

MJA Consulting		Page 1																																																																																																																																																																																																																			
Monarch House Barton Lane OX14 3NB	Soakaway 2, Care Home Westergate & Eastergate																																																																																																																																																																																																																				
Date 05/04/2018 15:14 File SOAKAWAY 2.SRCX	Designed by S.Smith Checked by																																																																																																																																																																																																																				
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<u>Summary of Results for 100 year Return Period (+40%)</u> Half Drain Time : 567 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>99.316</td><td>0.316</td><td>0.7</td><td>20.4</td><td>O K</td></tr><tr><td>30 min Summer</td><td>99.419</td><td>0.419</td><td>0.7</td><td>27.1</td><td>O K</td></tr><tr><td>60 min Summer</td><td>99.524</td><td>0.524</td><td>0.7</td><td>33.8</td><td>O K</td></tr><tr><td>120 min Summer</td><td>99.618</td><td>0.618</td><td>0.8</td><td>39.9</td><td>O K</td></tr><tr><td>180 min Summer</td><td>99.658</td><td>0.658</td><td>0.8</td><td>42.5</td><td>O K</td></tr><tr><td>240 min Summer</td><td>99.677</td><td>0.677</td><td>0.8</td><td>43.7</td><td>O K</td></tr><tr><td>360 min Summer</td><td>99.690</td><td>0.690</td><td>0.8</td><td>44.6</td><td>O K</td></tr><tr><td>480 min Summer</td><td>99.686</td><td>0.686</td><td>0.8</td><td>44.3</td><td>O K</td></tr><tr><td>600 min Summer</td><td>99.678</td><td>0.678</td><td>0.8</td><td>43.8</td><td>O K</td></tr><tr><td>720 min Summer</td><td>99.669</td><td>0.669</td><td>0.8</td><td>43.2</td><td>O K</td></tr><tr><td>960 min Summer</td><td>99.648</td><td>0.648</td><td>0.8</td><td>41.8</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>99.604</td><td>0.604</td><td>0.8</td><td>39.0</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>99.540</td><td>0.540</td><td>0.8</td><td>34.9</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>99.481</td><td>0.481</td><td>0.7</td><td>31.1</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>99.375</td><td>0.375</td><td>0.7</td><td>24.3</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>99.287</td><td>0.287</td><td>0.7</td><td>18.6</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>99.217</td><td>0.217</td><td>0.6</td><td>14.0</td><td>O K</td></tr><tr><td>8640 min 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Summer</td><td>12.548</td><td>0.0</td><td>430</td></tr><tr><td>600 min Summer</td><td>10.575</td><td>0.0</td><td>492</td></tr><tr><td>720 min Summer</td><td>9.191</td><td>0.0</td><td>556</td></tr><tr><td>960 min Summer</td><td>7.358</td><td>0.0</td><td>684</td></tr><tr><td>1440 min Summer</td><td>5.368</td><td>0.0</td><td>964</td></tr><tr><td>2160 min Summer</td><td>3.907</td><td>0.0</td><td>1364</td></tr><tr><td>2880 min Summer</td><td>3.115</td><td>0.0</td><td>1764</td></tr><tr><td>4320 min Summer</td><td>2.259</td><td>0.0</td><td>2552</td></tr><tr><td>5760 min Summer</td><td>1.796</td><td>0.0</td><td>3288</td></tr><tr><td>7200 min Summer</td><td>1.506</td><td>0.0</td><td>4032</td></tr><tr><td>8640 min