

Cotswold Transport Planning				Page 1																																																																																																																																																																																																																			
CTP House, Knapp Road Cheltenham Gloucestershire, GL50 3QQ		Mounon Road Chepstow Basin 3																																																																																																																																																																																																																					
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<u>Summary of Results for 100 year Return Period (+40%)</u> Half Drain Time : 90 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>0.423</td><td>0.423</td><td>31.3</td><td>201.3</td><td>O K</td></tr><tr><td>30 min Summer</td><td>0.542</td><td>0.542</td><td>34.7</td><td>267.1</td><td>O K</td></tr><tr><td>60 min Summer</td><td>0.633</td><td>0.633</td><td>37.4</td><td>320.3</td><td>O K</td></tr><tr><td>120 min Summer</td><td>0.671</td><td>0.671</td><td>38.5</td><td>343.5</td><td>O K</td></tr><tr><td>180 min Summer</td><td>0.667</td><td>0.667</td><td>38.4</td><td>341.0</td><td>O K</td></tr><tr><td>240 min Summer</td><td>0.654</td><td>0.654</td><td>38.0</td><td>332.6</td><td>O K</td></tr><tr><td>360 min Summer</td><td>0.620</td><td>0.620</td><td>37.0</td><td>312.7</td><td>O K</td></tr><tr><td>480 min Summer</td><td>0.585</td><td>0.585</td><td>36.0</td><td>291.8</td><td>O K</td></tr><tr><td>600 min Summer</td><td>0.549</td><td>0.549</td><td>35.0</td><td>271.2</td><td>O K</td></tr><tr><td>720 min Summer</td><td>0.515</td><td>0.515</td><td>34.0</td><td>251.5</td><td>O K</td></tr><tr><td>960 min Summer</td><td>0.450</td><td>0.450</td><td>32.1</td><td>215.5</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>0.339</td><td>0.339</td><td>28.9</td><td>157.0</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>0.214</td><td>0.214</td><td>25.4</td><td>95.4</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>0.127</td><td>0.127</td><td>23.1</td><td>55.0</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>0.049</td><td>0.049</td><td>20.4</td><td>20.6</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>0.039</td><td>0.039</td><td>16.3</td><td>16.6</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>0.033</td><td>0.033</td><td>13.8</td><td>14.1</td><td>O K</td></tr><tr><td>8640 min 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Summer</td><td>13.176</td><td>0.0</td><td>302</td></tr><tr><td>600 min Summer</td><td>11.178</td><td>0.0</td><td>370</td></tr><tr><td>720 min Summer</td><td>9.765</td><td>0.0</td><td>434</td></tr><tr><td>960 min Summer</td><td>7.881</td><td>0.0</td><td>564</td></tr><tr><td>1440 min Summer</td><td>5.811</td><td>0.0</td><td>812</td></tr><tr><td>2160 min Summer</td><td>4.273</td><td>0.0</td><td>1172</td></tr><tr><td>2880 min Summer</td><td>3.430</td><td>0.0</td><td>1528</td></tr><tr><td>4320 min Summer</td><td>2.516</td><td>0.0</td><td>2196</td></tr><tr><td>5760 min Summer</td><td>2.021</td><td>0.0</td><td>2936</td></tr><tr><td>7200 min Summer</td><td>1.706</td><td>0.0</td><td>3672</td></tr><tr><td>8640 min Summer</td><td>1.486</td><td>0.0</td><td>4312</td></tr><tr><td>10080 min Summer</td><td>1.323</td><td>0.0</td><td>5104</td></tr><tr><td>15 min