

Robert Clark Associates				Page 1																																																																																																																																																																																																																			
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<u>Summary of Results for 100 year Return Period (+45%)</u> Half Drain Time : 85 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>13.106</td><td>1.131</td><td>1.8</td><td>12.8</td><td>O K</td></tr><tr><td>30 min Summer</td><td>13.277</td><td>1.302</td><td>2.1</td><td>14.8</td><td>O K</td></tr><tr><td>60 min Summer</td><td>13.395</td><td>1.420</td><td>2.3</td><td>16.1</td><td>Flood Risk</td></tr><tr><td>120 min Summer</td><td>13.480</td><td>1.505</td><td>2.4</td><td>17.1</td><td>Flood Risk</td></tr><tr><td>180 min Summer</td><td>13.500</td><td>1.525</td><td>2.5</td><td>17.3</td><td>Flood Risk</td></tr><tr><td>240 min Summer</td><td>13.492</td><td>1.517</td><td>2.4</td><td>17.2</td><td>Flood Risk</td></tr><tr><td>360 min Summer</td><td>13.441</td><td>1.466</td><td>2.4</td><td>16.6</td><td>Flood Risk</td></tr><tr><td>480 min Summer</td><td>13.376</td><td>1.401</td><td>2.3</td><td>15.9</td><td>Flood Risk</td></tr><tr><td>600 min Summer</td><td>13.311</td><td>1.336</td><td>2.2</td><td>15.2</td><td>Flood Risk</td></tr><tr><td>720 min Summer</td><td>13.250</td><td>1.275</td><td>2.1</td><td>14.5</td><td>O K</td></tr><tr><td>960 min Summer</td><td>13.098</td><td>1.123</td><td>1.8</td><td>12.7</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>12.887</td><td>0.912</td><td>1.5</td><td>10.3</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>12.696</td><td>0.721</td><td>1.2</td><td>8.2</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>12.573</td><td>0.598</td><td>1.0</td><td>6.8</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>12.453</td><td>0.478</td><td>0.8</td><td>5.4</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>12.376</td><td>0.401</td><td>0.6</td><td>4.5</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>12.325</td><td>0.350</td><td>0.6</td><td>4.0</td><td>O K</td></tr><tr><td>8640 min Summer</td><td>12.286</td><td>0.311</td><td>0.5</td><td>3.5</td><td>O K</td></tr><tr><td>10080 min Summer</td><td>12.256</td><td>0.281</td><td>0.5</td><td>3.2</td><td>O K</td></tr><tr><td>15 min Winter</td><td>13.108</td><td>1.133</td><td>1.8</td><td>12.8</td><td>O K</td></tr></tbody></table> <table><thead><tr><th>Storm Event</th><th>Rain (mm/hr)</th><th>Flooded Volume (m³)</th><th>Time-Peak (mins)</th></tr></thead><tbody><tr><td>15 min Summer</td><td>167.647</td><td>0.0</td><td>18</td></tr><tr><td>30 min Summer</td><td>102.160</td><td>0.0</td><td>31</td></tr><tr><td>60 min Summer</td><td>62.253</td><td>0.0</td><td>54</td></tr><tr><td>120 min Summer</td><td>37.935</td><td>0.0</td><td>86</td></tr><tr><td>180 min Summer</td><td>28.393</td><td>0.0</td><td>120</td></tr><tr><td>240 min Summer</td><td>23.117</td><td>0.0</td><td>154</td></tr><tr><td>360 min Summer</td><td>17.302</td><td>0.0</td><td>220</td></tr><tr><td>480 min Summer</td><td>14.087</td><td>0.0</td><td>286</td></tr><tr><td>600 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Summer	13.277	1.302	2.1	14.8	O K	60 min Summer	