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Midpoint Alencon Link Basingstoke, RG21 7PP		
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STORM SEWER DESIGN by the Modified Rational Method

Design Criteria for Storm

Pipe Sizes STANDARD Manhole Sizes STANDARD

FEH Rainfall Model	
Return Period (years)	100
FEH Rainfall Version	1999
Site Location GB 529200 120700 TQ 29200 20700	
C (1km)	-0.027
D1 (1km)	0.383
D2 (1km)	0.289
D3 (1km)	0.420
E (1km)	0.316
F (1km)	2.478
Maximum Rainfall (mm/hr)	550
Maximum Time of Concentration (mins)	30
Foul Sewage (l/s/ha)	0.000
Volumetric Runoff Coeff.	1.000
PIMP (%)	100
Add Flow / Climate Change (%)	0
Minimum Backdrop Height (m)	0.200
Maximum Backdrop Height (m)	1.500
Min Design Depth for Optimisation (m)	1.200
Min Vel for Auto Design only (m/s)	1.00
Min Slope for Optimisation (1:X)	300

Designed with Level Soffits

Network Design Table for Storm

« - Indicates pipe capacity < flow

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
2.000	3.613	0.361	10.0	0.033	5.00	0.0	0.600	o	100	Pipe/Conduit	
2.001	33.701	0.225	150.0	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
3.000	2.971	0.297	10.0	0.038	5.00	0.0	0.600	o	100	Pipe/Conduit	

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)
2.000	320.49	5.02	28.550	0.033	0.0	0.0	0.0	2.46	19.3«	38.2
2.001	305.36	5.36	26.433	0.033	0.0	0.0	0.0	1.66	263.6	38.2
3.000	320.69	5.02	27.903	0.038	0.0	0.0	0.0	2.46	19.3«	44.0

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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)	Backdrop (mm)
TP05-601	30.080	1.530	Open Manhole	1200	2.000	28.550	100				
MH05-618	30.063	3.630	Open Manhole	1350	2.001	26.433	450	2.000	28.189	100	1406
TP05-603	29.428	1.525	Open Manhole	1200	3.000	27.903	100				
TP05-604	29.427	1.531	Open Manhole	1200	4.000	27.896	100				
MH05-617	29.419	3.211	Open Manhole	1350	2.002	26.208	450	2.001	26.208	450	
								3.000	27.606	100	1048
								4.000	27.232	100	674
MH05-616	28.989	2.925	Open Manhole	1350	2.003	26.064	450	2.002	26.064	450	
8	28.674	1.550	Open Manhole	1200	5.000	27.124	100				
MH05-615	28.661	5.181	Open Manhole	2400	2.004	23.480	1500	2.003	25.958	450	1428
								5.000	27.034	100	2154
MH05-629	28.480	4.831	Open Manhole	2400	6.000	23.649	1500				
MH05-628	28.175	4.678	Open Manhole	2400	6.001	23.497	1500	6.000	23.498	1500	1
12	27.865	1.526	Open Manhole	1200	7.000	26.339	100				
MH05-614	27.912	4.640	Open Manhole	2400	2.005	23.272	1500	2.004	23.272	1500	
								6.001	23.272	1500	
								7.000	25.361	100	689
MH05-613	27.700	4.618	Open Manhole	2400	2.006	23.082	1500	2.005	23.082	1500	
MH05-612	27.406	4.527	Open Manhole	2400	2.007	22.879	1500	2.006	22.879	1500	
MH05-611	27.559	5.896	Open Manhole	2400	2.008	21.663	1200	2.007	22.741	1500	1378
MH05-610	26.590	4.969	Open Manhole	2100	2.009	21.621	1200	2.008	21.621	1200	
MH05-609	25.846	4.358	Open Manhole	2100	2.010	21.488	1200	2.009	21.488	1200	
MH05-608	25.027	4.289	Open Manhole	2100	2.011	20.738	1200	2.010	21.338	1200	600
MH05-630	24.692	4.069	Open Manhole	2100	2.012	20.623	225	2.011	20.623	1200	
MH05-631	24.644	4.045	Open Manhole	2100	2.013	20.599	1200	2.012	20.599	225	
MH05-627	24.545	3.965	Open Manhole	2100	8.000	20.580	1200				
MH05-607	24.518	3.968	Open Manhole	2100	2.014	20.550	1200	2.013	20.550	1200	
								8.000	20.550	1200	
MH05-606	23.872	3.448	Open Manhole	2100	2.015	20.424	1200	2.014	20.424	1200	
MH05-605	23.983	3.710	Open Manhole	2100	2.016	20.273	1200	2.015	20.273	1200	
MH05-604	22.937	2.820	Open Manhole	2100	2.017	20.117	300	2.016	20.117	1200	
26	22.236	2.143	Open Manhole	1800	2.018	20.093	750	2.017	20.093	300	
MH05-625	26.780	6.144	Junction		9.000	20.636	750				
MH05-624	25.469	4.980	Open Manhole	1800	9.001	20.489	750	9.000	20.489	750	
MH05-623	24.845	4.424	Open Manhole	1800	9.002	20.421	750	9.001	20.421	750	
MH05-622	23.546	3.200	Open Manhole	1800	9.003	20.346	750	9.002	20.346	750	
MH05-621	22.751	2.583	Open Manhole	1800	9.004	20.168	750	9.003	20.168	750	
MH05-620	22.628	2.557	Open Manhole	1800	9.005	20.071	750	9.004	20.071	750	

