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

Half Drain Time : 1239 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	22.468	0.518	0.2	14.9	O K
30 min Summer	22.641	0.691	0.2	19.9	O K
60 min Summer	22.828	0.878	0.3	25.3	O K
120 min Summer	23.016	1.066	0.3	30.8	O K
180 min Summer	23.118	1.168	0.3	33.7	O K
240 min Summer	23.181	1.231	0.3	35.5	O K
360 min Summer	23.262	1.312	0.3	37.9	O K
480 min Summer	23.308	1.358	0.3	39.2	O K
600 min Summer	23.334	1.384	0.4	40.0	O K
720 min Summer	23.347	1.397	0.4	40.3	O K
960 min Summer	23.354	1.404	0.4	40.5	O K
1440 min Summer	23.352	1.402	0.4	40.5	O K
2160 min Summer	23.326	1.376	0.3	39.7	O K
2880 min Summer	23.286	1.336	0.3	38.6	O K
4320 min Summer	23.194	1.244	0.3	35.9	O K
5760 min Summer	23.105	1.155	0.3	33.3	O K
7200 min Summer	23.027	1.077	0.3	31.1	O K
8640 min Summer	22.960	1.010	0.3	29.1	O K
10080 min Summer	22.899	0.949	0.3	27.4	O K
15 min Winter	22.529	0.579	0.2	16.7	O K
30 min Winter	22.724	0.774	0.2	22.3	O K
60 min Winter	22.934	0.984	0.3	28.4	O K
120 min Winter	23.147	1.197	0.3	34.5	O K
180 min Winter	23.263	1.313	0.3	37.9	O K
240 min Winter	23.336	1.386	0.4	40.0	O K
360 min Winter	23.430	1.480	0.4	42.8	O K
480 min Winter	23.486	1.536	0.4	44.4	O K
600 min Winter	23.520	1.570	0.4	45.4	O K
720 min Winter	23.540	1.590	0.4	45.9	O K
960 min Winter	23.554	1.604	0.4	46.3	Flood Risk
1440 min Winter	23.541	1.591	0.4	46.0	O K
2160 min Winter	23.502	1.552	0.4	44.8	O K
2880 min Winter	23.443	1.493	0.4	43.1	O K
4320 min Winter	23.311	1.361	0.3	39.3	O K
5760 min Winter	23.185	1.235	0.3	35.7	O K
7200 min Winter	23.074	1.124	0.3	32.4	O K
8640 min Winter	22.981	1.031	0.3	29.7	O K
10080 min Winter	22.898	0.948	0.3	27.3	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	34
60 min Summer	58.567	0.0	64
120 min Summer	36.294	0.0	124
180 min Summer	27.017	0.0	182
240 min Summer	21.749	0.0	242
360 min Summer	16.006	0.0	362
480 min Summer	12.864	0.0	482
600 min Summer	10.849	0.0	600
720 min Summer	9.435	0.0	720
960 min Summer	7.561	0.0	840
1440 min Summer	5.523	0.0	1084
2160 min Summer	4.026	0.0	1492
2880 min Summer	3.213	0.0	1904
4320 min Summer	2.333	0.0	2724
5760 min Summer	1.857	0.0	3568
7200 min Summer	1.555	0.0	4328
8640 min Summer	1.347	0.0	5184
10080 min Summer	1.192	0.0	5952
15 min Winter	135.580	0.0	19
30 min Winter	91.216	0.0	33
60 min Winter	58.567	0.0	64
120 min Winter	36.294	0.0	122
180 min Winter	27.017	0.0	180
240 min Winter	21.749	0.0	238
360 min Winter	16.006	0.0	354
480 min Winter	12.864	0.0	470
600 min Winter	10.849	0.0	582
720 min Winter	9.435	0.0	694
960 min Winter	7.561	0.0	904
1440 min Winter	5.523	0.0	1128
2160 min Winter	4.026	0.0	1596
2880 min Winter	3.213	0.0	2048
4320 min Winter	2.333	0.0	2940
5760 min Winter	1.857	0.0	3800
7200 min Winter	1.555	0.0	4616
8640 min Winter	1.347	0.0	5448
10080 min Winter	1.192	0.0	6256

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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) 0.059

Time (mins) From:	To:	Area (ha)
0	4	0.059

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Model Details

Storage is Online Cover Level (m) 23.850

Complex Structure

Trench Soakaway

Infiltration Coefficient Base (m/hr) 0.18940 Invert Level (m) 21.950 Cap Volume Depth (m) 1.600
Infiltration Coefficient Side (m/hr) 0.18940 Trench Width (m) 1.0 Cap Infiltration Depth (m) 1.600
Safety Factor 10.0 Trench Length (m) 17.0
Porosity 0.95 Slope (1:X) 1000.0

Cellular Storage

Invert Level (m) 21.950 Infiltration Coefficient Side (m/hr) 0.00000 Porosity 0.95
Infiltration Coefficient Base (m/hr) 0.00000 Safety Factor 10.0

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	13.5	0.0	1.600	13.5	0.0	1.601	0.0	0.0

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