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Spring Lodge 172 Chester Road Helsby Cheshire WA6 0AR																																																																																																																																																																																																																							
Date 21/12/2021 12:33 File Soakaway TP102 Large Se...		Designed by mrayner Checked by																																																																																																																																																																																																																					
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<u>Summary of Results for 30 year Return Period</u> Half Drain Time : 687 minutes. <table><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><tr><td>15 min Summer</td><td>98.877</td><td>0.127</td><td>0.0</td><td>1.2</td><td>O K</td></tr><tr><td>30 min Summer</td><td>98.916</td><td>0.166</td><td>0.0</td><td>1.6</td><td>O K</td></tr><tr><td>60 min Summer</td><td>98.957</td><td>0.207</td><td>0.0</td><td>2.0</td><td>O K</td></tr><tr><td>120 min Summer</td><td>98.996</td><td>0.246</td><td>0.0</td><td>2.3</td><td>O K</td></tr><tr><td>180 min Summer</td><td>99.016</td><td>0.266</td><td>0.0</td><td>2.5</td><td>O K</td></tr><tr><td>240 min Summer</td><td>99.028</td><td>0.278</td><td>0.0</td><td>2.6</td><td>O K</td></tr><tr><td>360 min Summer</td><td>99.039</td><td>0.289</td><td>0.0</td><td>2.7</td><td>O K</td></tr><tr><td>480 min Summer</td><td>99.041</td><td>0.291</td><td>0.0</td><td>2.8</td><td>O K</td></tr><tr><td>600 min Summer</td><td>99.040</td><td>0.290</td><td>0.0</td><td>2.8</td><td>O K</td></tr><tr><td>720 min Summer</td><td>99.038</td><td>0.288</td><td>0.0</td><td>2.7</td><td>O K</td></tr><tr><td>960 min Summer</td><td>99.033</td><td>0.283</td><td>0.0</td><td>2.7</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>99.019</td><td>0.269</td><td>0.0</td><td>2.6</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>98.995</td><td>0.245</td><td>0.0</td><td>2.3</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>98.972</td><td>0.222</td><td>0.0</td><td>2.1</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>98.928</td><td>0.178</td><td>0.0</td><td>1.7</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>98.889</td><td>0.139</td><td>0.0</td><td>1.3</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>98.858</td><td>0.108</td><td>0.0</td><td>1.0</td><td>O K</td></tr><tr><td>8640 min Summer</td><td>98.833</td><td>0.083</td><td>0.0</td><td>0.8</td><td>O 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Summer	98.996	0.246	0.0	2.3	O K	180 min Summer	99.016	0.266	0.0	2.5	O K	240 min Summer	99.028	0.278	0.0	2.6	O K	360 min Summer	99.039	0.289	0.0	2.7	O K	480 min Summer	99.041	0.291	0.0	2.8	O K	600 min Summer	99.040	0.290	0.0	2.8	O K	720 min Summer	99.038	0.288	0.0	2.7	O K	960 min Summer	99.033	0.283	0.0	2.7	O K	1440 min Summer	99.019	0.269	0.0	2.6	O K	2160 min Summer	98.995	0.245	0.0	2.3	O K	2880 min Summer	98.972	0.222	0.0	2.1	O K	4320 min Summer	98.928	0.178	0.0	1.7	O K	5760 min Summer	98.889	0.139	0.0	1.3	O K	7200 min Summer	98.858	0.108	0.0	1.0	O K	8640 min Summer	98.833	0.083	0.0	0.8	O K	10080 min Summer	98.816	0.066	0.0	0.6	O K	15 min Winter	98.892	0.142	0.0	1.4	O K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	65.808	0.0	19	30 min Summer	43.570	0.0	33	60 min Summer	27.653	0.0	64	120 min Summer	17.064	0.0	122	180 min Summer	12.735	0.0	182	240 min Summer	10.303	0.0	242	360 min Summer	7.597	0.0	360	480 min Summer	6.121	0.0	480	600 min 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Date 21/12/2021 12:33 File Soakaway TP102 Large Se...		Designed by mrayner Checked by				
Micro Drainage			Source Control 2017.1.2			
Summary of Results for 30 year Return Period						
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status	
30 min Winter	98.937	0.187	0.0	1.8	O K	
60 min Winter	98.983	0.233	0.0	2.2	O K	
120 min Winter	99.028	0.278	0.0	2.6	O K	
180 min Winter	99.052	0.302	0.0	2.9	O K	
240 min Winter	99.067	0.317	0.0	3.0	O K	
360 min Winter	99.081	0.331	0.0	3.1	O K	
480 min Winter	99.087	0.337	0.0	3.2	O K	
600 min Winter	99.088	0.338	0.0	3.2	O K	
720 min Winter	99.086	0.336	0.0	3.2	O K	
960 min Winter	99.077	0.327	0.0	3.1	O K	
1440 min Winter	99.058	0.308	0.0	2.9	O K	
2160 min Winter	99.022	0.272	0.0	2.6	O K	
2880 min Winter	98.985	0.235	0.0	2.2	O K	
4320 min Winter	98.916	0.166	0.0	1.6	O K	
5760 min Winter	98.860	0.110	0.0	1.0	O K	
7200 min Winter	98.819	0.069	0.0	0.7	O K	
8640 min Winter	98.799	0.049	0.0	0.5	O K	
10080 min Winter	98.794	0.044	0.0	0.4	O K	
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)			
30 min Winter	43.570	0.0	33			
60 min Winter	27.653	0.0	62			
120 min Winter	17.064	0.0	120			
180 min Winter	12.735	0.0	180			
240 min Winter	10.303	0.0	238			
360 min Winter	7.597	0.0	352			
480 min Winter	6.121	0.0	464			
600 min Winter	5.173	0.0	574			
720 min Winter	4.507	0.0	680			
960 min Winter	3.624	0.0	780			
1440 min Winter	2.661	0.0	1082			
2160 min Winter	1.952	0.0	1532			
2880 min Winter	1.565	0.0	1960			
4320 min Winter	1.145	0.0	2764			
5760 min Winter	0.917	0.0	3456			
7200 min Winter	0.772	0.0	4040			
8640 min Winter	0.670	0.0	4496			
10080 min Winter	0.594	0.0	5240			
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Micro Drainage Source Control 2017.1.2		

Model Details

Storage is Online Cover Level (m) 100.000

Cellular Storage Structure

Invert Level (m) 98.750 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.02830 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.02830

Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	10.0	10.0	0.401	0.0	10.0
0.400	10.0	10.0			

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