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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)
MH05-603	21.957	1.987	Open Manhole	1800	2.019	19.970	225	2.018	19.970	750	
								9.005	19.970	750	
MH05-602	21.540	1.730	Open Manhole	1200	2.020	19.810	225	2.019	19.810	225	
MH05-601	21.428	1.713	Open Manhole	1200	2.021	19.715	225	2.020	19.715	225	
OUTFALL 5.6	20.220	0.568	Open Manhole	225		OUTFALL		2.021	19.652	225	

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
TP05-601	530662.474	120811.153	530662.474	120811.153	Required	
MH05-618	530659.098	120812.441	530659.098	120812.441	Required	
TP05-603	530635.566	120791.547	530635.566	120791.547	Required	
TP05-604	530629.746	120797.624	530629.746	120797.624	Required	
MH05-617	530632.596	120791.623	530632.596	120791.623	Required	
MH05-616	530613.513	120781.420	530613.513	120781.420	Required	
8	530601.643	120786.931	530601.643	120786.931	Required	
MH05-615	530597.868	120778.788	530597.868	120778.788	Required	
MH05-629	530496.096	120776.137	530496.096	120776.137	Required	
MH05-628	530509.505	120766.438	530509.505	120766.438	Required	
12	530532.393	120778.138	530532.393	120778.138	Required	

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Area Summary for Storm

Pipe Number	PIMP Type	PIMP Name	PIMP (%)	Gross Area (ha)	Imp. Area (ha)	Pipe Total (ha)
2.000	-	-	100	0.033	0.033	0.033
2.001	-	-	100	0.000	0.000	0.000
3.000	-	-	100	0.038	0.038	0.038
4.000	-	-	100	0.059	0.059	0.059
2.002	-	-	100	0.046	0.046	0.046
2.003	-	-	100	0.000	0.000	0.000
5.000	-	-	100	0.031	0.031	0.031
2.004	-	-	100	0.059	0.059	0.059
6.000	-	-	100	0.027	0.027	0.027
6.001	-	-	100	0.029	0.029	0.029
7.000	-	-	100	0.120	0.120	0.120
2.005	-	-	100	0.076	0.076	0.076
2.006	-	-	100	0.023	0.023	0.023
2.007	-	-	100	0.019	0.019	0.019
2.008	-	-	100	0.014	0.014	0.014
2.009	User	-	100	0.038	0.038	0.038
2.010	User	-	100	0.042	0.042	0.042
2.011	User	-	100	0.052	0.052	0.052
2.012	-	-	100	0.000	0.000	0.000
2.013	-	-	100	0.000	0.000	0.000
8.000	-	-	100	0.080	0.080	0.080
2.014	User	-	100	0.036	0.036	0.036
2.015	User	-	100	0.043	0.043	0.043
2.016	User	-	100	0.046	0.046	0.046
2.017	User	-	100	0.043	0.043	0.043
2.018	-	-	100	0.000	0.000	0.000
9.000	User	-	100	0.048	0.048	0.048
9.001	User	-	100	0.018	0.018	0.018
9.002	User	-	100	0.021	0.021	0.021
9.003	User	-	100	0.051	0.051	0.051
9.004	User	-	100	0.029	0.029	0.029
9.005	User	-	100	0.029	0.029	0.029
2.019	-	-	100	0.000	0.000	0.000
2.020	-	-	100	0.000	0.000	0.000
2.021	-	-	100	0.000	0.000	0.000
				Total	Total	Total
				1.150	1.150	1.150

