

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

Half Drain Time : 720 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m <sup>3</sup> )	Status
15 min Summer	0.331	0.331	1.5	56.5	O K
30 min Summer	0.429	0.429	1.5	73.3	O K
60 min Summer	0.525	0.525	1.5	89.7	O K
120 min Summer	0.610	0.610	1.6	104.3	O K
180 min Summer	0.649	0.649	1.6	111.0	O K
240 min Summer	0.668	0.668	1.6	114.2	O K
360 min Summer	0.680	0.680	1.6	116.3	O K
480 min Summer	0.677	0.677	1.6	115.8	O K
600 min Summer	0.666	0.666	1.6	113.9	O K
720 min Summer	0.654	0.654	1.6	111.8	O K
960 min Summer	0.630	0.630	1.6	107.7	O K
1440 min Summer	0.584	0.584	1.6	99.9	O K
2160 min Summer	0.523	0.523	1.5	89.4	O K
2880 min Summer	0.466	0.466	1.5	79.6	O K
4320 min Summer	0.364	0.364	1.5	62.3	O K
5760 min Summer	0.279	0.279	1.4	47.7	O K
7200 min Summer	0.208	0.208	1.4	35.6	O K
8640 min Summer	0.152	0.152	1.4	26.1	O K
10080 min Summer	0.109	0.109	1.4	18.6	O K
15 min Winter	0.371	0.371	1.5	63.4	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m <sup>3</sup> )	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	560
720 min Summer	8.369	0.0	612
960 min Summer	6.648	0.0	734
1440 min Summer	4.799	0.0	996
2160 min Summer	3.459	0.0	1404
2880 min Summer	2.739	0.0	1816
4320 min Summer	1.968	0.0	2596
5760 min Summer	1.556	0.0	3344
7200 min Summer	1.295	0.0	4040
8640 min Summer	1.115	0.0	4752
10080 min Summer	0.982	0.0	5440
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 (m <sup>3</sup> )	Status
30 min Winter	0.482	0.482	1.5	82.4	O K
60 min Winter	0.591	0.591	1.6	101.0	O K
120 min Winter	0.690	0.690	1.6	118.0	O K
180 min Winter	0.737	0.737	1.6	126.0	O K
240 min Winter	0.761	0.761	1.6	130.1	O K
360 min Winter	0.782	0.782	1.6	133.7	O K
480 min Winter	0.785	0.785	1.6	134.3	O K
600 min Winter	0.779	0.779	1.6	133.1	O K
720 min Winter	0.765	0.765	1.6	130.9	O K
960 min Winter	0.733	0.733	1.6	125.4	O K
1440 min Winter	0.675	0.675	1.6	115.4	O K
2160 min Winter	0.585	0.585	1.6	100.1	O K
2880 min Winter	0.501	0.501	1.5	85.6	O K
4320 min Winter	0.351	0.351	1.5	59.9	O K
5760 min Winter	0.228	0.228	1.4	39.0	O K
7200 min Winter	0.134	0.134	1.4	22.8	O K
8640 min Winter	0.069	0.069	1.3	11.9	O K
10080 min Winter	0.048	0.048	1.3	8.2	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m <sup>3</sup> )	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	466
600 min Winter	9.678	0.0	574
720 min Winter	8.369	0.0	680
960 min Winter	6.648	0.0	778
1440 min Winter	4.799	0.0	1080
2160 min Winter	3.459	0.0	1532
2880 min Winter	2.739	0.0	1960
4320 min Winter	1.968	0.0	2768
5760 min Winter	1.556	0.0	3512
7200 min Winter	1.295	0.0	4176
8640 min Winter	1.115	0.0	4680
10080 min Winter	0.982	0.0	5144

Unit 3 Sherwood Oaks Close  
 Sherwood Oaks Business Park  
 Mansfield Nottinghamshire ...



Date 09/01/2018 12:31  
 File Soakaway 2.SRCX

Designed by Thomas.Nunn  
 Checked by

XP Solutions Source Control 2017.1.2

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) 0.222

**Time (mins) Area**  
**From: To: (ha)**

0            4    0.222

Unit 3 Sherwood Oaks Close  
 Sherwood Oaks Business Park  
 Mansfield Nottinghamshire ...



Date 09/01/2018 12:31  
 File Soakaway 2.SRCX

Designed by Thomas.Nunn  
 Checked by

XP Solutions Source Control 2017.1.2

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 (m <sup>2</sup> )	Inf. Area (m <sup>2</sup> )	Depth (m)	Area (m <sup>2</sup> )	Inf. Area (m <sup>2</sup> )
0.000	180.0	180.0	0.900	0.0	224.8
0.800	180.0	224.8			