

Robert Clark Associates			Page 1																																																																																																																																																																																																																				
Willow Cottage Herne Lane Rustington BN16 3EE		Walberton Farm SA2 FEH22 rainfall data																																																																																																																																																																																																																					
Date 8.8.26 File SA2 calcs 30yr rain.SRCX		Designed by RTFC Checked by																																																																																																																																																																																																																					
Micro Drainage		Source Control 2016.1																																																																																																																																																																																																																					
<u>Summary of Results for 30 year Return Period (+45%)</u> Half Drain Time : 80 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>12.717</td><td>0.742</td><td>1.2</td><td>8.4</td><td>O K</td></tr><tr><td>30 min Summer</td><td>12.848</td><td>0.873</td><td>1.4</td><td>9.9</td><td>O K</td></tr><tr><td>60 min Summer</td><td>12.948</td><td>0.973</td><td>1.6</td><td>11.0</td><td>O K</td></tr><tr><td>120 min Summer</td><td>13.029</td><td>1.054</td><td>1.7</td><td>12.0</td><td>O K</td></tr><tr><td>180 min Summer</td><td>13.057</td><td>1.082</td><td>1.7</td><td>12.3</td><td>O K</td></tr><tr><td>240 min Summer</td><td>13.061</td><td>1.086</td><td>1.8</td><td>12.3</td><td>O K</td></tr><tr><td>360 min Summer</td><td>13.038</td><td>1.063</td><td>1.7</td><td>12.0</td><td>O K</td></tr><tr><td>480 min Summer</td><td>13.000</td><td>1.025</td><td>1.7</td><td>11.6</td><td>O K</td></tr><tr><td>600 min Summer</td><td>12.960</td><td>0.985</td><td>1.6</td><td>11.2</td><td>O K</td></tr><tr><td>720 min Summer</td><td>12.920</td><td>0.945</td><td>1.5</td><td>10.7</td><td>O K</td></tr><tr><td>960 min Summer</td><td>12.815</td><td>0.840</td><td>1.4</td><td>9.5</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>12.666</td><td>0.691</td><td>1.1</td><td>7.8</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>12.528</td><td>0.553</td><td>0.9</td><td>6.3</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>12.438</td><td>0.463</td><td>0.7</td><td>5.3</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>12.350</td><td>0.375</td><td>0.6</td><td>4.2</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>12.293</td><td>0.318</td><td>0.5</td><td>3.6</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>12.254</td><td>0.279</td><td>0.4</td><td>3.2</td><td>O K</td></tr><tr><td>8640 min Summer</td><td>12.225</td><td>0.250</td><td>0.4</td><td>2.8</td><td>O K</td></tr><tr><td>10080 min Summer</td><td>12.202</td><td>0.227</td><td>0.4</td><td>2.6</td><td>O K</td></tr><tr><td>15 min Winter</td><td>12.718</td><td>0.743</td><td>1.2</td><td>8.4</td><td>O K</td></tr></tbody></table> <table><thead><tr><th>Storm Event</th><th>Rain (mm/hr)</th><th>Flooded Volume (m³)</th><th>Time-Peak (mins)</th></tr></thead><tbody><tr><td>15 min Summer</td><td>109.937</td><td>0.0</td><td>18</td></tr><tr><td>30 min Summer</td><td>68.477</td><td>0.0</td><td>31</td></tr><tr><td>60 min Summer</td><td>42.652</td><td>0.0</td><td>54</td></tr><tr><td>120 min Summer</td><td>26.567</td><td>0.0</td><td>86</td></tr><tr><td>180 min Summer</td><td>20.141</td><td>0.0</td><td>120</td></tr><tr><td>240 min Summer</td><td>16.548</td><td>0.0</td><td>154</td></tr><tr><td>360 min Summer</td><td>12.545</td><td>0.0</td><td>220</td></tr><tr><td>480 min Summer</td><td>10.307</td><td>0.0</td><td>286</td></tr><tr><td>600 min Summer</td><td>8.850</td><td>0.0</td><td>350</td></tr><tr><td>720 min Summer</td><td>7.814</td><td>0.0</td><td>414</td></tr><tr><td>960 min Summer</td><td>6.163</td><td>0.0</td><td>540</td></tr><tr><td>1440 min Summer</td><td>4.411</td><td>0.0</td><td>782</td></tr><tr><td>2160 min Summer</td><td>3.157</td><td>0.0</td><td>1148</td></tr><tr><td>2880 min Summer</td><td>2.490</td><td>0.0</td><td>1524</td></tr><tr><td>4320 min Summer</td><td>1.880</td><td>0.0</td><td>2248</td></tr><tr><td>5760 min Summer</td><td>1.540</td><td>0.0</td><td>2944</td></tr><tr><td>7200 min Summer</td><td>1.319</td><td>0.0</td><td>3680</td></tr><tr><td>8640 min Summer</td><td>1.163</td><td>0.0</td><td>4408</td></tr><tr><td>10080 min Summer</td><td>1.045</td><td>0.0</td><td>5144</td></tr><tr><td>15 min Winter</td><td>109.937</td><td>0.0</td><td>17</td></tr></tbody></table>						Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status	15 min Summer	12.717	0.742	1.2	8.4	O K	30 min Summer	12.848	0.873	1.4	9.9	O K	60 min Summer	12.948	0.973	1.6	11.0	O K	120 min Summer	13.029	1.054	1.7	12.0	O K	180 min Summer	13.057	1.082	1.7	12.3	O K	240 min Summer	13.061	1.086	1.8	12.3	O K	360 min Summer	13.038	1.063	1.7	12.0	O K	480 min Summer	13.000	1.025	1.7	11.6	O K	600 min Summer	12.960	0.985	1.6	11.2	O K	720 min Summer	12.920	0.945	1.5	10.7	O K	960 min Summer	12.815	0.840	1.4	9.5	O K	1440 min Summer	12.666	0.691	1.1	7.8	O K	2160 min Summer	12.528	0.553	0.9	6.3	O K	2880 min Summer	12.438	0.463	0.7	5.3	O K	4320 min Summer	12.350	0.375	0.6	4.2	O K	5760 min Summer	12.293	0.318	0.5	3.6	O K	7200 min Summer	12.254	0.279	0.4	3.2	O K	8640 min Summer	12.225	0.250	0.4	2.8	O K	10080 min Summer	12.202	0.227	0.4	2.6	O K	15 min Winter	12.718	0.743	1.2	8.4	O K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	109.937	0.0	18	30 min Summer	68.477	0.0	31	60 min Summer	42.652	0.0	54	120 min Summer	26.567	0.0	86	180 min Summer	20.141	0.0	120	240 min Summer	16.548	0.0	154	360 min Summer	12.545	0.0	220	480 min Summer	10.307	0.0	286	600 min Summer	8.850	0.0	350	720 min Summer	7.814	0.0	414	960 min Summer	6.163	0.0	540	1440 min Summer	4.411	0.0	782	2160 min Summer	3.157	0.0	1148	2880 min Summer	2.490	0.0	1524	4320 min Summer	1.880	0.0	2248	5760 min Summer	1.540	0.0	2944	7200 min Summer	1.319	0.0	3680	8640 min Summer	1.163	0.0	4408	10080 min Summer	1.045	0.0	5144	15 min Winter	109.937	0.0	17