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)
2.021	OUTFALL 5.6	20.220	19.652	19.745	225	0

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Simulation Criteria for Storm

Volumetric Runoff Coeff 1.000	Additional Flow - % of Total Flow 0.000
Areal Reduction Factor 1.000	MADD Factor * 10m ³ /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 5
Number of Online Controls 5	Number of Time/Area Diagrams 0
Number of Offline Controls 0	Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model	FEH
Return Period (years)	100
FEH Rainfall Version	1999
Site Location	GB 529200 120700 TQ 29200 20700
C (1km)	-0.027
D1 (1km)	0.383
D2 (1km)	0.289
D3 (1km)	0.420
E (1km)	0.316
F (1km)	2.478
Summer Storms	Yes
Winter Storms	Yes
Cv (Summer)	1.000
Cv (Winter)	0.840
Storm Duration (mins)	30

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Online Controls for Storm

Hydro-Brake® Optimum Manhole: MH05-614, DS/PN: 2.005, Volume (m³): 170.3

Unit Reference	MD-SHE-0110-7000-1900-7000	
Design Head (m)	1.900	
Design Flow (l/s)	7.0	
Flush-Flo™	Calculated	
Objective	Minimise upstream storage	
Application	Surface	
Sump Available	Yes	
Diameter (mm)	110	
Invert Level (m)	23.272	
Minimum Outlet Pipe Diameter (mm)	150	
Suggested Manhole Diameter (mm)	1200	

Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	1.900	7.0
Flush-Flo™	0.483	6.5
Kick-Flo®	0.985	5.2
Mean Flow over Head Range	-	5.8

The hydrological calculations have been based on the Head/Discharge relationship for the Hydro-Brake® Optimum as specified. Should another type of control device other than a Hydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	3.8	1.200	5.6	3.000	8.7	7.000	13.0
0.200	5.7	1.400	6.1	3.500	9.3	7.500	13.4
0.300	6.2	1.600	6.5	4.000	9.9	8.000	13.8
0.400	6.4	1.800	6.8	4.500	10.5	8.500	14.2
0.500	6.5	2.000	7.2	5.000	11.1	9.000	14.6
0.600	6.4	2.200	7.5	5.500	11.6	9.500	15.0
0.800	6.1	2.400	7.8	6.000	12.1		
1.000	5.2	2.600	8.1	6.500	12.5		

Hydro-Brake® Optimum Manhole: MH05-611, DS/PN: 2.008, Volume (m³): 95.8

Unit Reference	MD-SHE-0080-3200-1370-3200	
Design Head (m)	1.370	
Design Flow (l/s)	3.2	
Flush-Flo™	Calculated	
Objective	Minimise upstream storage	
Application	Surface	
Sump Available	Yes	
Diameter (mm)	80	
Invert Level (m)	21.663	
Minimum Outlet Pipe Diameter (mm)	100	
Suggested Manhole Diameter (mm)	1200	

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Hydro-Brake® Optimum Manhole: MH05-611, DS/PN: 2.008, Volume (m³): 95.8

Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	1.370	3.2
Flush-Flo™	0.351	2.9
Kick-Flo®	0.711	2.4
Mean Flow over Head Range	-	2.7

The hydrological calculations have been based on the Head/Discharge relationship for the Hydro-Brake® Optimum as specified. Should another type of control device other than a Hydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	2.3	1.200	3.0	3.000	4.6	7.000	6.8
0.200	2.8	1.400	3.2	3.500	4.9	7.500	7.1
0.300	2.9	1.600	3.4	4.000	5.3	8.000	7.3
0.400	2.9	1.800	3.6	4.500	5.6	8.500	7.5
0.500	2.9	2.000	3.8	5.000	5.8	9.000	7.7
0.600	2.7	2.200	4.0	5.500	6.1	9.500	7.9
0.800	2.5	2.400	4.1	6.000	6.4		
1.000	2.8	2.600	4.3	6.500	6.6		

