Summary of Results for 100 year Return Period (+50%)

Half Drain Time : 390 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	24.051	0.651	1.5	41.4	O K
30 min Summer	24.260	0.860	1.8	54.9	O K
60 min Summer	24.470	1.070	2.0	68.4	O K
120 min Summer	24.654	1.254	2.3	80.3	O K
180 min Summer	24.727	1.327	2.4	85.0	O K
240 min Summer	24.751	1.351	2.4	86.6	O K
360 min Summer	24.765	1.365	2.4	87.5	O K
480 min Summer	24.767	1.367	2.4	87.6	O K
600 min Summer	24.760	1.360	2.4	87.2	O K
720 min Summer	24.746	1.346	2.4	86.3	O K
960 min Summer	24.709	1.309	2.3	83.9	O K
1440 min Summer	24.621	1.221	2.2	78.2	O K
2160 min Summer	24.497	1.097	2.1	70.2	O K
2880 min Summer	24.393	0.993	1.9	63.4	O K
4320 min Summer	24.225	0.825	1.7	52.6	O K
5760 min Summer	24.096	0.696	1.5	44.3	O K
7200 min Summer	23.993	0.593	1.4	37.6	O K
8640 min Summer	23.909	0.509	1.3	32.2	O K
10080 min Summer	23.841	0.441	1.2	27.8	O K
15 min Winter	24.129	0.729	1.6	46.4	O K
30 min Winter	24.365	0.965	1.9	61.6	O K
60 min Winter	24.603	1.203	2.2	77.1	O K
120 min Winter	24.816	1.416	2.5	90.8	O K
180 min Winter	24.905	1.505	2.6	96.5	O K
240 min Winter	24.939	1.539	2.6	98.8	O K
360 min Winter	24.953	1.553	2.7	99.6	O K
480 min Winter	24.951	1.551	2.7	99.5	O K
600 min Winter	24.939	1.539	2.6	98.7	O K
720 min Winter	24.918	1.518	2.6	97.3	O K
960 min Winter	24.861	1.461	2.5	93.7	O K
1440 min Winter	24.733	1.333	2.4	85.4	O K
2160 min Winter	24.553	1.153	2.1	73.8	O K
2880 min Winter	24.408	1.008	1.9	64.4	O K
4320 min Winter	24.185	0.785	1.7	50.0	O K
5760 min Winter	24.021	0.621	1.4	39.4	O K
7200 min Winter	23.897	0.497	1.3	31.4	O K
8640 min Winter	23.801	0.401	1.1	25.2	O K
10080 min Winter	23.723	0.323	1.0	20.2	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
15 min Summer	135.580	0.0	19
30 min Summer	91.216	0.0	33
60 min Summer	58.567	0.0	62
120 min Summer	36.294	0.0	122
180 min Summer	27.017	0.0	180
240 min Summer	21.749	0.0	240
360 min Summer	16.006	0.0	298
480 min Summer	12.864	0.0	360
600 min Summer	10.849	0.0	426
720 min Summer	9.435	0.0	494
960 min Summer	7.561	0.0	634
1440 min Summer	5.523	0.0	910
2160 min Summer	4.026	0.0	1316
2880 min Summer	3.213	0.0	1704
4320 min Summer	2.333	0.0	2468
5760 min Summer	1.857	0.0	3232
7200 min Summer	1.555	0.0	3968
8640 min Summer	1.347	0.0	4680
10080 min Summer	1.192	0.0	5448
15 min Winter	135.580	0.0	18
30 min Winter	91.216	0.0	33
60 min Winter	58.567	0.0	62
120 min Winter	36.294	0.0	120
180 min Winter	27.017	0.0	176
240 min Winter	21.749	0.0	232
360 min Winter	16.006	0.0	332
480 min Winter	12.864	0.0	374
600 min Winter	10.849	0.0	452
720 min Winter	9.435	0.0	528
960 min Winter	7.561	0.0	682
1440 min Winter	5.523	0.0	980
2160 min Winter	4.026	0.0	1404
2880 min Winter	3.213	0.0	1816
4320 min Winter	2.333	0.0	2596
5760 min Winter	1.857	0.0	3352
7200 min Winter	1.555	0.0	4112
8640 min Winter	1.347	0.0	4848
10080 min Winter	1.192	0.0	5552

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Rainfall Details

Rainfall Model	FSR	Ratio R	0.348	Cv (Winter)	0.840
Return Period (years)	100	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) 0.167

Time (mins) From:	To:	Area (ha)
0	4	0.167

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Model Details

Storage is Online Cover Level (m) 25.600

Complex Structure

Trench Soakaway

Infiltration Coefficient Base (m/hr) 0.60840 Invert Level (m) 23.400 Cap Volume Depth (m) 1.600
Infiltration Coefficient Side (m/hr) 0.60840 Trench Width (m) 1.0 Cap Infiltration Depth (m) 1.600
Safety Factor 10.0 Trench Length (m) 38.0
Porosity 0.95 Slope (1:X) 1000.0

Cellular Storage

Invert Level (m) 23.400 Infiltration Coefficient Side (m/hr) 0.00000 Porosity 0.95
Infiltration Coefficient Base (m/hr) 0.00000 Safety Factor 2.0

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	30.0	0.0	1.600	30.0	0.0	1.601	0.0	0.0

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