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

Half Drain Time : 319 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	23.799	0.399	1.1	25.1	O K
30 min Summer	23.914	0.514	1.3	32.5	O K
60 min Summer	24.027	0.627	1.4	39.8	O K
120 min Summer	24.124	0.724	1.6	46.1	O K
180 min Summer	24.163	0.763	1.6	48.6	O K
240 min Summer	24.176	0.776	1.6	49.5	O K
360 min Summer	24.189	0.789	1.7	50.3	O K
480 min Summer	24.190	0.790	1.7	50.3	O K
600 min Summer	24.184	0.784	1.7	50.0	O K
720 min Summer	24.175	0.775	1.6	49.4	O K
960 min Summer	24.151	0.751	1.6	47.8	O K
1440 min Summer	24.100	0.700	1.5	44.5	O K
2160 min Summer	24.028	0.628	1.4	39.9	O K
2880 min Summer	23.964	0.564	1.4	35.8	O K
4320 min Summer	23.858	0.458	1.2	28.9	O K
5760 min Summer	23.774	0.374	1.1	23.5	O K
7200 min Summer	23.707	0.307	1.0	19.2	O K
8640 min Summer	23.653	0.253	1.0	15.7	O K
10080 min Summer	23.608	0.208	0.9	12.7	O K
15 min Winter	23.846	0.446	1.2	28.2	O K
30 min Winter	23.977	0.577	1.4	36.6	O K
60 min Winter	24.106	0.706	1.5	44.9	O K
120 min Winter	24.221	0.821	1.7	52.3	O K
180 min Winter	24.269	0.869	1.8	55.5	O K
240 min Winter	24.290	0.890	1.8	56.8	O K
360 min Winter	24.299	0.899	1.8	57.4	O K
480 min Winter	24.300	0.900	1.8	57.4	O K
600 min Winter	24.290	0.890	1.8	56.8	O K
720 min Winter	24.275	0.875	1.8	55.9	O K
960 min Winter	24.237	0.837	1.7	53.4	O K
1440 min Winter	24.156	0.756	1.6	48.1	O K
2160 min Winter	24.047	0.647	1.5	41.1	O K
2880 min Winter	23.955	0.555	1.3	35.2	O K
4320 min Winter	23.811	0.411	1.2	25.9	O K
5760 min Winter	23.705	0.305	1.0	19.0	O K
7200 min Winter	23.624	0.224	0.9	13.8	O K
8640 min Winter	23.562	0.162	0.8	9.8	O K
10080 min Winter	23.512	0.112	0.8	6.6	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	33
60 min Summer	34.733	0.0	62
120 min Summer	21.518	0.0	122
180 min Summer	16.130	0.0	180
240 min Summer	13.106	0.0	222
360 min Summer	9.767	0.0	282
480 min Summer	7.922	0.0	346
600 min Summer	6.730	0.0	416
720 min Summer	5.890	0.0	486
960 min Summer	4.770	0.0	626
1440 min Summer	3.540	0.0	896
2160 min Summer	2.625	0.0	1300
2880 min Summer	2.123	0.0	1700
4320 min Summer	1.572	0.0	2464
5760 min Summer	1.270	0.0	3176
7200 min Summer	1.076	0.0	3960
8640 min Summer	0.940	0.0	4664
10080 min Summer	0.839	0.0	5352
15 min Winter	82.824	0.0	18
30 min Winter	54.698	0.0	33
60 min Winter	34.733	0.0	62
120 min Winter	21.518	0.0	118
180 min Winter	16.130	0.0	176
240 min Winter	13.106	0.0	230
360 min Winter	9.767	0.0	292
480 min Winter	7.922	0.0	368
600 min Winter	6.730	0.0	446
720 min Winter	5.890	0.0	522
960 min Winter	4.770	0.0	674
1440 min Winter	3.540	0.0	966
2160 min Winter	2.625	0.0	1384
2880 min Winter	2.123	0.0	1788
4320 min Winter	1.572	0.0	2552
5760 min Winter	1.270	0.0	3336
7200 min Winter	1.076	0.0	4040
8640 min Winter	0.940	0.0	4760
10080 min Winter	0.839	0.0	5448

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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) 0.167

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

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

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

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