

Odyssey				Page 1																																																																																																																																																																																																																			
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<u>Summary of Results for 10 year Return Period (+40%)</u> Half Drain Time : 616 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>0.153</td><td>0.153</td><td>0.1</td><td>1.8</td><td>O K</td></tr><tr><td>30 min Summer</td><td>0.180</td><td>0.180</td><td>0.1</td><td>2.5</td><td>O K</td></tr><tr><td>60 min Summer</td><td>0.208</td><td>0.208</td><td>0.1</td><td>3.2</td><td>O K</td></tr><tr><td>120 min Summer</td><td>0.238</td><td>0.238</td><td>0.1</td><td>4.0</td><td>Flood Risk</td></tr><tr><td>180 min Summer</td><td>0.253</td><td>0.253</td><td>0.1</td><td>4.4</td><td>Flood Risk</td></tr><tr><td>240 min Summer</td><td>0.262</td><td>0.262</td><td>0.1</td><td>4.6</td><td>Flood Risk</td></tr><tr><td>360 min Summer</td><td>0.268</td><td>0.268</td><td>0.1</td><td>4.7</td><td>Flood Risk</td></tr><tr><td>480 min Summer</td><td>0.268</td><td>0.268</td><td>0.1</td><td>4.7</td><td>Flood Risk</td></tr><tr><td>600 min Summer</td><td>0.266</td><td>0.266</td><td>0.1</td><td>4.7</td><td>Flood Risk</td></tr><tr><td>720 min Summer</td><td>0.264</td><td>0.264</td><td>0.1</td><td>4.6</td><td>Flood Risk</td></tr><tr><td>960 min Summer</td><td>0.258</td><td>0.258</td><td>0.1</td><td>4.5</td><td>Flood Risk</td></tr><tr><td>1440 min Summer</td><td>0.246</td><td>0.246</td><td>0.1</td><td>4.2</td><td>Flood Risk</td></tr><tr><td>2160 min Summer</td><td>0.230</td><td>0.230</td><td>0.1</td><td>3.8</td><td>Flood Risk</td></tr><tr><td>2880 min Summer</td><td>0.215</td><td>0.215</td><td>0.1</td><td>3.4</td><td>Flood Risk</td></tr><tr><td>4320 min Summer</td><td>0.193</td><td>0.193</td><td>0.1</td><td>2.8</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>0.176</td><td>0.176</td><td>0.1</td><td>2.4</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>0.165</td><td>0.165</td><td>0.1</td><td>2.1</td><td>O K</td></tr><tr><td>8640 min Summer</td><td>0.158</td><td>0.158</td><td>0.1</td><td>2.0</td><td>O K</td></tr><tr><td>10080 min Summer</td><td>0.152</td><td>0.152</td><td>0.1</td><td>1.8</td><td>O K</td></tr><tr><td>15 min Winter</td><td>0.164</td><td>0.164</td><td>0.1</td><td>2.1</td><td>O K</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>87.620</td><td>0.0</td><td>19</td></tr><tr><td>30 min Summer</td><td>57.683</td><td>0.0</td><td>33</td></tr><tr><td>60 min Summer</td><td>36.448</td><td>0.0</td><td>64</td></tr><tr><td>120 min Summer</td><td>22.639</td><td>0.0</td><td>122</td></tr><tr><td>180 min Summer</td><td>16.928</td><td>0.0</td><td>182</td></tr><tr><td>240 min Summer</td><td>13.676</td><td>0.0</td><td>242</td></tr><tr><td>360 min Summer</td><td>10.003</td><td>0.0</td><td>360</td></tr><tr><td>480 min Summer</td><td>7.960</td><td>0.0</td><td>466</td></tr><tr><td>600 