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2nd Floor, Fountain H...		
83 Fountain Street		
Manchester M2 2EE		
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Micro Drainage		Network W.12.6.1

Area Summary for Storm

Pipe Number	PIMP Type	PIMP Name	PIMP (%)	Gross Area (ha)	Imp. Area (ha)	Pipe Total (ha)
1.000	-	-	100	0.022	0.022	0.022
1.001	-	-	100	0.000	0.000	0.000
2.000	-	-	100	0.022	0.022	0.022
1.002	-	-	100	0.135	0.135	0.135
1.003	-	-	100	0.255	0.255	0.255
3.000	-	-	100	0.020	0.020	0.020
1.004	-	-	100	0.092	0.092	0.092
4.000	-	-	100	0.053	0.053	0.053
1.005	-	-	100	0.052	0.052	0.052
1.006	-	-	100	0.000	0.000	0.000
5.000	-	-	100	0.037	0.037	0.037
5.001	-	-	100	0.054	0.054	0.054
1.007	-	-	100	0.000	0.000	0.000
6.000	-	-	100	0.058	0.058	0.058
6.001	-	-	100	0.031	0.031	0.031
6.002	-	-	100	0.013	0.013	0.013
6.003	-	-	100	0.023	0.023	0.023
6.004	-	-	100	0.025	0.025	0.025
1.008	-	-	100	0.000	0.000	0.000
7.000	-	-	100	0.000	0.000	0.000
1.009	-	-	100	0.000	0.000	0.000
1.010	-	-	100	0.000	0.000	0.000
1.011	-	-	100	0.000	0.000	0.000
1.012	-	-	100	0.000	0.000	0.000
				Total	Total	Total
				0.892	0.892	0.892

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)
1.012		31.550	30.520	0.000	0	0

Simulation Criteria for Storm

Volumetric Runoff Coeff	0.750	Additional Flow - % of Total Flow	0.000
Areal Reduction Factor	1.000	MADD Factor * 10m³/ha Storage	2.000
Hot Start (mins)	0	Inlet Coefficient	0.800
Hot Start Level (mm)	0	Flow per Person per Day (l/per/day)	0.000
Manhole Headloss Coeff (Global)	0.500	Run Time (mins)	60
Foul Sewage per hectare (l/s)	0.000	Output Interval (mins)	1
Number of Input Hydrographs		0	Number of Storage Structures
Number of Online Controls		1	Number of Time/Area Diagrams
Number of Offline Controls		0	Number of Real Time Controls

Synthetic Rainfall Details

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Micro Drainage	Network W.12.6.1	
<u>Simulation Criteria for Storm</u>		
Rainfall Model	FSR	Profile Type Summer
Return Period (years)	30	Cv (Summer) 0.750
Region England and Wales		Cv (Winter) 0.840
M5-60 (mm)	18.000	Storm Duration (mins) 30
Ratio R	0.335	
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Online Controls for Storm

Depth/Flow Relationship Manhole: 24, DS/PN: 1.012, Volume (m³): 1.8

Invert Level (m) 30.690

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.018	0.2070	0.257	6.4580	0.496	6.0740	0.735	5.9100
0.037	0.7840	0.276	6.4610	0.514	5.9970	0.753	5.9780
0.055	1.6500	0.294	6.4540	0.533	5.9030	0.771	6.0460
0.073	2.7040	0.312	6.4400	0.551	5.7870	0.790	6.1120
0.092	3.8210	0.331	6.4200	0.569	5.6470	0.808	6.1780
0.110	4.8230	0.349	6.3970	0.588	5.4780	0.827	6.2430
0.129	5.6530	0.367	6.3700	0.606	5.4060	0.845	6.3070
0.147	6.0810	0.386	6.3410	0.624	5.4820	0.863	6.3700
0.165	6.2070	0.404	6.3100	0.643	5.5560	0.882	6.4330
0.184	6.3010	0.422	6.2750	0.661	5.6290	0.900	6.4950
0.202	6.3700	0.441	6.2360	0.680	5.7000	0.990	6.7900
0.220	6.4160	0.459	6.1910	0.698	5.7710	1.080	7.0720
0.239	6.4450	0.478	6.1380	0.716	5.8410		

