

The Civil Engineering Practice					Page 1																																																																																																																																																																																																																		
11 Tungsten Building George Street Fishersgate BN41 1RA			Manor Nursery Angmering West Sussex																																																																																																																																																																																																																				
Date 27/06/2019 File Soakaway 6.SRCX			Designed by S Burgess Checked by SRD																																																																																																																																																																																																																				
Innovyze			Source Control 2017.1.2																																																																																																																																																																																																																				
Summary of Results for 100 year Return Period (+40%) Half Drain Time : 249 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>13.900</td><td>0.700</td><td>2.1</td><td>27.9</td><td>O K</td></tr><tr><td>30 min Summer</td><td>14.126</td><td>0.926</td><td>2.1</td><td>36.9</td><td>O K</td></tr><tr><td>60 min Summer</td><td>14.343</td><td>1.143</td><td>2.1</td><td>45.6</td><td>O K</td></tr><tr><td>120 min Summer</td><td>14.515</td><td>1.315</td><td>2.1</td><td>52.5</td><td>O K</td></tr><tr><td>180 min Summer</td><td>14.564</td><td>1.364</td><td>2.1</td><td>54.4</td><td>O K</td></tr><tr><td>240 min Summer</td><td>14.568</td><td>1.368</td><td>2.1</td><td>54.6</td><td>O K</td></tr><tr><td>360 min Summer</td><td>14.559</td><td>1.359</td><td>2.1</td><td>54.2</td><td>O K</td></tr><tr><td>480 min Summer</td><td>14.533</td><td>1.333</td><td>2.1</td><td>53.2</td><td>O K</td></tr><tr><td>600 min Summer</td><td>14.496</td><td>1.296</td><td>2.1</td><td>51.7</td><td>O K</td></tr><tr><td>720 min Summer</td><td>14.454</td><td>1.254</td><td>2.1</td><td>50.0</td><td>O K</td></tr><tr><td>960 min Summer</td><td>14.363</td><td>1.163</td><td>2.1</td><td>46.4</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>14.185</td><td>0.985</td><td>2.1</td><td>39.3</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>13.958</td><td>0.758</td><td>2.1</td><td>30.3</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>13.794</td><td>0.594</td><td>2.1</td><td>23.7</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>13.644</td><td>0.444</td><td>1.9</td><td>17.7</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>13.570</td><td>0.370</td><td>1.6</td><td>14.8</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>13.518</td><td>0.318</td><td>1.3</td><td>12.7</td><td>O K</td></tr><tr><td>8640 min Summer</td><td>13.482</td><td>0.282</td><td>1.2</td><td>11.2</td><td>O K</td></tr><tr><td>10080 min Summer</td><td>13.453</td><td>0.253</td><td>1.1</td><td>10.1</td><td>O K</td></tr><tr><td>15 min Winter</td><td>13.988</td><td>0.788</td><td>2.1</td><td>31.4</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>128.238</td><td>0.0</td><td>20</td></tr><tr><td>30 min Summer</td><td>86.178</td><td>0.0</td><td>34</td></tr><tr><td>60 min Summer</td><td>55.250</td><td>0.0</td><td>64</td></tr><tr><td>120 min Summer</td><td>34.177</td><td>0.0</td><td>122</td></tr><tr><td>180 min Summer</td><td>25.410</td><td>0.0</td><td>180</td></tr><tr><td>240 min Summer</td><td>20.436</td><td>0.0</td><td>208</td></tr><tr><td>360 min Summer</td><td>15.037</td><td>0.0</td><td>270</td></tr><tr><td>480 min Summer</td><td>12.081</td><td>0.0</td><td>336</td></tr><tr><td>600 min Summer</td><td>10.185</td><td>0.0</td><td>404</td></tr><tr><td>720 min Summer</td><td>8.854</td><td>0.0</td><td>472</td></tr><tr><td>960 min Summer</td><td>7.093</td><td>0.0</td><td>608</td></tr><tr><td>1440 min Summer</td><td>5.178</td><td>0.0</td><td>868</td></tr><tr><td>2160 min Summer</td><td>3.772</td><td>0.0</td><td>1236</td></tr><tr><td>2880 min Summer</td><td>3.009</td><td>0.0</td><td>1584</td></tr><tr><td>4320 min Summer</td><td>2.184</td><td>0.0</td><td>2252</td></tr><tr><td>5760 min Summer</td><td>1.738</td><td>0.0</td><td>2992</td></tr><tr><td>7200 min Summer</td><td>1.455</td><td>0.0</td><td>3680</td></tr><tr><td>8640 min Summer</td><td>1.260</td><td>0.0</td><td>4416</td></tr><tr><td>10080 min Summer</td><td>1.115</td><td>0.0</td><td>5144</td></tr><tr><td>15 min Winter</td><td>128.238</td><td>0.0</td><td>21</td></tr></table>						Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status	15 min Summer	13.900	0.700	2.1	27.9	O K	30 min Summer	14.126	0.926	2.1	36.9	O K	60 min Summer	14.343	1.143	2.1	45.6	O K	120 min Summer	14.515	1.315	2.1	52.5	O K	180 min Summer	14.564	1.364	2.1	54.4	O K	240 min Summer	14.568	1.368	2.1	54.6	O K	360 min Summer	14.559	1.359	2.1	54.2	O K	480 min Summer	14.533	1.333	2.1	53.2	O K	600 min Summer	14.496	1.296	2.1	51.7	O K	720 min Summer	14.454	1.254	2.1	50.0	O K	960 min Summer	14.363	1.163	2.1	46.4	O K	1440 min Summer	14.185	0.985	2.1	39.3	O K	2160 min Summer	13.958	0.758	2.1	30.3	O K	2880 min Summer	13.794	0.594	2.1	23.7	O K	4320 min Summer	13.644	0.444	1.9	17.7	O K	5760 min Summer	13.570	0.370	1.6	14.8	O K	7200 min Summer	13.518	0.318	1.3	12.7	O K	8640 min Summer	13.482	0.282	1.2	11.2	O K	10080 min Summer	13.453	0.253	1.1	10.1	O K	15 min Winter	13.988	0.788	2.1	31.4	O K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	128.238	0.0	20	30 min Summer	86.178	0.0	34	60 min Summer	55.250	0.0	64	120 min Summer	34.177	0.0	122	180 min Summer	25.410	0.0	180	240 min 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11 Tungsten Building George Street Fishersgate BN41 1RA		Manor Nursery Angmering West Sussex			
Date 27/06/2019 File Soakaway 6.SRCX		Designed by S Burgess Checked by SRD			
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	14.243	1.043	2.1	41.6	O K
60 min Winter	14.494	1.294	2.1	51.6	O K
120 min Winter	14.699	1.499	2.1	59.8	O K
180 min Winter	14.767	1.567	2.1	62.5	O K
240 min Winter	14.777	1.577	2.1	62.9	O K
360 min Winter	14.749	1.549	2.1	61.8	O K
480 min Winter	14.708	1.508	2.1	60.2	O K
600 min Winter	14.650	1.450	2.1	57.9	O K
720 min Winter	14.584	1.384	2.1	55.2	O K
960 min Winter	14.443	1.243	2.1	49.6	O K
1440 min Winter	14.166	0.966	2.1	38.6	O K
2160 min Winter	13.839	0.639	2.1	25.5	O K
2880 min Winter	13.677	0.477	2.0	19.0	O K
4320 min Winter	13.559	0.359	1.5	14.3	O K
5760 min Winter	13.491	0.291	1.2	11.6	O K
7200 min Winter	13.446	0.246	1.0	9.8	O K
8640 min Winter	13.414	0.214	0.9	8.5	O K
10080 min Winter	13.390	0.190	0.8	7.6	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	86.178	0.0	34		
60 min Winter	55.250	0.0	62		
120 min Winter	34.177	0.0	120		
180 min Winter	25.410	0.0	176		
240 min Winter	20.436	0.0	230		
360 min Winter	15.037	0.0	290		
480 min Winter	12.081	0.0	366		
600 min Winter	10.185	0.0	442		
720 min Winter	8.854	0.0	516		
960 min Winter	7.093	0.0	660		
1440 min Winter	5.178	0.0	926		
2160 min Winter	3.772	0.0	1276		
2880 min Winter	3.009	0.0	1560		
4320 min Winter	2.184	0.0	2292		
5760 min Winter	1.738	0.0	3000		
7200 min Winter	1.455	0.0	3744		
8640 min Winter	1.260	0.0	4488		
10080 min Winter	1.115	0.0	5152		
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11 Tungsten Building
George Street
Fishersgate BN41 1RA

