

Odyssey				Page 1																																																																																																																																																																																																																			
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Summary of Results for 100 year Return Period (+40%) Half Drain Time : 671 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>0.070</td><td>0.070</td><td>0.1</td><td>2.1</td><td>O K</td></tr><tr><td>30 min Summer</td><td>0.099</td><td>0.099</td><td>0.1</td><td>3.0</td><td>Flood Risk</td></tr><tr><td>60 min Summer</td><td>0.130</td><td>0.130</td><td>0.1</td><td>3.9</td><td>Flood Risk</td></tr><tr><td>120 min Summer</td><td>0.152</td><td>0.152</td><td>0.1</td><td>4.6</td><td>Flood Risk</td></tr><tr><td>180 min Summer</td><td>0.164</td><td>0.164</td><td>0.1</td><td>4.9</td><td>Flood Risk</td></tr><tr><td>240 min Summer</td><td>0.170</td><td>0.170</td><td>0.1</td><td>5.1</td><td>Flood Risk</td></tr><tr><td>360 min Summer</td><td>0.174</td><td>0.174</td><td>0.1</td><td>5.2</td><td>Flood Risk</td></tr><tr><td>480 min Summer</td><td>0.174</td><td>0.174</td><td>0.1</td><td>5.2</td><td>Flood Risk</td></tr><tr><td>600 min Summer</td><td>0.171</td><td>0.171</td><td>0.1</td><td>5.1</td><td>Flood Risk</td></tr><tr><td>720 min Summer</td><td>0.169</td><td>0.169</td><td>0.1</td><td>5.1</td><td>Flood Risk</td></tr><tr><td>960 min Summer</td><td>0.163</td><td>0.163</td><td>0.1</td><td>4.9</td><td>Flood Risk</td></tr><tr><td>1440 min Summer</td><td>0.153</td><td>0.153</td><td>0.1</td><td>4.6</td><td>Flood Risk</td></tr><tr><td>2160 min Summer</td><td>0.137</td><td>0.137</td><td>0.1</td><td>4.1</td><td>Flood Risk</td></tr><tr><td>2880 min Summer</td><td>0.122</td><td>0.122</td><td>0.1</td><td>3.7</td><td>Flood Risk</td></tr><tr><td>4320 min Summer</td><td>0.099</td><td>0.099</td><td>0.1</td><td>3.0</td><td>Flood Risk</td></tr><tr><td>5760 min Summer</td><td>0.081</td><td>0.081</td><td>0.1</td><td>2.4</td><td>Flood Risk</td></tr><tr><td>7200 min Summer</td><td>0.069</td><td>0.069</td><td>0.1</td><td>2.1</td><td>O K</td></tr><tr><td>8640 min Summer</td><td>0.059</td><td>0.059</td><td>0.1</td><td>1.8</td><td>O K</td></tr><tr><td>10080 min Summer</td><td>0.053</td><td>0.053</td><td>0.1</td><td>1.6</td><td>O K</td></tr><tr><td>15 min Winter</td><td>0.081</td><td>0.081</td><td>0.1</td><td>2.4</td><td>Flood Risk</td></tr></tbody></table> <table><thead><tr><th>Storm Event</th><th>Rain (mm/hr)</th><th>Flooded Volume (m³)</th><th>Time-Peak (mins)</th></tr></thead><tbody><tr><td>15 min Summer</td><td>141.164</td><td>0.0</td><td>19</td></tr><tr><td>30 min Summer</td><td>94.700</td><td>0.0</td><td>34</td></tr><tr><td>60 min Summer</td><td>60.903</td><td>0.0</td><td>64</td></tr><tr><td>120 min Summer</td><td>36.128</td><td>0.0</td><td>122</td></tr><tr><td>180 min Summer</td><td>26.473</td><td>0.0</td><td>182</td></tr><tr><td>240 min Summer</td><td>21.126</td><td>0.0</td><td>242</td></tr><tr><td>360 min Summer</td><td>15.214</td><td>0.0</td><td>360</td></tr><tr><td>480 min Summer</td><td>12.016</td><td>0.0</td><td>480</td></tr><tr><td>600 min Summer</td><td>9.993</td><td>0.0</td><td>536</td></tr><tr><td>720 min Summer</td><td>8.590</td><td>0.0</td><td>590</td></tr><tr><td>960 min Summer</td><td>6.756</td><td>0.0</td><td>710</td></tr><tr><td>1440 min Summer</td><td>4.823</td><td>0.0</td><td>970</td></tr><tr><td>2160 min Summer</td><td>3.462</td><td>0.0</td><td>1380</td></tr><tr><td>2880 min Summer</td><td>2.754</td><td>0.0</td><td>1764</td></tr><tr><td>4320 min Summer</td><td>2.025</td><td>0.0</td><td>2548</td></tr><tr><td>5760 min Summer</td><td>1.648</td><td>0.0</td><td>3240</td></tr><tr><td>7200 min Summer</td><td>1.419</td><td>0.0</td><td>3960</td></tr><tr><td>8640 min Summer</td><td>1.264</td><td>0.0</td><td>4664</td></tr><tr><td>10080 min Summer</td><td>1.153</td><td>0.0</td><td>5336</td></tr><tr><td>15 min 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Summer	0.053	0.053	0.1	1.6	O K	15 min Winter	0.081	0.081	0.1	2.4	Flood Risk	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	141.164	0.0	19	30 min Summer	94.700	0.0	34	60 min Summer	60.903	0.0	64	120 min Summer	36.128	0.0	122	180 min Summer	26.473	0.0	182	240 min Summer	21.126	0.0	242	360 min Summer	15.214	0.0	360	480 min Summer	12.016	0.0	480	600 min Summer	9.993	0.0	536	720 min Summer	8.590	0.0	590	960 min Summer	6.756	0.0	710	1440 min Summer	4.823	0.0	970	2160 min Summer	3.462	0.0	1380	2880 min Summer	2.754	0.0	1764	4320 min Summer	2.025	0.0	2548	5760 min Summer	1.648	0.0	3240	7200 min Summer	1.419	0.0	3960	8640 min Summer	1.264	0.0	4664	10080 min Summer	1.153	0.0	5336	15 min Winter	141.164	0.0	19
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Tuscany House		Stakers Farm, Yapton			
White Hart Lane		19-156			
Basingstoke RG21 4AF		Private Driveways per 100sq.m			
Date 29/07/2020 09:34		Designed by AK			
File Private Driveways per		Checked by			
Micro Drainage		Source Control 2020.1			
<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	0.113	0.113	0.1	3.4	Flood Risk
60 min Winter	0.148	0.148	0.1	4.4	Flood Risk
120 min Winter	0.173	0.173	0.1	5.2	Flood Risk
180 min Winter	0.187	0.187	0.1	5.6	Flood Risk
240 min Winter	0.194	0.194	0.1	5.8	Flood Risk
360 min Winter	0.200	0.200	0.1	6.0	Flood Risk
480 min Winter	0.201	0.201	0.1	6.0	Flood Risk
600 min Winter	0.199	0.199	0.1	6.0	Flood Risk
720 min Winter	0.195	0.195	0.1	5.9	Flood Risk
960 min Winter	0.187	0.187	0.1	5.6	Flood Risk
1440 min Winter	0.172	0.172	0.1	5.1	Flood Risk
2160 min Winter	0.148	0.148	0.1	4.4	Flood Risk
2880 min Winter	0.125	0.125	0.1	3.8	Flood Risk
4320 min Winter	0.089	0.089	0.1	2.7	Flood Risk
5760 min Winter	0.064	0.064	0.1	1.9	O K
7200 min Winter	0.050	0.050	0.1	1.5	O K
8640 min Winter	0.045	0.045	0.1	1.4	O K
10080 min Winter	0.041	0.041	0.1	1.2	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	94.700	0.0	33		
60 min Winter	60.903	0.0	62		
120 min Winter	36.128	0.0	120		
180 min Winter	26.473	0.0	180		
240 min Winter	21.126	0.0	238		
360 min Winter	15.214	0.0	352		
480 min Winter	12.016	0.0	464		
600 min Winter	9.993	0.0	572		
720 min Winter	8.590	0.0	676		
960 min Winter	6.756	0.0	760		
1440 min Winter	4.823	0.0	1064		
2160 min Winter	3.462	0.0	1496		
2880 min Winter	2.754	0.0	1904		
4320 min Winter	2.025	0.0	2676		
5760 min Winter	1.648	0.0	3344		
7200 min Winter	1.419	0.0	3888		
8640 min Winter	1.264	0.0	4584		
10080 min Winter	1.153	0.0	5344		
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Odyssey		Page 3
Tuscany House	Stakers Farm, Yapton	
White Hart Lane	19-156	
Basingstoke RG21 4AF	Private Driveways per 100sq.m	
Date 29/07/2020 09:34	Designed by AK	
File Private Driveways per	Checked by	
Micro Drainage		Source Control 2020.1