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Micro Drainage	Network W.12.6.1																																																																																				
Storage Structures for Storm Tank or Pond Manhole: 23, DS/PN: 1.011 Invert Level (m) 30.700 <table><thead><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr></thead><tbody><tr><td>0.000</td><td>325.6</td><td>0.900</td><td>600.4</td></tr></tbody></table> Manhole Headloss for Storm <table><thead><tr><th>PN</th><th>US/MH Name</th><th>US/MH Headloss</th></tr></thead><tbody><tr><td>1.000</td><td>1</td><td>0.500</td></tr><tr><td>1.001</td><td>2</td><td>0.500</td></tr><tr><td>2.000</td><td>3</td><td>0.500</td></tr><tr><td>1.002</td><td>4</td><td>0.500</td></tr><tr><td>1.003</td><td>5</td><td>0.500</td></tr><tr><td>3.000</td><td>6</td><td>0.500</td></tr><tr><td>1.004</td><td>7</td><td>0.500</td></tr><tr><td>4.000</td><td>8</td><td>0.500</td></tr><tr><td>1.005</td><td>9</td><td>0.500</td></tr><tr><td>1.006</td><td>10</td><td>0.000</td></tr><tr><td>5.000</td><td>11</td><td>0.500</td></tr><tr><td>5.001</td><td>12</td><td>0.500</td></tr><tr><td>1.007</td><td>13</td><td>0.000</td></tr><tr><td>6.000</td><td>14</td><td>0.500</td></tr><tr><td>6.001</td><td>15</td><td>0.500</td></tr><tr><td>6.002</td><td>16</td><td>0.500</td></tr><tr><td>6.003</td><td>17</td><td>0.500</td></tr><tr><td>6.004</td><td>18</td><td>0.500</td></tr><tr><td>1.008</td><td>19</td><td>0.000</td></tr><tr><td>7.000</td><td>20</td><td>0.000</td></tr><tr><td>1.009</td><td>21</td><td>0.000</td></tr><tr><td>1.010</td><td>22</td><td>0.500</td></tr><tr><td>1.011</td><td>23</td><td>0.500</td></tr><tr><td>1.012</td><td>24</td><td>0.500</td></tr></tbody></table>			Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	325.6	0.900	600.4	PN	US/MH Name	US/MH Headloss	1.000	1	0.500	1.001	2	0.500	2.000	3	0.500	1.002	4	0.500	1.003	5	0.500	3.000	6	0.500	1.004	7	0.500	4.000	8	0.500	1.005	9	0.500	1.006	10	0.000	5.000	11	0.500	5.001	12	0.500	1.007	13	0.000	6.000	14	0.500	6.001	15	0.500	6.002	16	0.500	6.003	17	0.500	6.004	18	0.500	1.008	19	0.000	7.000	20	0.000	1.009	21	0.000	1.010	22	0.500	1.011	23	0.500	1.012	24	0.500
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<u>Summary of Critical Results by Maximum Level (Rank 1) for Storm</u>								
Margin for Flood Risk Warning (mm) 300.0								
Analysis Timestep 2.5 Second Increment (Extended)								
DTS Status ON								
DVD Status ON								
Inertia Status ON								
Profile(s) Summer and Winter								
Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440								
