Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	5.00
Return Period (years)	1	Maximum Rainfall (mm/hr)	50.0
Additional Flow (%)	0	Minimum Velocity (m/s)	0.75
FSR Region	England and Wales	Connection Type	Level Soffits
M5-60 (mm)	18.000	Minimum Backdrop Height (m)	0.500
Ratio-R	0.361	Preferred Cover Depth (m)	0.900
CV	0.750	Include Intermediate Ground	x
Time of Entry (mins)	5.00	Enforce best practice design rules	x

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
2	0.018	5.00	29.000	1350	382534.415	393277.140	1.423
3	0.026	5.00	28.885	1350	382525.380	393283.980	1.355
4	0.033	5.00	28.810	1350	382515.442	393270.841	1.349
5	0.172	5.00	29.065	1350	382524.407	393263.542	1.802
6	0.000		28.365	1350	382493.092	393221.725	1.233
7	0.038	5.00	29.100	1200	382495.688	393207.649	2.004
12	0.037	5.00	28.550	1350	382475.153	393204.357	1.045
13	0.028	5.00	28.500	1350	382464.211	393186.049	1.165
15	0.057	5.00	29.025	1350	382467.112	393169.393	1.693
14	0.076	5.00	29.000	1350	382474.086	393178.635	1.791
8	0.011	5.00	29.000	1500	382489.421	393199.122	1.930
16	0.040	5.00	28.985	1350	382505.244	393194.753	1.778
9	0.000		29.005	1500	382501.535	393189.888	1.973
10	0.000		29.050	1200	382498.427	393185.811	2.031
17	0.011	5.00	29.150	600	382557.265	393262.462	1.047
18	0.019	5.00	29.150	600	382564.717	393256.645	1.205
19	0.021	5.00	29.150	600	382551.360	393238.887	1.304
20	0.012	5.00	29.150	600	382537.011	393219.371	1.412
21	0.015	5.00	29.250	600	382522.790	393200.860	1.616
24	0.011	5.00	29.000	1350	382497.899	393218.217	1.145
22	0.000		29.000	1350	382516.188	393204.826	1.429
23	0.000		29.005	1350	382500.799	393183.221	1.561
Soakaway Tan	0.000		29.005		382479.483	393161.882	2.086
Outfall	0.000		29.005	1200	382478.432	393160.816	0.505

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)
1.002	2	3	11.332	0.600	27.577	27.530	0.047	241.1	300	5.00	50.0
1.003	3	4	16.474	0.600	27.530	27.461	0.069	238.8	300	5.00	50.0
1.004	4	5	11.561	0.600	27.461	27.413	0.048	240.9	300	5.00	50.0
1.005	5	6	52.243	0.600	27.263	27.132	0.131	398.8	450	5.00	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)
1.002	1.008	71.2	2.4	1.123	1.055	0.018	0.0	38	0.473
1.003	1.013	71.6	6.0	1.055	1.049	0.044	0.0	58	0.620
1.004	1.008	71.3	10.4	1.049	1.352	0.077	0.0	77	0.725
1.005	1.012	160.9	33.7	1.352	0.783	0.249	0.0	139	0.807

