	0.0	0.0
40	63.103	63.096	-0.107	0.0	0.0	0.0
48	63.106	63.096	-0.104	0.0	0.0	0.0
56	63.111	63.096	-0.099	0.0	0.0	0.0
64	63.117	63.096	-0.093	0.0	0.0	0.0
72	63.123	63.096	-0.087	0.0	0.0	0.0
80	63.131	63.096	-0.079	0.0	0.0	0.0
88	63.138	63.096	-0.072	0.0	0.0	0.0
96	63.144	63.096	-0.066	0.0	0.0	0.0
104	63.151	63.096	-0.059	0.0	0.0	0.0
112	63.158	63.096	-0.052	0.0	0.0	0.0
120	63.165	63.096	-0.045	0.0	0.0	0.0
128	63.174	63.096	-0.036	0.0	0.0	0.0
136	63.185	63.096	-0.025	0.0	0.0	0.0
144	63.197	63.096	-0.013	0.0	0.0	0.0
152	63.209	63.096	-0.001	0.0	0.0	0.0
160	63.222	63.096	0.012	0.0	0.0	0.0
168	63.237	63.096	0.027	0.0	0.0	0.0
176	63.252	63.096	0.042	0.0	0.0	0.0
184	63.257	63.096	0.047	0.0	0.0	0.0
192	63.258	63.096	0.048	0.0	0.0	0.0
200	63.257	63.096	0.047	0.0	0.0	0.0
208	63.260	63.096	0.050	0.0	0.0	0.0
216	63.267	63.096	0.057	0.0	0.0	0.0
224	63.280	63.096	0.070	0.0	0.0	0.0
232	63.295	63.096	0.085	0.0	0.0	0.0
240	63.315	63.096	0.105	0.0	0.0	0.0
248	63.337	63.096	0.127	0.0	0.1	0.0
256	63.361	63.096	0.151	0.0	0.1	0.0
264	63.385	63.096	0.175	0.0	0.1	0.0
272	63.407	63.096	0.197	0.0	0.1	0.0
280	63.428	63.096	0.218	0.0	0.1	0.0
288	63.448	63.096	0.238	0.0	0.1	0.0
296	63.467	63.096	0.257	0.0	0.1	0.0
304	63.485	63.096	0.275	0.0	0.1	0.0
312	63.501	63.096	0.291	0.0	0.1	0.0
320	63.516	63.096	0.306	0.0	0.1	0.0
328	63.530	63.096	0.320	0.0	0.1	0.0
336	63.543	63.096	0.333	0.0	0.1	0.0
344	63.554	63.096	0.344	0.0	0.1	0.0
352	63.565	63.096	0.355	0.0	0.1	0.0
360	63.574	63.096	0.364	0.0	0.1	0.0
368	63.581	63.096	0.371	0.0	0.1	0.0
376	63.589	63.096	0.379	0.0	0.1	0.0
384	63.594	63.096	0.384	0.0	0.1	0.0
392	63.600	63.096	0.390	0.0	0.1	0.0
400	63.605	63.096	0.395	0.0	0.1	0.0