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status																																																																																																																																																																																																																		
15 min Summer	12.717	0.742	1.2	8.4	O K																																																																																																																																																																																																																		
30 min Summer	12.848	0.873	1.4	9.9	O K																																																																																																																																																																																																																		
60 min Summer	12.948	0.973	1.6	11.0	O K																																																																																																																																																																																																																		
120 min Summer	13.029	1.054	1.7	12.0	O K																																																																																																																																																																																																																		
180 min Summer	13.057	1.082	1.7	12.3	O K																																																																																																																																																																																																																		
240 min Summer	13.061	1.086	1.8	12.3	O K																																																																																																																																																																																																																		
360 min Summer	13.038	1.063	1.7	12.0	O K																																																																																																																																																																																																																		
480 min Summer	13.000	1.025	1.7	11.6	O K																																																																																																																																																																																																																		
600 min Summer	12.960	0.985	1.6	11.2	O K																																																																																																																																																																																																																		
720 min Summer	12.920	0.945	1.5	10.7	O K																																																																																																																																																																																																																		
960 min Summer	12.815	0.840	1.4	9.5	O K																																																																																																																																																																																																																		
1440 min Summer	12.666	0.691	1.1	7.8	O K																																																																																																																																																																																																																		
2160 min Summer	12.528	0.553	0.9	6.3	O K																																																																																																																																																																																																																		
2880 min Summer	12.438	0.463	0.7	5.3	O K																																																																																																																																																																																																																		
4320 min Summer	12.350	0.375	0.6	4.2	O K																																																																																																																																																																																																																		
5760 min Summer	12.293	0.318	0.5	3.6	O K																																																																																																																																																																																																																		
7200 min Summer	12.254	0.279	0.4	3.2	O K																																																																																																																																																																																																																		
8640 min Summer	12.225	0.250	0.4	2.8	O K																																																																																																																																																																																																																		
10080 min Summer	12.202	0.227	0.4	2.6	O K																																																																																																																																																																																																																		