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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)
1.006	6	7	14.313	0.600	27.132	27.096	0.036	397.6	450	5.00	50.0
1.007	7	8	10.582	0.600	27.096	27.070	0.026	407.0	450	5.00	50.0
2.000	12	13	21.329	0.600	27.505	27.410	0.095	224.5	225	5.00	50.0
2.001	13	14	12.348	0.600	27.335	27.284	0.051	242.1	300	5.00	50.0
3.000	15	14	11.578	0.600	27.332	27.284	0.048	241.2	300	5.00	50.0
2.002	14	8	25.591	0.600	27.209	27.145	0.064	399.9	375	5.00	50.0
1.008	8	9	15.232	0.600	27.070	27.032	0.038	400.8	450	5.00	49.9
4.000	16	9	6.118	0.600	27.207	27.182	0.025	244.7	300	5.00	50.0
1.009	9	10	5.127	0.600	27.032	27.019	0.013	394.4	450	5.00	49.6
1.010	10	Soakaway Tan	30.520	0.600	27.019	26.919	0.100	305.2	450	5.00	48.1
5.000	17	18	9.454	0.600	28.103	27.945	0.158	59.8	225	5.00	50.0
5.001	18	19	22.221	0.600	27.945	27.846	0.099	224.5	225	5.00	50.0
5.002	19	20	24.223	0.600	27.846	27.738	0.108	224.3	225	5.00	50.0
5.003	20	21	23.343	0.600	27.738	27.634	0.104	224.5	225	5.00	50.0
5.004	21	22	7.702	0.600	27.634	27.571	0.063	122.3	225	5.00	50.0
6.000	24	22	22.667	0.600	27.855	27.571	0.284	79.8	225	5.00	50.0
5.005	22	23	26.525	0.600	27.571	27.444	0.127	208.9	225	5.00	49.9
5.006	23	Soakaway Tan	29.149	0.600	27.444	27.144	0.300	97.2	225	5.00	49.1
Outfall	Soakaway Tan	Outfall	1.497	0.600	26.919	28.500	-1.581	-0.9	450	5.00	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)
1.006	1.013	161.1	33.7	0.783	1.554	0.249	0.0	139	0.808
1.007	1.001	159.2	38.9	1.554	1.480	0.287	0.0	151	0.832
2.000	0.868	34.5	5.0	0.820	0.865	0.037	0.0	58	0.620
2.001	1.006	71.1	8.8	0.865	1.416	0.065	0.0	71	0.691
3.000	1.008	71.2	7.7	1.393	1.416	0.057	0.0	67	0.666
2.002	0.900	99.4	26.8	1.416	1.480	0.198	0.0	133	0.768
1.008	1.009	160.5	67.1	1.480	1.523	0.496	0.0	203	0.965
4.000	1.000	70.7	5.4	1.478	1.523	0.040	0.0	56	0.598
1.009	1.017	161.8	72.1	1.523	1.581	0.536	0.0	210	0.990
1.010	1.158	184.2	69.9	1.581	1.636	0.536	0.0	192	1.082
5.000	1.694	67.3	1.5	0.822	0.980	0.011	0.0	23	0.700
5.001	0.868	34.5	4.1	0.980	1.079	0.030	0.0	52	0.587
5.002	0.869	34.5	6.9	1.079	1.187	0.051	0.0	68	0.681
5.003	0.868	34.5	8.5	1.187	1.391	0.063	0.0	76	0.722
5.004	1.181	47.0	10.6	1.391	1.204	0.078	0.0	73	0.958
6.000	1.465	58.2	1.5	0.920	1.204	0.011	0.0	25	0.634
5.005	0.901	35.8	12.0	1.204	1.336	0.089	0.0	90	0.815
5.006	1.326	52.7	11.8	1.336	1.636	0.089	0.0	73	1.077
Outfall	0.750	119.3	84.7	1.636	0.055	0.625	0.0	450	0.000

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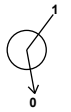
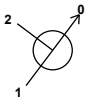
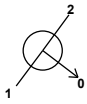
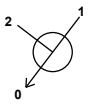
Pipeline Schedule

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)
1.002	11.332	241.1	300	Circular	29.000	27.577	1.123	28.885	27.530	1.055
1.003	16.474	238.8	300	Circular	28.885	27.530	1.055	28.810	27.461	1.049
1.004	11.561	240.9	300	Circular	28.810	27.461	1.049	29.065	27.413	1.352
1.005	52.243	398.8	450	Circular	29.065	27.263	1.352	28.365	27.132	0.783
1.006	14.313	397.6	450	Circular	28.365	27.132	0.783	29.100	27.096	1.554
1.007	10.582	407.0	450	Circular	29.100	27.096	1.554	29.000	27.070	1.480
2.000	21.329	224.5	225	Circular	28.550	27.505	0.820	28.500	27.410	0.865
2.001	12.348	242.1	300	Circular	28.500	27.335	0.865	29.000	27.284	1.416
3.000	11.578	241.2	300	Circular	29.025	27.332	1.393	29.000	27.284	1.416
2.002	25.591	399.9	375	Circular	29.000	27.209	1.416	29.000	27.145	1.480
1.008	15.232	400.8	450	Circular	29.000	27.070	1.480	29.005	27.032	1.523
4.000	6.118	244.7	300	Circular	28.985	27.207	1.478	29.005	27.182	1.523
1.009	5.127	394.4	450	Circular	29.005	27.032	1.523	29.050	27.019	1.581
1.010	30.520	305.2	450	Circular	29.050	27.019	1.581	29.005	26.919	1.636
5.000	9.454	59.8	225	Circular	29.150	28.103	0.822	29.150	27.945	0.980
5.001	22.221	224.5	225	Circular	29.150	27.945	0.980	29.150	27.846	1.079
5.002	24.223	224.3	225	Circular	29.150	27.846	1.079	29.150	27.738	1.187
5.003	23.343	224.5	225	Circular	29.150	27.738	1.187	29.250	27.634	1.391
5.004	7.702	122.3	225	Circular	29.250	27.634	1.391	29.000	27.571	1.204
6.000	22.667	79.8	225	Circular_Default Sewer Type	29.000	27.855	0.920	29.000	27.571	1.204
5.005	26.525	208.9	225	Circular	29.000	27.571	1.204	29.005	27.444	1.336
5.006	29.149	97.2	225	Circular	29.005	27.444	1.336	29.005	27.144	1.636
Outfall	1.497	-0.9	450	Circular	29.005	26.919	1.636	29.005	28.500	0.055

