

Robert Clark Associates					Page 1																																																																																																																																																																																																																			
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Summary of Results for 100 year Return Period (+40%) Half Drain Time : 313 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>2.545</td><td>0.185</td><td>1.5</td><td>26.0</td><td>0 K</td></tr><tr><td>30 min Summer</td><td>2.604</td><td>0.244</td><td>1.5</td><td>34.3</td><td>0 K</td></tr><tr><td>60 min Summer</td><td>2.662</td><td>0.302</td><td>1.6</td><td>42.4</td><td>0 K</td></tr><tr><td>120 min Summer</td><td>2.709</td><td>0.349</td><td>1.7</td><td>49.0</td><td>0 K</td></tr><tr><td>180 min Summer</td><td>2.724</td><td>0.364</td><td>1.7</td><td>51.2</td><td>0 K</td></tr><tr><td>240 min Summer</td><td>2.726</td><td>0.366</td><td>1.7</td><td>51.4</td><td>0 K</td></tr><tr><td>360 min Summer</td><td>2.722</td><td>0.362</td><td>1.7</td><td>50.9</td><td>0 K</td></tr><tr><td>480 min 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Date 28.4.19 File Geocell G1-3 with FOS of 6.5.SRCX		Designed by Checked by			
Micro Drainage		Source Control 2016.1			
Summary of Results for 100 year Return Period (+40%)					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	2.635	0.275	1.6	38.6	0 K
60 min Winter	2.701	0.341	1.7	47.9	0 K
120 min Winter	2.757	0.397	1.7	55.8	0 K
180 min Winter	2.783	0.423	1.7	58.8	0 K
240 min Winter	2.794	0.434	1.7	59.6	0 K
360 min Winter	2.782	0.422	1.7	58.7	0 K
480 min Winter	2.770	0.410	1.7	57.5	0 K
600 min Winter	2.757	0.397	1.7	55.9	0 K
720 min Winter	2.744	0.384	1.7	54.0	0 K
960 min Winter	2.715	0.355	1.7	49.9	0 K
1440 min Winter	2.657	0.297	1.6	41.7	0 K
2160 min Winter	2.579	0.219	1.5	30.9	0 K
2880 min Winter	2.516	0.156	1.4	21.9	0 K
4320 min Winter	2.429	0.069	1.3	9.7	0 K
5760 min Winter	2.405	0.045	1.2	6.3	0 K
7200 min Winter	2.398	0.038	1.0	5.3	0 K
8640 min Winter	2.393	0.033	0.8	4.6	0 K
10080 min Winter	2.389	0.029	0.8	4.1	0 K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	83.789	0.0	33		
60 min Winter	53.779	0.0	62		
120 min Winter	33.337	0.0	120		
180 min Winter	24.832	0.0	176		
240 min Winter	20.006	0.0	232		
360 min Winter	14.706	0.0	330		
480 min Winter	11.818	0.0	374		
600 min Winter	9.966	0.0	450		
720 min Winter	8.665	0.0	528		
960 min Winter	6.943	0.0	676		
1440 min Winter	5.071	0.0	966		
2160 min Winter	3.696	0.0	1364		
2880 min Winter	2.949	0.0	1756		
4320 min Winter	2.142	0.0	2380		
5760 min Winter	1.705	0.0	2952		
7200 min Winter	1.427	0.0	3672		
8640 min Winter	1.235	0.0	4408		
10080 min Winter	1.093	0.0	5120		
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Micro Drainage Source Control 2016.1		

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)	19.000	Shortest Storm (mins)	15
Ratio R	0.350	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.116

Time (mins)	Area
From:	To: (ha)
0	4 0.116

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Model Details

Storage is Online Cover Level (m) 3.290

Cellular Storage Structure

Invert Level (m)	2.360
Infiltration Coefficient Base (m/hr)	0.19346
Infiltration Coefficient Side (m/hr)	0.19346
Safety Factor	6.5
Porosity	0.95

Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	148.0	148.0	0.500	0.0	208.8
0.400	148.0	208.8			

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