

Robert Clark Associates				Page 1																																																																																																																																																																																																																			
Willow Cottage Herne Lane Rustington BN16 3EE		32 Ivy Lane Westergate																																																																																																																																																																																																																					
Date 30 May 2024 File Ivy Lane FEH 100yr.SRCX		Designed by RTFC Checked by																																																																																																																																																																																																																					
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<u>Summary of Results for 100 year Return Period (+45%)</u> Half Drain Time : 957 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>9.930</td><td>0.160</td><td>0.0</td><td>2.4</td><td>O K</td></tr><tr><td>30 min Summer</td><td>9.964</td><td>0.194</td><td>0.0</td><td>3.0</td><td>O K</td></tr><tr><td>60 min Summer</td><td>10.005</td><td>0.235</td><td>0.1</td><td>3.6</td><td>O K</td></tr><tr><td>120 min Summer</td><td>10.051</td><td>0.281</td><td>0.1</td><td>4.3</td><td>O K</td></tr><tr><td>180 min Summer</td><td>10.079</td><td>0.309</td><td>0.1</td><td>4.7</td><td>O K</td></tr><tr><td>240 min Summer</td><td>10.099</td><td>0.329</td><td>0.1</td><td>5.0</td><td>O K</td></tr><tr><td>360 min Summer</td><td>10.125</td><td>0.355</td><td>0.1</td><td>5.4</td><td>O K</td></tr><tr><td>480 min 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Date 30 May 2024 File Ivy Lane FEH 100yr.SRCX		Designed by RTFC Checked by			
Micro Drainage		Source Control 2016.1			
Summary of Results for 100 year Return Period (+45%)					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	9.964	0.194	0.0	3.0	O K
60 min Winter	10.005	0.235	0.1	3.6	O K
120 min Winter	10.051	0.281	0.1	4.3	O K
180 min Winter	10.079	0.309	0.1	4.7	O K
240 min Winter	10.099	0.329	0.1	5.0	O K
360 min Winter	10.126	0.356	0.1	5.4	O K
480 min Winter	10.143	0.373	0.1	5.7	O K
600 min Winter	10.153	0.383	0.1	5.8	O K
720 min Winter	10.160	0.390	0.1	5.9	O K
960 min Winter	10.142	0.372	0.1	5.7	O K
1440 min Winter	10.110	0.340	0.1	5.2	O K
2160 min Winter	10.068	0.298	0.1	4.5	O K
2880 min Winter	10.029	0.259	0.1	3.9	O K
4320 min Winter	9.988	0.218	0.0	3.3	O K
5760 min Winter	9.950	0.180	0.0	2.7	O K
7200 min Winter	9.915	0.145	0.0	2.2	O K
8640 min Winter	9.885	0.115	0.0	1.8	O K
10080 min Winter	9.860	0.090	0.0	1.4	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	100.756	0.0	33		
60 min Winter	61.782	0.0	62		
120 min Winter	37.884	0.0	122		
180 min Winter	28.458	0.0	180		
240 min Winter	23.230	0.0	238		
360 min Winter	17.450	0.0	354		
480 min Winter	14.244	0.0	468		
600 min Winter	12.169	0.0	580		
720 min Winter	10.700	0.0	692		
960 min Winter	8.315	0.0	896		
1440 min Winter	5.828	0.0	1110		
2160 min Winter	4.085	0.0	1560		
2880 min Winter	3.174	0.0	1992		
4320 min Winter	2.373	0.0	2852		
5760 min Winter	1.930	0.0	3640		
7200 min Winter	1.645	0.0	4400		
8640 min Winter	1.443	0.0	5112		
10080 min Winter	1.292	0.0	5848		
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Micro Drainage		Source Control 2016.1

Rainfall Details

Rainfall Model	FEH
Return Period (years)	100
Site Location	GB 494154 105138 SU 94154 05138
C (1km)	-0.026
D1 (1km)	0.414
D2 (1km)	0.243
D3 (1km)	0.402
E (1km)	0.310
F (1km)	2.326
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) 0.006

Time (mins)	Area
From: To:	(ha)
0	4 0.006

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Model Details

Storage is Online Cover Level (m) 10.570

Cellular Storage Structure

Invert Level (m) 9.770 Safety Factor 1.5
Infiltration Coefficient Base (m/hr) 0.01368 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.01368

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	16.0	16.0	0.500	0.0	22.4
0.400	16.0	22.4			

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