Return Period(s) (years) 30								
Climate Change (%) 0								
PN	Storm	Return Period	Climate Change	First X Surcharge	First Y Flood	First Z Overflow	O/F Act. Exc.	Lvl
1.000	15 Winter	30	0%	30/15 Winter				
1.001	15 Winter	30	0%	30/15 Summer				
2.000	15 Winter	30	0%	30/15 Winter				
1.002	15 Winter	30	0%	30/15 Summer				
1.003	15 Winter	30	0%	30/15 Summer				
3.000	15 Winter	30	0%					
1.004	15 Winter	30	0%					
4.000	15 Winter	30	0%					
1.005	30 Winter	30	0%	30/15 Winter				
1.006	30 Winter	30	0%	30/15 Winter				
5.000	240 Winter	30	0%	30/30 Winter				
5.001	240 Winter	30	0%	30/30 Winter				
1.007	120 Winter	30	0%					
6.000	15 Winter	30	0%					
6.001	15 Winter	30	0%					
6.002	15 Winter	30	0%					
6.003	15 Winter	30	0%					
6.004	240 Winter	30	0%	30/15 Summer				
1.008	360 Winter	30	0%					
7.000	240 Winter	30	0%					
1.009	360 Winter	30	0%					
1.010	360 Winter	30	0%	30/360 Winter				
1.011	360 Winter	30	0%	30/240 Winter				
1.012	360 Winter	30	0%	30/240 Summer				
PN	US/MH Name	Water Level (m)	Surch'd Depth (m)	Flooded Volume (m³)	Flow / Cap.	O'flow (l/s)	Pipe Flow (l/s)	Status
1.000	1	32.727	0.027	0.000	0.43	0.0	6.1	SURCHARGED
1.001	2	32.701	0.161	0.000	0.67	0.0	9.2	SURCHARGED
2.000	3	32.706	0.006	0.000	0.30	0.0	6.0	SURCHARGED
1.002	4	32.679	0.294	0.000	1.02	0.0	41.1	SURCHARGED
1.003	5	32.317	0.287	0.000	1.34	0.0	101.0	SURCHARGED
3.000	6	32.005	-0.190	0.000	0.06	0.0	5.8	OK
1.004	7	31.550	-0.155	0.000	0.63	0.0	125.9	OK
4.000	8	31.486	-0.064	0.000	0.62	0.0	15.2	OK
1.005	9	31.328	0.068	0.000	1.00	0.0	129.7	SURCHARGED
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Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Water		Flooded		Pipe		Status
		Level (m)	Surch'd Depth (m)	Volume (m³)	Flow / Cap.	O'flow (l/s)	Flow (l/s)	
1.006	10	31.240	0.050	0.000	0.08	0.0	128.8	SURCHARGED*
5.000	11	31.247	0.007	0.000	0.16	0.0	2.3	SURCHARGED
5.001	12	31.243	0.078	0.000	0.09	0.0	5.6	SURCHARGED
1.007	13	31.163	0.000	0.000	0.04	0.0	70.3	SURCHARGED*
6.000	14	32.249	-0.146	0.000	0.26	0.0	16.3	OK
6.001	15	31.508	-0.087	0.000	0.67	0.0	25.2	OK
6.002	16	31.328	-0.077	0.000	0.76	0.0	28.3	OK
6.003	17	31.261	-0.004	0.000	0.86	0.0	31.8	OK
6.004	18	31.221	0.076	0.000	0.24	0.0	9.2	SURCHARGED
1.008	19	31.149	0.000	0.000	0.02	0.0	35.6	SURCHARGED*
7.000	20	31.150	0.000	0.000	0.00	0.0	0.0	SURCHARGED*
1.009	21	31.170	0.000	0.000	0.18	0.0	29.6	OK*
1.010	22	31.163	0.003	0.000	0.23	0.0	29.5	SURCHARGED
1.011	23	31.162	0.012	0.000	0.08	0.0	9.7	SURCHARGED
1.012	24	31.185	0.045	0.000	0.03	0.0	6.4	SURCHARGED

