

Robert Clark Associates			Page 1																																																																																																																																																																																															
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<u>Summary of Results for 10 year Return Period (+40%)</u> Half Drain Time : 154 minutes. <table><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><tr><td>15 min Summer</td><td>11.462</td><td>0.462</td><td>0.1</td><td>1.0</td><td>O K</td></tr><tr><td>30 min Summer</td><td>11.591</td><td>0.591</td><td>0.1</td><td>1.3</td><td>O K</td></tr><tr><td>60 min Summer</td><td>11.703</td><td>0.703</td><td>0.1</td><td>1.5</td><td>O K</td></tr><tr><td>120 min Summer</td><td>11.775</td><td>0.775</td><td>0.1</td><td>1.7</td><td>O K</td></tr><tr><td>180 min Summer</td><td>11.804</td><td>0.804</td><td>0.1</td><td>1.8</td><td>O K</td></tr><tr><td>240 min Summer</td><td>11.818</td><td>0.818</td><td>0.1</td><td>1.8</td><td>O K</td></tr><tr><td>360 min Summer</td><td>11.823</td><td>0.823</td><td>0.1</td><td>1.8</td><td>O K</td></tr><tr><td>480 min Summer</td><td>11.814</td><td>0.814</td><td>0.1</td><td>1.8</td><td>O K</td></tr><tr><td>600 min Summer</td><td>11.797</td><td>0.797</td><td>0.1</td><td>1.7</td><td>O K</td></tr><tr><td>720 min Summer</td><td>11.778</td><td>0.778</td><td>0.1</td><td>1.7</td><td>O K</td></tr><tr><td>960 min Summer</td><td>11.737</td><td>0.737</td><td>0.1</td><td>1.6</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>11.663</td><td>0.663</td><td>0.1</td><td>1.5</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>11.576</td><td>0.576</td><td>0.1</td><td>1.3</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>11.512</td><td>0.512</td><td>0.1</td><td>1.1</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>11.422</td><td>0.422</td><td>0.1</td><td>0.9</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>11.362</td><td>0.362</td><td>0.1</td><td>0.8</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>11.319</td><td>0.319</td><td>0.1</td><td>0.7</td><td>O K</td></tr><tr><td>8640 min Summer</td><td>11.286</td><td>0.286</td><td>0.0</td><td>0.6</td><td>O K</td></tr></table> <table><tr><th>Storm Event</th><th>Rain (mm/hr)</th><th>Flooded Volume (m³)</th><th>Time-Peak (mins)</th></tr><tr><td>15 min Summer</td><td>80.329</td><td>0.0</td><td>18</td></tr><tr><td>30 min Summer</td><td>52.994</td><td>0.0</td><td>33</td></tr><tr><td>60 min Summer</td><td>33.604</td><td>0.0</td><td>62</td></tr><tr><td>120 min Summer</td><td>20.781</td><td>0.0</td><td>102</td></tr><tr><td>180 min Summer</td><td>15.558</td><td>0.0</td><td>134</td></tr><tr><td>240 min Summer</td><td>12.632</td><td>0.0</td><td>166</td></tr><tr><td>360 min Summer</td><td>9.410</td><td>0.0</td><td>236</td></tr><tr><td>480 min Summer</td><td>7.628</td><td>0.0</td><td>304</td></tr><tr><td>600 min Summer</td><td>6.479</td><td>0.0</td><td>370</td></tr><tr><td>720 min Summer</td><td>5.668</td><td>0.0</td><td>436</td></tr><tr><td>960 min Summer</td><td>4.587</td><td>0.0</td><td>568</td></tr><tr><td>1440 min Summer</td><td>3.402</td><td>0.0</td><td>824</td></tr><tr><td>2160 min Summer</td><td>2.521</td><td>0.0</td><td>1192</td></tr><tr><td>2880 min Summer</td><td>2.038</td><td>0.0</td><td>1560</td></tr><tr><td>4320 min Summer</td><td>1.508</td><td>0.0</td><td>2292</td></tr><tr><td>5760 min Summer</td><td>1.218</td><td>0.0</td><td>3008</td></tr><tr><td>7200 min Summer</td><td>1.032</td><td>0.0</td><td>3744</td></tr><tr><td>8640 min Summer</td><td>0.901</td><td>0.0</td><td>4488</td></tr></table>					Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status	15 min Summer	11.462	0.462	0.1	1.0	O K	30 min Summer	11.591	0.591	0.1	1.3	O K	60 min Summer	11.703	0.703	0.1	1.5	O K	120 min Summer	11.775	0.775	0.1	1.7	O K	180 min Summer	11.804	0.804	