15 min Winter	12.718	0.743	1.2	8.4	O K																																																																																																																																																																																																																		
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)																																																																																																																																																																																																																				
15 min Summer	109.937	0.0	18																																																																																																																																																																																																																				
30 min Summer	68.477	0.0	31																																																																																																																																																																																																																				
60 min Summer	42.652	0.0	54																																																																																																																																																																																																																				
120 min Summer	26.567	0.0	86																																																																																																																																																																																																																				
180 min Summer	20.141	0.0	120																																																																																																																																																																																																																				
240 min Summer	16.548	0.0	154																																																																																																																																																																																																																				
360 min Summer	12.545	0.0	220																																																																																																																																																																																																																				
480 min Summer	10.307	0.0	286																																																																																																																																																																																																																				
600 min Summer	8.850	0.0	350																																																																																																																																																																																																																				
720 min Summer	7.814	0.0	414																																																																																																																																																																																																																				
960 min Summer	6.163	0.0	540																																																																																																																																																																																																																				
1440 min Summer	4.411	0.0	782																																																																																																																																																																																																																				
2160 min Summer	3.157	0.0	1148																																																																																																																																																																																																																				
2880 min Summer	2.490	0.0	1524																																																																																																																																																																																																																				
4320 min Summer	1.880	0.0	2248																																																																																																																																																																																																																				
5760 min Summer	1.540	0.0	2944																																																																																																																																																																																																																				
7200 min Summer	1.319	0.0	3680																																																																																																																																																																																																																				
8640 min Summer	1.163	0.0	4408																																																																																																																																																																																																																				
10080 min Summer	1.045	0.0	5144																																																																																																																																																																																																																				
15 min Winter	109.937	0.0	17																																																																																																																																																																																																																				
©1982-2016 XP Solutions																																																																																																																																																																																																																							

