Summary of Results for 100 year Return Period

Half Drain Time : 3980 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	97.829	0.219	0.0	3.1	O K
30 min Summer	97.897	0.287	0.0	4.1	O K
60 min Summer	97.967	0.357	0.0	5.1	O K
120 min Summer	98.038	0.428	0.0	6.1	O K
180 min Summer	98.079	0.469	0.0	6.7	O K
240 min Summer	98.106	0.496	0.0	7.1	O K
360 min Summer	98.143	0.533	0.0	7.6	O K
480 min Summer	98.170	0.560	0.0	8.0	O K
600 min Summer	98.189	0.579	0.0	8.3	O K
720 min Summer	98.204	0.594	0.0	8.5	O K
960 min Summer	98.225	0.615	0.0	8.8	O K
1440 min Summer	98.247	0.637	0.0	9.1	O K
2160 min Summer	98.255	0.645	0.0	9.2	O K
2880 min Summer	98.248	0.638	0.0	9.1	O K
4320 min Summer	98.230	0.620	0.0	8.8	O K
5760 min Summer	98.211	0.601	0.0	8.6	O K
7200 min Summer	98.191	0.581	0.0	8.3	O K
8640 min Summer	98.171	0.561	0.0	8.0	O K
10080 min Summer	98.151	0.541	0.0	7.7	O K
15 min Winter	97.855	0.245	0.0	3.5	O K
30 min Winter	97.931	0.321	0.0	4.6	O K
60 min Winter	98.010	0.400	0.0	5.7	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
15 min Summer	98.140	0.0	19
30 min Summer	64.441	0.0	34
60 min Summer	40.301	0.0	64
120 min Summer	24.345	0.0	124
180 min Summer	17.884	0.0	184
240 min Summer	14.282	0.0	244
360 min Summer	10.373	0.0	364
480 min Summer	8.266	0.0	484
600 min Summer	6.927	0.0	602
720 min Summer	5.992	0.0	722
960 min Summer	4.764	0.0	962
1440 min Summer	3.442	0.0	1442
2160 min Summer	2.483	0.0	2160
2880 min Summer	1.968	0.0	2740
4320 min Summer	1.415	0.0	3416
5760 min Summer	1.119	0.0	4160
7200 min Summer	0.933	0.0	4976
8640 min Summer	0.803	0.0	5800
10080 min Summer	0.708	0.0	6656
15 min Winter	98.140	0.0	19
30 min Winter	64.441	0.0	34
60 min Winter	40.301	0.0	64

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Summary of Results for 100 year Return Period

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
120 min Winter	98.090	0.480	0.0	6.8	O K
180 min Winter	98.136	0.526	0.0	7.5	O K
240 min Winter	98.167	0.557	0.0	7.9	O K
360 min Winter	98.209	0.599	0.0	8.5	O K
480 min Winter	98.240	0.630	0.0	9.0	O K
600 min Winter	98.262	0.652	0.0	9.3	O K
720 min Winter	98.280	0.670	0.0	9.5	O K
960 min Winter	98.305	0.695	0.0	9.9	O K
1440 min Winter	98.333	0.723	0.0	10.3	O K
2160 min Winter	98.347	0.737	0.0	10.5	O K
2880 min Winter	98.345	0.735	0.0	10.5	O K
4320 min Winter	98.321	0.711	0.0	10.1	O K
5760 min Winter	98.298	0.688	0.0	9.8	O K
7200 min Winter	98.273	0.663	0.0	9.4	O K
8640 min Winter	98.246	0.636	0.0	9.1	O K
10080 min Winter	98.220	0.610	0.0	8.7	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
120 min Winter	24.345	0.0	122
180 min Winter	17.884	0.0	182
240 min Winter	14.282	0.0	242
360 min Winter	10.373	0.0	360
480 min Winter	8.266	0.0	478
600 min Winter	6.927	0.0	596
720 min Winter	5.992	0.0	714
960 min Winter	4.764	0.0	946
1440 min Winter	3.442	0.0	1412
2160 min Winter	2.483	0.0	2096
2880 min Winter	1.968	0.0	2740
4320 min Winter	1.415	0.0	3628
5760 min Winter	1.119	0.0	4440
7200 min Winter	0.933	0.0	5336
8640 min Winter	0.803	0.0	6304
10080 min Winter	0.708	0.0	7168

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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)	19.900	Shortest Storm (mins)	15
Ratio R	0.400	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+0

Time Area Diagram

Total Area (ha) 0.017

Time (mins) From:	To:	Area (ha)
0	4	0.017

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Model Details

Storage is Online Cover Level (m) 99.620

Cellular Storage Structure

Invert Level (m) 97.610 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.00576 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.00576

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	15.0	15.0	1.300	0.0	42.6
1.200	15.0	42.6			

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