

Escher Silverman			Page 1		
Lone Barn Studios Stanbridge Lane Romsey SO51 0HE		Orchard Business Park Yapton Sol & So2			
Date August 2018 File Sol & So2 10yrs....		Designed by KN Checked by			
Micro Drainage		Source Control 2013.1.1			
Summary of Results for 10 year Return Period					
Half Drain Time : 531 minutes.					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	6.306	0.106	0.0	0.5	O K
30 min Summer	6.339	0.139	0.0	0.7	O K
60 min Summer	6.373	0.173	0.0	0.8	O K
120 min Summer	6.406	0.206	0.0	1.0	O K
180 min Summer	6.424	0.224	0.0	1.1	O K
240 min Summer	6.433	0.233	0.0	1.1	O K
360 min Summer	6.443	0.243	0.0	1.2	O K
480 min Summer	6.449	0.249	0.0	1.2	O K
600 min Summer	6.453	0.253	0.0	1.2	O K
720 min Summer	6.456	0.256	0.0	1.2	O K
960 min Summer	6.458	0.258	0.0	1.2	O K
1440 min Summer	6.457	0.257	0.0	1.2	O K
2160 min Summer	6.448	0.248	0.0	1.2	O K
2880 min Summer	6.437	0.237	0.0	1.1	O K
4320 min Summer	6.416	0.216	0.0	1.0	O K
5760 min Summer	6.398	0.198	0.0	0.9	O K
15 min Winter	6.319	0.119	0.0	0.6	O K
30 min Winter	6.356	0.156	0.0	0.7	O K
60 min Winter	6.394	0.194	0.0	0.9	O K
120 min Winter	6.432	0.232	0.0	1.1	O K
180 min Winter	6.451	0.251	0.0	1.2	O K
240 min Winter	6.463	0.263	0.0	1.3	O K
Storm Event	Rain (mm/hr)		Flooded Volume (m³)	Time-Peak (mins)	
15 min Summer	55.026		0.0	23	
30 min Summer	36.308		0.0	38	
60 min Summer	23.034		0.0	68	
120 min Summer	14.258		0.0	126	
180 min Summer	10.683		0.0	186	
240 min Summer	8.678		0.0	244	
360 min Summer	6.463		0.0	334	
480 min Summer	5.239		0.0	388	
600 min Summer	4.450		0.0	450	
720 min Summer	3.893		0.0	516	
960 min Summer	3.152		0.0	650	
1440 min Summer	2.338		0.0	926	
2160 min Summer	1.733		0.0	1328	
2880 min Summer	1.401		0.0	1732	
4320 min Summer	1.037		0.0	2512	
5760 min Summer	0.837		0.0	3240	
15 min Winter	55.026		0.0	23	
30 min Winter	36.308		0.0	37	
60 min Winter	23.034		0.0	66	
120 min Winter	14.258		0.0	124	
180 min Winter	10.683		0.0	182	
240 min Winter	8.678		0.0	238	
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Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	10	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	19.200	Shortest Storm (mins)	15
Ratio R	0.350	Longest Storm (mins)	5760
Summer Storms	Yes	Climate Change %	+0

Time Area Diagram

Total Area (ha) 0.005

Time (mins)	Area	Time (mins)	Area
From: To:	(ha)	From: To:	(ha)
0 4	0.000	4 8	0.005

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<u>Model Details</u> Storage is Online Cover Level (m) 6.550 <u>Trench Soakaway Structure</u> <table> <tr> <td>Infiltration Coefficient Base (m/hr)</td> <td>0.00000</td> <td>Trench Width (m)</td> <td>1.5</td> </tr> <tr> <td>Infiltration Coefficient Side (m/hr)</td> <td>0.03816</td> <td>Trench Length (m)</td> <td>8.0</td> </tr> <tr> <td>Safety Factor</td> <td>2.0</td> <td>Slope (1:X)</td> <td>0.0</td> </tr> <tr> <td>Porosity</td> <td>0.40</td> <td>Cap Volume Depth (m)</td> <td>0.000</td> </tr> <tr> <td>Invert Level (m)</td> <td>6.200</td> <td>Cap Infiltration Depth (m)</td> <td>0.000</td> </tr> </table>			Infiltration Coefficient Base (m/hr)	0.00000	Trench Width (m)	1.5	Infiltration Coefficient Side (m/hr)	0.03816	Trench Length (m)	8.0	Safety Factor	2.0	Slope (1:X)	0.0	Porosity	0.40	Cap Volume Depth (m)	0.000	Invert Level (m)	6.200	Cap Infiltration Depth (m)	0.000
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