

Cotswold Transport Planning					Page 1																																																																																																																																																																																																																			
CTP House, Knapp Road Cheltenham Gloucestershire, GL50 3QQ			Mounon Road Chepstow Basin 4																																																																																																																																																																																																																					
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<u>Summary of Results for 100 year Return Period (+40%)</u> Half Drain Time : 3973 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>0.212</td><td>0.212</td><td>1.6</td><td>238.8</td><td>O K</td></tr><tr><td>30 min Summer</td><td>0.287</td><td>0.287</td><td>1.7</td><td>328.5</td><td>O K</td></tr><tr><td>60 min Summer</td><td>0.370</td><td>0.370</td><td>1.8</td><td>430.3</td><td>O K</td></tr><tr><td>120 min Summer</td><td>0.457</td><td>0.457</td><td>1.9</td><td>540.0</td><td>O K</td></tr><tr><td>180 min Summer</td><td>0.506</td><td>0.506</td><td>1.9</td><td>603.1</td><td>O K</td></tr><tr><td>240 min Summer</td><td>0.540</td><td>0.540</td><td>2.0</td><td>648.7</td><td>O K</td></tr><tr><td>360 min Summer</td><td>0.591</td><td>0.591</td><td>2.0</td><td>715.8</td><td>O K</td></tr><tr><td>480 min Summer</td><td>0.626</td><td>0.626</td><td>2.1</td><td>763.6</td><td>O K</td></tr><tr><td>600 min Summer</td><td>0.653</td><td>0.653</td><td>2.1</td><td>800.2</td><td>O K</td></tr><tr><td>720 min Summer</td><td>0.674</td><td>0.674</td><td>2.1</td><td>829.4</td><td>O K</td></tr><tr><td>960 min Summer</td><td>0.705</td><td>0.705</td><td>2.2</td><td>872.7</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>0.742</td><td>0.742</td><td>2.2</td><td>924.8</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>0.766</td><td>0.766</td><td>2.3</td><td>958.6</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>0.770</td><td>0.770</td><td>2.3</td><td>965.5</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>0.763</td><td>0.763</td><td>2.3</td><td>955.4</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>0.753</td><td>0.753</td><td>2.2</td><td>940.6</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>0.740</td><td>0.740</td><td>2.2</td><td>922.9</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>490</td></tr><tr><td>600 min Summer</td><td>11.178</td><td>0.0</td><td>608</td></tr><tr><td>720 min Summer</td><td>9.765</td><td>0.0</td><td>728</td></tr><tr><td>960 min Summer</td><td>7.881</td><td>0.0</td><td>968</td></tr><tr><td>1440 min Summer</td><td>5.811</td><td>0.0</td><td>1446</td></tr><tr><td>2160 min Summer</td><td>4.273</td><td>0.0</td><td>2164</td></tr><tr><td>2880 min Summer</td><td>3.430</td><td>0.0</td><td>2880</td></tr><tr><td>4320 min Summer</td><td>2.516</td><td>0.0</td><td>3628</td></tr><tr><td>5760 min Summer</td><td>2.021</td><td>0.0</td><td>4376</td></tr><tr><td>7200 min Summer</td><td>1.706</td><td>0.0</td><td>5128</td></tr><tr><td>8640 min Summer</td><td>1.486</td><td>0.0</td><td>5968</td></tr><tr><td>10080 min Summer</td><td>1.323</td><td>0.0</td><td>6848</td></tr><tr><td>15 min Winter</td><td>125.216</td><td>0.0</td><td>27</td></tr></tbody></table>							Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration 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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	0.287	0.287	1.7	328.5	O K
60 min Winter	0.370	0.370	1.8	430.4	O K
120 min Winter	0.457	0.457	1.9	540.2	O K
180 min Winter	0.506	0.506	1.9	603.4	O K
240 min Winter	0.541	0.541	2.0	649.1	O K
360 min Winter	0.591	0.591	2.0	716.5	O K
480 min Winter	0.627	0.627	2.1	764.7	O K
600 min Winter	0.654	0.654	2.1	801.5	O K
720 min Winter	0.675	0.675	2.1	830.9	O K
960 min Winter	0.707	0.707	2.2	874.9	O K
1440 min Winter	0.744	0.744	2.2	928.4	O K
2160 min Winter	0.770	0.770	2.3	964.9	O K
2880 min Winter	0.777	0.777	2.3	975.2	O K
4320 min Winter	0.768	0.768	2.3	962.1	O K
5760 min Winter	0.754	0.754	2.2	942.2	O K
7200 min Winter	0.738	0.738	2.2	919.0	O K
8640 min Winter	0.719	0.719	2.2	892.9	O K
10080 min Winter	0.700	0.700	2.2	865.9	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	86.254	0.0	41		
60 min Winter	56.713	0.0	70		
120 min Winter	35.847	0.0	130		
180 min Winter	26.880	0.0	188		
240 min Winter	21.831	0.0	246		
360 min Winter	16.267	0.0	364		
480 min Winter	13.176	0.0	482		
600 min Winter	11.178	0.0	600		
720 min Winter	9.765	0.0	716		
960 min Winter	7.881	0.0	952		
1440 min Winter	5.811	0.0	1416		
2160 min Winter	4.273	0.0	2100		
2880 min Winter	3.430	0.0	2768		
4320 min Winter	2.516	0.0	3980		
5760 min Winter	2.021	0.0	4504		
7200 min Winter	1.706	0.0	5416		
8640 min Winter	1.486	0.0	6392		
10080 min Winter	1.323	0.0	7264		
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Model Details Storage is Online Cover Level (m) 1.100 Infiltration Basin Structure Invert Level (m) 0.000 Safety Factor 2.0 Infiltration Coefficient Base (m/hr) 0.00900 Porosity 1.00 Infiltration Coefficient Side (m/hr) 0.00900 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr><tr><td>0.000</td><td>1081.0</td><td>1.100</td><td>1600.0</td></tr></table>			Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	1081.0	1.100	1600.0
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