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

Half Drain Time : 35 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	69.734	0.234	18.5	52.7	O K
30 min Summer	69.778	0.278	18.5	62.7	O K
60 min Summer	69.791	0.291	18.5	65.4	O K
120 min Summer	69.764	0.264	18.5	59.5	O K
180 min Summer	69.726	0.226	18.5	50.9	O K
240 min Summer	69.689	0.189	18.5	42.5	O K
360 min Summer	69.627	0.127	18.5	28.5	O K
480 min Summer	69.583	0.083	18.5	18.8	O K
600 min Summer	69.557	0.057	18.5	12.9	O K
720 min Summer	69.547	0.047	17.5	10.7	O K
960 min Summer	69.538	0.038	14.1	8.6	O K
1440 min Summer	69.528	0.028	10.4	6.3	O K
2160 min Summer	69.521	0.021	7.7	4.6	O K
2880 min Summer	69.516	0.016	6.0	3.6	O K
4320 min Summer	69.512	0.012	4.3	2.6	O K
5760 min Summer	69.509	0.009	3.4	2.1	O K
7200 min Summer	69.508	0.008	2.9	1.7	O K
8640 min Summer	69.507	0.007	2.5	1.5	O K
10080 min Summer	69.506	0.006	2.3	1.4	O K
15 min Winter	69.734	0.234	18.5	52.6	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
15 min Summer	138.153	0.0	16
30 min Summer	90.705	0.0	29
60 min Summer	56.713	0.0	46
120 min Summer	34.246	0.0	80
180 min Summer	25.149	0.0	114
240 min Summer	20.078	0.0	146
360 min Summer	14.585	0.0	206
480 min Summer	11.622	0.0	262
600 min Summer	9.738	0.0	314
720 min Summer	8.424	0.0	370
960 min Summer	6.697	0.0	490
1440 min Summer	4.839	0.0	734
2160 min Summer	3.490	0.0	1096
2880 min Summer	2.766	0.0	1444
4320 min Summer	1.989	0.0	2140
5760 min Summer	1.573	0.0	2896
7200 min Summer	1.311	0.0	3576
8640 min Summer	1.129	0.0	4272
10080 min Summer	0.994	0.0	5064
15 min Winter	138.153	0.0	16

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	69.778	0.278	18.5	62.6	O K
60 min Winter	69.785	0.285	18.5	64.1	O K
120 min Winter	69.740	0.240	18.5	54.0	O K
180 min Winter	69.683	0.183	18.5	41.1	O K
240 min Winter	69.630	0.130	18.5	29.3	O K
360 min Winter	69.559	0.059	18.5	13.3	O K
480 min Winter	69.543	0.043	16.0	9.7	O K
600 min Winter	69.537	0.037	13.6	8.2	O K
720 min Winter	69.532	0.032	11.7	7.1	O K
960 min Winter	69.525	0.025	9.3	5.7	O K
1440 min Winter	69.518	0.018	6.7	4.1	O K
2160 min Winter	69.513	0.013	4.9	3.0	O K
2880 min Winter	69.511	0.011	4.0	2.4	O K
4320 min Winter	69.508	0.008	2.9	1.7	O K
5760 min Winter	69.506	0.006	2.3	1.4	O K
7200 min Winter	69.505	0.005	1.9	1.1	O K
8640 min Winter	69.504	0.004	1.6	1.0	O K
10080 min Winter	69.504	0.004	1.4	0.8	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
30 min Winter	90.705	0.0	30
60 min Winter	56.713	0.0	48
120 min Winter	34.246	0.0	86
180 min Winter	25.149	0.0	120
240 min Winter	20.078	0.0	150
360 min Winter	14.585	0.0	200
480 min Winter	11.622	0.0	250
600 min Winter	9.738	0.0	310
720 min Winter	8.424	0.0	368
960 min Winter	6.697	0.0	492
1440 min Winter	4.839	0.0	736
2160 min Winter	3.490	0.0	1068
2880 min Winter	2.766	0.0	1448
4320 min Winter	1.989	0.0	2124
5760 min Winter	1.573	0.0	2856
7200 min Winter	1.311	0.0	3560
8640 min Winter	1.129	0.0	4304
10080 min Winter	0.994	0.0	4976

Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	100	Cv (Summer)	1.000
Region	England and Wales	Cv (Winter)	1.000
M5-60 (mm)	20.000	Shortest Storm (mins)	15
Ratio R	0.400	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.200

Time (mins) From:	To:	Area (ha)
0	4	0.200

Time Area Diagram

Total Area (ha) 0.000

Time (mins) From:	To:	Area (ha)
0	4	0.000

Model Details

Storage is Online Cover Level (m) 70.100

Porous Car Park Structure

Infiltration Coefficient Base (m/hr)	0.17748	Width (m)	75.0
Membrane Percolation (mm/hr)	1000	Length (m)	10.0
Max Percolation (l/s)	208.3	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	69.500	Membrane Depth (m)	0

Event: 60 min Summer