

Robert Clark Associates				Page 1																																																																																																																																																																																																																			
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<u>Summary of Results for 100 year Return Period (+40%)</u> Half Drain Time : 787 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>10.855</td><td>0.255</td><td>0.1</td><td>2.5</td><td>O K</td></tr><tr><td>30 min Summer</td><td>10.941</td><td>0.341</td><td>0.1</td><td>3.4</td><td>O K</td></tr><tr><td>60 min Summer</td><td>11.033</td><td>0.433</td><td>0.1</td><td>4.3</td><td>O K</td></tr><tr><td>120 min Summer</td><td>11.122</td><td>0.522</td><td>0.1</td><td>5.2</td><td>O K</td></tr><tr><td>180 min Summer</td><td>11.167</td><td>0.567</td><td>0.1</td><td>5.7</td><td>O K</td></tr><tr><td>240 min Summer</td><td>11.191</td><td>0.591</td><td>0.1</td><td>5.9</td><td>O K</td></tr><tr><td>360 min Summer</td><td>11.219</td><td>0.619</td><td>0.1</td><td>6.2</td><td>O K</td></tr><tr><td>480 min 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Summer	10.941	0.341	0.1	3.4	O K	60 min Summer	11.033	0.433	0.1	4.3	O K	120 min Summer	11.122	0.522	0.1	5.2	O K	180 min Summer	11.167	0.567	0.1	5.7	O K	240 min Summer	11.191	0.591	0.1	5.9	O K	360 min Summer	11.219	0.619	0.1	6.2	O K	480 min Summer	11.229	0.629	0.1	6.3	O K	600 min Summer	11.229	0.629	0.1	6.3	O K	720 min Summer	11.228	0.628	0.1	6.3	O K	960 min Summer	11.221	0.621	0.1	6.2	O K	1440 min Summer	11.200	0.600	0.1	6.0	O K	2160 min Summer	11.162	0.562	0.1	5.6	O K	2880 min Summer	11.125	0.525	0.1	5.2	O K	4320 min Summer	11.056	0.456	0.1	4.5	O K	5760 min Summer	10.994	0.394	0.1	3.9	O K	7200 min Summer	10.941	0.341	0.1	3.4	O K	8640 min Summer	10.895	0.295	0.1	2.9	O K	10080 min Summer	10.854	0.254	0.1	2.5	O K	15 min Winter	10.886	0.286	0.1	2.9	O K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	125.515	0.0	19	30 min Summer	84.780	0.0	34	60 min Summer	54.663	0.0	64	120 min Summer	34.005	0.0	122	180 min Summer	25.359	0.0	182	240 min Summer	20.434	0.0	242	360 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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	10.983	0.383	0.1	3.8	O K
60 min Winter	11.086	0.486	0.1	4.9	O K
120 min Winter	11.188	0.588	0.1	5.9	O K
180 min Winter	11.241	0.641	0.1	6.4	O K
240 min Winter	11.271	0.671	0.1	6.7	O K
360 min Winter	11.306	0.706	0.1	7.0	O K
480 min Winter	11.321	0.721	0.1	7.2	O K
600 min Winter	11.326	0.726	0.1	7.2	O K
720 min Winter	11.325	0.725	0.1	7.2	O K
960 min Winter	11.314	0.714	0.1	7.1	O K
1440 min Winter	11.287	0.687	0.1	6.9	O K
2160 min Winter	11.233	0.633	0.1	6.3	O K
2880 min Winter	11.178	0.578	0.1	5.8	O K
4320 min Winter	11.076	0.476	0.1	4.7	O K
5760 min Winter	10.988	0.388	0.1	3.9	O K
7200 min Winter	10.914	0.314	0.1	3.1	O K
8640 min Winter	10.851	0.251	0.1	2.5	O K
10080 min Winter	10.797	0.197	0.1	2.0	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	84.780	0.0	33		
60 min Winter	54.663	0.0	62		
120 min Winter	34.005	0.0	120		
180 min Winter	25.359	0.0	180		
240 min Winter	20.434	0.0	238		
360 min Winter	15.075	0.0	352		
480 min Winter	12.133	0.0	464		
600 min Winter	10.243	0.0	572		
720 min Winter	8.914	0.0	678		
960 min Winter	7.153	0.0	772		
1440 min Winter	5.234	0.0	1082		
2160 min Winter	3.821	0.0	1536		
2880 min Winter	3.053	0.0	1988		
4320 min Winter	2.220	0.0	2848		
5760 min Winter	1.769	0.0	3640		
7200 min Winter	1.484	0.0	4400		
8640 min Winter	1.286	0.0	5184		
10080 min Winter	1.139	0.0	5944		
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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)	19.300	Shortest Storm (mins)	15
Ratio R	0.340	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.011

Time (mins)	Area
From:	To: (ha)
0	4 0.011

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Model Details

Storage is Online Cover Level (m) 12.000

Cellular Storage Structure

Invert Level (m) 10.600 Safety Factor 4.0
Infiltration Coefficient Base (m/hr) 0.06332 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.06332

Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	10.5	10.5	0.900	0.0	20.9
0.800	10.5	20.9			

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