

Robert Clark Associates				Page 1																																																																																																																																																																																																																			
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<u>Summary of Results for 100 year Return Period (+40%)</u> Half Drain Time : 1026 minutes. <table><thead><tr><th>Storm Event</th><th>Max Level (m)</th><th>Max Depth (m)</th><th>Max Infiltration (l/s)</th><th>Max Volume (m³)</th><th>Status</th></tr></thead><tbody><tr><td>15 min Summer</td><td>3.070</td><td>0.270</td><td>0.0</td><td>2.3</td><td>0 K</td></tr><tr><td>30 min Summer</td><td>3.160</td><td>0.360</td><td>0.0</td><td>3.1</td><td>0 K</td></tr><tr><td>60 min Summer</td><td>3.256</td><td>0.456</td><td>0.0</td><td>3.9</td><td>0 K</td></tr><tr><td>120 min Summer</td><td>3.352</td><td>0.552</td><td>0.1</td><td>4.7</td><td>0 K</td></tr><tr><td>180 min Summer</td><td>3.403</td><td>0.603</td><td>0.1</td><td>5.2</td><td>0 K</td></tr><tr><td>240 min Summer</td><td>3.433</td><td>0.633</td><td>0.1</td><td>5.4</td><td>0 K</td></tr><tr><td>360 min Summer</td><td>3.468</td><td>0.668</td><td>0.1</td><td>5.7</td><td>0 K</td></tr><tr><td>480 min Summer</td><td>3.486</td><td>0.686</td><td>0.1</td><td>5.9</td><td>0 K</td></tr><tr><td>600 min Summer</td><td>3.493</td><td>0.693</td><td>0.1</td><td>5.9</td><td>0 K</td></tr><tr><td>720 min Summer</td><td>3.494</td><td>0.694</td><td>0.1</td><td>5.9</td><td>0 K</td></tr><tr><td>960 min Summer</td><td>3.491</td><td>0.691</td><td>0.1</td><td>5.9</td><td>0 K</td></tr><tr><td>1440 min Summer</td><td>3.477</td><td>0.677</td><td>0.1</td><td>5.8</td><td>0 K</td></tr><tr><td>2160 min Summer</td><td>3.447</td><td>0.647</td><td>0.1</td><td>5.5</td><td>0 K</td></tr><tr><td>2880 min Summer</td><td>3.414</td><td>0.614</td><td>0.1</td><td>5.2</td><td>0 K</td></tr><tr><td>4320 min Summer</td><td>3.352</td><td>0.552</td><td>0.1</td><td>4.7</td><td>0 K</td></tr><tr><td>5760 min Summer</td><td>3.297</td><td>0.497</td><td>0.1</td><td>4.2</td><td>0 K</td></tr><tr><td>7200 min Summer</td><td>3.247</td><td>0.447</td><td>0.0</td><td>3.8</td><td>0 K</td></tr><tr><td>8640 min 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Summer	3.160	0.360	0.0	3.1	0 K	60 min Summer	3.256	0.456	0.0	3.9	0 K	120 min Summer	3.352	0.552	0.1	4.7	0 K	180 min Summer	3.403	0.603	0.1	5.2	0 K	240 min Summer	3.433	0.633	0.1	5.4	0 K	360 min Summer	3.468	0.668	0.1	5.7	0 K	480 min Summer	3.486	0.686	0.1	5.9	0 K	600 min Summer	3.493	0.693	0.1	5.9	0 K	720 min Summer	3.494	0.694	0.1	5.9	0 K	960 min Summer	3.491	0.691	0.1	5.9	0 K	1440 min Summer	3.477	0.677	0.1	5.8	0 K	2160 min Summer	3.447	0.647	0.1	5.5	0 K	2880 min Summer	3.414	0.614	0.1	5.2	0 K	4320 min Summer	3.352	0.552	0.1	4.7	0 K	5760 min Summer	3.297	0.497	0.1	4.2	0 K	7200 min Summer	3.247	0.447	0.0	3.8	0 K	8640 min Summer	3.202	0.402	0.0	3.4	0 K	10080 min Summer	3.163	0.363	0.0	3.1	0 K	15 min Winter	3.102	0.302	0.0	2.6	0 K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	124.633	0.0	19	30 min Summer	83.789	0.0	34	60 min Summer	53.779	0.0	64	120 min Summer	33.337	0.0	124	180 min Summer	24.832	0.0	182	240 min Summer	20.006	0.0	242	360 min 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Willow Cottage Herne Lane Rustington BN16 3EE			Northway Road Littlehampton Rear geocell			
Date 3 May 2018 File Front 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	3.204	0.404	0.0	3.5	0 K	
60 min Winter	3.312	0.512	0.1	4.4	0 K	
120 min Winter	3.421	0.621	0.1	5.3	0 K	
180 min Winter	3.480	0.680	0.1	5.8	0 K	
240 min Winter	3.515	0.715	0.1	6.1	0 K	
360 min Winter	3.558	0.758	0.1	6.5	0 K	
480 min Winter	3.582	0.782	0.1	6.7	0 K	
600 min Winter	3.594	0.794	0.1	6.8	0 K	
720 min Winter	3.599	0.799	0.1	6.8	0 K	
960 min Winter	3.596	0.796	0.1	6.8	0 K	
1440 min Winter	3.576	0.776	0.1	6.6	0 K	
2160 min Winter	3.536	0.736	0.1	6.3	0 K	
2880 min Winter	3.489	0.689	0.1	5.9	0 K	
4320 min Winter	3.399	0.599	0.1	5.1	0 K	
5760 min Winter	3.318	0.518	0.1	4.4	0 K	
7200 min Winter	3.247	0.447	0.0	3.8	0 K	
8640 min Winter	3.185	0.385	0.0	3.3	0 K	
10080 min Winter	3.131	0.331	0.0	2.8	0 K	
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)			
30 min Winter	83.789	0.0	33			
60 min Winter	53.779	0.0	62			
120 min Winter	33.337	0.0	122			
180 min Winter	24.832	0.0	180			
240 min Winter	20.006	0.0	238			
360 min Winter	14.706	0.0	354			
480 min Winter	11.818	0.0	468			
600 min Winter	9.966	0.0	580			
720 min Winter	8.665	0.0	690			
960 min Winter	6.943	0.0	896			
1440 min Winter	5.071	0.0	1114			
2160 min Winter	3.696	0.0	1580			
2880 min Winter	2.949	0.0	2044			
4320 min Winter	2.142	0.0	2900			
5760 min Winter	1.705	0.0	3752			
7200 min Winter	1.427	0.0	4608			
8640 min Winter	1.235	0.0	5360			
10080 min Winter	1.093	0.0	6152			
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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>+40</td> </tr> </table> <u>Time Area Diagram</u> Total Area (ha) 0.010 <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>0.010</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	0.010
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Model Details

Storage is Online Cover Level (m) 4.200

Cellular Storage Structure

Invert Level (m)	2.800
Infiltration Coefficient Base (m/hr)	0.01797
Infiltration Coefficient Side (m/hr)	0.01797
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	9.0	9.0	0.900	0.0	19.4
0.800	9.0	19.4			

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