Hydro-Brake® Optimum Manhole: MH05-608, DS/PN: 2.011, Volume (m³): 63.5

Unit Reference	MD-SHE-0080-3800-1900-3800
Design Head (m)	1.900
Design Flow (l/s)	3.8
Flush-Flo™	Calculated
Objective	Minimise upstream storage
Application	Surface
Sump Available	Yes
Diameter (mm)	80
Invert Level (m)	20.738
Minimum Outlet Pipe Diameter (mm)	100
Suggested Manhole Diameter (mm)	1200

Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	1.900	3.8
Flush-Flo™	0.350	3.0
Kick-Flo®	0.719	2.4
Mean Flow over Head Range	-	3.0

The hydrological calculations have been based on the Head/Discharge relationship for the Hydro-Brake® Optimum as specified. Should another type of control device other than a Hydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	2.3	0.300	3.0	0.500	3.0	0.800	2.6
0.200	2.9	0.400	3.0	0.600	2.8	1.000	2.8

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Hydro-Brake® Optimum Manhole: MH05-608, DS/PN: 2.011, Volume (m³): 63.5

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
1.200	3.1	2.400	4.2	5.000	6.0	8.000	7.5
1.400	3.3	2.600	4.4	5.500	6.2	8.500	7.7
1.600	3.5	3.000	4.7	6.000	6.5	9.000	7.9
1.800	3.7	3.500	5.1	6.500	6.8	9.500	8.1
2.000	3.9	4.000	5.4	7.000	7.0		
2.200	4.1	4.500	5.7	7.500	7.2		

Hydro-Brake® Optimum Manhole: MH05-604, DS/PN: 2.017, Volume (m³): 61.9

Unit Reference MD-SHE-0107-6800-2022-6800

Design Head (m)2.022

Design Flow (l/s)6.8

Flush-Flo™Calculated

ObjectiveMinimise upstream storage

ApplicationSurface

Sump AvailableYes

Diameter (mm)107

Invert Level (m)20.117

Minimum Outlet Pipe Diameter (mm)150

Suggested Manhole Diameter (mm)1200

Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	2.022	6.8
Flush-Flo™	0.463	6.0
Kick-Flo®	0.953	4.8
Mean Flow over Head Range	-	5.6

The hydrological calculations have been based on the Head/Discharge relationship for the Hydro-Brake® Optimum as specified. Should another type of control device other than a Hydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	3.6	1.200	5.3	3.000	8.2	7.000	12.2
0.200	5.4	1.400	5.7	3.500	8.8	7.500	12.6
0.300	5.8	1.600	6.1	4.000	9.4	8.000	13.0
0.400	6.0	1.800	6.4	4.500	9.9	8.500	13.4
0.500	6.0	2.000	6.8	5.000	10.4	9.000	13.8
0.600	6.0	2.200	7.1	5.500	10.9	9.500	14.1
0.800	5.6	2.400	7.4	6.000	11.4		
1.000	4.9	2.600	7.6	6.500	11.8		