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.002	2	1350	Manhole	Adoptable	3	1350	Manhole	Adoptable
1.003	3	1350	Manhole	Adoptable	4	1350	Manhole	Adoptable
1.004	4	1350	Manhole	Adoptable	5	1350	Manhole	Adoptable
1.005	5	1350	Manhole	Adoptable	6	1350	Manhole	Adoptable
1.006	6	1350	Manhole	Adoptable	7	1200	Manhole	Adoptable
1.007	7	1200	Manhole	Adoptable	8	1500	Manhole	Adoptable
2.000	12	1350	Manhole	Adoptable	13	1350	Manhole	Adoptable
2.001	13	1350	Manhole	Adoptable	14	1350	Manhole	Adoptable
3.000	15	1350	Manhole	Adoptable	14	1350	Manhole	Adoptable
2.002	14	1350	Manhole	Adoptable	8	1500	Manhole	Adoptable
1.008	8	1500	Manhole	Adoptable	9	1500	Manhole	Adoptable
4.000	16	1350	Manhole	Adoptable	9	1500	Manhole	Adoptable
1.009	9	1500	Manhole	Adoptable	10	1200	Manhole	Adoptable
1.010	10	1200	Manhole	Adoptable	Soakaway Tan		Junction	
5.000	17	600	Manhole	Adoptable	18	600	Manhole	Adoptable
5.001	18	600	Manhole	Adoptable	19	600	Manhole	Adoptable
5.002	19	600	Manhole	Adoptable	20	600	Manhole	Adoptable
5.003	20	600	Manhole	Adoptable	21	600	Manhole	Adoptable
5.004	21	600	Manhole	Adoptable	22	1350	Manhole	Adoptable
6.000	24	1350	Manhole	Adoptable	22	1350	Manhole	Adoptable
5.005	22	1350	Manhole	Adoptable	23	1350	Manhole	Adoptable
5.006	23	1350	Manhole	Adoptable	Soakaway Tan		Junction	
Outfall	Soakaway Tan		Junction		Outfall	1200	Manhole	Adoptable

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Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
2	382534.415	393277.140	29.000	1.423	1350				
						0	1.002	27.577	300
3	382525.380	393283.980	28.885	1.355	1350	1	1.002	27.530	300
									
						0	1.003	27.530	300
4	382515.442	393270.841	28.810	1.349	1350	1	1.003	27.461	300
									
						0	1.004	27.461	300
5	382524.407	393263.542	29.065	1.802	1350	1	1.004	27.413	300
									
						0	1.005	27.263	450
6	382493.092	393221.725	28.365	1.233	1350	1	1.005	27.132	450
									
						0	1.006	27.132	450
7	382495.688	393207.649	29.100	2.004	1200	1	1.006	27.096	450
									
						0	1.007	27.096	450
12	382475.153	393204.357	28.550	1.045	1350				
						0	2.000	27.505	225
13	382464.211	393186.049	28.500	1.165	1350	1	2.000	27.410	225
									