Summer</td><td>1.304</td><td>0.0</td><td>4680</td></tr><tr><td>10080 min Summer</td><td>1.154</td><td>0.0</td><td>5352</td></tr><tr><td>15 min Winter</td><td>134.746</td><td>0.0</td><td>19</td></tr></tbody></table>				Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status	15 min Summer	99.316	0.316	0.7	20.4	O K	30 min Summer	99.419	0.419	0.7	27.1	O K	60 min Summer	99.524	0.524	0.7	33.8	O K	120 min Summer	99.618	0.618	0.8	39.9	O K	180 min Summer	99.658	0.658	0.8	42.5	O K	240 min Summer	99.677	0.677	0.8	43.7	O K	360 min Summer	99.690	0.690	0.8	44.6	O K	480 min Summer	99.686	0.686	0.8	44.3	O K	600 min Summer	99.678	0.678	0.8	43.8	O K	720 min Summer	99.669	0.669	0.8	43.2	O K	960 min Summer	99.648	0.648	0.8	41.8	O K	1440 min Summer	99.604	0.604	0.8	39.0	O K	2160 min Summer	99.540	0.540	0.8	34.9	O K	2880 min Summer	99.481	0.481	0.7	31.1	O K	4320 min Summer	99.375	0.375	0.7	24.3	O K	5760 min Summer	99.287	0.287	0.7	18.6	O K	7200 min Summer	99.217	0.217	0.6	14.0	O K	8640 min Summer	99.161	0.161	0.6	10.4	O K	10080 min Summer	99.117	0.117	0.6	7.6	O K	15 min Winter	99.355	0.355	0.7	22.9	O K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	134.746	0.0	19	30 min Summer	90.474	0.0	33	60 min Summer	57.877	0.0	64	120 min 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MJA Consulting				Page 2	
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Date 05/04/2018 15:14 File SOAKAWAY 2.SRCX		Designed by S.Smith Checked by			
Innovyze		Source Control 2017.1.2			
<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	99.471	0.471	0.7	30.5	O K
60 min Winter	99.590	0.590	0.8	38.1	O K
120 min Winter	99.700	0.700	0.8	45.2	O K
180 min Winter	99.749	0.749	0.8	48.4	Flood Risk
240 min Winter	99.774	0.774	0.8	50.0	Flood Risk
360 min Winter	99.797	0.797	0.8	51.5	Flood Risk
480 min Winter	99.798	0.798	0.8	51.5	Flood Risk
600 min Winter	99.788	0.788	0.8	50.9	Flood Risk
720 min Winter	99.775	0.775	0.8	50.0	Flood Risk
960 min Winter	99.749	0.749	0.8	48.4	Flood Risk
1440 min Winter	99.687	0.687	0.8	44.4	O K
2160 min Winter	99.592	0.592	0.8	38.2	O K
2880 min Winter	99.503	0.503	0.7	32.5	O K
4320 min Winter	99.349	0.349	0.7	22.5	O K
5760 min Winter	99.227	0.227	0.6	14.6	O K
7200 min Winter	99.135	0.135	0.6	8.7	O K
8640 min Winter	99.071	0.071	0.6	4.6	O K
10080 min Winter	99.048	0.048	0.6	3.1	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	90.474	0.0	33		
60 min Winter	57.877	0.0	62		
120 min Winter	35.655	0.0	120		
180 min Winter	26.413	0.0	178		
240 min Winter	21.237	0.0	236		
360 min Winter	15.626	0.0	348		
480 min Winter	12.548	0.0	458		
600 min Winter	10.575	0.0	558		
720 min Winter	9.191	0.0	582		
960 min Winter	7.358	0.0	732		
1440 min Winter	5.368	0.0	1040		
2160 min Winter	3.907	0.0	1488		
2880 min Winter	3.115	0.0	1904		
4320 min Winter	2.259	0.0	2720		
5760 min Winter	1.796	0.0	3456		
7200 min Winter	1.506	0.0	4112		
8640 min Winter	1.304	0.0	4672		
10080 min Winter	1.154	0.0	5144		
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MJA Consulting		Page 4
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Model Details

Storage is Online Cover Level (m) 100.000

Cellular Storage Structure

Invert Level (m) 99.000 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.06000 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.06000

Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	68.0	68.0	0.801	0.0	101.6
0.800	68.0	101.6			

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