

**Design Settings**

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	2	Maximum Rainfall (mm/hr)	50.0
Additional Flow (%)	0	Minimum Velocity (m/s)	1.00
FSR Region	England and Wales	Connection Type	Level Soffits
M5-60 (mm)	17.000	Minimum Backdrop Height (m)	1.000
Ratio-R	0.300	Preferred Cover Depth (m)	1.200
CV	0.750	Include Intermediate Ground	✓
Time of Entry (mins)	5.00	Enforce best practice design rules	✓

**Nodes**

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
SW 0201	0.003	5.00	209.550	460	332110.152	289183.428	0.700
SW 0202	0.005	5.00	209.550	460	332104.160	289183.120	0.760
Rainwater_In			209.825		332100.554	289181.381	1.075
Rainwater_Out			209.825		332099.814	289178.432	1.175
04 Re	0.002	5.00	209.875		332091.082	289175.346	1.150
03 Re	0.002	5.00	209.825		332098.256	289182.456	0.800
SW 0203			209.875	460	332098.371	289175.501	1.258
SW 0210	0.003	5.00	209.550	460	332109.953	289168.073	0.700
SW 0211	0.002	5.00	209.550	460	332103.961	289167.766	0.760
SW 0204			209.550	460	332098.836	289167.469	1.013
Soakaway_In_03			209.550		332096.344	289167.325	1.038
01 Re	0.003	5.00	208.550		332113.286	289150.404	0.700
SW 0101	0.005	5.00	208.550	460	332107.150	289149.545	1.000
02 Re	0.002	5.00	208.500		332100.225	289141.922	0.800
SW 0120	0.001	5.00	208.550	460	332098.010	289148.679	1.150
SW 0102			208.550	460	332099.925	289151.481	1.184
Soakaway_In_01			208.500		332096.910	289156.322	1.191
SW 0110	0.002	5.00	208.550	460	332110.010	289165.421	0.700
SW 0111	0.002	5.00	208.550	460	332104.067	289164.597	1.000
Soakaway_In_02			208.500		332096.680	289160.919	1.191

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
Dummy Node			208.500	460	332096.795	289158.621	1.230
Soakaway (Node)			208.500		332095.796	289158.571	1.247

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
S2.000	SW 0201	SW 0202	6.000	0.600	208.850	208.790	0.060	100.0	100	5.13	50.0
S2.001	SW 0202	Rainwater_In	4.003	0.600	208.790	208.750	0.040	100.0	100	5.22	50.0
Rainwater	Rainwater_In	Rainwater_Out	3.040	0.600	208.750	208.650	0.100	30.4	100	5.25	50.0
S2.002	Rainwater_Out	SW 0203	3.267	0.600	208.650	208.617	0.033	100.0	100	5.32	50.0
S2.020	04 Re	SW 0203	7.291	0.600	208.725	208.617	0.108	67.5	100	5.13	50.0
S2.030	03 Re	SW 0203	6.956	0.600	209.025	208.617	0.408	17.0	100	5.06	50.0
S2.003	SW 0203	SW 0204	8.045	0.600	208.617	208.537	0.080	100.0	100	5.50	49.6
S2.010	SW 0210	SW 0211	6.000	0.600	208.850	208.790	0.060	100.0	100	5.13	50.0
S2.011	SW 0211	SW 0204	5.134	0.600	208.790	208.537	0.253	20.3	100	5.18	50.0
S2.004	SW 0204	Soakaway_In_03	2.496	0.600	208.537	208.512	0.025	100.0	100	5.55	49.4

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
S2.000	0.769	6.0	0.4	0.600	0.660	0.003	0.0	18	0.432
S2.001	0.769	6.0	1.1	0.660	0.975	0.008	0.0	29	0.579
Rainwater	1.404	11.0	1.1	0.975	1.075	0.008	0.0	21	0.898
S2.002	0.769	6.0	1.1	1.075	1.158	0.008	0.0	29	0.579
S2.020	0.938	7.4	0.3	1.050	1.158	0.002	0.0	13	0.433
S2.030	1.879	14.8	0.3	0.700	1.158	0.002	0.0	10	0.726
S2.003	0.769	6.0	1.6	1.158	0.913	0.012	0.0	36	0.653
S2.010	0.769	6.0	0.4	0.600	0.660	0.003	0.0	18	0.432
S2.011	1.722	13.5	0.7	0.660	0.913	0.005	0.0	15	0.890
S2.004	0.769	6.0	2.3	0.913	0.938	0.017	0.0	43	0.715

