Summary of Results for 100 year Return Period (+40%)

Half Drain Time : 73 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	99.299	0.299	0.1	0.7	O K
30 min Summer	99.376	0.376	0.1	0.8	O K
60 min Summer	99.422	0.422	0.1	0.9	O K
120 min Summer	99.434	0.434	0.1	1.0	O K
180 min Summer	99.419	0.419	0.1	0.9	O K
240 min Summer	99.399	0.399	0.1	0.9	O K
360 min Summer	99.359	0.359	0.1	0.8	O K
480 min Summer	99.322	0.322	0.1	0.7	O K
600 min Summer	99.288	0.288	0.1	0.6	O K
720 min Summer	99.258	0.258	0.1	0.6	O K
960 min Summer	99.206	0.206	0.1	0.5	O K
1440 min Summer	99.130	0.130	0.1	0.3	O K
2160 min Summer	99.065	0.065	0.1	0.1	O K
2880 min Summer	99.046	0.046	0.1	0.1	O K
4320 min Summer	99.033	0.033	0.1	0.1	O K
5760 min Summer	99.027	0.027	0.0	0.1	O K
7200 min Summer	99.022	0.022	0.0	0.0	O K
8640 min Summer	99.019	0.019	0.0	0.0	O K
10080 min Summer	99.017	0.017	0.0	0.0	O K
15 min Winter	99.338	0.338	0.1	0.8	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
15 min Summer	134.746	0.0	17
30 min Summer	90.474	0.0	31
60 min Summer	57.877	0.0	54
120 min Summer	35.655	0.0	86
180 min Summer	26.413	0.0	122
240 min Summer	21.237	0.0	156
360 min Summer	15.626	0.0	224
480 min Summer	12.548	0.0	290
600 min Summer	10.575	0.0	356
720 min Summer	9.191	0.0	418
960 min Summer	7.358	0.0	540
1440 min Summer	5.368	0.0	780
2160 min Summer	3.907	0.0	1124
2880 min Summer	3.115	0.0	1468
4320 min Summer	2.259	0.0	2200
5760 min Summer	1.796	0.0	2896
7200 min Summer	1.506	0.0	3672
8640 min Summer	1.304	0.0	4400
10080 min Summer	1.154	0.0	5056
15 min Winter	134.746	0.0	17

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Summary of Results for 100 year Return Period (+40%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	99.428	0.428	0.1	1.0	O K
60 min Winter	99.485	0.485	0.2	1.1	O K
120 min Winter	99.495	0.495	0.2	1.1	O K
180 min Winter	99.472	0.472	0.1	1.1	O K
240 min Winter	99.441	0.441	0.1	1.0	O K
360 min Winter	99.380	0.380	0.1	0.9	O K
480 min Winter	99.326	0.326	0.1	0.7	O K
600 min Winter	99.278	0.278	0.1	0.6	O K
720 min Winter	99.236	0.236	0.1	0.5	O K
960 min Winter	99.167	0.167	0.1	0.4	O K
1440 min Winter	99.075	0.075	0.1	0.2	O K
2160 min Winter	99.042	0.042	0.1	0.1	O K
2880 min Winter	99.033	0.033	0.1	0.1	O K
4320 min Winter	99.024	0.024	0.0	0.1	O K
5760 min Winter	99.019	0.019	0.0	0.0	O K
7200 min Winter	99.016	0.016	0.0	0.0	O K
8640 min Winter	99.014	0.014	0.0	0.0	O K
10080 min Winter	99.013	0.013	0.0	0.0	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
30 min Winter	90.474	0.0	31
60 min Winter	57.877	0.0	58
120 min Winter	35.655	0.0	92
180 min Winter	26.413	0.0	130
240 min Winter	21.237	0.0	168
360 min Winter	15.626	0.0	240
480 min Winter	12.548	0.0	310
600 min Winter	10.575	0.0	376
720 min Winter	9.191	0.0	440
960 min Winter	7.358	0.0	566
1440 min Winter	5.368	0.0	792
2160 min Winter	3.907	0.0	1100
2880 min Winter	3.115	0.0	1468
4320 min Winter	2.259	0.0	2140
5760 min Winter	1.796	0.0	2880
7200 min Winter	1.506	0.0	3664
8640 min Winter	1.304	0.0	4392
10080 min Winter	1.154	0.0	5128

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Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	20.400	Shortest Storm (mins)	15
Ratio R	0.350	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.003

Time (mins) From:	To:	Area (ha)
0	4	0.003

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Model Details

Storage is Online Cover Level (m) 100.000

Trench Soakaway Structure

Infiltration Coefficient Base (m/hr)	0.07200	Trench Width (m)	1.1
Infiltration Coefficient Side (m/hr)	0.07200	Trench Length (m)	6.8
Safety Factor	2.0	Slope (1:X)	0.0
Porosity	0.30	Cap Volume Depth (m)	0.000
Invert Level (m)	99.000	Cap Infiltration Depth (m)	0.000

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