Rainfall Details

Rainfall Model	FEH
Return Period (years)	100
FEH Rainfall Version	2013
Site Location	GB 497682 103581 SU 97682 03581
Data Type	Point
Summer Storms	Yes
Winter Storms	Yes
Cv (Summer)	0.750
Cv (Winter)	0.840
Shortest Storm (mins)	15
Longest Storm (mins)	10080
Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.010

	Time (mins)	Area
From:	To:	(ha)
	0	4 0.010

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Odyssey		Page 4																								
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<u>Model Details</u> Storage is Online Cover Level (m) 0.370 <u>Porous Car Park Structure</u> <table> <tr> <td>Infiltration Coefficient Base (m/hr)</td> <td>0.00540</td> <td>Width (m)</td> <td>10.0</td> </tr> <tr> <td>Membrane Percolation (mm/hr)</td> <td>1000</td> <td>Length (m)</td> <td>10.0</td> </tr> <tr> <td>Max Percolation (l/s)</td> <td>27.8</td> <td>Slope (1:X)</td> <td>0.0</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>0.000</td> <td>Membrane Depth (m)</td> <td>0</td> </tr> </table>			Infiltration Coefficient Base (m/hr)	0.00540	Width (m)	10.0	Membrane Percolation (mm/hr)	1000	Length (m)	10.0	Max Percolation (l/s)	27.8	Slope (1:X)	0.0	Safety Factor	2.0	Depression Storage (mm)	5	Porosity	0.30	Evaporation (mm/day)	3	Invert Level (m)	0.000	Membrane Depth (m)	0
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