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
S1.000	01 Re	SW 0101	6.196	0.600	207.850	207.550	0.300	20.7	100	5.06	50.0
S1.001	SW 0101	SW 0102	7.480	0.600	207.550	207.366	0.184	40.7	100	5.16	50.0
S1.020	02 Re	SW 0120	7.111	0.600	207.700	207.400	0.300	23.7	100	5.07	50.0
S1.021	SW 0120	SW 0102	3.394	0.600	207.400	207.366	0.034	100.0	100	5.15	50.0
S1.002	SW 0102	Soakaway_In_01	5.703	0.600	207.366	207.309	0.057	100.0	100	5.29	50.0
S1.010	SW 0110	SW 0111	6.000	0.600	207.850	207.550	0.300	20.0	100	5.06	50.0
S1.011	SW 0111	Soakaway_In_02	8.252	0.600	207.550	207.309	0.241	34.2	100	5.16	50.0
Dummy 01	Soakaway_In_01	Dummy Node	2.302	0.600	207.309	207.270	0.039	59.0	100	5.33	50.0
Dummy 02	Soakaway_In_02	Dummy Node	2.301	0.600	207.309	207.270	0.039	59.0	100	5.20	50.0
Dummy 03	Dummy Node	Soakaway (Node)	1.000	0.600	207.270	207.253	0.017	58.8	100	5.34	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
S1.000	1.706	13.4	0.4	0.600	0.900	0.003	0.0	12	0.760
S1.001	1.213	9.5	1.1	0.900	1.084	0.008	0.0	23	0.808
S1.020	1.592	12.5	0.3	0.700	1.050	0.002	0.0	11	0.647
S1.021	0.769	6.0	0.4	1.050	1.084	0.003	0.0	18	0.432
S1.002	0.769	6.0	1.5	1.084	1.091	0.011	0.0	34	0.637
S1.010	1.734	13.6	0.3	0.600	0.900	0.002	0.0	10	0.669
S1.011	1.322	10.4	0.5	0.900	1.091	0.004	0.0	15	0.682
Dummy 01	1.004	7.9	1.5	1.091	1.130	0.011	0.0	29	0.768
Dummy 02	1.004	7.9	0.5	1.091	1.130	0.004	0.0	18	0.566
Dummy 03	1.006	7.9	2.0	1.130	1.147	0.015	0.0	35	0.845

**Pipeline Schedule**

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
S2.000	6.000	100.0	100	Circular	209.550	208.850	0.600	209.550	208.790	0.660
S2.001	4.003	100.0	100	Circular	209.550	208.790	0.660	209.825	208.750	0.975
Rainwater	3.040	30.4	100	Circular	209.825	208.750	0.975	209.825	208.650	1.075
S2.002	3.267	100.0	100	Circular	209.825	208.650	1.075	209.875	208.617	1.158
S2.020	7.291	67.5	100	Circular	209.875	208.725	1.050	209.875	208.617	1.158
S2.030	6.956	17.0	100	Circular	209.825	209.025	0.700	209.875	208.617	1.158
S2.003	8.045	100.0	100	Circular	209.875	208.617	1.158	209.550	208.537	0.913
S2.010	6.000	100.0	100	Circular	209.550	208.850	0.600	209.550	208.790	0.660
S2.011	5.134	20.3	100	Circular	209.550	208.790	0.660	209.550	208.537	0.913
S2.004	2.496	100.0	100	Circular	209.550	208.537	0.913	209.550	208.512	0.938
S1.000	6.196	20.7	100	Circular	208.550	207.850	0.600	208.550	207.550	0.900
S1.001	7.480	40.7	100	Circular	208.550	207.550	0.900	208.550	207.366	1.084
S1.020	7.111	23.7	100	Circular	208.500	207.700	0.700	208.550	207.400	1.050
S1.021	3.394	100.0	100	Circular	208.550	207.400	1.050	208.550	207.366	1.084
S1.002	5.703	100.0	100	Circular	208.550	207.366	1.084	208.500	207.309	1.091




Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
S2.000	SW 0201	460	Manhole	Adoptable	SW 0202	460	Manhole	Adoptable
S2.001	SW 0202	460	Manhole	Adoptable	Rainwater_In		Junction	
Rainwater	Rainwater_In		Junction		Rainwater_Out		Junction	
S2.002	Rainwater_Out		Junction		SW 0203	460	Manhole	Adoptable
S2.020	04 Re		Junction		SW 0203	460	Manhole	Adoptable
S2.030	03 Re		Junction		SW 0203	460	Manhole	Adoptable
S2.003	SW 0203	460	Manhole	Adoptable	SW 0204	460	Manhole	Adoptable
S2.010	SW 0210	460	Manhole	Adoptable	SW 0211	460	Manhole	Adoptable
S2.011	SW 0211	460	Manhole	Adoptable	SW 0204	460	Manhole	Adoptable
S2.004	SW 0204	460	Manhole	Adoptable	Soakaway_In_03		Junction	
S1.000	01 Re		Junction		SW 0101	460	Manhole	Adoptable
S1.001	SW 0101	460	Manhole	Adoptable	SW 0102	460	Manhole	Adoptable
S1.020	02 Re		Junction		SW 0120	460	Manhole	Adoptable
S1.021	SW 0120	460	Manhole	Adoptable	SW 0102	460	Manhole	Adoptable
S1.002	SW 0102	460	Manhole	Adoptable	Soakaway_In_01		Junction	

**Pipeline Schedule**




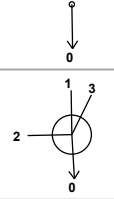

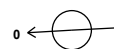
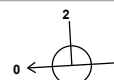



Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
S1.010	6.000	20.0	100	Circular	208.550	207.850	0.600	208.550	207.550	0.900
S1.011	8.252	34.2	100	Circular	208.550	207.550	0.900	208.500	207.309	1.091
Dummy 01	2.302	59.0	100	Circular	208.500	207.309	1.091	208.500	207.270	1.130
Dummy 02	2.301	59.0	100	Circular	208.500	207.309	1.091	208.500	207.270	1.130
Dummy 03	1.000	58.8	100	Circular	208.500	207.270	1.130	208.500	207.253	1.147

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
S1.010	SW 0110	460	Manhole	Adoptable	SW 0111	460	Manhole	Adoptable
S1.011	SW 0111	460	Manhole	Adoptable	Soakaway_In_02		Junction	
Dummy 01	Soakaway_In_01		Junction		Dummy Node	460	Manhole	Adoptable
Dummy 02	Soakaway_In_02		Junction		Dummy Node	460	Manhole	Adoptable
Dummy 03	Dummy Node	460	Manhole	Adoptable	Soakaway (Node)		Junction	





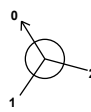



**Manhole Schedule**

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
SW 0201	332110.152	289183.428	209.550	0.700	460				
						0	S2.000	208.850	100
SW 0202	332104.160	289183.120	209.550	0.760	460				
						0	S2.001	208.790	100
Rainwater_In	332100.554	289181.381	209.825	1.075					
						0	Rainwater	208.750	100


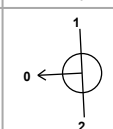

**Manhole Schedule**

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
Rainwater_Out	332099.814	289178.432	209.825	1.175		 1	Rainwater	208.650	100
04 Re	332091.082	289175.346	209.875	1.150		0 	S2.002	208.650	100
03 Re	332098.256	289182.456	209.825	0.800		0 	S2.020	208.725	100
SW 0203	332098.371	289175.501	209.875	1.258	460	 0	S2.030	209.025	100
SW 0210	332109.953	289168.073	209.550	0.700	460	0 	S2.030	208.617	100
SW 0211	332103.961	289167.766	209.550	0.760	460	2 	S2.020	208.617	100
SW 0204	332098.836	289167.469	209.550	1.013	460	3 	S2.002	208.617	100
Soakaway_In_03	332096.344	289167.325	209.550	1.038		0 	S2.003	208.617	100
						1 	S2.004	208.537	100
						0 	S2.004	208.512	100