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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)	30	Add Flow / Climate Change (%)	0
M5-60 (mm)	18.000	Minimum Backdrop Height (m)	0.200
Ratio R	0.335	Maximum Backdrop Height (m)	1.500
Maximum Rainfall (mm/hr)	50	Min Design Depth for Optimisation (m)	1.200
Foul Sewage (l/s/ha)	0.00	Min Vel for Auto Design only (m/s)	1.00
Volumetric Runoff Coeff.	0.750	Min Slope for Optimisation (1:X)	400
PIMP (%)	100		

Designed with Level Soffits

Time Area Diagram for Storm

Time (mins)	Area (ha)	Time (mins)	Area (ha)	Time (mins)	Area (ha)
0-4	0.476	4-8	0.412	8-12	0.004

Total Area Contributing (ha) = 0.892

Total Pipe Volume (m³) = 92.591

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	22.759	0.160	142.2	0.022	5.00	0.0	0.600	o	150
1.001	23.010	0.155	148.5	0.000	0.00	0.0	0.600	o	150
2.000	22.493	0.315	71.4	0.022	5.00	0.0	0.600	o	150
1.002	54.302	0.355	153.0	0.135	0.00	0.0	0.600	o	225
1.003	64.234	0.325	197.6	0.255	0.00	0.0	0.600	o	300

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	5.45	32.550	0.022	0.0	0.0	0.0	0.84	14.9	3.0
1.001	50.00	5.92	32.390	0.022	0.0	0.0	0.0	0.82	14.5	3.0
2.000	50.00	5.31	32.550	0.022	0.0	0.0	0.0	1.19	21.1	3.0
1.002	50.00	6.78	32.160	0.179	0.0	0.0	0.0	1.05	41.9	24.2
1.003	50.00	7.74	31.730	0.434	0.0	0.0	0.0	1.11	78.8	58.8

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<u>Network Design Table for Storm</u>										
PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	
3.000	9.033	0.490	18.4	0.020	5.00	0.0	0.600	o	225	
1.004	36.505	0.445	82.0	0.092	0.00	0.0	0.600	o	375	
4.000	12.655	0.290	43.6	0.053	5.00	0.0	0.600	o	150	
1.005	1.671	0.020	83.6	0.052	0.00	0.0	0.600	o	450	
1.006	10.662	0.027	394.9	0.000	0.00	0.0	0.600	[]	-1	
5.000	9.038	0.075	120.5	0.037	5.00	0.0	0.600	o	150	
5.001	1.603	0.177	9.1	0.054	0.00	0.0	0.600	o	225	
1.007	5.582	0.014	398.7	0.000	0.00	0.0	0.600	[]	-1	
6.000	50.769	0.800	63.5	0.058	5.00	0.0	0.600	o	225	
6.001	31.515	0.190	165.9	0.031	0.00	0.0	0.600	o	225	
6.002	22.427	0.140	160.2	0.013	0.00	0.0	0.600	o	225	
6.003	19.261	0.120	160.5	0.023	0.00	0.0	0.600	o	225	
6.004	27.656	0.170	162.7	0.025	0.00	0.0	0.600	o	225	
1.008	11.711	0.029	403.8	0.000	0.00	0.0	0.600	[]	-1	
<u>Network Results Table</u>										
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)
3.000	50.00	5.05	31.970	0.020	0.0	0.0	0.0	3.06	121.8	2.7
1.004	50.00	8.04	31.330	0.546	0.0	0.0	0.0	2.00	221.1	73.9
4.000	50.00	5.14	31.400	0.053	0.0	0.0	0.0	1.53	27.0	7.2
1.005	50.00	8.05	30.810	0.651	0.0	0.0	0.0	2.23	354.0	88.2
1.006	50.00	8.18	30.790	0.651	0.0	0.0	0.0	1.38	2360.6	88.2
5.000	50.00	5.16	31.090	0.037	0.0	0.0	0.0	0.91	16.2	5.0
5.001	50.00	5.17	30.940	0.091	0.0	0.0	0.0	4.37	173.9	12.3
1.007	50.00	8.25	30.763	0.742	0.0	0.0	0.0	1.37	2349.1	100.5
6.000	50.00	5.51	32.170	0.058	0.0	0.0	0.0	1.64	65.4	7.9
6.001	50.00	6.03	31.370	0.089	0.0	0.0	0.0	1.01	40.3	12.1
6.002	50.00	6.40	31.180	0.102	0.0	0.0	0.0	1.03	41.0	13.8
6.003	50.00	6.71	31.040	0.125	0.0	0.0	0.0	1.03	40.9	16.9
6.004	50.00	7.16	30.920	0.150	0.0	0.0	0.0	1.02	40.7	20.3
1.008	50.00	8.39	30.749	0.892	0.0	0.0	0.0	1.36	2334.1	120.8
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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)
7.000	12.045	0.030	401.5	0.000	5.00	0.0	0.600	[]	-1
1.009	2.000	0.010	200.0	0.000	0.00	0.0	0.600	o	450
1.010	2.000	0.010	200.0	0.000	0.00	0.0	0.600	o	450
1.011	3.000	0.010	300.0	0.000	0.00	0.0	0.600	o	450
1.012	25.399	0.170	149.4	0.000	0.00	0.0	0.600	o	450