						0	2.001	27.335	300
15	382467.112	393169.393	29.025	1.693	1350				
						0	3.000	27.332	300
14	382474.086	393178.635	29.000	1.791	1350	1	3.000	27.284	300
						2	2.001	27.284	300
									
						0	2.002	27.209	375
8	382489.421	393199.122	29.000	1.930	1500	1	2.002	27.145	375
						2	1.007	27.070	450
									
						0	1.008	27.070	450
16	382505.244	393194.753	28.985	1.778	1350				
						0	4.000	27.207	300
9	382501.535	393189.888	29.005	1.973	1500	1	4.000	27.182	300
						2	1.008	27.032	450
									
						0	1.009	27.032	450

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Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
10	382498.427	393185.811	29.050	2.031	1200	1	1.009	27.019	450
						0	1.010	27.019	450
17	382557.265	393262.462	29.150	1.047	600	0	5.000	28.103	225
18	382564.717	393256.645	29.150	1.205	600	1	5.000	27.945	225
						0	5.001	27.945	225
19	382551.360	393238.887	29.150	1.304	600	1	5.001	27.846	225
						0	5.002	27.846	225
20	382537.011	393219.371	29.150	1.412	600	1	5.002	27.738	225
						0	5.003	27.738	225
21	382522.790	393200.860	29.250	1.616	600	1	5.003	27.634	225
						0	5.004	27.634	225
24	382497.899	393218.217	29.000	1.145	1350	0	6.000	27.855	225
22	382516.188	393204.826	29.000	1.429	1350	1	6.000	27.571	225
						2	5.004	27.571	225
						0	5.005	27.571	225
23	382500.799	393183.221	29.005	1.561	1350	1	5.005	27.444	225
						0	5.006	27.444	225
Soakaway Tan	382479.483	393161.882	29.005	2.086		1	5.006	27.144	225
						2	1.010	26.919	450
						0	Outfall	26.919	450
Outfall	382478.432	393160.816	29.005	0.505	1200	1	Outfall	28.500	450

Simulation Settings

Rainfall Methodology	FSR	Analysis Speed	Normal
FSR Region	England and Wales	Skip Steady State	✓
M5-60 (mm)	18.000	Drain Down Time (mins)	1440
Ratio-R	0.361	Additional Storage (m³/ha)	0.0
Summer CV	1.000	Check Discharge Rate(s)	✓
Winter CV	1.000	Check Discharge Volume	✓

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Simulation Settings

100 year 360 minute (m³)

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 %)
1	0	0	0
30	0	0	0
100	0	0	0
100	45	0	0

Pre-development Discharge Rate

Site Makeup	Greenfield	Growth Factor 30 year	1.95
Greenfield Method	IH124	Growth Factor 100 year	2.48
Positively Drained Area (ha)		Betterment (%)	0
SAAR (mm)		QBar	
Soil Index	1	Q 1 year (l/s)	
SPR	0.10	Q 30 year (l/s)	
Region	1	Q 100 year (l/s)	
Growth Factor 1 year	0.85		

Pre-development Discharge Volume

Site Makeup	Greenfield	Return Period (years)	100
Greenfield Method	FSR/FEH	Climate Change (%)	0
Positively Drained Area (ha)		Storm Duration (mins)	360
Soil Index	1	Betterment (%)	0
SPR	0.10	PR	
CWI		Runoff Volume (m³)	

Node Soakaway Tan Soakaway Storage Structure

Base Inf Coefficient (m/hr)	0.28524	Invert Level (m)	26.900	Depth (m)	0.740
Side Inf Coefficient (m/hr)	0.28524	Time to half empty (mins)	148	Inf Depth (m)	
Safety Factor	2.0	Pit Width (m)	12.000	Number Required	1
Porosity	0.95	Pit Length (m)	33.000		

Other (defaults)

Entry Loss (manhole)	0.250	Entry Loss (junction)	0.000	Apply Recommended Losses	x
Exit Loss (manhole)	0.250	Exit Loss (junction)	0.000	Flood Risk (m)	0.300

