

Paul Basham Associates				Page 1																																																																																																																																																																																																																			
Lancaster Court Fareham Hampshire, PO15 5TU		TRENCH SA 03																																																																																																																																																																																																																					
Date 17/04/2019 File Plots 10-11. lin10 plus...		Designed by JB Checked by RW																																																																																																																																																																																																																					
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<p style="text-align: center;"><u>Summary of Results for 10 year Return Period (+30%)</u></p> <p style="text-align: center;">Half Drain Time : 13 minutes.</p> <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>-0.670</td><td>0.330</td><td>0.8</td><td>0.7</td><td>O K</td></tr><tr><td>30 min Summer</td><td>-0.646</td><td>0.354</td><td>0.8</td><td>0.8</td><td>O K</td></tr><tr><td>60 min Summer</td><td>-0.671</td><td>0.329</td><td>0.8</td><td>0.7</td><td>O K</td></tr><tr><td>120 min Summer</td><td>-0.742</td><td>0.258</td><td>0.7</td><td>0.6</td><td>O K</td></tr><tr><td>180 min Summer</td><td>-0.804</td><td>0.196</td><td>0.6</td><td>0.4</td><td>O K</td></tr><tr><td>240 min Summer</td><td>-0.853</td><td>0.147</td><td>0.6</td><td>0.3</td><td>O K</td></tr><tr><td>360 min Summer</td><td>-0.918</td><td>0.082</td><td>0.5</td><td>0.2</td><td>O K</td></tr><tr><td>480 min Summer</td><td>-0.950</td><td>0.050</td><td>0.5</td><td>0.1</td><td>O K</td></tr><tr><td>600 min Summer</td><td>-0.957</td><td>0.043</td><td>0.4</td><td>0.1</td><td>O K</td></tr><tr><td>720 min Summer</td><td>-0.962</td><td>0.038</td><td>0.4</td><td>0.1</td><td>O K</td></tr><tr><td>960 min Summer</td><td>-0.969</td><td>0.031</td><td>0.3</td><td>0.1</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>-0.977</td><td>0.023</td><td>0.2</td><td>0.1</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>-0.983</td><td>0.017</td><td>0.2</td><td>0.0</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>-0.986</td><td>0.014</td><td>0.1</td><td>0.0</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>-0.990</td><td>0.010</td><td>0.1</td><td>0.0</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>-0.992</td><td>0.008</td><td>0.1</td><td>0.0</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>-0.993</td><td>0.007</td><td>0.1</td><td>0.0</td><td>O K</td></tr><tr><td>8640 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Lancaster Court Fareham Hampshire, PO15 5TU		TRENCH SA 03			
Date 17/04/2019		Designed by JB			
File Plots 10-11. lin10 plus...		Checked by RW			
Innovyze		Source Control 2018.1.1			
Summary of Results for 10 year Return Period (+30%)					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	-0.603	0.397		0.8 0.9	O K
60 min Winter	-0.650	0.350		0.8 0.8	O K
120 min Winter	-0.762	0.238		0.7 0.5	O K
180 min Winter	-0.847	0.153		0.6 0.3	O K
240 min Winter	-0.908	0.092		0.5 0.2	O K
360 min Winter	-0.955	0.045		0.4 0.1	O K
480 min Winter	-0.963	0.037		0.4 0.1	O K
600 min Winter	-0.969	0.031		0.3 0.1	O K
720 min Winter	-0.972	0.028		0.3 0.1	O K
960 min Winter	-0.978	0.022		0.2 0.0	O K
1440 min Winter	-0.983	0.017		0.2 0.0	O K
2160 min Winter	-0.988	0.012		0.1 0.0	O K
2880 min Winter	-0.990	0.010		0.1 0.0	O K
4320 min Winter	-0.992	0.008		0.1 0.0	O K
5760 min Winter	-0.994	0.006		0.1 0.0	O K
7200 min Winter	-0.995	0.005		0.1 0.0	O K
8640 min Winter	-0.995	0.005		0.0 0.0	O K
10080 min Winter	-0.996	0.004		0.0 0.0	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	46.698	0.0	24		
60 min Winter	29.629	0.0	42		
120 min Winter	18.344	0.0	76		
180 min Winter	13.747	0.0	106		
240 min Winter	11.169	0.0	136		
360 min Winter	8.317	0.0	186		
480 min Winter	6.743	0.0	246		
600 min Winter	5.728	0.0	308		
720 min Winter	5.011	0.0	364		
960 min Winter	4.057	0.0	474		
1440 min Winter	3.009	0.0	734		
2160 min Winter	2.231	0.0	1064		
2880 min Winter	1.803	0.0	1420		
4320 min Winter	1.335	0.0	2160		
5760 min Winter	1.078	0.0	2784		
7200 min Winter	0.913	0.0	3784		
8640 min Winter	0.798	0.0	4400		
10080 min Winter	0.711	0.0	5312		
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Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	10	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	19.000	Shortest Storm (mins)	15
Ratio R	0.350	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+30

Time Area Diagram

Total Area (ha) 0.009

Time (mins)	Area
From:	To: (ha)
0	4 0.009

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<p style="text-align: center;"><u>Model Details</u></p> <p style="text-align: center;">Storage is Online Cover Level (m) 0.000</p> <p style="text-align: center;"><u>Trench Soakaway Structure</u></p> <table> <tr> <td>Infiltration Coefficient Base (m/hr)</td> <td>0.41760</td> <td>Trench Width (m)</td> <td>1.0</td> </tr> <tr> <td>Infiltration Coefficient Side (m/hr)</td> <td>0.41760</td> <td>Trench Length (m)</td> <td>7.5</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>0.30</td> <td>Cap Volume Depth (m)</td> <td>0.850</td> </tr> <tr> <td>Invert Level (m)</td> <td>-1.000</td> <td>Cap Infiltration Depth (m)</td> <td>0.850</td> </tr> </table>			Infiltration Coefficient Base (m/hr)	0.41760	Trench Width (m)	1.0	Infiltration Coefficient Side (m/hr)	0.41760	Trench Length (m)	7.5	Safety Factor	2.0	Slope (1:X)	0.0	Porosity	0.30	Cap Volume Depth (m)	0.850	Invert Level (m)	-1.000	Cap Infiltration Depth (m)	0.850
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