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)
7.000	50.00	5.15	30.750	0.000	0.0	0.0	0.0	1.37	2340.9	0.0
1.009	50.00	8.42	30.720	0.892	0.0	0.0	0.0	1.43	228.1	120.8
1.010	50.00	8.44	30.710	0.892	0.0	0.0	0.0	1.43	228.1	120.8
1.011	50.00	8.48	30.700	0.892	0.0	0.0	0.0	1.17	185.8	120.8
1.012	50.00	8.74	30.690	0.892	0.0	0.0	0.0	1.66	264.2	120.8

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Area Summary for Storm

Pipe Number	PIMP Type	PIMP Name	PIMP (%)	Gross Area (ha)	Imp. Area (ha)	Pipe Total (ha)
1.000	-	-	100	0.022	0.022	0.022
1.001	-	-	100	0.000	0.000	0.000
2.000	-	-	100	0.022	0.022	0.022
1.002	-	-	100	0.135	0.135	0.135
1.003	-	-	100	0.255	0.255	0.255
3.000	-	-	100	0.020	0.020	0.020
1.004	-	-	100	0.092	0.092	0.092
4.000	-	-	100	0.053	0.053	0.053
1.005	-	-	100	0.052	0.052	0.052
1.006	-	-	100	0.000	0.000	0.000
5.000	-	-	100	0.037	0.037	0.037
5.001	-	-	100	0.054	0.054	0.054
1.007	-	-	100	0.000	0.000	0.000
6.000	-	-	100	0.058	0.058	0.058
6.001	-	-	100	0.031	0.031	0.031
6.002	-	-	100	0.013	0.013	0.013
6.003	-	-	100	0.023	0.023	0.023
6.004	-	-	100	0.025	0.025	0.025
1.008	-	-	100	0.000	0.000	0.000
7.000	-	-	100	0.000	0.000	0.000
1.009	-	-	100	0.000	0.000	0.000
1.010	-	-	100	0.000	0.000	0.000
1.011	-	-	100	0.000	0.000	0.000
1.012	-	-	100	0.000	0.000	0.000
				Total	Total	Total
				0.892	0.892	0.892

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)
1.012		31.550	30.520	0.000	0	0

Simulation Criteria for Storm

Volumetric Runoff Coeff	0.750	Additional Flow - % of Total Flow	0.000
Areal Reduction Factor	1.000	MADD Factor * 10m³/ha Storage	2.000
Hot Start (mins)	0	Inlet Coefficient	0.800
Hot Start Level (mm)	0	Flow per Person per Day (l/per/day)	0.000
Manhole Headloss Coeff (Global)	0.500	Run Time (mins)	60
Foul Sewage per hectare (l/s)	0.000	Output Interval (mins)	1
Number of Input Hydrographs		0	Number of Storage Structures
Number of Online Controls		1	Number of Time/Area Diagrams
Number of Offline Controls		0	Number of Real Time Controls

Synthetic Rainfall Details

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Simulation Criteria for Storm

Rainfall Model	FSR	Profile Type	Summer
Return Period (years)	30	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	18.000	Storm Duration (mins)	30
Ratio R	0.335		

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Online Controls for Storm

Depth/Flow Relationship Manhole: 24, DS/PN: 1.012, Volume (m³): 1.8

Invert Level (m) 30.690

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.018	0.2070	0.257	6.4580	0.496	6.0740	0.735	5.9100
0.037	0.7840	0.276	6.4610	0.514	5.9970	0.753	5.9780
0.055	1.6500	0.294	6.4540	0.533	5.9030	0.771	6.0460
0.073	2.7040	0.312	6.4400	0.551	5.7870	0.790	6.1120
0.092	3.8210	0.331	6.4200	0.569	5.6470	0.808	6.1780
0.110	4.8230	0.349	6.3970	0.588	5.4780	0.827	6.2430
0.129	5.6530	0.367	6.3700	0.606	5.4060	0.845	6.3070
0.147	6.0810	0.386	6.3410	0.624	5.4820	0.863	6.3700
0.165	6.2070	0.404	6.3100	0.643	5.5560	0.882	6.4330
0.184	6.3010	0.422	6.2750	0.661	5.6290	0.900	6.4950
0.202	6.3700	0.441	6.2360	0.680	5.7000	0.990	6.7900
0.220	6.4160	0.459	6.1910	0.698	5.7710	1.080	7.0720
0.239	6.4450	0.478	6.1380	0.716	5.8410		

