

MJA Consulting				Page 1																																																																																																																																																																																																																			
Monarch House Barton Lane OX14 3NB		Plots 67, 68, 70 - 73																																																																																																																																																																																																																					
Date 08/03/2018 10:49 File TRENCH SA PLOTS 55,74,7...		Designed by chrisp Checked by																																																																																																																																																																																																																					
Innovyze		Source Control 2017.1.2																																																																																																																																																																																																																					
<u>Summary of Results for 100 year Return Period (+40%)</u> Half Drain Time : 110 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>99.427</td><td>0.427</td><td>0.3</td><td>2.3</td><td>O K</td></tr><tr><td>30 min Summer</td><td>99.546</td><td>0.546</td><td>0.3</td><td>3.0</td><td>O K</td></tr><tr><td>60 min Summer</td><td>99.635</td><td>0.635</td><td>0.4</td><td>3.4</td><td>O K</td></tr><tr><td>120 min Summer</td><td>99.665</td><td>0.665</td><td>0.4</td><td>3.6</td><td>O K</td></tr><tr><td>180 min Summer</td><td>99.656</td><td>0.656</td><td>0.4</td><td>3.5</td><td>O K</td></tr><tr><td>240 min Summer</td><td>99.636</td><td>0.636</td><td>0.4</td><td>3.4</td><td>O K</td></tr><tr><td>360 min Summer</td><td>99.594</td><td>0.594</td><td>0.3</td><td>3.2</td><td>O K</td></tr><tr><td>480 min Summer</td><td>99.553</td><td>0.553</td><td>0.3</td><td>3.0</td><td>O K</td></tr><tr><td>600 min Summer</td><td>99.513</td><td>0.513</td><td>0.3</td><td>2.8</td><td>O K</td></tr><tr><td>720 min Summer</td><td>99.476</td><td>0.476</td><td>0.3</td><td>2.6</td><td>O K</td></tr><tr><td>960 min Summer</td><td>99.408</td><td>0.408</td><td>0.3</td><td>2.2</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>99.299</td><td>0.299</td><td>0.3</td><td>1.6</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>99.184</td><td>0.184</td><td>0.2</td><td>1.0</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>99.108</td><td>0.108</td><td>0.2</td><td>0.6</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>99.048</td><td>0.048</td><td>0.2</td><td>0.3</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>99.038</td><td>0.038</td><td>0.1</td><td>0.2</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>99.032</td><td>0.032</td><td>0.1</td><td>0.2</td><td>O K</td></tr><tr><td>8640 min Summer</td><td>99.028</td><td>0.028</td><td>0.1</td><td>0.1</td><td>O K</td></tr><tr><td>10080 min Summer</td><td>99.025</td><td>0.025</td><td>0.1</td><td>0.1</td><td>O K</td></tr><tr><td>15 min Winter</td><td>99.482</td><td>0.482</td><td>0.3</td><td>2.6</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>134.746</td><td>0.0</td><td>18</td></tr><tr><td>30 min Summer</td><td>90.474</td><td>0.0</td><td>32</td></tr><tr><td>60 min Summer</td><td>57.877</td><td>0.0</td><td>60</td></tr><tr><td>120 min Summer</td><td>35.655</td><td>0.0</td><td>96</td></tr><tr><td>180 min Summer</td><td>26.413</td><td>0.0</td><td>128</td></tr><tr><td>240 min Summer</td><td>21.237</td><td>0.0</td><td>164</td></tr><tr><td>360 min Summer</td><td>15.626</td><td>0.0</td><td>232</td></tr><tr><td>480 min Summer</td><td>12.548</td><td>0.0</td><td>300</td></tr><tr><td>600 min Summer</td><td>10.575</td><td>0.0</td><td>368</td></tr><tr><td>720 min Summer</td><td>9.191</td><td>0.0</td><td>434</td></tr><tr><td>960 min Summer</td><td>7.358</td><td>0.0</td><td>562</td></tr><tr><td>1440 min Summer</td><td>5.368</td><td>0.0</td><td>810</td></tr><tr><td>2160 min Summer</td><td>3.907</td><td>0.0</td><td>1168</td></tr><tr><td>2880 min Summer</td><td>3.115</td><td>0.0</td><td>1528</td></tr><tr><td>4320 min Summer</td><td>2.259</td><td>0.0</td><td>2196</td></tr><tr><td>5760 min Summer</td><td>1.796</td><td>0.0</td><td>2936</td></tr><tr><td>7200 min Summer</td><td>1.506</td><td>0.0</td><td>3672</td></tr><tr><td>8640 min Summer</td><td>1.304</td><td>0.0</td><td>4400</td></tr><tr><td>10080 min Summer</td><td>1.154</td><td>0.0</td><td>5112</td></tr><tr><td>15 min Winter</td><td>134.746</td><td>0.0</td><td>18</td></tr></table>						Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status	15 min Summer	99.427	0.427	0.3	2.3	O K	30 min Summer	99.546	0.546	0.3	3.0	O K	60 min Summer	99.635	0.635	0.4	3.4	O K	120 min Summer	99.665	0.665	0.4	3.6	O K	180 min Summer	99.656	0.656	0.4	3.5	O K	240 min Summer	99.636	0.636	0.4	3.4	O K	360 min Summer	99.594	0.594	0.3	3.2	O K	480 min Summer	99.553	0.553	0.3	3.0	O K	600 min Summer	99.513	0.513	0.3	2.8	O K	720 min Summer	99.476	0.476	0.3	2.6	O K	960 min Summer	99.408	0.408	0.3	2.2	O K	1440 min Summer	99.299	0.299	0.3	1.6	O K	2160 min Summer	99.184	0.184	0.2	1.0	O K	2880 min Summer	99.108	0.108	0.2	0.6	O K	4320 min Summer	99.048	0.048	0.2	0.3	O K	5760 min Summer	99.038	0.038	0.1	0.2	O K	7200 min Summer	99.032	0.032	0.1	0.2	O K	8640 min Summer	99.028	0.028	0.1	0.1	O K	10080 min Summer	99.025	0.025	0.1	0.1	O K	15 min Winter	99.482	0.482	0.3	2.6	O K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	134.746	0.0	18	30 min Summer	90.474	0.0	32	60 min Summer	57.877	0.0	60	120 min Summer	35.655	0.0	96	180 min Summer	26.413	0.0	128	240 min Summer	21.237	0.0	164	360 min Summer	15.626	0.0	232	480 min Summer	12.548	0.0	300	600 min Summer	10.575	0.0	368	720 min Summer	9.191	0.0	434	960 min Summer	7.358	0.0	562	1440 min Summer	5.368	0.0	810	2160 min Summer	3.907	0.0	1168	2880 min Summer	3.115	0.0	1528	4320 min Summer	2.259	0.0	2196	5760 min Summer	1.796	0.0	2936	7200 min Summer	1.506	0.0	3672	8640 min Summer	1.304	0.0	4400	10080 min Summer	1.154	0.0	5112	15 min Winter	134.746	0.0	18
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status																																																																																																																																																																																																																		
15 min Summer	99.427	0.427	0.3	2.3	O K																																																																																																																																																																																																																		
30 min Summer	99.546	0.546	0.3	3.0	O K																																																																																																																																																																																																																		
60 min Summer	99.635	0.635	0.4	3.4	O K																																																																																																																																																																																																																		
120 min Summer	99.665	0.665	0.4	3.6	O K																																																																																																																																																																																																																		
180 min Summer	99.656	0.656	0.4	3.5	O K																																																																																																																																																																																																																		
240 min Summer	99.636	0.636	0.4	3.4	O K																																																																																																																																																																																																																		
360 min Summer	99.594	0.594	0.3	3.2	O K																																																																																																																																																																																																																		
480 min Summer	99.553	0.553	0.3	3.0	O K																																																																																																																																																																																																																		