13.395	1.420	2.3	16.1	Flood Risk	120 min Summer	13.480	1.505	2.4	17.1	Flood Risk	180 min Summer	13.500	1.525	2.5	17.3	Flood Risk	240 min Summer	13.492	1.517	2.4	17.2	Flood Risk	360 min Summer	13.441	1.466	2.4	16.6	Flood Risk	480 min Summer	13.376	1.401	2.3	15.9	Flood Risk	600 min Summer	13.311	1.336	2.2	15.2	Flood Risk	720 min Summer	13.250	1.275	2.1	14.5	O K	960 min Summer	13.098	1.123	1.8	12.7	O K	1440 min Summer	12.887	0.912	1.5	10.3	O K	2160 min Summer	12.696	0.721	1.2	8.2	O K	2880 min Summer	12.573	0.598	1.0	6.8	O K	4320 min Summer	12.453	0.478	0.8	5.4	O K	5760 min Summer	12.376	0.401	0.6	4.5	O K	7200 min Summer	12.325	0.350	0.6	4.0	O K	8640 min Summer	12.286	0.311	0.5	3.5	O K	10080 min Summer	12.256	0.281	0.5	3.2	O K	15 min Winter	13.108	1.133	1.8	12.8	O K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	167.647	0.0	18	30 min Summer	102.160	0.0	31	60 min Summer	62.253	0.0	54	120 min Summer	37.935	0.0	86	180 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Robert Clark Associates				Page 2	
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Date 8.8.26 File SA2 calcs 100yr rain.SRCX		Designed by RTFC Checked by			
Micro Drainage		Source Control 2016.1			
Summary of Results for 100 year Return Period (+45%)					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	13.283	1.308	2.1	14.8	O K
60 min Winter	13.403	1.428	2.3	16.2	Flood Risk
120 min Winter	13.467	1.492	2.4	16.9	Flood Risk
180 min Winter	13.460	1.485	2.4	16.8	Flood Risk
240 min Winter	13.425	1.450	2.3	16.4	Flood Risk
360 min Winter	13.334	1.359	2.2	15.4	Flood Risk
480 min Winter	13.240	1.265	2.0	14.3	O K
600 min Winter	13.155	1.180	1.9	13.4	O K
720 min Winter	13.080	1.105	1.8	12.5	O K
960 min Winter	12.915	0.940	1.5	10.7	O K
1440 min Winter	12.701	0.726	1.2	8.2	O K
2160 min Winter	12.519	0.544	0.9	6.2	O K
2880 min Winter	12.413	0.438	0.7	5.0	O K
4320 min Winter	12.310	0.335	0.5	3.8	O K
5760 min Winter	12.250	0.275	0.4	3.1	O K
7200 min Winter	12.210	0.235	0.4	2.7	O K
8640 min Winter	12.182	0.207	0.3	2.3	O K
10080 min Winter	12.160	0.185	0.3	2.1	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	102.160	0.0	31		
60 min Winter	62.253	0.0	58		
120 min Winter	37.935	0.0	90		
180 min Winter	28.393	0.0	128		
240 min Winter	23.117	0.0	164		
360 min Winter	17.302	0.0	234		
480 min Winter	14.087	0.0	302		
600 min Winter	12.010	0.0	368		
720 min Winter	10.543	0.0	434		
960 min Winter	8.240	0.0	560		
1440 min Winter	5.823	0.0	808		
2160 min Winter	4.114	0.0	1172		
2880 min Winter	3.215	0.0	1532		
4320 min Winter	2.397	0.0	2252		
5760 min Winter	1.946	0.0	2992		
7200 min Winter	1.655	0.0	3680		
8640 min Winter	1.451	0.0	4408		
10080 min Winter	1.297	0.0	5144		
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Robert Clark Associates		Page 3																																						
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Model Details

Storage is Online Cover Level (m) 13.600

Lined Soakaway Structure

Infiltration Coefficient Base (m/hr)	0.00000	Ring Diameter (m)	1.80
Infiltration Coefficient Side (m/hr)	0.30262	Pit Multiplier	2.0
Safety Factor	1.5	Number Required	2
Porosity	0.30	Cap Volume Depth (m)	0.000
Invert Level (m)	11.975	Cap Infiltration Depth (m)	0.000

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