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Storage Structures for Storm Tank or Pond Manhole: 23, DS/PN: 1.011 Invert Level (m) 30.700 <table><thead><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr></thead><tbody><tr><td>0.000</td><td>325.6</td><td>0.900</td><td>600.4</td></tr></tbody></table> Manhole Headloss for Storm <table><thead><tr><th>PN</th><th>US/MH Name</th><th>US/MH Headloss</th></tr></thead><tbody><tr><td>1.000</td><td>1</td><td>0.500</td></tr><tr><td>1.001</td><td>2</td><td>0.500</td></tr><tr><td>2.000</td><td>3</td><td>0.500</td></tr><tr><td>1.002</td><td>4</td><td>0.500</td></tr><tr><td>1.003</td><td>5</td><td>0.500</td></tr><tr><td>3.000</td><td>6</td><td>0.500</td></tr><tr><td>1.004</td><td>7</td><td>0.500</td></tr><tr><td>4.000</td><td>8</td><td>0.500</td></tr><tr><td>1.005</td><td>9</td><td>0.500</td></tr><tr><td>1.006</td><td>10</td><td>0.000</td></tr><tr><td>5.000</td><td>11</td><td>0.500</td></tr><tr><td>5.001</td><td>12</td><td>0.500</td></tr><tr><td>1.007</td><td>13</td><td>0.000</td></tr><tr><td>6.000</td><td>14</td><td>0.500</td></tr><tr><td>6.001</td><td>15</td><td>0.500</td></tr><tr><td>6.002</td><td>16</td><td>0.500</td></tr><tr><td>6.003</td><td>17</td><td>0.500</td></tr><tr><td>6.004</td><td>18</td><td>0.500</td></tr><tr><td>1.008</td><td>19</td><td>0.000</td></tr><tr><td>7.000</td><td>20</td><td>0.000</td></tr><tr><td>1.009</td><td>21</td><td>0.000</td></tr><tr><td>1.010</td><td>22</td><td>0.500</td></tr><tr><td>1.011</td><td>23</td><td>0.500</td></tr><tr><td>1.012</td><td>24</td><td>0.500</td></tr></tbody></table>			Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	325.6	0.900	600.4	PN	US/MH Name	US/MH Headloss	1.000	1	0.500	1.001	2	0.500	2.000	3	0.500	1.002	4	0.500	1.003	5	0.500	3.000	6	0.500	1.004	7	0.500	4.000	8	0.500	1.005	9	0.500	1.006	10	0.000	5.000	11	0.500	5.001	12	0.500	1.007	13	0.000	6.000	14	0.500	6.001	15	0.500	6.002	16	0.500	6.003	17	0.500	6.004	18	0.500	1.008	19	0.000	7.000	20	0.000	1.009	21	0.000	1.010	22	0.500	1.011	23	0.500	1.012	24	0.500
Depth (m)	Area (m²)	Depth (m)	Area (m²)																																																																																		
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Summary of Critical Results by Maximum Level (Rank 1) for Storm

Margin for Flood Risk Warning (mm)

300.0

Analysis Timestep 2.5 Second Increment (Extended)

DTS Status ON

DVD Status ON

Inertia Status ON

Profile(s)

Summer and Winter

Duration(s) (mins)

15, 30, 60, 120, 240, 360, 480, 960, 1440

Return Period(s) (years)

100

Climate Change (%)

