

Robert Clark Associates		Page 1
Willow Cottage Herne Lane Rustington BN16 3EE	Greencourt Drive Bognor Regis Geocellular Soakaway	
Date 15.3.18 File Geocell.SRCX	Designed by RTFC Checked by	
Micro Drainage	Source Control 2016.1	

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

Half Drain Time : 44 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m ³)	Status
15 min Summer	7.075	0.275	0.2	0.8	0 K
30 min Summer	7.135	0.335	0.2	1.0	0 K
60 min Summer	7.166	0.366	0.3	1.0	0 K
120 min Summer	7.163	0.363	0.3	1.0	0 K
180 min Summer	7.141	0.341	0.2	1.0	0 K
240 min Summer	7.114	0.314	0.2	0.9	0 K
360 min Summer	7.066	0.266	0.2	0.8	0 K
480 min Summer	7.025	0.225	0.2	0.6	0 K
600 min Summer	6.991	0.191	0.2	0.5	0 K
720 min Summer	6.961	0.161	0.2	0.5	0 K
960 min Summer	6.916	0.116	0.2	0.3	0 K
1440 min Summer	6.861	0.061	0.1	0.2	0 K
2160 min Summer	6.841	0.041	0.1	0.1	0 K
2880 min Summer	6.833	0.033	0.1	0.1	0 K
4320 min Summer	6.824	0.024	0.1	0.1	0 K
5760 min Summer	6.819	0.019	0.1	0.1	0 K
7200 min Summer	6.816	0.016	0.0	0.0	0 K
8640 min Summer	6.814	0.014	0.0	0.0	0 K
10080 min Summer	6.812	0.012	0.0	0.0	0 K
15 min Winter	7.112	0.312	0.2	0.9	0 K

Storm Event	Rain (mm/hr)	Flooded Volume (m ³)	Time-Peak (mins)
15 min Summer	124.633	0.0	17
30 min Summer	83.789	0.0	30
60 min Summer	53.779	0.0	46
120 min Summer	33.337	0.0	80
180 min Summer	24.832	0.0	116
240 min Summer	20.006	0.0	148
360 min Summer	14.706	0.0	214
480 min Summer	11.818	0.0	278
600 min Summer	9.966	0.0	338
720 min Summer	8.665	0.0	400
960 min Summer	6.943	0.0	520
1440 min Summer	5.071	0.0	748
2160 min Summer	3.696	0.0	1100
2880 min Summer	2.949	0.0	1468
4320 min Summer	2.142	0.0	2204
5760 min Summer	1.705	0.0	2896
7200 min Summer	1.427	0.0	3576
8640 min Summer	1.235	0.0	4336
10080 min Summer	1.093	0.0	5136
15 min Winter	124.633	0.0	17

Robert Clark Associates				Page 2	
Willow Cottage Herne Lane Rustington BN16 3EE		Greencourt Drive Bognor Regis Geocellular Soakaway			
Date 15.3.18 File Geocell.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	7.183	0.383	0.3	1.1	0 K
60 min Winter	7.221	0.421	0.3	1.2	0 K
120 min Winter	7.206	0.406	0.3	1.2	0 K
180 min Winter	7.169	0.369	0.3	1.1	0 K
240 min Winter	7.129	0.329	0.2	0.9	0 K
360 min Winter	7.059	0.259	0.2	0.7	0 K
480 min Winter	7.003	0.203	0.2	0.6	0 K
600 min Winter	6.957	0.157	0.2	0.4	0 K
720 min Winter	6.920	0.120	0.2	0.3	0 K
960 min Winter	6.867	0.067	0.2	0.2	0 K
1440 min Winter	6.841	0.041	0.1	0.1	0 K
2160 min Winter	6.830	0.030	0.1	0.1	0 K
2880 min Winter	6.824	0.024	0.1	0.1	0 K
4320 min Winter	6.817	0.017	0.1	0.0	0 K
5760 min Winter	6.814	0.014	0.0	0.0	0 K
7200 min Winter	6.812	0.012	0.0	0.0	0 K
8640 min Winter	6.810	0.010	0.0	0.0	0 K
10080 min Winter	6.809	0.009	0.0	0.0	0 K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	83.789	0.0	30		
60 min Winter	53.779	0.0	50		
120 min Winter	33.337	0.0	88		
180 min Winter	24.832	0.0	124		
240 min Winter	20.006	0.0	160		
360 min Winter	14.706	0.0	226		
480 min Winter	11.818	0.0	292		
600 min Winter	9.966	0.0	354		
720 min Winter	8.665	0.0	414		
960 min Winter	6.943	0.0	522		
1440 min Winter	5.071	0.0	736		
2160 min Winter	3.696	0.0	1104		
2880 min Winter	2.949	0.0	1472		
4320 min Winter	2.142	0.0	2204		
5760 min Winter	1.705	0.0	2936		
7200 min Winter	1.427	0.0	3568		
8640 min Winter	1.235	0.0	4216		
10080 min Winter	1.093	0.0	5080		
©1982-2016 XP Solutions					

Robert Clark Associates		Page 3																																	
Willow Cottage Herne Lane Rustington BN16 3EE	Greencourt Drive Bognor Regis Geocellular Soakaway																																		
Date 15.3.18 File Geocell.SRCX	Designed by RTFC Checked by																																		
Micro Drainage																																			
<u>Rainfall Details</u> <table> <tr> <td>Rainfall Model</td> <td>FSR</td> <td>Winter Storms</td> <td>Yes</td> </tr> <tr> <td>Return Period (years)</td> <td>100</td> <td>Cv (Summer)</td> <td>0.750</td> </tr> <tr> <td>Region</td> <td>England and Wales</td> <td>Cv (Winter)</td> <td>0.840</td> </tr> <tr> <td>M5-60 (mm)</td> <td>19.000</td> <td>Shortest Storm (mins)</td> <td>15</td> </tr> <tr> <td>Ratio R</td> <td>0.350</td> <td>Longest Storm (mins)</td> <td>10080</td> </tr> <tr> <td>Summer Storms</td> <td>Yes</td> <td>Climate Change %</td> <td>+40</td> </tr> </table> <u>Time Area Diagram</u> Total Area (ha) 0.004 <table> <tr> <th colspan="2">Time (mins)</th> <th>Area</th> </tr> <tr> <th>From:</th> <th>To:</th> <th>(ha)</th> </tr> <tr> <td>0</td> <td>4</td> <td>0.004</td> </tr> </table>			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 (mins)		Area	From:	To:	(ha)	0	4	0.004
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 (mins)		Area																																	
From:	To:	(ha)																																	
0	4	0.004																																	
©1982-2016 XP Solutions																																			

Robert Clark Associates		Page 4
Willow Cottage Herne Lane Rustington BN16 3EE	Greencourt Drive Bognor Regis Geocellular Soakaway	
Date 15.3.18 File Geocell.SRCX	Designed by RTFC Checked by	
Micro Drainage Source Control 2016.1		

Model Details

Storage is Online Cover Level (m) 7.800

Cellular Storage Structure

Invert Level (m)	6.800
Infiltration Coefficient Base (m/hr)	0.23144
Infiltration Coefficient Side (m/hr)	0.23144
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	3.0	3.0	0.500	0.0	6.2
0.400	3.0	6.2			

©1982-2016 XP Solutions