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Results for 1 year Critical Storm Duration. Lowest mass balance: 99.40%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	2	10	27.617	0.040	2.8	0.0573	0.0000	OK
15 minute summer	3	10	27.591	0.061	6.8	0.0873	0.0000	OK
15 minute summer	4	11	27.547	0.086	11.7	0.1232	0.0000	OK
15 minute summer	5	10	27.411	0.148	38.0	0.2112	0.0000	OK
15 minute summer	6	12	27.326	0.194	37.8	0.2775	0.0000	OK
15 minute summer	7	12	27.315	0.219	40.8	0.2478	0.0000	OK
15 minute summer	12	10	27.567	0.062	5.7	0.0894	0.0000	OK
15 minute summer	13	11	27.413	0.078	9.8	0.1122	0.0000	OK
15 minute summer	15	10	27.406	0.074	8.8	0.1061	0.0000	OK
15 minute summer	14	11	27.356	0.147	30.1	0.2102	0.0000	OK
15 minute summer	8	12	27.305	0.235	70.7	0.4153	0.0000	OK
15 minute summer	16	11	27.272	0.065	6.2	0.0925	0.0000	OK
15 minute summer	9	12	27.263	0.231	74.6	0.4082	0.0000	OK
15 minute summer	10	12	27.220	0.201	74.8	0.2278	0.0000	OK
15 minute summer	17	10	28.128	0.025	1.7	0.0069	0.0000	OK
15 minute summer	18	11	27.999	0.054	4.6	0.0154	0.0000	OK
15 minute summer	19	11	27.918	0.072	7.8	0.0205	0.0000	OK
15 minute summer	20	11	27.821	0.083	9.5	0.0234	0.0000	OK
15 minute summer	21	11	27.719	0.085	11.7	0.0241	0.0000	OK
15 minute summer	24	10	27.881	0.026	1.7	0.0372	0.0000	OK
15 minute summer	22	12	27.667	0.096	13.2	0.1380	0.0000	OK
15 minute summer	23	12	27.521	0.077	13.0	0.1096	0.0000	OK
60 minute summer	Soakaway Tan	47	27.004	0.085	64.4	39.0144	0.0000	OK
15 minute summer	Outfall	1	28.500	0.000	0.0	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	2	1.002	3	2.8	0.354	0.039	0.0896	
15 minute summer	3	1.003	4	6.6	0.498	0.092	0.2216	
15 minute summer	4	1.004	5	11.6	0.727	0.163	0.1851	
15 minute summer	5	1.005	6	37.8	0.765	0.235	2.8289	
15 minute summer	6	1.006	7	35.2	0.504	0.218	1.0156	
15 minute summer	7	1.007	8	40.4	0.504	0.254	0.8483	
15 minute summer	12	2.000	13	5.6	0.637	0.162	0.1871	
15 minute summer	13	2.001	14	9.8	0.695	0.138	0.1740	
15 minute summer	15	3.000	14	8.7	0.665	0.122	0.1517	
15 minute summer	14	2.002	8	29.7	0.781	0.298	1.0696	
15 minute summer	8	1.008	9	69.6	0.842	0.434	1.2618	
15 minute summer	16	4.000	9	6.1	0.601	0.087	0.0793	
15 minute summer	9	1.009	10	74.8	0.997	0.462	0.3861	
15 minute summer	10	1.010	Soakaway Tan	75.0	1.137	0.407	2.0131	
15 minute summer	17	5.000	18	1.7	0.361	0.025	0.0457	
15 minute summer	18	5.001	19	4.5	0.491	0.130	0.2043	
15 minute summer	19	5.002	20	7.7	0.637	0.223	0.2938	
15 minute summer	20	5.003	21	9.5	0.704	0.275	0.3150	
15 minute summer	21	5.004	22	11.6	0.774	0.246	0.1152	
15 minute summer	24	6.000	22	1.7	0.336	0.028	0.2115	
15 minute summer	22	5.005	23	13.0	0.935	0.364	0.3732	
15 minute summer	23	5.006	Soakaway Tan	12.9	1.096	0.244	0.3428	
60 minute summer	Soakaway Tan	Outfall	Outfall	0.0	0.000	0.000	0.0154	0.0
60 minute summer	Soakaway Tan	Infiltration		16.1				