Hydro-Brake® Optimum Manhole: MH05-603, DS/PN: 2.019, Volume (m³): 33.3

Unit Reference MD-SHE-0124-8000-1505-8000

Design Head (m)1.505

Design Flow (l/s)8.0

Flush-Flo™Calculated

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Hydro-Brake® Optimum Manhole: MH05-603, DS/PN: 2.019, Volume (m³): 33.3 Objective Minimise upstream storage Application Surface Sump Available Yes Diameter (mm) 124 Invert Level (m) 19.970 Minimum Outlet Pipe Diameter (mm) 150 Suggested Manhole Diameter (mm) 1200 <table><thead><tr><th>Control Points</th><th>Head (m)</th><th>Flow (l/s)</th></tr></thead><tbody><tr><td>Design Point (Calculated)</td><td>1.505</td><td>8.0</td></tr><tr><td>Flush-Flo™</td><td>0.441</td><td>8.0</td></tr><tr><td>Kick-Flo®</td><td>0.924</td><td>6.4</td></tr><tr><td>Mean Flow over Head Range</td><td>-</td><td>7.0</td></tr></tbody></table> The hydrological calculations have been based on the Head/Discharge relationship for the Hydro-Brake® Optimum as specified. Should another type of control device other than a Hydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated <table><thead><tr><th>Depth (m)</th><th>Flow (l/s)</th><th>Depth (m)</th><th>Flow (l/s)</th><th>Depth (m)</th><th>Flow (l/s)</th><th>Depth (m)</th><th>Flow (l/s)</th></tr></thead><tbody><tr><td>0.100</td><td>4.4</td><td>1.200</td><td>7.2</td><td>3.000</td><td>11.1</td><td>7.000</td><td>16.6</td></tr><tr><td>0.200</td><td>7.2</td><td>1.400</td><td>7.7</td><td>3.500</td><td>11.9</td><td>7.500</td><td>17.1</td></tr><tr><td>0.300</td><td>7.8</td><td>1.600</td><td>8.2</td><td>4.000</td><td>12.7</td><td>8.000</td><td>17.7</td></tr><tr><td>0.400</td><td>8.0</td><td>1.800</td><td>8.7</td><td>4.500</td><td>13.4</td><td>8.500</td><td>18.2</td></tr><tr><td>0.500</td><td>8.0</td><td>2.000</td><td>9.1</td><td>5.000</td><td>14.1</td><td>9.000</td><td>18.7</td></tr><tr><td>0.600</td><td>7.8</td><td>2.200</td><td>9.6</td><td>5.500</td><td>14.8</td><td>9.500</td><td>19.2</td></tr><tr><td>0.800</td><td>7.3</td><td>2.400</td><td>10.0</td><td>6.000</td><td>15.4</td><td></td><td></td></tr><tr><td>1.000</td><td>6.6</td><td>2.600</td><td>10.3</td><td>6.500</td><td>16.0</td><td></td><td></td></tr></tbody></table>			Control Points	Head (m)	Flow (l/s)	Design Point (Calculated)	1.505	8.0	Flush-Flo™	0.441	8.0	Kick-Flo®	0.924	6.4	Mean Flow over Head Range	-	7.0	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	0.100	4.4	1.200	7.2	3.000	11.1	7.000	16.6	0.200	7.2	1.400	7.7	3.500	11.9	7.500	17.1	0.300	7.8	1.600	8.2	4.000	12.7	8.000	17.7	0.400	8.0	1.800	8.7	4.500	13.4	8.500	18.2	0.500	8.0	2.000	9.1	5.000	14.1	9.000	18.7	0.600	7.8	2.200	9.6	5.500	14.8	9.500	19.2	0.800	7.3	2.400	10.0	6.000	15.4			1.000	6.6	2.600	10.3	6.500	16.0		
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Storage Structures for Storm Bio-Retention Area Manhole: TP05-601, DS/PN: 2.000 Invert Level (m)28.550Infiltration Coefficient Side (m/hr)0.00000 Porosity0.30Safety Factor2.0 Infiltration Coefficient Base (m/hr)0.00000 <table><tr><td>Depth (m)</td><td>Area (m²)</td><td>Perimeter (m)</td><td>Depth (m)</td><td>Area (m²)</td><td>Perimeter (m)</td></tr><tr><td>0.000</td><td>83.0</td><td>66.000</td><td>1.000</td><td>83.0</td><td>66.000</td></tr></table> Bio-Retention