600 min Summer	99.513	0.513	0.3	2.8	O K																																																																																																																																																																																																																		
720 min Summer	99.476	0.476	0.3	2.6	O K																																																																																																																																																																																																																		
960 min Summer	99.408	0.408	0.3	2.2	O K																																																																																																																																																																																																																		
1440 min Summer	99.299	0.299	0.3	1.6	O K																																																																																																																																																																																																																		
2160 min Summer	99.184	0.184	0.2	1.0	O K																																																																																																																																																																																																																		
2880 min Summer	99.108	0.108	0.2	0.6	O K																																																																																																																																																																																																																		
4320 min Summer	99.048	0.048	0.2	0.3	O K																																																																																																																																																																																																																		
5760 min Summer	99.038	0.038	0.1	0.2	O K																																																																																																																																																																																																																		
7200 min Summer	99.032	0.032	0.1	0.2	O K																																																																																																																																																																																																																		
8640 min Summer	99.028	0.028	0.1	0.1	O K																																																																																																																																																																																																																		
10080 min Summer	99.025	0.025	0.1	0.1	O K																																																																																																																																																																																																																		
15 min Winter	99.482	0.482	0.3	2.6	O K																																																																																																																																																																																																																		
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)																																																																																																																																																																																																																				
15 min Summer	134.746	0.0	18																																																																																																																																																																																																																				
30 min Summer	90.474	0.0	32																																																																																																																																																																																																																				
60 min Summer	57.877	0.0	60																																																																																																																																																																																																																				
120 min Summer	35.655	0.0	96																																																																																																																																																																																																																				
180 min Summer	26.413	0.0	128																																																																																																																																																																																																																				
240 min Summer	21.237	0.0	164																																																																																																																																																																																																																				
360 min Summer	15.626	0.0	232																																																																																																																																																																																																																				
480 min Summer	12.548	0.0	300																																																																																																																																																																																																																				
600 min Summer	10.575	0.0	368																																																																																																																																																																																																																				
720 min Summer	9.191	0.0	434																																																																																																																																																																																																																				
960 min Summer	7.358	0.0	562																																																																																																																																																																																																																				
1440 min Summer	5.368	0.0	810																																																																																																																																																																																																																				
2160 min Summer	3.907	0.0	1168																																																																																																																																																																																																																				
2880 min Summer	3.115	0.0	1528																																																																																																																																																																																																																				
4320 min Summer	2.259	0.0	2196																																																																																																																																																																																																																				
5760 min Summer	1.796	0.0	2936																																																																																																																																																																																																																				
7200 min Summer	1.506	0.0	3672																																																																																																																																																																																																																				
8640 min Summer	1.304	0.0	4400																																																																																																																																																																																																																				
10080 min Summer	1.154	0.0	5112																																																																																																																																																																																																																				
15 min Winter	134.746	0.0	18																																																																																																																																																																																																																				
©1982-2017 XP Solutions																																																																																																																																																																																																																							

