Summary of Results for 10 year Return Period (+50%)

Half Drain Time : 919 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	26.334	0.334	0.4	21.1	O K
30 min Summer	26.432	0.432	0.5	27.6	O K
60 min Summer	26.536	0.536	0.5	34.5	O K
120 min Summer	26.642	0.642	0.5	41.5	O K
180 min Summer	26.701	0.701	0.6	45.4	O K
240 min Summer	26.739	0.739	0.6	48.0	O K
360 min Summer	26.785	0.785	0.6	51.0	O K
480 min Summer	26.809	0.809	0.6	52.6	O K
600 min Summer	26.819	0.819	0.6	53.3	O K
720 min Summer	26.823	0.823	0.6	53.6	O K
960 min Summer	26.825	0.825	0.6	53.7	O K
1440 min Summer	26.815	0.815	0.6	53.0	O K
2160 min Summer	26.786	0.786	0.6	51.1	O K
2880 min Summer	26.755	0.755	0.6	49.1	O K
4320 min Summer	26.694	0.694	0.6	45.0	O K
5760 min Summer	26.635	0.635	0.5	41.0	O K
7200 min Summer	26.579	0.579	0.5	37.3	O K
8640 min Summer	26.528	0.528	0.5	33.9	O K
10080 min Summer	26.481	0.481	0.5	30.8	O K
15 min Winter	26.373	0.373	0.4	23.6	O K
30 min Winter	26.483	0.483	0.5	31.0	O K
60 min Winter	26.601	0.601	0.5	38.8	O K
120 min Winter	26.722	0.722	0.6	46.8	O K
180 min Winter	26.790	0.790	0.6	51.4	O K
240 min Winter	26.836	0.836	0.6	54.4	O K
360 min Winter	26.892	0.892	0.6	58.2	O K
480 min Winter	26.924	0.924	0.6	60.3	O K
600 min Winter	26.942	0.942	0.6	61.5	O K
720 min Winter	26.950	0.950	0.6	62.0	O K
960 min Winter	26.951	0.951	0.6	62.1	O K
1440 min Winter	26.939	0.939	0.6	61.3	O K
2160 min Winter	26.897	0.897	0.6	58.5	O K
2880 min Winter	26.848	0.848	0.6	55.2	O K
4320 min Winter	26.750	0.750	0.6	48.7	O K
5760 min Winter	26.660	0.660	0.5	42.7	O K
7200 min Winter	26.577	0.577	0.5	37.2	O K
8640 min Winter	26.504	0.504	0.5	32.3	O K
10080 min Winter	26.438	0.438	0.5	28.0	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
15 min Summer	82.824	0.0	19
30 min Summer	54.698	0.0	34
60 min Summer	34.733	0.0	64
120 min Summer	21.518	0.0	122
180 min Summer	16.130	0.0	182
240 min Summer	13.106	0.0	242
360 min Summer	9.767	0.0	362
480 min Summer	7.922	0.0	480
600 min Summer	6.730	0.0	600
720 min Summer	5.890	0.0	672
960 min Summer	4.770	0.0	788
1440 min Summer	3.540	0.0	1040
2160 min Summer	2.625	0.0	1468
2880 min Summer	2.123	0.0	1876
4320 min Summer	1.572	0.0	2684
5760 min Summer	1.270	0.0	3512
7200 min Summer	1.076	0.0	4320
8640 min Summer	0.940	0.0	5096
10080 min Summer	0.839	0.0	5848
15 min Winter	82.824	0.0	19
30 min Winter	54.698	0.0	33
60 min Winter	34.733	0.0	62
120 min Winter	21.518	0.0	122
180 min Winter	16.130	0.0	180
240 min Winter	13.106	0.0	238
360 min Winter	9.767	0.0	354
480 min Winter	7.922	0.0	466
600 min Winter	6.730	0.0	578
720 min Winter	5.890	0.0	686
960 min Winter	4.770	0.0	886
1440 min Winter	3.540	0.0	1110
2160 min Winter	2.625	0.0	1576
2880 min Winter	2.123	0.0	2020
4320 min Winter	1.572	0.0	2900
5760 min Winter	1.270	0.0	3752
7200 min Winter	1.076	0.0	4544
8640 min Winter	0.940	0.0	5360
10080 min Winter	0.839	0.0	6152

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Rainfall Details

Rainfall Model	FSR	Ratio R	0.348	Cv (Winter)	0.840
Return Period (years)	10	Summer Storms	Yes	Shortest Storm (mins)	15
Region	England and Wales	Winter Storms	Yes	Longest Storm (mins)	10080
M5-60 (mm)	19.300	Cv (Summer)	0.750	Climate Change %	+50

Time Area Diagram

Total Area (ha) 0.138

Time (mins) From:	To:	Area (ha)
0	4	0.138

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Model Details

Storage is Online Cover Level (m) 28.000

Trench Soakaway Structure

Infiltration Coefficient Base (m/hr)	0.16700	Invert Level (m)	26.000	Cap Volume Depth (m)	1.600
Infiltration Coefficient Side (m/hr)	0.16700	Trench Width (m)	2.0	Cap Infiltration Depth (m)	1.600
Safety Factor	10.0	Trench Length (m)	35.0		
Porosity	0.95	Slope (1:X)	1000.0		

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