

11 Broomhead Road
Wombell
Barnsley S73 0SA



Date 30/03/2026 14:26
File soakaway design.SRCX

Designed by shaun
Checked by

CADS Source Control 2020.1.3

Summary of Results for 30 year Return Period

Half Drain Time : 39 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m ³)	Status
15 min Summer	8.785	0.235	0.7	1.9	O K
30 min Summer	8.826	0.276	0.7	2.2	O K
60 min Summer	8.846	0.296	0.8	2.4	O K
120 min Summer	8.835	0.285	0.8	2.3	O K
180 min Summer	8.813	0.263	0.7	2.1	O K
240 min Summer	8.789	0.239	0.7	1.9	O K
360 min Summer	8.747	0.197	0.6	1.6	O K
480 min Summer	8.713	0.163	0.6	1.3	O K
600 min Summer	8.686	0.136	0.5	1.1	O K
720 min Summer	8.664	0.114	0.5	0.9	O K
960 min Summer	8.630	0.080	0.5	0.6	O K
1440 min Summer	8.598	0.048	0.4	0.4	O K
2160 min Summer	8.586	0.036	0.3	0.3	O K
2880 min Summer	8.579	0.029	0.2	0.2	O K
4320 min Summer	8.572	0.022	0.2	0.2	O K
5760 min Summer	8.567	0.017	0.1	0.1	O K
7200 min Summer	8.565	0.015	0.1	0.1	O K
8640 min Summer	8.563	0.013	0.1	0.1	O K
10080 min Summer	8.561	0.011	0.1	0.1	O K
15 min Winter	8.817	0.267	0.7	2.2	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m ³)	Time-Peak (mins)
15 min Summer	69.101	0.0	16
30 min Summer	45.919	0.0	27
60 min Summer	29.238	0.0	44
120 min Summer	18.077	0.0	78
180 min Summer	13.494	0.0	112
240 min Summer	10.913	0.0	146
360 min Summer	8.067	0.0	208
480 min Summer	6.508	0.0	270
600 min Summer	5.506	0.0	332
720 min Summer	4.801	0.0	392
960 min Summer	3.864	0.0	510
1440 min Summer	2.843	0.0	736
2160 min Summer	2.088	0.0	1100
2880 min Summer	1.676	0.0	1468
4320 min Summer	1.229	0.0	2176
5760 min Summer	0.985	0.0	2864
7200 min Summer	0.829	0.0	3672
8640 min Summer	0.721	0.0	4336
10080 min Summer	0.640	0.0	5024
15 min Winter	69.101	0.0	16

11 Broomhead Road
Wombell
Barnsley S73 0SA



Date 30/03/2026 14:26
File soakaway design.SRCX

Designed by shaun
Checked by

CADS Source Control 2020.1.3

Summary of Results for 30 year Return Period

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m ³)	Status
30 min Winter	8.865	0.315	0.8	2.5	O K
60 min Winter	8.884	0.334	0.8	2.7	O K
120 min Winter	8.861	0.311	0.8	2.5	O K
180 min Winter	8.825	0.275	0.7	2.2	O K
240 min Winter	8.789	0.239	0.7	1.9	O K
360 min Winter	8.731	0.181	0.6	1.5	O K
480 min Winter	8.687	0.137	0.5	1.1	O K
600 min Winter	8.653	0.103	0.5	0.8	O K
720 min Winter	8.626	0.076	0.5	0.6	O K
960 min Winter	8.598	0.048	0.4	0.4	O K
1440 min Winter	8.586	0.036	0.3	0.3	O K
2160 min Winter	8.576	0.026	0.2	0.2	O K
2880 min Winter	8.571	0.021	0.2	0.2	O K
4320 min Winter	8.566	0.016	0.1	0.1	O K
5760 min Winter	8.563	0.013	0.1	0.1	O K
7200 min Winter	8.561	0.011	0.1	0.1	O K
8640 min Winter	8.559	0.009	0.1	0.1	O K
10080 min Winter	8.558	0.008	0.1	0.1	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m ³)	Time-Peak (mins)
30 min Winter	45.919	0.0	29
60 min Winter	29.238	0.0	46
120 min Winter	18.077	0.0	84
180 min Winter	13.494	0.0	120
240 min Winter	10.913	0.0	154
360 min Winter	8.067	0.0	220
480 min Winter	6.508	0.0	282
600 min Winter	5.506	0.0	342
720 min Winter	4.801	0.0	398
960 min Winter	3.864	0.0	494
1440 min Winter	2.843	0.0	736
2160 min Winter	2.088	0.0	1104
2880 min Winter	1.676	0.0	1444
4320 min Winter	1.229	0.0	2176
5760 min Winter	0.985	0.0	2960
7200 min Winter	0.829	0.0	3664
8640 min Winter	0.721	0.0	4264
10080 min Winter	0.640	0.0	4976

11 Broomhead Road
Wombell
Barnsley S73 0SA



Date 30/03/2026 14:26
File soakaway design.SRCX

Designed by shaun
Checked by

CADS Source Control 2020.1.3

Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	30	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	19.000	Shortest Storm (mins)	15
Ratio R	0.354	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+0

Time Area Diagram

Total Area (ha) 0.018

Time (mins)	Area
From:	To: (ha)
0	4 0.018

11 Broomhead Road
Wombell
Barnsley S73 0SA



Date 30/03/2026 14:26
File soakaway design.SRCX

Designed by shaun
Checked by

CADS Source Control 2020.1.3

Model Details

Storage is Online Cover Level (m) 10.000

Cellular Storage Structure

Invert Level (m) 8.550
Infiltration Coefficient Base (m/hr) 0.29520
Infiltration Coefficient Side (m/hr) 0.29520
Safety Factor 2.0
Porosity 0.95

Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	8.5	8.5	0.500	0.0	22.5
0.400	8.5	22.5			