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The Stables High Cogges, Witney Oxfordshire, OX29 6UN																																																																																																																																																																																																																							
Date 04/03/2025 13:01 File Permeable Paving.SRCX		Designed by Tim.Trotman Checked by																																																																																																																																																																																																																					
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<u>Summary of Results for 100 year Return Period (+45%)</u> Half Drain Time : 9 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>28.319</td><td>0.159</td><td>1.8</td><td>1.5</td><td>O K</td></tr><tr><td>30 min Summer</td><td>28.314</td><td>0.154</td><td>1.8</td><td>1.4</td><td>O K</td></tr><tr><td>60 min Summer</td><td>28.299</td><td>0.139</td><td>1.7</td><td>1.1</td><td>O K</td></tr><tr><td>120 min Summer</td><td>28.275</td><td>0.115</td><td>1.4</td><td>0.8</td><td>O K</td></tr><tr><td>180 min Summer</td><td>28.258</td><td>0.098</td><td>1.2</td><td>0.6</td><td>O K</td></tr><tr><td>240 min Summer</td><td>28.245</td><td>0.085</td><td>1.0</td><td>0.4</td><td>O K</td></tr><tr><td>360 min Summer</td><td>28.228</td><td>0.068</td><td>0.8</td><td>0.3</td><td>O K</td></tr><tr><td>480 min Summer</td><td>28.217</td><td>0.057</td><td>0.7</td><td>0.2</td><td>O K</td></tr><tr><td>600 min Summer</td><td>28.210</td><td>0.050</td><td>0.6</td><td>0.1</td><td>O K</td></tr><tr><td>720 min Summer</td><td>28.207</td><td>0.047</td><td>0.5</td><td>0.1</td><td>O K</td></tr><tr><td>960 min Summer</td><td>28.201</td><td>0.041</td><td>0.4</td><td>0.1</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>28.195</td><td>0.035</td><td>0.3</td><td>0.1</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>28.190</td><td>0.030</td><td>0.2</td><td>0.1</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>28.187</td><td>0.027</td><td>0.2</td><td>0.0</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>28.182</td><td>0.022</td><td>0.1</td><td>0.0</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>28.180</td><td>0.020</td><td>0.1</td><td>0.0</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>28.178</td><td>0.018</td><td>0.1</td><td>0.0</td><td>O K</td></tr><tr><td>8640 min Summer</td><td>28.176</td><td>0.016</td><td>0.1</td><td>0.0</td><td>O 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Summer	12.262	0.0	310	720 min Summer	10.607	0.0	370	960 min Summer	8.389	0.0	494	1440 min Summer	6.027	0.0	726	2160 min Summer	4.331	0.0	1100	2880 min Summer	3.425	0.0	1444	4320 min Summer	2.391	0.0	2156	5760 min Summer	1.853	0.0	2856	7200 min Summer	1.520	0.0	3616	8640 min Summer	1.293	0.0	4344	10080 min Summer	1.128	0.0	5024	15 min Winter	230.597	0.0	18
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The Stables High Cogges, Witney Oxfordshire, OX29 6UN					
Date 04/03/2025 13:01 File Permeable Paving.SRCX		Designed by Tim.Trotman Checked by			
Innovyze		Source Control 2020.1.3			
<u>Summary of Results for 100 year Return Period (+45%)</u>					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	28.322	0.162	1.8	1.5	O K
60 min Winter	28.300	0.140	1.7	1.1	O K
120 min Winter	28.267	0.107	1.3	0.7	O K
180 min Winter	28.245	0.085	1.0	0.4	O K
240 min Winter	28.231	0.071	0.8	0.3	O K
360 min Winter	28.214	0.054	0.6	0.2	O K
480 min Winter	28.207	0.047	0.5	0.1	O K
600 min Winter	28.203	0.043	0.4	0.1	O K
720 min Winter	28.200	0.040	0.4	0.1	O K
960 min Winter	28.195	0.035	0.3	0.1	O K
1440 min Winter	28.190	0.030	0.2	0.1	O K
2160 min Winter	28.185	0.025	0.2	0.0	O K
2880 min Winter	28.183	0.023	0.1	0.0	O K
4320 min Winter	28.179	0.019	0.1	0.0	O K
5760 min Winter	28.177	0.017	0.1	0.0	O K
7200 min Winter	28.175	0.015	0.1	0.0	O K
8640 min Winter	28.174	0.014	0.0	0.0	O K
10080 min Winter	28.173	0.013	0.0	0.0	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	132.866	0.0	27		
60 min Winter	76.555	0.0	44		
120 min Winter	44.110	0.0	76		
180 min Winter	31.950	0.0	106		
240 min Winter	25.415	0.0	134		
360 min Winter	18.409	0.0	192		
480 min Winter	14.644	0.0	248		
600 min Winter	12.262	0.0	310		
720 min Winter	10.607	0.0	378		
960 min Winter	8.389	0.0	484		
1440 min Winter	6.027	0.0	738		
2160 min Winter	4.331	0.0	1084		
2880 min Winter	3.425	0.0	1448		
4320 min Winter	2.391	0.0	2180		
5760 min Winter	1.853	0.0	2856		
7200 min Winter	1.520	0.0	3520		
8640 min Winter	1.293	0.0	4400		
10080 min Winter	1.128	0.0	5016		
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The Stables High Cogges, Witney Oxfordshire, OX29 6UN		
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Innovyze		Source Control 2020.1.3

Rainfall Details

Rainfall Model	FEH
Return Period (years)	100
FEH Rainfall Version	1999
Site Location	GB 506150 180600 TQ 06150 80600
C (1km)	-0.024
D1 (1km)	0.315
D2 (1km)	0.295
D3 (1km)	0.224
E (1km)	0.304
F (1km)	2.568
Summer Storms	Yes
Winter Storms	Yes
Cv (Summer)	0.750
Cv (Winter)	0.840
Shortest Storm (mins)	15
Longest Storm (mins)	10080
Climate Change %	+45

Time Area Diagram

Total Area (ha) 0.006

Time (mins)	Area	Time (mins)	Area
From:	To: (ha)	From:	To: (ha)
0	4 0.000	4	8 0.006

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<u>Model Details</u> Storage is Online Cover Level (m) 28.720 <u>Porous Car Park Structure</u> <table> <tr> <td>Infiltration Coefficient Base (m/hr)</td> <td>0.22356</td> <td>Width (m)</td> <td>4.8</td> </tr> <tr> <td>Membrane Percolation (mm/hr)</td> <td>1000</td> <td>Length (m)</td> <td>12.0</td> </tr> <tr> <td>Max Percolation (l/s)</td> <td>16.0</td> <td>Slope (1:X)</td> <td>80.0</td> </tr> <tr> <td>Safety Factor</td> <td>2.0</td> <td>Depression Storage (mm)</td> <td>5</td> </tr> <tr> <td>Porosity</td> <td>0.30</td> <td>Evaporation (mm/day)</td> <td>3</td> </tr> <tr> <td>Invert Level (m)</td> <td>28.160</td> <td>Cap Volume Depth (m)</td> <td>0.450</td> </tr> </table>			Infiltration Coefficient Base (m/hr)	0.22356	Width (m)	4.8	Membrane Percolation (mm/hr)	1000	Length (m)	12.0	Max Percolation (l/s)	16.0	Slope (1:X)	80.0	Safety Factor	2.0	Depression Storage (mm)	5	Porosity	0.30	Evaporation (mm/day)	3	Invert Level (m)	28.160	Cap Volume Depth (m)	0.450
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