MJA Consulting		Page 2																																																																																																																																																																																														
Monarch House Barton Lane OX14 3NB	Plots 67, 68, 70 - 73																																																																																																																																																																																															
Date 08/03/2018 10:49 File TRENCH SA PLOTS 55,74,7...	Designed by chrisp Checked by																																																																																																																																																																																															
Innovyze	Source Control 2017.1.2																																																																																																																																																																																															
<u>Summary of Results for 100 year Return Period (+40%)</u> <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>30 min Winter</td><td>99.619</td><td>0.619</td><td>0.3</td><td>3.3</td><td>O K</td></tr><tr><td>60 min Winter</td><td>99.726</td><td>0.726</td><td>0.4</td><td>3.9</td><td>O K</td></tr><tr><td>120 min Winter</td><td>99.763</td><td>0.763</td><td>0.4</td><td>4.1</td><td>O K</td></tr><tr><td>180 min Winter</td><td>99.751</td><td>0.751</td><td>0.4</td><td>4.1</td><td>O K</td></tr><tr><td>240 min Winter</td><td>99.722</td><td>0.722</td><td>0.4</td><td>3.9</td><td>O K</td></tr><tr><td>360 min Winter</td><td>99.658</td><td>0.658</td><td>0.4</td><td>3.6</td><td>O K</td></tr><tr><td>480 min Winter</td><td>99.595</td><td>0.595</td><td>0.3</td><td>3.2</td><td>O K</td></tr><tr><td>600 min Winter</td><td>99.536</td><td>0.536</td><td>0.3</td><td>2.9</td><td>O K</td></tr><tr><td>720 min Winter</td><td>99.482</td><td>0.482</td><td>0.3</td><td>2.6</td><td>O K</td></tr><tr><td>960 min Winter</td><td>99.387</td><td>0.387</td><td>0.3</td><td>2.1</td><td>O K</td></tr><tr><td>1440 min Winter</td><td>99.241</td><td>0.241</td><td>0.2</td><td>1.3</td><td>O K</td></tr><tr><td>2160 min Winter</td><td>99.101</td><td>0.101</td><td>0.2</td><td>0.5</td><td>O K</td></tr><tr><td>2880 min Winter</td><td>99.047</td><td>0.047</td><td>0.2</td><td>0.3</td><td>O K</td></tr><tr><td>4320 min Winter</td><td>99.035</td><td>0.035</td><td>0.1</td><td>0.2</td><td>O K</td></tr><tr><td>5760 min Winter</td><td>99.028</td><td>0.028</td><td>0.1</td><td>0.1</td><td>O K</td></tr><tr><td>7200 min Winter</td><td>99.023</td><td>0.023</td><td>0.1</td><td>0.1</td><td>O K</td></tr><tr><td>8640 min Winter</td><td>99.020</td><td>0.020</td><td>0.1</td><td>0.1</td><td>O K</td></tr><tr><td>10080 min Winter</td><td>99.018</td><td>0.018</td><td>0.1</td><td>0.1</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>30 min Winter</td><td>90.474</td><td>0.0</td><td>32</td></tr><tr><td>60 min Winter</td><td>57.877</td><td>0.0</td><td>60</td></tr><tr><td>120 min Winter</td><td>35.655</td><td>0.0</td><td>100</td></tr><tr><td>180 min Winter</td><td>26.413</td><td>0.0</td><td>138</td></tr><tr><td>240 min Winter</td><td>21.237</td><td>0.0</td><td>176</td></tr><tr><td>360 min Winter</td><td>15.626</td><td>0.0</td><td>250</td></tr><tr><td>480 min Winter</td><td>12.548</td><td>0.0</td><td>324</td></tr><tr><td>600 min Winter</td><td>10.575</td><td>0.0</td><td>392</td></tr><tr><td>720 min Winter</td><td>9.191</td><td>0.0</td><td>462</td></tr><tr><td>960 min Winter</td><td>7.358</td><td>0.0</td><td>596</td></tr><tr><td>1440 min Winter</td><td>5.368</td><td>0.0</td><td>850</td></tr><tr><td>2160 min Winter</td><td>3.907</td><td>0.0</td><td>1192</td></tr><tr><td>2880 min Winter</td><td>3.115</td><td>0.0</td><td>1468</td></tr><tr><td>4320 min Winter</td><td>2.259</td><td>0.0</td><td>2184</td></tr><tr><td>5760 min Winter</td><td>1.796</td><td>0.0</td><td>2896</td></tr><tr><td>7200 min Winter</td><td>1.506</td><td>0.0</td><td>3640</td></tr><tr><td>8640 min Winter</td><td>1.304</td><td>0.0</td><td>4336</td></tr><tr><td>10080 min Winter</td><td>1.154</td><td>0.0</td><td>5088</td></tr></table>			Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status	30 min Winter	99.619	0.619	0.3	3.3	O K	60 min Winter	99.726	0.726	0.4	3.9	O K	120 min Winter	99.763	0.763	0.4	4.1	O K	180 min Winter	99.751	0.751	0.4	4.1	O K	240 min Winter	99.722	0.722	0.4	3.9	O K	360 min Winter	99.658	0.658	0.4	3.6	O K	480 min Winter	99.595	0.595	0.3	3.2	O K	600 min Winter	99.536	0.536	0.3	2.9	O K	720 min Winter	99.482	0.482	0.3	2.6	O K	960 min Winter	99.387	0.387	0.3	2.1	O K	1440 min Winter	99.241	0.241	0.2	1.3	O K	2160 min Winter	99.101	0.101	0.2	0.5	O K	2880 min Winter	99.047	0.047	0.2	0.3	O K	4320 min Winter	99.035	0.035	0.1	0.2	O K	5760 min Winter	99.028	0.028	0.1	0.1	O K	7200 min Winter	99.023	0.023	0.1	0.1	O K	8640 min Winter	99.020	0.020	0.1	0.1	O K	10080 min Winter	99.018	0.018	0.1	0.1	O K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	30 min Winter	90.474	0.0	32	60 min Winter	57.877	0.0	60	120 min Winter	35.655	0.0	100	180 min Winter	26.413	0.0	138	240 min Winter	21.237	0.0	176	360 min Winter	15.626	0.0	250	480 min Winter	12.548	0.0	324	600 min Winter	10.575	0.0	392	720 min Winter	9.191	0.0	462	960 min Winter	7.358	0.0	596	1440 min Winter	5.368	0.0	850	2160 min Winter	3.907	0.0	1192	2880 min Winter	3.115	0.0	1468	4320 min Winter	2.259	0.0	2184	5760 min Winter	1.796	0.0	2896	7200 min Winter	1.506	0.0	3640	8640 min Winter	1.304	0.0	4336	10080 min Winter	1.154	0.0	5088
