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

Half Drain Time : 779 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	0.457	0.457	0.7	31.9	O K
30 min Summer	0.594	0.594	0.7	41.5	O K
60 min Summer	0.728	0.728	0.8	50.9	O K
120 min Summer	0.850	0.850	0.8	59.3	O K
180 min Summer	0.907	0.907	0.9	63.3	O K
240 min Summer	0.936	0.936	0.9	65.3	O K
360 min Summer	0.960	0.960	0.9	67.0	O K
480 min Summer	0.961	0.961	0.9	67.1	O K
600 min Summer	0.951	0.951	0.9	66.4	O K
720 min Summer	0.938	0.938	0.9	65.5	O K
960 min Summer	0.912	0.912	0.9	63.7	O K
1440 min Summer	0.857	0.857	0.8	59.9	O K
2160 min Summer	0.783	0.783	0.8	54.7	O K
2880 min Summer	0.716	0.716	0.8	50.0	O K
4320 min Summer	0.599	0.599	0.8	41.8	O K
5760 min Summer	0.497	0.497	0.7	34.7	O K
7200 min Summer	0.410	0.410	0.7	28.6	O K
8640 min Summer	0.335	0.335	0.7	23.4	O K
10080 min Summer	0.271	0.271	0.6	18.9	O K
15 min Winter	0.513	0.513	0.7	35.8	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
15 min Summer	138.754	0.0	19
30 min Summer	90.906	0.0	34
60 min Summer	56.713	0.0	64
120 min Summer	34.176	0.0	122
180 min Summer	25.072	0.0	182
240 min Summer	20.006	0.0	242
360 min Summer	14.514	0.0	362
480 min Summer	11.557	0.0	480
600 min Summer	9.678	0.0	570
720 min Summer	8.369	0.0	616
960 min Summer	6.648	0.0	742
1440 min Summer	4.799	0.0	1008
2160 min Summer	3.459	0.0	1424
2880 min Summer	2.739	0.0	1820
4320 min Summer	1.968	0.0	2636
5760 min Summer	1.556	0.0	3408
7200 min Summer	1.295	0.0	4176
8640 min Summer	1.115	0.0	4920
10080 min Summer	0.982	0.0	5640
15 min Winter	138.754	0.0	19

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	0.667	0.667	0.8	46.6	O K
60 min Winter	0.819	0.819	0.8	57.2	O K
120 min Winter	0.959	0.959	0.9	67.0	O K
180 min Winter	1.027	1.027	0.9	71.7	O K
240 min Winter	1.063	1.063	0.9	74.2	O K
360 min Winter	1.097	1.097	0.9	76.6	O K
480 min Winter	1.107	1.107	0.9	77.3	O K
600 min Winter	1.103	1.103	0.9	77.0	O K
720 min Winter	1.090	1.090	0.9	76.1	O K
960 min Winter	1.055	1.055	0.9	73.7	O K
1440 min Winter	0.988	0.988	0.9	69.0	O K
2160 min Winter	0.884	0.884	0.9	61.8	O K
2880 min Winter	0.787	0.787	0.8	55.0	O K
4320 min Winter	0.616	0.616	0.8	43.0	O K
5760 min Winter	0.473	0.473	0.7	33.0	O K
7200 min Winter	0.353	0.353	0.7	24.7	O K
8640 min Winter	0.254	0.254	0.6	17.7	O K
10080 min Winter	0.173	0.173	0.6	12.1	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
30 min Winter	90.906	0.0	33
60 min Winter	56.713	0.0	62
120 min Winter	34.176	0.0	120
180 min Winter	25.072	0.0	180
240 min Winter	20.006	0.0	238
360 min Winter	14.514	0.0	352
480 min Winter	11.557	0.0	464
600 min Winter	9.678	0.0	574
720 min Winter	8.369	0.0	678
960 min Winter	6.648	0.0	776
1440 min Winter	4.799	0.0	1082
2160 min Winter	3.459	0.0	1536
2880 min Winter	2.739	0.0	1984
4320 min Winter	1.968	0.0	2812
5760 min Winter	1.556	0.0	3632
7200 min Winter	1.295	0.0	4392
8640 min Winter	1.115	0.0	5104
10080 min Winter	0.982	0.0	5752

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)	20.000	Shortest Storm (mins)	15
Ratio R	0.405	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.125

Time (mins) From:	To:	Area (ha)
0	4	0.125

Model Details

Storage is Online Cover Level (m) 10.000

Cellular Storage Structure

Invert Level (m) 0.000 Safety Factor 1.0
Infiltration Coefficient Base (m/hr) 0.02630 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.02630

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	73.5	73.5	1.300	0.0	132.3
1.200	73.5	132.3			