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Results for 30 year Critical Storm Duration. Lowest mass balance: 99.40%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	2	10	27.641	0.064	6.8	0.0921	0.0000	OK
15 minute summer	3	10	27.632	0.102	16.6	0.1462	0.0000	OK
15 minute summer	4	11	27.604	0.143	28.7	0.2040	0.0000	OK
15 minute summer	5	12	27.553	0.290	93.2	0.4150	0.0000	OK
15 minute summer	6	12	27.524	0.392	86.6	0.5603	0.0000	OK
15 minute summer	7	12	27.510	0.414	94.2	0.4677	0.0000	OK
15 minute summer	12	10	27.608	0.103	14.0	0.1469	0.0000	OK
15 minute summer	13	12	27.526	0.191	24.3	0.2729	0.0000	OK
15 minute summer	15	12	27.524	0.192	21.6	0.2747	0.0000	OK
15 minute summer	14	12	27.520	0.311	70.6	0.4451	0.0000	OK
15 minute summer	8	12	27.493	0.423	162.1	0.7481	0.0000	OK
15 minute summer	16	12	27.429	0.222	15.2	0.3175	0.0000	OK
15 minute summer	9	12	27.428	0.396	174.3	0.6993	0.0000	OK
15 minute summer	10	12	27.357	0.338	174.8	0.3825	0.0000	OK
15 minute summer	17	10	28.141	0.038	4.2	0.0107	0.0000	OK
15 minute summer	18	10	28.032	0.087	11.4	0.0247	0.0000	OK
15 minute summer	19	11	27.969	0.123	19.2	0.0348	0.0000	OK
15 minute summer	20	11	27.882	0.144	23.3	0.0406	0.0000	OK
15 minute summer	21	11	27.790	0.156	28.8	0.0440	0.0000	OK
15 minute summer	24	10	27.895	0.040	4.2	0.0579	0.0000	OK
15 minute summer	22	11	27.740	0.169	32.6	0.2412	0.0000	OK
15 minute summer	23	12	27.573	0.129	32.0	0.1851	0.0000	OK
120 minute summer	Soakaway Tan	94	27.223	0.304	105.1	121.4064	0.0000	OK
15 minute summer	Outfall	1	28.500	0.000	0.0	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	2	1.002	3	6.7	0.423	0.094	0.1825	
15 minute summer	3	1.003	4	16.3	0.605	0.227	0.4451	
15 minute summer	4	1.004	5	28.0	0.916	0.393	0.3752	
15 minute summer	5	1.005	6	86.6	0.842	0.538	6.6451	
15 minute summer	6	1.006	7	82.1	0.549	0.510	2.1388	
15 minute summer	7	1.007	8	94.2	0.613	0.591	1.6252	
15 minute summer	12	2.000	13	13.7	0.811	0.397	0.3971	
15 minute summer	13	2.001	14	22.4	0.666	0.315	0.6588	
15 minute summer	15	3.000	14	19.8	0.669	0.277	0.6198	
15 minute summer	14	2.002	8	65.4	0.846	0.659	2.6171	
15 minute summer	8	1.008	9	162.2	1.071	1.011	2.3030	
15 minute summer	16	4.000	9	13.8	0.677	0.196	0.3599	
15 minute summer	9	1.009	10	174.8	1.263	1.080	0.7062	
15 minute summer	10	1.010	Soakaway Tan	175.3	1.471	0.952	3.6315	
15 minute summer	17	5.000	18	4.2	0.464	0.062	0.0879	
15 minute summer	18	5.001	19	11.2	0.617	0.324	0.4039	
15 minute summer	19	5.002	20	19.0	0.779	0.549	0.5923	
15 minute summer	20	5.003	21	23.4	0.833	0.676	0.6539	
15 minute summer	21	5.004	22	28.6	0.936	0.609	0.2357	
15 minute summer	24	6.000	22	4.1	0.436	0.071	0.4156	
15 minute summer	22	5.005	23	32.0	1.162	0.894	0.7315	
15 minute summer	23	5.006	Soakaway Tan	32.2	1.388	0.611	0.6771	
120 minute summer	Soakaway Tan	Outfall	Outfall	0.0	0.000	0.000	0.0852	0.0
120 minute summer	Soakaway Tan	Infiltration		16.8				