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status																																																																																																																																																																																											
30 min Winter	99.619	0.619	0.3	3.3	O K																																																																																																																																																																																											
60 min Winter	99.726	0.726	0.4	3.9	O K																																																																																																																																																																																											
120 min Winter	99.763	0.763	0.4	4.1	O K																																																																																																																																																																																											
180 min Winter	99.751	0.751	0.4	4.1	O K																																																																																																																																																																																											
240 min Winter	99.722	0.722	0.4	3.9	O K																																																																																																																																																																																											
360 min Winter	99.658	0.658	0.4	3.6	O K																																																																																																																																																																																											
480 min Winter	99.595	0.595	0.3	3.2	O K																																																																																																																																																																																											
600 min Winter	99.536	0.536	0.3	2.9	O K																																																																																																																																																																																											
720 min Winter	99.482	0.482	0.3	2.6	O K																																																																																																																																																																																											
960 min Winter	99.387	0.387	0.3	2.1	O K																																																																																																																																																																																											
1440 min Winter	99.241	0.241	0.2	1.3	O K																																																																																																																																																																																											
2160 min Winter	99.101	0.101	0.2	0.5	O K																																																																																																																																																																																											
2880 min Winter	99.047	0.047	0.2	0.3	O K																																																																																																																																																																																											
4320 min Winter	99.035	0.035	0.1	0.2	O K																																																																																																																																																																																											
5760 min Winter	99.028	0.028	0.1	0.1	O K																																																																																																																																																																																											
7200 min Winter	99.023	0.023	0.1	0.1	O K																																																																																																																																																																																											
8640 min Winter	99.020	0.020	0.1	0.1	O K																																																																																																																																																																																											
10080 min Winter	99.018	0.018	0.1	0.1	O K																																																																																																																																																																																											