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Flows and Levels for Pipe 1.004 US/MH RAIN GARDEN (Storm)
480 minute 100 year Winter
Average Rainfall Intensity 8.895 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total (l/s)	O/F Velocity (m/s)	Pipe Flow (l/s)
408	63.610	63.096	0.400	0.0	0.1	0.0
416	63.614	63.096	0.404	0.0	0.1	0.0
424	63.618	63.096	0.408	0.0	0.1	0.0
432	63.622	63.096	0.412	0.0	0.1	0.0
440	63.626	63.096	0.416	0.0	0.1	0.0
448	63.630	63.096	0.420	0.0	0.1	0.0
456	63.634	63.096	0.424	0.0	0.1	0.0
464	63.638	63.096	0.428	0.0	0.1	0.0
472	63.642	63.096	0.432	0.0	0.1	0.0
480	63.644	63.096	0.434	0.0	0.1	0.0
488	63.646	63.096	0.436	0.0	0.1	0.0
496	63.647	63.096	0.437	0.0	0.1	0.0
504	63.647	63.096	0.437	0.0	0.1	0.0
512	63.646	63.096	0.436	0.0	0.1	0.0
520	63.645	63.096	0.435	0.0	0.1	0.0
528	63.643	63.096	0.433	0.0	0.1	0.0
536	63.642	63.096	0.432	0.0	0.1	0.0
544	63.640	63.096	0.430	0.0	0.1	0.0
552	63.638	63.096	0.428	0.0	0.1	0.0
560	63.636	63.096	0.426	0.0	0.1	0.0
568	63.635	63.096	0.425	0.0	0.1	0.0
576	63.633	63.096	0.423	0.0	0.1	0.0
584	63.631	63.096	0.421	0.0	0.1	0.0
592	63.629	63.096	0.419	0.0	0.1	0.0
600	63.627	63.096	0.417	0.0	0.1	0.0
608	63.626	63.096	0.416	0.0	0.1	0.0
616	63.624	63.096	0.414	0.0	0.1	0.0
624	63.622	63.096	0.412	0.0	0.1	0.0
632	63.621	63.096	0.411	0.0	0.1	0.0
640	63.619	63.096	0.409	0.0	0.1	0.0
648	63.618	63.096	0.408	0.0	0.1	0.0
656	63.617	63.096	0.407	0.0	0.1	0.0
664	63.615	63.096	0.405	0.0	0.1	0.0
672	63.614	63.096	0.404	0.0	0.1	0.0
680	63.612	63.096	0.402	0.0	0.1	0.0
688	63.611	63.096	0.401	0.0	0.1	0.0
696	63.609	63.096	0.399	0.0	0.1	0.0
704	63.608	63.096	0.398	0.0	0.1	0.0
712	63.606	63.096	0.396	0.0	0.1	0.0
720	63.605	63.096	0.395	0.0	0.1	0.0
728	63.604	63.096	0.394	0.0	0.1	0.0
736	63.602	63.096	0.392	0.0	0.1	0.0
744	63.601	63.096	0.391	0.0	0.1	0.0
752	63.600	63.096	0.390	0.0	0.1	0.0
760	63.598	63.096	0.388	0.0	0.1	0.0
768	63.597	63.096	0.387	0.0	0.1	0.0
776	63.596	63.096	0.386	0.0	0.1	0.0
784	63.595	63.096	0.385	0.0	0.1	0.0
792	63.593	63.096	0.383	0.0	0.1	0.0
800	63.592	63.096	0.382	0.0	0.1	0.0

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Flows and Levels for Pipe 1.004 US/MH RAIN GARDEN (Storm)
480 minute 100 year Winter
Average Rainfall Intensity 8.895 mm/hr

Time (mins)	Upstream Level (m)	Downstream Level (m)	Surcharged Depth (m)	Total (l/s)	O/F Velocity (m/s)	Pipe Flow (l/s)
808	63.591	63.096	0.381	0.0	0.1	0.0
816	63.589	63.096	0.379	0.0	0.1	0.0
824	63.588	63.096	0.378	0.0	0.1	0.0
832	63.587	63.096	0.377	0.0	0.1	0.0
840	63.586	63.096	0.376	0.0	0.1	0.0
848	63.584	63.096	0.374	0.0	0.1	0.0
856	63.584	63.096	0.374	0.0	0.1	0.0
864	63.582	63.096	0.372	0.0	0.1	0.0
872	63.581	63.096	0.371	0.0	0.1	0.0
880	63.580	63.096	0.370	0.0	0.1	0.0
888	63.579	63.096	0.369	0.0	0.1	0.0
896	63.577	63.096	0.367	0.0	0.1	0.0
904	63.576	63.096	0.366	0.0	0.1	0.0
912	63.575	63.096	0.365	0.0	0.1	0.0
920	63.574	63.096	0.364	0.0	0.1	0.0
928	63.572	63.096	0.362	0.0	0.1	0.0
936	63.571	63.096	0.361	0.0	0.1	0.0
944	63.570	63.096	0.360	0.0	0.1	0.0
952	63.569	63.096	0.359	0.0	0.1	0.0
960	63.568	63.096	0.358	0.0	0.1	0.0