

Robert Clark Associates					Page 1																																																																																																																																																																																																																			
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Summary of Results for 100 year Return Period (+40%) Half Drain Time : 2620 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>8.528</td><td>0.167</td><td>0.1</td><td>6.7</td><td>O K</td></tr><tr><td>30 min Summer</td><td>8.585</td><td>0.224</td><td>0.1</td><td>8.9</td><td>O K</td></tr><tr><td>60 min Summer</td><td>8.646</td><td>0.285</td><td>0.1</td><td>11.4</td><td>O K</td></tr><tr><td>120 min Summer</td><td>8.710</td><td>0.349</td><td>0.1</td><td>13.9</td><td>O K</td></tr><tr><td>180 min Summer</td><td>8.745</td><td>0.384</td><td>0.1</td><td>15.4</td><td>O K</td></tr><tr><td>240 min Summer</td><td>8.769</td><td>0.408</td><td>0.1</td><td>16.3</td><td>O K</td></tr><tr><td>360 min Summer</td><td>8.802</td><td>0.441</td><td>0.1</td><td>17.6</td><td>O K</td></tr><tr><td>480 min 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Summer	8.585	0.224	0.1	8.9	O K	60 min Summer	8.646	0.285	0.1	11.4	O K	120 min Summer	8.710	0.349	0.1	13.9	O K	180 min Summer	8.745	0.384	0.1	15.4	O K	240 min Summer	8.769	0.408	0.1	16.3	O K	360 min Summer	8.802	0.441	0.1	17.6	O K	480 min Summer	8.825	0.464	0.1	18.5	O K	600 min Summer	8.841	0.480	0.1	19.2	O K	720 min Summer	8.852	0.491	0.1	19.6	O K	960 min Summer	8.867	0.506	0.1	20.2	O K	1440 min Summer	8.878	0.517	0.1	20.7	O K	2160 min Summer	8.872	0.511	0.1	20.4	O K	2880 min Summer	8.861	0.500	0.1	20.0	O K	4320 min Summer	8.837	0.476	0.1	19.0	O K	5760 min Summer	8.813	0.452	0.1	18.1	O K	7200 min Summer	8.789	0.428	0.1	17.1	O K	8640 min Summer	8.767	0.406	0.1	16.2	O K	10080 min Summer	8.746	0.385	0.1	15.4	O K	15 min Winter	8.548	0.187	0.1	7.5	O K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	128.238	0.0	19	30 min Summer	86.178	0.0	34	60 min Summer	55.250	0.0	64	120 min Summer	34.177	0.0	124	180 min Summer	25.410	0.0	184	240 min Summer	20.436	0.0	244	360 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Robert Clark Associates				Page 2	
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Date 2 June 2017 File Infiltration Basin.SRCX		Designed by RTFC Checked by			
Micro Drainage		Source Control 2016.1			
<u>Summary of Results for 100 year Return Period (+40%)</u>					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	8.612	0.251	0.1	10.0	O K
60 min Winter	8.681	0.320	0.1	12.8	O K
120 min Winter	8.752	0.391	0.1	15.7	O K
180 min Winter	8.793	0.432	0.1	17.3	O K
240 min Winter	8.820	0.459	0.1	18.4	O K
360 min Winter	8.859	0.498	0.1	19.9	O K
480 min Winter	8.885	0.524	0.1	21.0	O K
600 min Winter	8.904	0.543	0.1	21.7	O K
720 min Winter	8.918	0.557	0.1	22.3	O K
960 min Winter	8.938	0.577	0.1	23.1	O K
1440 min Winter	8.955	0.594	0.1	23.8	O K
2160 min Winter	8.956	0.595	0.1	23.8	O K
2880 min Winter	8.942	0.581	0.1	23.3	O K
4320 min Winter	8.911	0.550	0.1	22.0	O K
5760 min Winter	8.878	0.517	0.1	20.7	O K
7200 min Winter	8.843	0.482	0.1	19.3	O K
8640 min Winter	8.810	0.449	0.1	18.0	O K
10080 min Winter	8.778	0.417	0.1	16.7	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	86.178	0.0	34		
60 min Winter	55.250	0.0	64		
120 min Winter	34.177	0.0	122		
180 min Winter	25.410	0.0	182		
240 min Winter	20.436	0.0	240		
360 min Winter	15.037	0.0	358		
480 min Winter	12.081	0.0	476		
600 min Winter	10.185	0.0	594		
720 min Winter	8.854	0.0	710		
960 min Winter	7.093	0.0	942		
1440 min Winter	5.178	0.0	1398		
2160 min Winter	3.772	0.0	2056		
2880 min Winter	3.009	0.0	2676		
4320 min Winter	2.184	0.0	3324		
5760 min Winter	1.738	0.0	4256		
7200 min Winter	1.455	0.0	5120		
8640 min Winter	1.260	0.0	6048		
10080 min Winter	1.115	0.0	6864		
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Robert Clark Associates		Page 3
Willow Cottage Herne Lane Rustington BN16 3EE	Woodfield Farm Wandleys Lane Eastergate	
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Rainfall Details

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)	19.500	Shortest Storm (mins)	15
Ratio R	0.350	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.028

Time (mins)	Area
From:	To: (ha)
0	4 0.028

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Robert Clark Associates		Page 4
Willow Cottage Herne Lane Rustington BN16 3EE	Woodfield Farm Wandleys Lane Eastergate	
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Model Details

Storage is Online Cover Level (m) 9.420

Infiltration Basin Structure

Invert Level (m) 8.361 Safety Factor 1.0
Infiltration Coefficient Base (m/hr) 0.00551 Porosity 1.00
Infiltration Coefficient Side (m/hr) 0.00551

Depth (m)	Area (m ²)
0.000	40.0

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