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)																																																																																																																																																																																													
30 min Winter	90.474	0.0	32																																																																																																																																																																																													
60 min Winter	57.877	0.0	60																																																																																																																																																																																													
120 min Winter	35.655	0.0	100																																																																																																																																																																																													
180 min Winter	26.413	0.0	138																																																																																																																																																																																													
240 min Winter	21.237	0.0	176																																																																																																																																																																																													
360 min Winter	15.626	0.0	250																																																																																																																																																																																													
480 min Winter	12.548	0.0	324																																																																																																																																																																																													
600 min Winter	10.575	0.0	392																																																																																																																																																																																													
720 min Winter	9.191	0.0	462																																																																																																																																																																																													
960 min Winter	7.358	0.0	596																																																																																																																																																																																													
1440 min Winter	5.368	0.0	850																																																																																																																																																																																													
2160 min Winter	3.907	0.0	1192																																																																																																																																																																																													
2880 min Winter	3.115	0.0	1468																																																																																																																																																																																													
4320 min Winter	2.259	0.0	2184																																																																																																																																																																																													
5760 min Winter	1.796	0.0	2896																																																																																																																																																																																													
7200 min Winter	1.506	0.0	3640																																																																																																																																																																																													
8640 min Winter	1.304	0.0	4336																																																																																																																																																																																													
10080 min Winter	1.154	0.0	5088																																																																																																																																																																																													
©1982-2017 XP Solutions																																																																																																																																																																																																

ARUN DISTRICT COUNCIL AL/28/18/DOC

MJA Consulting		Page 4
Monarch House Barton Lane OX14 3NB	Plots 67, 68, 70 - 73	
Date 08/03/2018 10:49 File TRENCH SA PLOTS 55,74,7...	Designed by chrisp Checked by	
Innovyze	Source Control 2017.1.2	

Model Details

Storage is Online Cover Level (m) 100.000

Trench Soakaway Structure

Infiltration Coefficient Base (m/hr) 0.07200	Trench Width (m) 1.5
Infiltration Coefficient Side (m/hr) 0.07200	Trench Length (m) 12.0
Safety Factor 2.0	Slope (1:X) 0.0
Porosity 0.30	Cap Volume Depth (m) 0.000
Invert Level (m) 99.000	Cap Infiltration Depth (m) 0.000

©1982-2017 XP Solutions