

Robert Clark Associates				Page 1		
Willow Cottage Herne Lane Rustington BN16 3EE		Ashgrove SK3 West Walberton Lane Walberton				
Date 13.2.19 File G3-400.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 : 1790 minutes.						
Storm Event		Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer		24.807	0.107	0.0	1.2	0 K
30 min Summer		24.844	0.144	0.0	1.6	0 K
60 min Summer		24.883	0.183	0.0	2.1	0 K
120 min Summer		24.922	0.222	0.0	2.5	0 K
180 min Summer		24.944	0.244	0.0	2.8	0 K
240 min Summer		24.957	0.257	0.0	2.9	0 K
360 min Summer		24.977	0.277	0.0	3.2	0 K
480 min Summer		24.989	0.289	0.0	3.3	0 K
600 min Summer		24.997	0.297	0.0	3.4	0 K
720 min Summer		25.003	0.303	0.0	3.4	0 K
960 min Summer		25.008	0.308	0.0	3.5	0 K
1440 min Summer		25.007	0.307	0.0	3.5	0 K
2160 min Summer		25.001	0.301	0.0	3.4	0 K
2880 min Summer		24.993	0.293	0.0	3.3	0 K
4320 min Summer		24.974	0.274	0.0	3.1	0 K
5760 min Summer		24.955	0.255	0.0	2.9	0 K
7200 min Summer		24.937	0.237	0.0	2.7	0 K
8640 min Summer		24.920	0.220	0.0	2.5	0 K
10080 min Summer		24.904	0.204	0.0	2.3	0 K
15 min Winter		24.820	0.120	0.0	1.4	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	34		
60 min Summer		56.713	0.0	64		
120 min Summer		35.004	0.0	124		
180 min Summer		25.973	0.0	184		
240 min Summer		20.877	0.0	242		
360 min Summer		15.365	0.0	362		
480 min Summer		12.341	0.0	482		
600 min Summer		10.402	0.0	602		
720 min Summer		9.042	0.0	722		
960 min Summer		7.241	0.0	960		
1440 min Summer		5.284	0.0	1340		
2160 min Summer		3.848	0.0	1684		
2880 min Summer		3.068	0.0	2072		
4320 min Summer		2.226	0.0	2896		
5760 min Summer		1.771	0.0	3696		
7200 min Summer		1.483	0.0	4536		
8640 min Summer		1.284	0.0	5280		
10080 min Summer		1.137	0.0	6144		
15 min Winter		131.851	0.0	19		
©1982-2016 XP Solutions						

Robert Clark Associates				Page 2	
Willow Cottage Herne Lane Rustington BN16 3EE		Ashgrove SK3 West Walberton Lane Walberton			
Date 13.2.19 File G3-400.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	24.861	0.161	0.0	1.8	O K
60 min Winter	24.905	0.205	0.0	2.3	O K
120 min Winter	24.949	0.249	0.0	2.8	O K
180 min Winter	24.974	0.274	0.0	3.1	O K
240 min Winter	24.990	0.290	0.0	3.3	O K
360 min Winter	25.013	0.313	0.0	3.6	O K
480 min Winter	25.027	0.327	0.0	3.7	O K
600 min Winter	25.037	0.337	0.0	3.8	O K
720 min Winter	25.044	0.344	0.0	3.9	O K
960 min Winter	25.052	0.352	0.0	4.0	O K
1440 min Winter	25.055	0.355	0.0	4.1	O K
2160 min Winter	25.046	0.346	0.0	3.9	O K
2880 min Winter	25.036	0.336	0.0	3.8	O K
4320 min Winter	25.009	0.309	0.0	3.5	O K
5760 min Winter	24.981	0.281	0.0	3.2	O K
7200 min Winter	24.954	0.254	0.0	2.9	O K
8640 min Winter	24.929	0.229	0.0	2.6	O K
10080 min Winter	24.905	0.205	0.0	2.3	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	88.566	0.0	34		
60 min Winter	56.713	0.0	64		
120 min Winter	35.004	0.0	122		
180 min Winter	25.973	0.0	180		
240 min Winter	20.877	0.0	240		
360 min Winter	15.365	0.0	358		
480 min Winter	12.341	0.0	474		
600 min Winter	10.402	0.0	590		
720 min Winter	9.042	0.0	706		
960 min Winter	7.241	0.0	934		
1440 min Winter	5.284	0.0	1372		
2160 min Winter	3.848	0.0	1776		
2880 min Winter	3.068	0.0	2216		
4320 min Winter	2.226	0.0	3116		
5760 min Winter	1.771	0.0	4032		
7200 min Winter	1.483	0.0	4896		
8640 min Winter	1.284	0.0	5712		
10080 min Winter	1.137	0.0	6552		
©1982-2016 XP Solutions					

Robert Clark Associates		Page 3																																
Willow Cottage Herne Lane Rustington BN16 3EE	Ashgrove SK3 West Walberton Lane Walberton																																	
Date 13.2.19 File G3-400.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>20.000</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) 0.005 <table> <tr> <th colspan="2">Time (mins)</th> <th rowspan="2">Area (ha)</th> </tr> <tr> <th>From:</th> <th>To:</th> </tr> <tr> <td>0</td> <td>4</td> <td>0.005</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)	20.000	Shortest Storm (mins)	15	Ratio R	0.350	Longest Storm (mins)	10080	Summer Storms	Yes	Climate Change %	+40	Time (mins)		Area (ha)	From:	To:	0	4	0.005
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 (mins)		Area (ha)																																
From:	To:																																	
0	4	0.005																																
©1982-2016 XP Solutions																																		

Robert Clark Associates		Page 4
Willow Cottage Herne Lane Rustington BN16 3EE	Ashgrove SK3 West Walberton Lane Walberton	
Date 13.2.19 File G3-400.SRCX	Designed by RTFC Checked by	
Micro Drainage Source Control 2016.1		

Model Details

Storage is Online Cover Level (m) 25.500

Cellular Storage Structure

Invert Level (m) 24.700

Infiltration Coefficient Base (m/hr) 0.00652

Infiltration Coefficient Side (m/hr) 0.00652

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	12.0	12.0	0.500	0.0	17.6
0.400	12.0	17.6			

©1982-2016 XP Solutions