0.1	1.8	O K	240 min Summer	11.818	0.818	0.1	1.8	O K	360 min Summer	11.823	0.823	0.1	1.8	O K	480 min Summer	11.814	0.814	0.1	1.8	O K	600 min Summer	11.797	0.797	0.1	1.7	O K	720 min Summer	11.778	0.778	0.1	1.7	O K	960 min Summer	11.737	0.737	0.1	1.6	O K	1440 min Summer	11.663	0.663	0.1	1.5	O K	2160 min Summer	11.576	0.576	0.1	1.3	O K	2880 min Summer	11.512	0.512	0.1	1.1	O K	4320 min Summer	11.422	0.422	0.1	0.9	O K	5760 min Summer	11.362	0.362	0.1	0.8	O K	7200 min Summer	11.319	0.319	0.1	0.7	O K	8640 min Summer	11.286	0.286	0.0	0.6	O K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	80.329	0.0	18	30 min Summer	52.994	0.0	33	60 min Summer	33.604	0.0	62	120 min Summer	20.781	0.0	102	180 min Summer	15.558	0.0	134	240 min Summer	12.632	0.0	166	360 min Summer	9.410	0.0	236	480 min Summer	7.628	0.0	304	600 min Summer	6.479	0.0	370	720 min Summer	5.668	0.0	436	960 min Summer	4.587	0.0	568	1440 min Summer	3.402	0.0	824	2160 min Summer	2.521	0.0	1192	2880 min Summer	2.038	0.0	1560	4320 min Summer	1.508	0.0	2292	5760 min Summer	1.218	0.0	3008	7200 min Summer	1.032	0.0	3744	8640 min Summer	0.901	0.0	4488
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Date 24 August 2021 File SA1 calcs-10yr.SRCX		Designed by RTFC Checked by			
Micro Drainage		Source Control 2016.1			
<u>Summary of Results for 10 year Return Period (+40%)</u>					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m ³)	Status
10080 min Summer	11.259	0.259	0.0	0.6	O K
15 min Winter	11.518	0.518	0.1	1.1	O K
30 min Winter	11.663	0.663	0.1	1.5	O K
60 min Winter	11.792	0.792	0.1	1.7	O K
120 min Winter	11.872	0.872	0.1	1.9	O K
180 min Winter	11.899	0.899	0.1	2.0	O K
240 min Winter	11.907	0.907	0.1	2.0	O K
360 min Winter	11.896	0.896	0.1	2.0	O K
480 min Winter	11.869	0.869	0.1	1.9	O K
600 min Winter	11.837	0.837	0.1	1.8	O K
720 min Winter	11.805	0.805	0.1	1.8	O K
960 min Winter	11.743	0.743	0.1	1.6	O K
1440 min Winter	11.640	0.640	0.1	1.4	O K
2160 min Winter	11.530	0.530	0.1	1.2	O K
2880 min Winter	11.454	0.454	0.1	1.0	O K
4320 min Winter	11.355	0.355	0.1	0.8	O K
5760 min Winter	11.295	0.295	0.0	0.6	O K
7200 min Winter	11.254	0.254	0.0	0.6	O K
8640 min Winter	11.223	0.223	0.0	0.5	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m ³)	Time-Peak (mins)		
10080 min Summer	0.804	0.0	5152		
15 min Winter	80.329	0.0	18		
30 min Winter	52.994	0.0	32		
60 min Winter	33.604	0.0	60		
120 min Winter	20.781	0.0	112		
180 min Winter	15.558	0.0	140		
240 min Winter	12.632	0.0	178		
360 min Winter	9.410	0.0	252		
480 min Winter	7.628	0.0	326		
600 min Winter	6.479	0.0	396		
720 min Winter	5.668	0.0	464		
960 min Winter	4.587	0.0	598		
1440 min Winter	3.402	0.0	864		
2160 min Winter	2.521	0.0	1236		
2880 min Winter	2.038	0.0	1612		
4320 min Winter	1.508	0.0	2336		
5760 min Winter	1.218	0.0	3064		
7200 min Winter	1.032	0.0	3816		
8640 min Winter	0.901	0.0	4504		
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<u>Model Details</u> Storage is Online Cover Level (m) 12.900 <u>Lined Soakaway Structure</u> <table> <tr> <td>Infiltration Coefficient Base (m/hr)</td> <td>0.00000</td> <td>Ring Diameter (m)</td> <td>1.20</td> </tr> <tr> <td>Infiltration Coefficient Side (m/hr)</td> <td>0.20279</td> <td>Pit Multiplier</td> <td>1.8</td> </tr> <tr> <td>Safety Factor</td> <td>3.0</td> <td>Number Required</td> <td>1</td> </tr> <tr> <td>Porosity</td> <td>0.30</td> <td>Cap Volume Depth (m)</td> <td>0.000</td> </tr> <tr> <td>Invert Level (m)</td> <td>11.000</td> <td>Cap Infiltration Depth (m)</td> <td>1.300</td> </tr> </table>			Infiltration Coefficient Base (m/hr)	0.00000	Ring Diameter (m)	1.20	Infiltration Coefficient Side (m/hr)	0.20279	Pit Multiplier	1.8	Safety Factor	3.0	Number Required	1	Porosity	0.30	Cap Volume Depth (m)	0.000	Invert Level (m)	11.000	Cap Infiltration Depth (m)	1.300
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