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Results for 100 year Critical Storm Duration. Lowest mass balance: 99.40%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	2	12	27.737	0.160	8.8	0.2285	0.0000	OK
15 minute summer	3	12	27.739	0.209	21.2	0.2989	0.0000	OK
15 minute summer	4	12	27.749	0.288	36.7	0.4118	0.0000	OK
15 minute summer	5	12	27.730	0.467	118.4	0.6682	0.0000	SURCHARGED
15 minute summer	6	12	27.656	0.524	101.1	0.7501	0.0000	SURCHARGED
15 minute summer	7	12	27.628	0.532	113.5	0.6018	0.0000	SURCHARGED
15 minute summer	12	11	27.715	0.210	18.1	0.3009	0.0000	OK
15 minute summer	13	11	27.681	0.346	32.3	0.4957	0.0000	SURCHARGED
15 minute summer	15	11	27.664	0.332	27.9	0.4753	0.0000	SURCHARGED
15 minute summer	14	11	27.661	0.452	85.1	0.6469	0.0000	SURCHARGED
15 minute summer	8	11	27.601	0.531	201.2	0.9381	0.0000	SURCHARGED
15 minute summer	16	11	27.504	0.297	19.6	0.4256	0.0000	OK
15 minute summer	9	11	27.501	0.469	218.6	0.8295	0.0000	SURCHARGED
15 minute summer	10	12	27.422	0.403	218.2	0.4558	0.0000	OK
15 minute summer	17	10	28.146	0.043	5.4	0.0121	0.0000	OK
15 minute summer	18	10	28.046	0.101	14.7	0.0285	0.0000	OK
15 minute summer	19	11	27.993	0.147	24.7	0.0417	0.0000	OK
15 minute summer	20	11	27.916	0.178	30.0	0.0504	0.0000	OK
15 minute summer	21	12	27.837	0.203	36.8	0.0574	0.0000	OK
15 minute summer	24	10	27.901	0.046	5.4	0.0654	0.0000	OK
15 minute summer	22	12	27.792	0.221	41.1	0.3159	0.0000	OK
15 minute summer	23	12	27.593	0.149	39.7	0.2131	0.0000	OK
120 minute winter	Soakaway Tan	114	27.348	0.429	95.9	168.6544	0.0000	OK
15 minute summer	Outfall	1	28.500	0.000	0.0	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	2	1.002	3	10.0	0.429	0.140	0.5126	
15 minute summer	3	1.003	4	23.4	0.616	0.326	1.0035	
15 minute summer	4	1.004	5	39.4	0.941	0.552	0.8086	
15 minute summer	5	1.005	6	101.1	0.860	0.628	8.2776	
15 minute summer	6	1.006	7	101.1	0.638	0.627	2.2678	
15 minute summer	7	1.007	8	113.2	0.714	0.711	1.6766	
15 minute summer	12	2.000	13	18.6	0.838	0.539	0.8361	
15 minute summer	13	2.001	14	30.1	0.675	0.423	0.8695	
15 minute summer	15	3.000	14	24.3	0.677	0.341	0.8153	
15 minute summer	14	2.002	8	83.6	0.866	0.841	2.8226	
15 minute summer	8	1.008	9	200.1	1.263	1.247	2.4134	
15 minute summer	16	4.000	9	18.6	0.649	0.263	0.4305	
15 minute summer	9	1.009	10	218.2	1.390	1.348	0.7900	
15 minute summer	10	1.010	Soakaway Tan	219.5	1.587	1.192	4.1896	
15 minute summer	17	5.000	18	5.4	0.493	0.080	0.1060	
15 minute summer	18	5.001	19	14.4	0.647	0.418	0.4948	
15 minute summer	19	5.002	20	24.4	0.807	0.706	0.7423	
15 minute summer	20	5.003	21	29.8	0.856	0.862	0.8291	
15 minute summer	21	5.004	22	35.9	0.977	0.766	0.2976	
15 minute summer	24	6.000	22	5.3	0.454	0.091	0.5061	
15 minute summer	22	5.005	23	39.7	1.195	1.109	0.8946	
15 minute summer	23	5.006	Soakaway Tan	39.7	1.450	0.753	0.7982	
120 minute winter	Soakaway Tan	Outfall	Outfall	0.0	0.000	0.000	0.1167	0.0
120 minute winter	Soakaway Tan	Infiltration		17.3				