**Manhole Schedule**

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
01 Re	332113.286	289150.404	208.550	0.700						
						0	S1.000	207.850	100	
SW 0101	332107.150	289149.545	208.550	1.000	460		1	S1.000	207.550	100
						0	S1.001	207.550	100	
02 Re	332100.225	289141.922	208.500	0.800						
						0	S1.020	207.700	100	
SW 0120	332098.010	289148.679	208.550	1.150	460		1	S1.020	207.400	100
						0	S1.021	207.400	100	
SW 0102	332099.925	289151.481	208.550	1.184	460		1	S1.021	207.366	100
						2	S1.001	207.366	100	
						0	S1.002	207.366	100	
Soakaway_In_01	332096.910	289156.322	208.500	1.191			1	S1.002	207.309	100
						0	Dummy 01	207.309	100	
SW 0110	332110.010	289165.421	208.550	0.700	460					
						0	S1.010	207.850	100	
SW 0111	332104.067	289164.597	208.550	1.000	460		1	S1.010	207.550	100
						0	S1.011	207.550	100	

**Manhole Schedule**

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
Soakaway_In_02	332096.680	289160.919	208.500	1.191		1	S1.011	207.309	100
									
Dummy Node	332096.795	289158.621	208.500	1.230	460	1 2	Dummy 02 Dummy 01	207.309 207.270	100 100
									
Soakaway (Node)	332095.796	289158.571	208.500	1.247		1	Dummy 03	207.270 207.253	100 100
									

**Simulation Settings**

Rainfall Methodology	FSR	Summer CV	0.750	Drain Down Time (mins)	240
FSR Region	England and Wales	Winter CV	0.840	Additional Storage (m <sup>3</sup> /ha)	20.0
M5-60 (mm)	17.000	Analysis Speed	Detailed	Check Discharge Rate(s)	x
Ratio-R	0.400	Skip Steady State	x	Check Discharge Volume	x

**Storm Durations**

15 | 30 | 60 | 120 | 180 | 240 | 360 | 480 | 600 | 720 | 960 | 1440

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)	Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
2	0	0	0	100	45	0	0
30	0	0	0				

**Node Soakaway\_In\_03 Lined Soakaway Storage Structure**

Base Inf Coefficient (m/hr)	0.00000	Porosity	0.35	Ring Diameter (m)	1.500	Depth (m)	1.500
Side Inf Coefficient (m/hr)	0.03100	Invert Level (m)	207.150	Pit Width (m)	3.000	Inf Depth (m)	1.500
Safety Factor	2.0	Time to half empty (mins)	1387	Pit Length (m)	3.000	Number Required	1



**Node Soakaway (Node) Lined Soakaway Storage Structure**

Base Inf Coefficient (m/hr)	0.00000	Porosity	0.35	Ring Diameter (m)	1.500	Depth (m)	1.500
Side Inf Coefficient (m/hr)	0.03100	Invert Level (m)	205.960	Pit Width (m)	3.000	Inf Depth (m)	1.500
Safety Factor	2.0	Time to half empty (mins)	1387	Pit Length (m)	3.000	Number Required	1