30

PN	Storm	Return Period	Climate Change	First X Surcharge	First Y Flood	First Z Overflow	O/F Act.	Lvl Exc.
1.000	15 Winter	100	+30%	100/15 Summer	100/15 Summer			4
1.001	30 Summer	100	+30%	100/15 Summer				
2.000	15 Winter	100	+30%	100/15 Summer	100/15 Summer			4
1.002	15 Winter	100	+30%	100/15 Summer	100/15 Summer			4
1.003	15 Winter	100	+30%	100/15 Summer				
3.000	30 Winter	100	+30%					
1.004	30 Winter	100	+30%	100/15 Summer				
4.000	30 Winter	100	+30%	100/15 Summer				
1.005	30 Winter	100	+30%	100/15 Summer				
1.006	60 Winter	100	+30%	100/15 Summer				
5.000	360 Winter	100	+30%	100/15 Summer				
5.001	360 Winter	100	+30%	100/15 Summer				
1.007	60 Winter	100	+30%					
6.000	15 Winter	100	+30%					
6.001	30 Winter	100	+30%	100/15 Summer	100/30 Winter			1
6.002	30 Winter	100	+30%	100/15 Summer				
6.003	30 Winter	100	+30%	100/15 Summer				
6.004	30 Winter	100	+30%	100/15 Summer				
1.008	60 Winter	100	+30%					
7.000	60 Winter	100	+30%					
1.009	60 Winter	100	+30%					
1.010	480 Winter	100	+30%	100/15 Summer				
1.011	480 Winter	100	+30%	100/30 Winter				
1.012	480 Winter	100	+30%	100/30 Winter				

PN	US/MH Name	Water Level (m)	Surch'd Depth (m)	Flooded Volume (m³)	Flow / Cap. (l/s)	O'flow (l/s)	Pipe (l/s)	Status
1.000	1	33.252	0.552	2.503	1.23	0.0	17.2	FLOOD
1.001	2	33.273	0.733	0.000	1.15	0.0	15.9	FLOOD RISK
2.000	3	33.252	0.552	2.519	1.15	0.0	22.9	FLOOD
1.002	4	33.254	0.869	4.343	1.43	0.0	57.5	FLOOD
1.003	5	33.094	1.064	0.000	1.93	0.0	145.3	FLOOD RISK
3.000	6	32.089	-0.106	0.000	0.08	0.0	7.8	OK
1.004	7	32.079	0.374	0.000	0.78	0.0	155.8	SURCHARGED
4.000	8	31.920	0.370	0.000	0.79	0.0	19.4	FLOOD RISK
1.005	9	31.836	0.576	0.000	1.42	0.0	183.6	FLOOD RISK

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Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Water		Flooded		Pipe		Status
		Level (m)	Surch'd Depth (m)	Volume (m³)	Flow / Cap.	O'flow (l/s)	Flow (l/s)	
1.006	10	31.240	0.050	0.000	0.08	0.0	144.0	SURCHARGED*
5.000	11	31.766	0.526	0.000	0.21	0.0	3.0	FLOOD RISK
5.001	12	31.762	0.597	0.000	0.12	0.0	7.3	FLOOD RISK
1.007	13	31.163	0.000	0.000	0.10	0.0	164.4	SURCHARGED*
6.000	14	32.276	-0.119	0.000	0.44	0.0	27.4	OK
6.001	15	32.000	0.405	0.146	0.78	0.0	29.6	FLOOD
6.002	16	31.913	0.508	0.000	0.81	0.0	30.5	SURCHARGED
6.003	17	31.824	0.559	0.000	1.02	0.0	37.8	SURCHARGED
6.004	18	31.732	0.587	0.000	1.20	0.0	45.3	SURCHARGED
1.008	19	31.149	0.000	0.000	0.11	0.0	190.9	SURCHARGED*
7.000	20	31.150	0.000	0.000	0.00	0.0	0.9	SURCHARGED*
1.009	21	31.170	0.000	0.000	1.13	0.0	190.8	SURCHARGED*
1.010	22	31.579	0.419	0.000	0.46	0.0	58.4	SURCHARGED
1.011	23	31.578	0.428	0.000	0.10	0.0	12.4	FLOOD RISK
1.012	24	31.614	0.474	0.000	0.03	0.0	6.4	SURCHARGED