Robert Clark Associates		Page 2
Willow Cottage Herne Lane Rustington BN16 3EE	Walberton Farm SA2 FEH22 rainfall data	
Date 8.8.26 File SA2 calcs 30yr rain.SRCX	Designed by RTFC Checked by	
Micro Drainage	Source Control 2016.1	

Summary of Results for 30 year Return Period (+45%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m ³)	Status
30 min Winter	12.851	0.876	1.4	9.9	O K
60 min Winter	12.953	0.978	1.6	11.1	O K
120 min Winter	13.020	1.045	1.7	11.8	O K
180 min Winter	13.028	1.053	1.7	11.9	O K
240 min Winter	13.013	1.038	1.7	11.8	O K
360 min Winter	12.960	0.985	1.6	11.2	O K
480 min Winter	12.901	0.926	1.5	10.5	O K
600 min Winter	12.845	0.870	1.4	9.9	O K
720 min Winter	12.794	0.819	1.3	9.3	O K
960 min Winter	12.678	0.703	1.1	8.0	O K
1440 min Winter	12.525	0.550	0.9	6.2	O K
2160 min Winter	12.393	0.418	0.7	4.7	O K
2880 min Winter	12.314	0.339	0.5	3.8	O K
4320 min Winter	12.237	0.262	0.4	3.0	O K
5760 min Winter	12.192	0.217	0.4	2.5	O K
7200 min Winter	12.162	0.187	0.3	2.1	O K
8640 min Winter	12.141	0.166	0.3	1.9	O K
10080 min Winter	12.124	0.149	0.2	1.7	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m ³)	Time-Peak (mins)
30 min Winter	68.477	0.0	31
60 min Winter	42.652	0.0	58
120 min Winter	26.567	0.0	90
180 min Winter	20.141	0.0	128
240 min Winter	16.548	0.0	164
360 min Winter	12.545	0.0	234
480 min Winter	10.307	0.0	302
600 min Winter	8.850	0.0	368
720 min Winter	7.814	0.0	434
960 min Winter	6.163	0.0	560
1440 min Winter	4.411	0.0	808
2160 min Winter	3.157	0.0	1172
2880 min Winter	2.490	0.0	1532
4320 min Winter	1.880	0.0	2252
5760 min Winter	1.540	0.0	2992
7200 min Winter	1.319	0.0	3680
8640 min Winter	1.163	0.0	4408
10080 min Winter	1.045	0.0	5144

Robert Clark Associates		Page 3
Willow Cottage Herne Lane Rustington BN16 3EE	Walberton Farm SA2 FEH22 rainfall data	
Date 8.8.26 File SA2 calcs 30yr rain.SRCX	Designed by RTFC Checked by	
Micro Drainage Source Control 2016.1		

Rainfall Details

Rainfall Model	FEH
Return Period (years)	30
Site Location	497914 105490 SU 979 054
C (1km)	-0.026
D1 (1km)	0.405
D2 (1km)	0.263
D3 (1km)	0.395
E (1km)	0.311
F (1km)	2.329
Summer Storms	Yes
Winter Storms	Yes
Cv (Summer)	1.000
Cv (Winter)	1.000
Shortest Storm (mins)	15
Longest Storm (mins)	10080
Climate Change %	+45

Time Area Diagram

Total Area (ha) 0.033

Time (mins)	Area
From:	To: (ha)
0	4 0.033

©1982-2016 XP Solutions

Robert Clark Associates		Page 4																				
Willow Cottage Herne Lane Rustington BN16 3EE	Walberton Farm SA2 FEH22 rainfall data																					
Date 8.8.26 File SA2 calcs 30yr rain.SRCX	Designed by RTFC Checked by																					
Micro Drainage Source Control 2016.1																						
<u>Model Details</u> Storage is Online Cover Level (m) 13.600 <u>Lined Soakaway Structure</u> <table> <tr> <td>Infiltration Coefficient Base (m/hr)</td> <td>0.00000</td> <td>Ring Diameter (m)</td> <td>1.80</td> </tr> <tr> <td>Infiltration Coefficient Side (m/hr)</td> <td>0.30262</td> <td>Pit Multiplier</td> <td>2.0</td> </tr> <tr> <td>Safety Factor</td> <td>1.5</td> <td>Number Required</td> <td>2</td> </tr> <tr> <td>Porosity</td> <td>0.30</td> <td>Cap Volume Depth (m)</td> <td>0.000</td> </tr> <tr> <td>Invert Level (m)</td> <td>11.975</td> <td>Cap Infiltration Depth (m)</td> <td>0.000</td> </tr> </table>			Infiltration Coefficient Base (m/hr)	0.00000	Ring Diameter (m)	1.80	Infiltration Coefficient Side (m/hr)	0.30262	Pit Multiplier	2.0	Safety Factor	1.5	Number Required	2	Porosity	0.30	Cap Volume Depth (m)	0.000	Invert Level (m)	11.975	Cap Infiltration Depth (m)	0.000
Infiltration Coefficient Base (m/hr)	0.00000	Ring Diameter (m)	1.80																			
Infiltration Coefficient Side (m/hr)	0.30262	Pit Multiplier	2.0																			
Safety Factor	1.5	Number Required	2																			
Porosity	0.30	Cap Volume Depth (m)	0.000																			
Invert Level (m)	11.975	Cap Infiltration Depth (m)	0.000																			
©1982-2016 XP Solutions																						