**Results for 2 year Critical Storm Duration. Lowest mass balance: 90.61%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
15 minute winter	SW 0201	10	208.869	0.019	0.5	0.0047	0.0000	OK
15 minute winter	SW 0202	10	208.821	0.031	1.3	0.0093	0.0000	OK
15 minute winter	Rainwater_In	11	208.772	0.022	1.2	0.0000	0.0000	OK
15 minute winter	Rainwater_Out	11	208.682	0.032	1.2	0.0000	0.0000	OK
15 minute winter	04 Re	11	208.739	0.014	0.3	0.0005	0.0000	OK
15 minute winter	03 Re	11	209.035	0.010	0.3	0.0005	0.0000	OK
15 minute winter	SW 0203	11	208.655	0.038	1.8	0.0064	0.0000	OK
15 minute winter	SW 0210	10	208.870	0.020	0.5	0.0049	0.0000	OK
15 minute winter	SW 0211	11	208.806	0.016	0.8	0.0035	0.0000	OK
15 minute winter	SW 0204	11	208.584	0.047	2.5	0.0078	0.0000	OK
180 minute winter	Soakaway_In_03	148	207.630	-0.882	0.7	2.0615	0.0000	OK
15 minute winter	01 Re	10	207.863	0.013	0.5	0.0011	0.0000	OK
15 minute winter	SW 0101	10	207.574	0.024	1.3	0.0065	0.0000	OK
15 minute winter	02 Re	11	207.711	0.011	0.3	0.0005	0.0000	OK
15 minute winter	SW 0120	10	207.418	0.018	0.5	0.0034	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )
15 minute winter	SW 0201	S2.000	SW 0202	0.5	0.303	0.076	0.0093
15 minute winter	SW 0202	S2.001	Rainwater_In	1.2	0.721	0.199	0.0067
15 minute winter	Rainwater_In	Rainwater	Rainwater_Out	1.2	0.712	0.109	0.0053
15 minute winter	Rainwater_Out	S2.002	SW 0203	1.2	0.497	0.202	0.0080
15 minute winter	04 Re	S2.020	SW 0203	0.3	0.356	0.041	0.0124
15 minute winter	03 Re	S2.030	SW 0203	0.3	0.628	0.020	0.0110
15 minute winter	SW 0203	S2.003	SW 0204	1.8	0.558	0.295	0.0257
15 minute winter	SW 0210	S2.010	SW 0211	0.5	0.490	0.076	0.0056
15 minute winter	SW 0211	S2.011	SW 0204	0.8	0.742	0.056	0.0114
15 minute winter	SW 0204	S2.004	Soakaway_In_03	2.5	0.710	0.412	0.0087
180 minute winter	Soakaway_In_03	Infiltration		0.0			
15 minute winter	01 Re	S1.000	SW 0101	0.5	0.472	0.035	0.0064
15 minute winter	SW 0101	S1.001	SW 0102	1.2	0.621	0.128	0.0150
15 minute winter	02 Re	S1.020	SW 0120	0.3	0.629	0.024	0.0051
15 minute winter	SW 0120	S1.021	SW 0102	0.4	0.259	0.073	0.0061

**Results for 2 year Critical Storm Duration. Lowest mass balance: 90.61%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
15 minute winter	SW 0102	11	207.403	0.037	1.7	0.0061	0.0000	OK
15 minute winter	Soakaway_In_01	11	207.342	0.033	1.7	0.0000	0.0000	OK
15 minute winter	SW 0110	11	207.860	0.010	0.3	0.0023	0.0000	OK
15 minute winter	SW 0111	11	207.566	0.016	0.6	0.0034	0.0000	OK
15 minute winter	Soakaway_In_02	11	207.328	0.019	0.6	0.0000	0.0000	OK
15 minute winter	Dummy Node	11	207.310	0.040	2.3	0.0066	0.0000	OK
180 minute winter	Soakaway (Node)	148	206.355	-0.898	0.6	1.6977	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )
15 minute winter	SW 0102	S1.002	Soakaway_In_01	1.7	0.682	0.275	0.0139
15 minute winter	Soakaway_In_01	Dummy 01	Dummy Node	1.7	0.643	0.212	0.0060
15 minute winter	SW 0110	S1.010	SW 0111	0.3	0.486	0.022	0.0038
15 minute winter	SW 0111	S1.011	Soakaway_In_02	0.6	0.659	0.058	0.0076
15 minute winter	Soakaway_In_02	Dummy 02	Dummy Node	0.6	0.405	0.076	0.0045
15 minute winter	Dummy Node	Dummy 03	Soakaway (Node)	2.2	0.816	0.284	0.0028
180 minute winter	Soakaway (Node)	Infiltration		0.0			

