

The Civil Engineering Practice					Page 1																																																																																																																																																																																																																			
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Summary of Results for 100 year Return Period (+40%) Half Drain Time : 103 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>14.841</td><td>1.341</td><td>0.4</td><td>2.6</td><td>O K</td></tr><tr><td>30 min Summer</td><td>15.248</td><td>1.748</td><td>0.4</td><td>3.3</td><td>O K</td></tr><tr><td>60 min Summer</td><td>15.548</td><td>2.048</td><td>0.4</td><td>3.8</td><td>O K</td></tr><tr><td>120 min Summer</td><td>15.641</td><td>2.141</td><td>0.4</td><td>4.0</td><td>O K</td></tr><tr><td>180 min Summer</td><td>15.592</td><td>2.092</td><td>0.4</td><td>3.9</td><td>O K</td></tr><tr><td>240 min Summer</td><td>15.495</td><td>1.995</td><td>0.4</td><td>3.7</td><td>O K</td></tr><tr><td>360 min Summer</td><td>15.287</td><td>1.787</td><td>0.4</td><td>3.4</td><td>O K</td></tr><tr><td>480 min 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min Summer</td><td>10.185</td><td>0.0</td><td>362</td></tr><tr><td>720 min Summer</td><td>8.854</td><td>0.0</td><td>426</td></tr><tr><td>960 min Summer</td><td>7.093</td><td>0.0</td><td>542</td></tr><tr><td>1440 min Summer</td><td>5.178</td><td>0.0</td><td>764</td></tr><tr><td>2160 min Summer</td><td>3.772</td><td>0.0</td><td>1104</td></tr><tr><td>2880 min Summer</td><td>3.009</td><td>0.0</td><td>1468</td></tr><tr><td>4320 min Summer</td><td>2.184</td><td>0.0</td><td>2204</td></tr><tr><td>5760 min Summer</td><td>1.738</td><td>0.0</td><td>2936</td></tr><tr><td>7200 min Summer</td><td>1.455</td><td>0.0</td><td>3672</td></tr><tr><td>8640 min Summer</td><td>1.260</td><td>0.0</td><td>4400</td></tr><tr><td>10080 min Summer</td><td>1.115</td><td>0.0</td><td>5136</td></tr><tr><td>15 min Winter</td><td>128.238</td><td>0.0</td><td>17</td></tr></tbody></table>							Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status	15 min Summer	14.841	1.341	0.4	2.6	O K	30 min Summer	15.248	1.748	0.4	3.3	O K	60 min Summer	15.548	2.048	0.4	3.8	O K	120 min Summer	15.641	2.141	0.4	4.0	O K	180 min Summer	15.592	2.092	0.4	3.9	O K	240 min Summer	15.495	1.995	0.4	3.7	O K	360 min Summer	15.287	1.787	0.4	3.4	O K	480 min Summer	15.079	1.579	0.4	3.0	O K	600 min Summer	14.881	1.381	0.4	2.7	O K	720 min Summer	14.696	1.196	0.4	2.3	O K	960 min Summer	14.381	0.881	0.4	1.8	O K	1440 min Summer	13.967	0.467	0.4	1.0	O K	2160 min Summer	13.801	0.301	0.4	0.7	O K	2880 min Summer	13.745	0.245	0.3	0.6	O K	4320 min Summer	13.681	0.181	0.2	0.4	O K	5760 min Summer	13.645	0.145	0.2	0.3	O K	7200 min Summer	13.622	0.122	0.1	0.3	O K	8640 min Summer	13.606	0.106	0.1	0.3	O K	10080 min Summer	13.593	0.093	0.1	0.2	O K	15 min Winter	15.033	1.533	0.4	2.9	O K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	128.238	0.0	18	30 min Summer	86.178	0.0	32	60 min Summer	55.250	0.0	60	120 min Summer	34.177	0.0	96	180 min Summer	25.410	0.0	128	240 min Summer	20.436	0.0	164	360 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Innovyze		Source Control 2020.1			
<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	15.506	2.006	0.4	3.8	O K
60 min Winter	15.877	2.377	0.4	4.4	Flood Risk
120 min Winter	15.992	2.492	0.4	4.6	Flood Risk
180 min Winter	15.916	2.416	0.4	4.5	Flood Risk
240 min Winter	15.772	2.272	0.4	4.2	Flood Risk
360 min Winter	15.448	1.948	0.4	3.7	O K
480 min Winter	15.120	1.620	0.4	3.1	O K
600 min Winter	14.812	1.312	0.4	2.5	O K
720 min Winter	14.534	1.034	0.4	2.0	O K
960 min Winter	14.091	0.591	0.4	1.3	O K
1440 min Winter	13.806	0.306	0.4	0.7	O K
2160 min Winter	13.726	0.226	0.3	0.5	O K
2880 min Winter	13.681	0.181	0.2	0.4	O K
4320 min Winter	13.632	0.132	0.2	0.3	O K
5760 min Winter	13.605	0.105	0.1	0.2	O K
7200 min Winter	13.588	0.088	0.1	0.2	O K
8640 min Winter	13.576	0.076	0.1	0.2	O K
10080 min Winter	13.568	0.068	0.1	0.2	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	86.178	0.0	32		
60 min Winter	55.250	0.0	60		
120 min Winter	34.177	0.0	112		
180 min Winter	25.410	0.0	140		
240 min Winter	20.436	0.0	178		
360 min Winter	15.037	0.0	252		
480 min Winter	12.081	0.0	320		
600 min Winter	10.185	0.0	386		
720 min Winter	8.854	0.0	448		
960 min Winter	7.093	0.0	556		
1440 min Winter	5.178	0.0	750		
2160 min Winter	3.772	0.0	1108		
2880 min Winter	3.009	0.0	1472		
4320 min Winter	2.184	0.0	2204		
5760 min Winter	1.738	0.0	2928		
7200 min Winter	1.455	0.0	3672		
8640 min Winter	1.260	0.0	4408		
10080 min Winter	1.115	0.0	5136		
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<u>Model Details</u> Storage is Online Cover Level (m) 16.000 <u>Lined Soakaway Structure</u> <table> <tr> <td>Infiltration Coefficient Base (m/hr)</td> <td>0.00000</td> <td>Ring Diameter (m)</td> <td>1.50</td> </tr> <tr> <td>Infiltration Coefficient Side (m/hr)</td> <td>2.16000</td> <td>Pit Multiplier</td> <td>1.3</td> </tr> <tr> <td>Safety Factor</td> <td>4.0</td> <td>Number Required</td> <td>1</td> </tr> <tr> <td>Porosity</td> <td>0.30</td> <td>Cap Volume Depth (m)</td> <td>2.500</td> </tr> <tr> <td>Invert Level (m)</td> <td>13.500</td> <td>Cap Infiltration Depth (m)</td> <td>0.350</td> </tr> </table>			Infiltration Coefficient Base (m/hr)	0.00000	Ring Diameter (m)	1.50	Infiltration Coefficient Side (m/hr)	2.16000	Pit Multiplier	1.3	Safety Factor	4.0	Number Required	1	Porosity	0.30	Cap Volume Depth (m)	2.500	Invert Level (m)	13.500	Cap Infiltration Depth (m)	0.350
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