

Robert Clark Associates				Page 1		
Willow Cottage Herne Lane Rustington BN16 3EE		Meadowsley Woodgate				
Date 3.2.18 File Geocell G1.SRCX		Designed by RTFC Checked by				
Micro Drainage		Source Control 2016.1				
<u>Summary of Results for 100 year Return Period (+30%)</u> Half Drain Time : 221 minutes.						
Storm Event		Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer		7.245	0.165	0.3	3.3	0 K
30 min Summer		7.296	0.216	0.3	4.3	0 K
60 min Summer		7.343	0.263	0.3	5.3	0 K
120 min Summer		7.377	0.297	0.3	5.9	0 K
180 min Summer		7.382	0.302	0.3	6.0	0 K
240 min Summer		7.381	0.301	0.3	6.0	0 K
360 min Summer		7.374	0.294	0.3	5.9	0 K
480 min Summer		7.364	0.284	0.3	5.7	0 K
600 min Summer		7.352	0.272	0.3	5.4	0 K
720 min Summer		7.341	0.261	0.3	5.2	0 K
960 min Summer		7.318	0.238	0.3	4.7	0 K
1440 min Summer		7.275	0.195	0.3	3.9	0 K
2160 min Summer		7.222	0.142	0.2	2.8	0 K
2880 min Summer		7.182	0.102	0.2	2.0	0 K
4320 min Summer		7.136	0.056	0.2	1.1	0 K
5760 min Summer		7.124	0.044	0.2	0.9	0 K
7200 min Summer		7.117	0.037	0.2	0.7	0 K
8640 min Summer		7.112	0.032	0.1	0.6	0 K
10080 min Summer		7.109	0.029	0.1	0.6	0 K
15 min Winter		7.265	0.185	0.3	3.7	0 K
Storm Event		Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
15 min Summer		115.731	0.0	18		
30 min Summer		77.804	0.0	33		
60 min Summer		49.937	0.0	62		
120 min Summer		30.956	0.0	120		
180 min Summer		23.058	0.0	164		
240 min Summer		18.577	0.0	194		
360 min Summer		13.656	0.0	258		
480 min Summer		10.974	0.0	328		
600 min Summer		9.254	0.0	396		
720 min Summer		8.046	0.0	464		
960 min Summer		6.447	0.0	598		
1440 min Summer		4.709	0.0	864		
2160 min Summer		3.432	0.0	1232		
2880 min Summer		2.739	0.0	1584		
4320 min Summer		1.989	0.0	2248		
5760 min Summer		1.583	0.0	2936		
7200 min Summer		1.325	0.0	3672		
8640 min Summer		1.147	0.0	4408		
10080 min Summer		1.015	0.0	5136		
15 min Winter		115.731	0.0	18		
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<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>+30</td> </tr> </table> <u>Time Area Diagram</u> Total Area (ha) 0.016 <table> <thead> <tr> <th colspan="2">Time (mins)</th> <th rowspan="2">Area (ha)</th> </tr> <tr> <th>From:</th> <th>To:</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>4</td> <td>0.016</td> </tr> </tbody> </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 %	+30	Time (mins)		Area (ha)	From:	To:	0	4	0.016
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<u>Model Details</u> Storage is Online Cover Level (m) 7.880 <u>Cellular Storage Structure</u> Invert Level (m) 7.080 Infiltration Coefficient Base (m/hr) 0.05647 Infiltration Coefficient Side (m/hr) 0.05647 Safety Factor 1.5 Porosity 0.95 <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Depth (m)</th> <th>Area (m²)</th> <th>Inf. Area (m²)</th> <th>Depth (m)</th> <th>Area (m²)</th> <th>Inf. Area (m²)</th> </tr> </thead> <tbody> <tr> <td>0.000</td> <td>21.0</td> <td>21.0</td> <td>0.500</td> <td>0.0</td> <td>29.0</td> </tr> <tr> <td>0.400</td> <td>21.0</td> <td>29.0</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>			Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)	0.000	21.0	21.0	0.500	0.0	29.0	0.400	21.0	29.0			
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