

Land at South Point
Beehive Lane, Ferring
Amended calcs



Date 6 April 2019
File Geocell G5.SRCX

Designed by
Checked by

Micro Drainage

Source Control 2016.1

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

Half Drain Time : 374 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	4.267	0.167	0.1	1.9	0 K
30 min Summer	4.322	0.222	0.1	2.5	0 K
60 min Summer	4.375	0.275	0.1	3.1	0 K
120 min Summer	4.420	0.320	0.1	3.6	0 K
180 min Summer	4.436	0.336	0.1	3.8	0 K
240 min Summer	4.440	0.340	0.1	3.9	0 K
360 min Summer	4.439	0.339	0.1	3.9	0 K
480 min Summer	4.435	0.335	0.1	3.8	0 K
600 min Summer	4.430	0.330	0.1	3.8	0 K
720 min Summer	4.423	0.323	0.1	3.7	0 K
960 min Summer	4.408	0.308	0.1	3.5	0 K
1440 min Summer	4.377	0.277	0.1	3.2	0 K
2160 min Summer	4.334	0.234	0.1	2.7	0 K
2880 min Summer	4.296	0.196	0.1	2.2	0 K
4320 min Summer	4.235	0.135	0.1	1.5	0 K
5760 min Summer	4.192	0.092	0.1	1.1	0 K
7200 min Summer	4.164	0.064	0.1	0.7	0 K
8640 min Summer	4.150	0.050	0.1	0.6	0 K
10080 min Summer	4.145	0.045	0.1	0.5	0 K
15 min Winter	4.288	0.188	0.1	2.1	0 K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
15 min Summer	131.851	0.0	19
30 min Summer	88.566	0.0	33
60 min Summer	56.713	0.0	62
120 min Summer	35.004	0.0	122
180 min Summer	25.973	0.0	180
240 min Summer	20.877	0.0	240
360 min Summer	15.365	0.0	304
480 min Summer	12.341	0.0	366
600 min Summer	10.402	0.0	432
720 min Summer	9.042	0.0	500
960 min Summer	7.241	0.0	636
1440 min Summer	5.284	0.0	910
2160 min Summer	3.848	0.0	1316
2880 min Summer	3.068	0.0	1700
4320 min Summer	2.226	0.0	2420
5760 min Summer	1.771	0.0	3112
7200 min Summer	1.483	0.0	3752
8640 min Summer	1.284	0.0	4408
10080 min Summer	1.137	0.0	5144
15 min Winter	131.851	0.0	18

Land at South Point
Beehive Lane, Ferring
Amended calcs



Date 6 April 2019
File Geocell G5.SRCX

Designed by
Checked by

Micro Drainage

Source Control 2016.1

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

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m ³)	Status
30 min Winter	4.349	0.249	0.1	2.8	0 K
60 min Winter	4.410	0.310	0.1	3.5	0 K
120 min Winter	4.463	0.363	0.1	4.1	0 K
180 min Winter	4.484	0.384	0.1	4.4	0 K
240 min Winter	4.491	0.391	0.1	4.5	0 K
360 min Winter	4.492	0.392	0.1	4.5	0 K
480 min Winter	4.485	0.385	0.1	4.4	0 K
600 min Winter	4.478	0.378	0.1	4.3	0 K
720 min Winter	4.469	0.369	0.1	4.2	0 K
960 min Winter	4.447	0.347	0.1	4.0	0 K
1440 min Winter	4.401	0.301	0.1	3.4	0 K
2160 min Winter	4.336	0.236	0.1	2.7	0 K
2880 min Winter	4.281	0.181	0.1	2.1	0 K
4320 min Winter	4.198	0.098	0.1	1.1	0 K
5760 min Winter	4.152	0.052	0.1	0.6	0 K
7200 min Winter	4.143	0.043	0.1	0.5	0 K
8640 min Winter	4.137	0.037	0.1	0.4	0 K
10080 min Winter	4.133	0.033	0.1	0.4	0 K

Storm Event	Rain (mm/hr)	Flooded Volume (m ³)	Time-Peak (mins)
30 min Winter	88.566	0.0	33
60 min Winter	56.713	0.0	62
120 min Winter	35.004	0.0	120
180 min Winter	25.973	0.0	176
240 min Winter	20.877	0.0	232
360 min Winter	15.365	0.0	340
480 min Winter	12.341	0.0	386
600 min Winter	10.402	0.0	462
720 min Winter	9.042	0.0	540
960 min Winter	7.241	0.0	692
1440 min Winter	5.284	0.0	984
2160 min Winter	3.848	0.0	1404
2880 min Winter	3.068	0.0	1788
4320 min Winter	2.226	0.0	2504
5760 min Winter	1.771	0.0	3048
7200 min Winter	1.483	0.0	3744
8640 min Winter	1.284	0.0	4416
10080 min Winter	1.137	0.0	5136

Land at South Point
Beehive Lane, Ferring
Amended calcs



Date 6 April 2019
File Geocell G5.SRCX

Designed by
Checked by

Micro Drainage

Source Control 2016.1

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	0.350	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.008

Time (mins)		Area
From:	To:	(ha)
0	4	0.008

Land at South Point
Beehive Lane, Ferring
Amended calcs



Date 6 April 2019
File Geocell G5.SRCX

Designed by
Checked by

Micro Drainage

Source Control 2016.1

Model Details

Storage is Online Cover Level (m) 5.050

Cellular Storage Structure

Invert Level (m) 4.100
Infiltration Coefficient Base (m/hr) 0.04572
Infiltration Coefficient Side (m/hr) 0.04572
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	12.0	12.0	0.500	0.0	17.6
0.400	12.0	17.6			