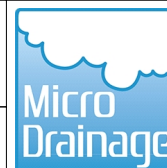
Manor Nursery
Angmering
West Sussex

Date	27/06/2019
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Designed by S Burgess

File Soakaway 6.SRCX

Checked by SRD



Innovyze

Source Control 2017.1.2

Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	19.500	Shortest Storm (mins)	15
Ratio R	0.350	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.062

Time (mins)	Area	Time (mins)	Area
From: To:	(ha)	From: To:	(ha)
0 4	0.044	4 8	0.018

Time Area Diagram

Total Area (ha) 0.061

Time (mins)	Area	Time (mins)	Area
From: To:	(ha)	From: To:	(ha)
0 4	0.047	4 8	0.014

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<u>Model Details</u> Storage is Online Cover Level (m) 16.000 <u>Infiltration Trench Structure</u> <table> <tr> <td>Infiltration Coefficient Base (m/hr)</td> <td>0.00000</td> <td>Trench Width (m)</td> <td>3.0</td> </tr> <tr> <td>Infiltration Coefficient Side (m/hr)</td> <td>0.89280</td> <td>Trench Length (m)</td> <td>14.0</td> </tr> <tr> <td>Safety Factor</td> <td>2.0</td> <td>Slope (1:X)</td> <td>0.0</td> </tr> <tr> <td>Porosity</td> <td>0.95</td> <td>Cap Volume Depth (m)</td> <td>1.600</td> </tr> <tr> <td>Invert Level (m)</td> <td>13.200</td> <td>Cap Infiltration Depth (m)</td> <td>0.500</td> </tr> </table>			Infiltration Coefficient Base (m/hr)	0.00000	Trench Width (m)	3.0	Infiltration Coefficient Side (m/hr)	0.89280	Trench Length (m)	14.0	Safety Factor	2.0	Slope (1:X)	0.0	Porosity	0.95	Cap Volume Depth (m)	1.600	Invert Level (m)	13.200	Cap Infiltration Depth (m)	0.500
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