**Results for 30 year Critical Storm Duration. Lowest mass balance: 90.61%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
15 minute winter	SW 0201	10	208.876	0.026	0.9	0.0065	0.0000	OK
15 minute winter	SW 0202	10	208.834	0.044	2.4	0.0130	0.0000	OK
15 minute winter	Rainwater_In	11	208.781	0.031	2.3	0.0000	0.0000	OK
15 minute winter	Rainwater_Out	11	208.697	0.047	2.3	0.0000	0.0000	OK
15 minute winter	04 Re	10	208.744	0.019	0.6	0.0007	0.0000	OK
15 minute winter	03 Re	10	209.039	0.014	0.6	0.0007	0.0000	OK
15 minute winter	SW 0203	11	208.673	0.056	3.4	0.0094	0.0000	OK
15 minute winter	SW 0210	10	208.877	0.027	0.9	0.0068	0.0000	OK
15 minute winter	SW 0211	10	208.812	0.022	1.5	0.0048	0.0000	OK
15 minute winter	SW 0204	11	208.609	0.072	4.8	0.0119	0.0000	OK
360 minute winter	Soakaway_In_03	280	208.176	-0.336	0.7	4.4092	0.0000	OK
15 minute winter	01 Re	10	207.868	0.017	0.9	0.0015	0.0000	OK
15 minute winter	SW 0101	10	207.584	0.034	2.4	0.0090	0.0000	OK
15 minute winter	02 Re	10	207.715	0.015	0.6	0.0007	0.0000	OK
15 minute winter	SW 0120	11	207.425	0.025	0.9	0.0047	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )
15 minute winter	SW 0201	S2.000	SW 0202	0.9	0.360	0.144	0.0146
15 minute winter	SW 0202	S2.001	Rainwater_In	2.3	0.869	0.384	0.0107
15 minute winter	Rainwater_In	Rainwater	Rainwater_Out	2.3	0.832	0.208	0.0086
15 minute winter	Rainwater_Out	S2.002	SW 0203	2.3	0.573	0.385	0.0132
15 minute winter	04 Re	S2.020	SW 0203	0.6	0.359	0.077	0.0201
15 minute winter	03 Re	S2.030	SW 0203	0.6	0.634	0.039	0.0179
15 minute winter	SW 0203	S2.003	SW 0204	3.4	0.646	0.566	0.0424
15 minute winter	SW 0210	S2.010	SW 0211	0.9	0.585	0.144	0.0089
15 minute winter	SW 0211	S2.011	SW 0204	1.4	0.768	0.106	0.0186
15 minute winter	SW 0204	S2.004	Soakaway_In_03	4.8	0.826	0.792	0.0145
360 minute winter	Soakaway_In_03	Infiltration		0.1			
15 minute winter	01 Re	S1.000	SW 0101	0.9	0.556	0.066	0.0100
15 minute winter	SW 0101	S1.001	SW 0102	2.3	0.726	0.245	0.0242
15 minute winter	02 Re	S1.020	SW 0120	0.6	0.520	0.046	0.0080
15 minute winter	SW 0120	S1.021	SW 0102	0.8	0.300	0.141	0.0098

**Results for 30 year Critical Storm Duration. Lowest mass balance: 90.61%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
15 minute winter	SW 0102	11	207.419	0.053	3.2	0.0088	0.0000	OK
15 minute winter	Soakaway_In_01	11	207.359	0.050	3.2	0.0000	0.0000	OK
15 minute winter	SW 0110	10	207.864	0.014	0.6	0.0031	0.0000	OK
15 minute winter	SW 0111	10	207.572	0.022	1.2	0.0046	0.0000	OK
15 minute winter	Soakaway_In_02	11	207.334	0.025	1.1	0.0000	0.0000	OK
15 minute winter	Dummy Node	11	207.329	0.059	4.3	0.0097	0.0000	OK
240 minute winter	Soakaway (Node)	208	206.835	-0.418	0.9	3.7621	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )
15 minute winter	SW 0102	S1.002	Soakaway_In_01	3.2	0.786	0.524	0.0231
15 minute winter	Soakaway_In_01	Dummy 01	Dummy Node	3.2	0.734	0.403	0.0100
15 minute winter	SW 0110	S1.010	SW 0111	0.6	0.593	0.042	0.0059
15 minute winter	SW 0111	S1.011	Soakaway_In_02	1.1	0.797	0.108	0.0117
15 minute winter	Soakaway_In_02	Dummy 02	Dummy Node	1.1	0.417	0.140	0.0073
15 minute winter	Dummy Node	Dummy 03	Soakaway (Node)	4.3	0.961	0.544	0.0045
240 minute winter	Soakaway (Node)	Infiltration		0.0			

**Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 90.61%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
960 minute winter	SW 0201	705	209.010	0.160	0.1	0.0403	0.0000	SURCHARGED
960 minute winter	SW 0202	705	209.010	0.220	0.3	0.0656	0.0000	SURCHARGED
960 minute winter	Rainwater_In	705	209.010	0.260	0.3	0.0000	0.0000	SURCHARGED
960 minute winter	Rainwater_Out	705	209.010	0.360	0.3	0.0000	0.0000	SURCHARGED
960 minute winter	04 Re	705	209.010	0.285	0.1	0.0100	0.0000	SURCHARGED
15 minute winter	03 Re	10	209.043	0.018	1.1	0.0009	0.0000	OK
960 minute winter	SW 0203	705	209.010	0.393	0.5	0.0652	0.0000	SURCHARGED
960 minute winter	SW 0210	705	209.010	0.160	0.1	0.0403	0.0000	SURCHARGED
960 minute winter	SW 0211	705	209.010	0.220	0.2	0.0482	0.0000	SURCHARGED
960 minute winter	SW 0204	705	209.010	0.473	0.7	0.0785	0.0000	SURCHARGED
960 minute winter	Soakaway_In_03	705	209.010	0.498	0.7	6.4507	0.0000	OK
15 minute winter	01 Re	10	207.873	0.023	1.6	0.0020	0.0000	OK
15 minute winter	SW 0101	10	207.597	0.047	4.3	0.0126	0.0000	OK
15 minute winter	02 Re	10	207.720	0.020	1.1	0.0010	0.0000	OK
480 minute winter	SW 0120	448	207.590	0.190	0.2	0.0350	0.0000	SURCHARGED

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )
960 minute winter	SW 0201	S2.000	SW 0202	0.1	0.215	0.017	0.0469
960 minute winter	SW 0202	S2.001	Rainwater_In	0.3	0.472	0.050	0.0313
960 minute winter	Rainwater_In	Rainwater	Rainwater_Out	0.3	0.489	0.027	0.0238
960 minute winter	Rainwater_Out	S2.002	SW 0203	0.3	0.353	0.050	0.0256
960 minute winter	04 Re	S2.020	SW 0203	0.1	0.171	0.014	0.0570
15 minute winter	03 Re	S2.030	SW 0203	1.1	0.634	0.073	0.0306
960 minute winter	SW 0203	S2.003	SW 0204	0.5	0.403	0.083	0.0629
960 minute winter	SW 0210	S2.010	SW 0211	0.1	0.349	0.017	0.0469
960 minute winter	SW 0211	S2.011	SW 0204	0.2	0.272	0.015	0.0402
960 minute winter	SW 0204	S2.004	Soakaway_In_03	0.7	0.505	0.116	0.0195
960 minute winter	Soakaway_In_03	Infiltration		0.1			
15 minute winter	01 Re	S1.000	SW 0101	1.6	0.642	0.118	0.0156
15 minute winter	SW 0101	S1.001	SW 0102	4.2	0.833	0.446	0.0388
15 minute winter	02 Re	S1.020	SW 0120	1.1	0.605	0.086	0.0173
480 minute winter	SW 0120	S1.021	SW 0102	0.2	0.214	0.033	0.0266

**Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 90.61%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
480 minute winter	SW 0102	448	207.590	0.224	0.7	0.0373	0.0000	SURCHARGED
480 minute winter	Soakaway_In_01	448	207.590	0.281	0.7	0.0000	0.0000	SURCHARGED
15 minute winter	SW 0110	10	207.869	0.019	1.1	0.0043	0.0000	OK
480 minute winter	SW 0111	448	207.590	0.040	0.2	0.0083	0.0000	OK
480 minute winter	Soakaway_In_02	448	207.590	0.281	0.2	0.0000	0.0000	SURCHARGED
480 minute winter	Dummy Node	448	207.590	0.320	0.9	0.0532	0.0000	SURCHARGED
480 minute winter	Soakaway (Node)	448	207.590	0.337	0.9	6.4507	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )
480 minute winter	SW 0102	S1.002	Soakaway_In_01	0.7	0.548	0.116	0.0446
480 minute winter	Soakaway_In_01	Dummy 01	Dummy Node	0.7	0.533	0.089	0.0180
15 minute winter	SW 0110	S1.010	SW 0111	1.1	0.708	0.079	0.0093
480 minute winter	SW 0111	S1.011	Soakaway_In_02	0.2	0.472	0.019	0.0445
480 minute winter	Soakaway_In_02	Dummy 02	Dummy Node	0.3	0.272	0.039	0.0180
480 minute winter	Dummy Node	Dummy 03	Soakaway (Node)	0.9	0.640	0.114	0.0078
480 minute winter	Soakaway (Node)	Infiltration		0.1			