Winter</td><td>125.216</td><td>0.0</td><td>23</td></tr></tbody></table>						Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status	15 min Summer	0.423	0.423	31.3	201.3	O K	30 min Summer	0.542	0.542	34.7	267.1	O K	60 min Summer	0.633	0.633	37.4	320.3	O K	120 min Summer	0.671	0.671	38.5	343.5	O K	180 min Summer	0.667	0.667	38.4	341.0	O K	240 min Summer	0.654	0.654	38.0	332.6	O K	360 min Summer	0.620	0.620	37.0	312.7	O K	480 min Summer	0.585	0.585	36.0	291.8	O K	600 min Summer	0.549	0.549	35.0	271.2	O K	720 min Summer	0.515	0.515	34.0	251.5	O K	960 min Summer	0.450	0.450	32.1	215.5	O K	1440 min Summer	0.339	0.339	28.9	157.0	O K	2160 min Summer	0.214	0.214	25.4	95.4	O K	2880 min Summer	0.127	0.127	23.1	55.0	O K	4320 min Summer	0.049	0.049	20.4	20.6	O K	5760 min Summer	0.039	0.039	16.3	16.6	O K	7200 min Summer	0.033	0.033	13.8	14.1	O K	8640 min Summer	0.029	0.029	12.1	12.3	O K	10080 min Summer	0.026	0.026	10.8	11.0	O K	15 min Winter	0.423	0.423	31.3	201.4	O K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	125.216	0.0	23	30 min Summer	86.254	0.0	36	60 min 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Cotswold Transport Planning				Page 2	
CTP House, Knapp Road Cheltenham Gloucestershire, GL50 3QQ		Mounon Road Chepstow Basin 3			
Date 28/03/2024 10:10 File Basin 3.SRCX		Designed by SC Checked by SM			
Innovyze		Source Control 2020.1.3			
<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	0.543	0.543	34.8	267.7	O K
60 min Winter	0.636	0.636	37.5	322.2	O K
120 min Winter	0.672	0.672	38.5	343.8	O K
180 min Winter	0.661	0.661	38.2	337.3	O K
240 min Winter	0.638	0.638	37.5	323.4	O K
360 min Winter	0.585	0.585	36.0	292.0	O K
480 min Winter	0.531	0.531	34.4	260.5	O K
600 min Winter	0.478	0.478	32.9	231.0	O K
720 min Winter	0.428	0.428	31.5	203.8	O K
960 min Winter	0.339	0.339	28.9	157.0	O K
1440 min Winter	0.197	0.197	25.0	87.5	O K
2160 min Winter	0.064	0.064	21.3	27.2	O K
2880 min Winter	0.043	0.043	17.8	18.2	O K
4320 min Winter	0.032	0.032	13.2	13.3	O K
5760 min Winter	0.026	0.026	10.6	10.8	O K
7200 min Winter	0.022	0.022	8.9	9.1	O K
8640 min Winter	0.019	0.019	7.9	8.0	O K
10080 min Winter	0.017	0.017	7.1	7.2	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	86.254	0.0	36		
60 min Winter	56.713	0.0	62		
120 min Winter	35.847	0.0	100		
180 min Winter	26.880	0.0	140		
240 min Winter	21.831	0.0	178		
360 min Winter	16.267	0.0	250		
480 min Winter	13.176	0.0	322		
600 min Winter	11.178	0.0	390		
720 min Winter	9.765	0.0	458		
960 min Winter	7.881	0.0	586		
1440 min Winter	5.811	0.0	830		
2160 min Winter	4.273	0.0	1152		
2880 min Winter	3.430	0.0	1472		
4320 min Winter	2.516	0.0	2176		
5760 min Winter	2.021	0.0	2856		
7200 min Winter	1.706	0.0	3672		
8640 min Winter	1.486	0.0	4360		
10080 min Winter	1.323	0.0	5136		
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Model Details Storage is Online Cover Level (m) 1.000 Infiltration Basin Structure Invert Level (m) 0.000 Safety Factor 2.0 Infiltration Coefficient Base (m/hr) 0.33800 Porosity 1.00 Infiltration Coefficient Side (m/hr) 0.33800 <table><thead><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr></thead><tbody><tr><td>0.000</td><td>418.0</td><td>1.000</td><td>719.0</td></tr></tbody></table>			Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	418.0	1.000	719.0
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