Area Manhole: TP05-603, DS/PN: 3.000 Invert Level (m)27.903Infiltration Coefficient Side (m/hr)0.00000 Porosity0.30Safety Factor2.0 Infiltration Coefficient Base (m/hr)0.00000 <table><tr><td>Depth (m)</td><td>Area (m²)</td><td>Perimeter (m)</td><td>Depth (m)</td><td>Area (m²)</td><td>Perimeter (m)</td></tr><tr><td>0.000</td><td>70.0</td><td>56.000</td><td>1.000</td><td>70.0</td><td>56.000</td></tr></table> Bio-Retention Area Manhole: TP05-604, DS/PN: 4.000 Invert Level (m)27.896Infiltration Coefficient Side (m/hr)0.00000 Porosity0.30Safety Factor2.0 Infiltration Coefficient Base (m/hr)0.00000 <table><tr><td>Depth (m)</td><td>Area (m²)</td><td>Perimeter (m)</td><td>Depth (m)</td><td>Area (m²)</td><td>Perimeter (m)</td></tr><tr><td>0.000</td><td>155.0</td><td>118.000</td><td>1.000</td><td>155.0</td><td>118.000</td></tr></table> Bio-Retention Area Manhole: 8, DS/PN: 5.000 Invert Level (m)27.124Infiltration Coefficient Side (m/hr)0.00000 Porosity0.30Safety Factor2.0 Infiltration Coefficient Base (m/hr)0.00000 <table><tr><td>Depth (m)</td><td>Area (m²)</td><td>Perimeter (m)</td><td>Depth (m)</td><td>Area (m²)</td><td>Perimeter (m)</td></tr><tr><td>0.000</td><td>84.0</td><td>68.000</td><td>1.000</td><td>84.0</td><td>68.000</td></tr></table> Bio-Retention Area Manhole: 12, DS/PN: 7.000 Invert Level (m)26.339Infiltration Coefficient Side (m/hr)0.00000 Porosity0.30Safety Factor2.0 Infiltration Coefficient Base (m/hr)0.00000 <table><tr><td>Depth (m)</td><td>Area (m²)</td><td>Perimeter (m)</td><td>Depth (m)</td><td>Area (m²)</td><td>Perimeter (m)</td></tr><tr><td>0.000</td><td>274.0</td><td>206.000</td><td>1.000</td><td>274.0</td><td>206.000</td></tr></table>			Depth (m)	Area (m²)	Perimeter (m)	Depth (m)	Area (m²)	Perimeter (m)	0.000	83.0	66.000	1.000	83.0	66.000	Depth (m)	Area (m²)	Perimeter (m)	Depth (m)	Area (m²)	Perimeter (m)	0.000	70.0	56.000	1.000	70.0	56.000	Depth (m)	Area (m²)	Perimeter (m)	Depth (m)	Area (m²)	Perimeter (m)	0.000	155.0	118.000	1.000	155.0	118.000	Depth (m)	Area (m²)	Perimeter (m)	Depth (m)	Area (m²)	Perimeter (m)	0.000	84.0	68.000	1.000	84.0	68.000	Depth (m)	Area (m²)	Perimeter (m)	Depth (m)	Area (m²)	Perimeter (m)	0.000	274.0	206.000	1.000	274.0	206.000
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Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
2.000	TP05-601	28.805	0.155	0.000	1.20		7	19.4	SURCHARGED
2.001	MH05-618	27.920	1.037	0.000	0.03			5.9	SURCHARGED
3.000	TP05-603	28.264	0.261	0.000	1.37		7	20.8	SURCHARGED
4.000	TP05-604	28.251	0.255	0.000	1.18		11	20.5	SURCHARGED
2.002	MH05-617	27.919	1.261	0.000	0.15			31.3	SURCHARGED
2.003	MH05-616	27.914	1.400	0.000	0.17			31.2	SURCHARGED
5.000	8	27.915	0.691	0.000	0.97		120	5.4	SURCHARGED
2.004	MH05-615	27.909	2.929	0.000	0.01			42.7	SURCHARGED
6.000	MH05-629	27.909	2.760	0.000	0.00			2.2	SURCHARGED
6.001	MH05-628	27.909	2.912	0.000	0.00			4.5	FLOOD RISK
7.000	12	27.844	1.405	0.000	0.86		216	15.4	FLOOD RISK
2.005	MH05-614	27.909	3.137	0.000	0.00			10.4	FLOOD RISK

PN	US/MH Name	Level Exceeded
2.000	TP05-601	
2.001	MH05-618	
3.000	TP05-603	
4.000	TP05-604	
2.002	MH05-617	
2.003	MH05-616	
5.000	8	
2.004	MH05-615	
6.000	MH05-629	
6.001	MH05-628	
7.000	12	
2.005	MH05-614	

