

Campbell Reith Hill LLP				Page 1																																																																																																																																																																																																																			
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Micro Drainage		Source Control 2014.1.1			
<u>Summary of Results for 100 year Return Period (+30%)</u>					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	68.674	1.174	1.4	8.6	O K
60 min Winter	68.857	1.357	1.5	9.9	O K
120 min Winter	68.912	1.412	1.6	10.3	O K
180 min Winter	68.852	1.352	1.5	9.9	O K
240 min Winter	68.771	1.271	1.5	9.3	O K
360 min Winter	68.617	1.117	1.4	8.1	O K
480 min Winter	68.473	0.973	1.3	7.1	O K
600 min Winter	68.344	0.844	1.2	6.2	O K
720 min Winter	68.230	0.730	1.1	5.3	O K
960 min Winter	68.040	0.540	1.0	3.9	O K
1440 min Winter	67.770	0.270	0.9	2.0	O K
2160 min Winter	67.553	0.053	0.7	0.4	O K
2880 min Winter	67.541	0.041	0.6	0.3	O K
4320 min Winter	67.530	0.030	0.4	0.2	O K
5760 min Winter	67.524	0.024	0.3	0.2	O K
7200 min Winter	67.520	0.020	0.3	0.1	O K
8640 min Winter	67.518	0.018	0.3	0.1	O K
10080 min Winter	67.516	0.016	0.2	0.1	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	79.998	0.0	31		
60 min Winter	52.662	0.0	58		
120 min Winter	33.322	0.0	92		
180 min Winter	24.998	0.0	130		
240 min Winter	20.313	0.0	168		
360 min Winter	15.144	0.0	238		
480 min Winter	12.271	0.0	308		
600 min Winter	10.413	0.0	374		
720 min Winter	9.099	0.0	440		
960 min Winter	7.345	0.0	568		
1440 min Winter	5.419	0.0	808		
2160 min Winter	3.986	0.0	1104		
2880 min Winter	3.200	0.0	1428		
4320 min Winter	2.349	0.0	2168		
5760 min Winter	1.888	0.0	2840		
7200 min Winter	1.594	0.0	3672		
8640 min Winter	1.389	0.0	4368		
10080 min Winter	1.237	0.0	4984		
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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)	20.000	Shortest Storm (mins)	15
Ratio R	0.300	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+30

Time Area Diagram

Total Area (ha) 0.031

Time (mins)	Area
From:	To: (ha)
0	4 0.031

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Model Details

Storage is Online Cover Level (m) 70.000

Trench Soakaway Structure

Infiltration Coefficient Base (m/hr)	0.20400	Trench Width (m)	3.0
Infiltration Coefficient Side (m/hr)	0.20400	Trench Length (m)	8.1
Safety Factor	2.0	Slope (1:X)	0.0
Porosity	0.30	Cap Volume Depth (m)	0.000
Invert Level (m)	67.500	Cap Infiltration Depth (m)	1.500

Event: 120 min Winter

