

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

Half Drain Time : 1038 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	22.267	0.317	0.1	9.1	0 K
30 min Summer	22.365	0.415	0.2	11.9	0 K
60 min Summer	22.469	0.519	0.2	14.9	0 K
120 min Summer	22.576	0.626	0.2	18.0	0 K
180 min Summer	22.638	0.688	0.2	19.8	0 K
240 min Summer	22.679	0.729	0.2	21.0	0 K
360 min Summer	22.731	0.781	0.2	22.5	0 K
480 min Summer	22.761	0.811	0.2	23.4	0 K
600 min Summer	22.777	0.827	0.2	23.8	0 K
720 min Summer	22.785	0.835	0.2	24.1	0 K
960 min Summer	22.795	0.845	0.2	24.3	0 K
1440 min Summer	22.800	0.850	0.2	24.5	0 K
2160 min Summer	22.788	0.838	0.2	24.1	0 K
2880 min Summer	22.765	0.815	0.2	23.5	0 K
4320 min Summer	22.712	0.762	0.2	22.0	0 K
5760 min Summer	22.663	0.713	0.2	20.5	0 K
7200 min Summer	22.616	0.666	0.2	19.2	0 K
8640 min Summer	22.574	0.624	0.2	17.9	0 K
10080 min Summer	22.534	0.584	0.2	16.8	0 K
15 min Winter	22.305	0.355	0.2	10.1	0 K
30 min Winter	22.414	0.464	0.2	13.3	0 K
60 min Winter	22.532	0.582	0.2	16.7	0 K
120 min Winter	22.654	0.704	0.2	20.3	0 K
180 min Winter	22.725	0.775	0.2	22.3	0 K
240 min Winter	22.773	0.823	0.2	23.7	0 K
360 min Winter	22.834	0.884	0.3	25.5	0 K
480 min Winter	22.871	0.921	0.3	26.6	0 K
600 min Winter	22.894	0.944	0.3	27.2	0 K
720 min Winter	22.907	0.957	0.3	27.6	0 K
960 min Winter	22.916	0.966	0.3	27.9	0 K
1440 min Winter	22.918	0.968	0.3	27.9	0 K
2160 min Winter	22.897	0.947	0.3	27.3	0 K
2880 min Winter	22.861	0.911	0.3	26.2	0 K
4320 min Winter	22.778	0.828	0.2	23.9	0 K
5760 min Winter	22.702	0.752	0.2	21.7	0 K
7200 min Winter	22.633	0.683	0.2	19.7	0 K
8640 min Winter	22.572	0.622	0.2	17.9	0 K
10080 min Winter	22.517	0.567	0.2	16.3	0 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	124
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	698
960 min Summer	4.770	0.0	800
1440 min Summer	3.540	0.0	1052
2160 min Summer	2.625	0.0	1468
2880 min Summer	2.123	0.0	1876
4320 min Summer	1.572	0.0	2720
5760 min Summer	1.270	0.0	3520
7200 min Summer	1.076	0.0	4320
8640 min Summer	0.940	0.0	5104
10080 min Summer	0.839	0.0	5856
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	468
600 min Winter	6.730	0.0	578
720 min Winter	5.890	0.0	688
960 min Winter	4.770	0.0	892
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	4608
8640 min Winter	0.940	0.0	5368
10080 min Winter	0.839	0.0	6160

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) 0.059

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

Model Details

Storage is Online Cover Level (m) 23.850

Complex Structure

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

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