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Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 99.40%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	2	11	28.400	0.823	12.8	1.1780	0.0000	SURCHARGED
15 minute summer	3	11	28.397	0.867	28.2	1.2413	0.0000	SURCHARGED
15 minute summer	4	11	28.383	0.922	60.0	1.3188	0.0000	SURCHARGED
15 minute summer	5	11	28.352	1.089	160.0	1.5579	0.0000	SURCHARGED
15 minute summer	6	11	28.200	1.068	157.4	1.5285	0.0000	FLOOD RISK
15 minute summer	7	11	28.143	1.047	180.9	1.1843	0.0000	SURCHARGED
15 minute summer	12	11	28.287	0.782	26.3	1.1197	0.0000	FLOOD RISK
15 minute summer	13	11	28.236	0.901	41.1	1.2899	0.0000	FLOOD RISK
15 minute summer	15	11	28.231	0.899	40.5	1.2866	0.0000	SURCHARGED
15 minute summer	14	11	28.211	1.002	125.1	1.4345	0.0000	SURCHARGED
15 minute summer	8	11	28.077	1.007	309.1	1.7789	0.0000	SURCHARGED
15 minute summer	16	12	27.850	0.643	28.4	0.9206	0.0000	SURCHARGED
15 minute summer	9	12	27.845	0.813	331.1	1.4365	0.0000	SURCHARGED
15 minute summer	10	12	27.680	0.661	331.3	0.7474	0.0000	SURCHARGED
15 minute summer	17	12	28.292	0.189	7.8	0.0535	0.0000	OK
15 minute summer	18	12	28.291	0.346	21.2	0.0980	0.0000	SURCHARGED
15 minute summer	19	12	28.256	0.410	33.0	0.1161	0.0000	SURCHARGED
15 minute summer	20	12	28.157	0.419	37.9	0.1187	0.0000	SURCHARGED
15 minute summer	21	12	28.012	0.378	45.3	0.1070	0.0000	SURCHARGED
15 minute summer	24	12	27.924	0.069	7.8	0.0986	0.0000	OK
15 minute summer	22	12	27.918	0.347	51.6	0.4968	0.0000	SURCHARGED
15 minute summer	23	12	27.627	0.183	51.1	0.2617	0.0000	OK
120 minute winter	Soakaway Tan	118	27.608	0.689	134.9	266.2884	0.0000	SURCHARGED
15 minute summer	Outfall	1	28.500	0.000	0.0	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	2	1.002	3	16.2	0.428	0.227	0.7980	
15 minute summer	3	1.003	4	35.5	0.620	0.495	1.1601	
15 minute summer	4	1.004	5	56.2	0.908	0.789	0.8141	
15 minute summer	5	1.005	6	157.4	0.994	0.979	8.2776	
15 minute summer	6	1.006	7	155.2	0.980	0.963	2.2678	
15 minute summer	7	1.007	8	179.4	1.132	1.127	1.6766	
15 minute summer	12	2.000	13	23.4	0.843	0.676	0.8483	
15 minute summer	13	2.001	14	41.6	0.687	0.585	0.8695	
15 minute summer	15	3.000	14	35.6	0.669	0.499	0.8153	
15 minute summer	14	2.002	8	122.3	1.109	1.230	2.8226	
15 minute summer	8	1.008	9	306.1	1.932	1.907	2.4134	
15 minute summer	16	4.000	9	25.1	0.637	0.354	0.4308	
15 minute summer	9	1.009	10	331.3	2.091	2.048	0.8123	
15 minute summer	10	1.010	Soakaway Tan	333.0	2.105	1.808	4.6793	
15 minute summer	17	5.000	18	8.4	0.517	0.124	0.3563	
15 minute summer	18	5.001	19	18.8	0.665	0.545	0.8838	
15 minute summer	19	5.002	20	30.0	0.832	0.868	0.9634	
15 minute summer	20	5.003	21	37.0	0.931	1.072	0.9284	
15 minute summer	21	5.004	22	45.4	1.142	0.967	0.3063	
15 minute summer	24	6.000	22	7.7	0.487	0.132	0.5673	
15 minute summer	22	5.005	23	51.1	1.305	1.427	0.9861	
15 minute summer	23	5.006	Soakaway Tan	50.8	1.505	0.963	0.9863	
120 minute winter	Soakaway Tan	Outfall	Outfall	0.0	0.000	0.000	0.1186	0.0
120 minute winter	Soakaway Tan	Infiltration		18.2				

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