

Robert Clark Associates				Page 1		
Willow Cottage Herne Lane Rustington BN16 3EE		2 Mill Cottages Yapton Road Barnham				
Date 7.3.18 File Geocell-1.SRCX		Designed by RTFC Checked by				
Micro Drainage		Source Control 2016.1				
<u>Summary of Results for 100 year Return Period (+40%)</u> Half Drain Time : 17 minutes.						
Storm Event		Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer		9.835	0.335	0.4	0.5	O K
30 min Summer		9.877	0.377	0.4	0.5	O K
60 min Summer		9.874	0.374	0.4	0.5	O K
120 min Summer		9.818	0.318	0.4	0.5	O K
180 min Summer		9.763	0.263	0.3	0.4	O K
240 min Summer		9.715	0.215	0.3	0.3	O K
360 min Summer		9.645	0.145	0.3	0.2	O K
480 min Summer		9.598	0.098	0.2	0.1	O K
600 min Summer		9.567	0.067	0.2	0.1	O K
720 min Summer		9.550	0.050	0.2	0.1	O K
960 min Summer		9.541	0.041	0.2	0.1	O K
1440 min Summer		9.530	0.030	0.1	0.0	O K
2160 min Summer		9.522	0.022	0.1	0.0	O K
2880 min Summer		9.517	0.017	0.1	0.0	O K
4320 min Summer		9.513	0.013	0.1	0.0	O K
5760 min Summer		9.510	0.010	0.0	0.0	O K
7200 min Summer		9.509	0.009	0.0	0.0	O K
8640 min Summer		9.507	0.007	0.0	0.0	O K
10080 min Summer		9.507	0.007	0.0	0.0	O K
15 min Winter		9.882	0.382	0.4	0.5	O K
Storm Event		Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
15 min Summer		124.633	0.0	14		
30 min Summer		83.789	0.0	23		
60 min Summer		53.779	0.0	40		
120 min Summer		33.337	0.0	74		
180 min Summer		24.832	0.0	104		
240 min Summer		20.006	0.0	136		
360 min Summer		14.706	0.0	196		
480 min Summer		11.818	0.0	256		
600 min Summer		9.966	0.0	312		
720 min Summer		8.665	0.0	368		
960 min Summer		6.943	0.0	490		
1440 min Summer		5.071	0.0	734		
2160 min Summer		3.696	0.0	1084		
2880 min Summer		2.949	0.0	1468		
4320 min Summer		2.142	0.0	2140		
5760 min Summer		1.705	0.0	2936		
7200 min Summer		1.427	0.0	3632		
8640 min Summer		1.235	0.0	4400		
10080 min Summer		1.093	0.0	5024		
15 min Winter		124.633	0.0	15		
©1982-2016 XP Solutions						

Robert Clark Associates		Page 2
Willow Cottage Herne Lane Rustington BN16 3EE	2 Mill Cottages Yapton Road Barnham	
Date 7.3.18 File Geocell-1.SRCX	Designed by RTFC 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 (m³)	Status
30 min Winter	9.940	0.440	0.4	0.6	O K
60 min Winter	9.905	0.405	0.4	0.6	O K
120 min Winter	9.816	0.316	0.4	0.5	O K
180 min Winter	9.739	0.239	0.3	0.3	O K
240 min Winter	9.677	0.177	0.3	0.3	O K
360 min Winter	9.593	0.093	0.2	0.1	O K
480 min Winter	9.550	0.050	0.2	0.1	O K
600 min Winter	9.542	0.042	0.2	0.1	O K
720 min Winter	9.537	0.037	0.2	0.1	O K
960 min Winter	9.530	0.030	0.1	0.0	O K
1440 min Winter	9.522	0.022	0.1	0.0	O K
2160 min Winter	9.516	0.016	0.1	0.0	O K
2880 min Winter	9.513	0.013	0.1	0.0	O K
4320 min Winter	9.509	0.009	0.0	0.0	O K
5760 min Winter	9.507	0.007	0.0	0.0	O K
7200 min Winter	9.506	0.006	0.0	0.0	O K
8640 min Winter	9.505	0.005	0.0	0.0	O K
10080 min Winter	9.505	0.005	0.0	0.0	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
30 min Winter	83.789	0.0	24
60 min Winter	53.779	0.0	42
120 min Winter	33.337	0.0	78
180 min Winter	24.832	0.0	110
240 min Winter	20.006	0.0	142
360 min Winter	14.706	0.0	200
480 min Winter	11.818	0.0	248
600 min Winter	9.966	0.0	306
720 min Winter	8.665	0.0	370
960 min Winter	6.943	0.0	492
1440 min Winter	5.071	0.0	722
2160 min Winter	3.696	0.0	1100
2880 min Winter	2.949	0.0	1444
4320 min Winter	2.142	0.0	2196
5760 min Winter	1.705	0.0	2816
7200 min Winter	1.427	0.0	3656
8640 min Winter	1.235	0.0	4240
10080 min Winter	1.093	0.0	5128

Robert Clark Associates		Page 3
Willow Cottage Herne Lane Rustington BN16 3EE	2 Mill Cottages Yapton Road Barnham	
Date 7.3.18 File Geocell-1.SRCX	Designed by RTFC 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)	19.000	Shortest Storm (mins)	15
Ratio R	0.350	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.003

Time (mins)	Area
From:	To: (ha)
0	4 0.003

©1982-2016 XP Solutions

Robert Clark Associates		Page 4
Willow Cottage Herne Lane Rustington BN16 3EE	2 Mill Cottages Yapton Road Barnham	
Date 7.3.18 File Geocell-1.SRCX	Designed by RTFC Checked by	
Micro Drainage Source Control 2016.1		

Model Details

Storage is Online Cover Level (m) 10.300

Cellular Storage Structure

Invert Level (m)	9.500
Infiltration Coefficient Base (m/hr)	0.64350
Infiltration Coefficient Side (m/hr)	0.64350
Safety Factor	1.5
Porosity	0.95

Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	1.5	1.5	0.500	0.0	3.5
0.400	1.5	3.5			

©1982-2016 XP Solutions