min Summer</td><td>6.652</td><td>0.0</td><td>512</td></tr><tr><td>720 min Summer</td><td>5.738</td><td>0.0</td><td>570</td></tr><tr><td>960 min Summer</td><td>4.539</td><td>0.0</td><td>694</td></tr><tr><td>1440 min Summer</td><td>3.269</td><td>0.0</td><td>966</td></tr><tr><td>2160 min Summer</td><td>2.374</td><td>0.0</td><td>1364</td></tr><tr><td>2880 min Summer</td><td>1.907</td><td>0.0</td><td>1760</td></tr><tr><td>4320 min Summer</td><td>1.430</td><td>0.0</td><td>2512</td></tr><tr><td>5760 min Summer</td><td>1.183</td><td>0.0</td><td>3280</td></tr><tr><td>7200 min Summer</td><td>1.034</td><td>0.0</td><td>3968</td></tr><tr><td>8640 min Summer</td><td>0.933</td><td>0.0</td><td>4672</td></tr><tr><td>10080 min Summer</td><td>0.861</td><td>0.0</td><td>5440</td></tr><tr><td>15 min Winter</td><td>87.620</td><td>0.0</td><td>19</td></tr></tbody></table>						Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status	15 min Summer	0.153	0.153	0.1	1.8	O K	30 min Summer	0.180	0.180	0.1	2.5	O K	60 min Summer	0.208	0.208	0.1	3.2	O K	120 min Summer	0.238	0.238	0.1	4.0	Flood Risk	180 min Summer	0.253	0.253	0.1	4.4	Flood Risk	240 min Summer	0.262	0.262	0.1	4.6	Flood Risk	360 min Summer	0.268	0.268	0.1	4.7	Flood Risk	480 min Summer	0.268	0.268	0.1	4.7	Flood Risk	600 min Summer	0.266	0.266	0.1	4.7	Flood Risk	720 min Summer	0.264	0.264	0.1	4.6	Flood Risk	960 min Summer	0.258	0.258	0.1	4.5	Flood Risk	1440 min Summer	0.246	0.246	0.1	4.2	Flood Risk	2160 min Summer	0.230	0.230	0.1	3.8	Flood Risk	2880 min Summer	0.215	0.215	0.1	3.4	Flood Risk	4320 min Summer	0.193	0.193	0.1	2.8	O K	5760 min Summer	0.176	0.176	0.1	2.4	O K	7200 min Summer	0.165	0.165	0.1	2.1	O K	8640 min Summer	0.158	0.158	0.1	2.0	O K	10080 min Summer	0.152	0.152	0.1	1.8	O K	15 min Winter	0.164	0.164	0.1	2.1	O K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	87.620	0.0	19	30 min Summer	57.683	0.0	33	60 min Summer	36.448	0.0	64	120 min Summer	22.639	0.0	122	180 min Summer	16.928	0.0	182	240 min Summer	13.676	0.0	242	360 min Summer	10.003	0.0	360	480 min Summer	7.960	0.0	466	600 min Summer	6.652	0.0	512	720 min Summer	5.738	0.0	570	960 min Summer	4.539	0.0	694	1440 min Summer	3.269	0.0	966	2160 min Summer	2.374	0.0	1364	2880 min Summer	1.907	0.0	1760	4320 min Summer	1.430	0.0	2512	5760 min Summer	1.183	0.0	3280	7200 min Summer	1.034	0.0	3968	8640 min Summer	0.933	0.0	4672	10080 min Summer	0.861	0.0	5440	15 min Winter	87.620	0.0	19
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Tuscany House		Stakers Farm, Yapton - 19-156			
White Hart Lane		Road 1_Rev_B			
Baskingstoke RG21 4AF		Chainage 44-100, Every 14m			
Date 10/12/2020 12:40		Designed by AK			
File Road 1_Rev_B_chainage		Checked by			
XP Solutions		Source Control 2020.1			
<u>Summary of Results for 10 year Return Period (+40%)</u>					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	0.195	0.195	0.1	2.9	O K
60 min Winter	0.226	0.226	0.1	3.7	Flood Risk
120 min Winter	0.260	0.260	0.1	4.5	Flood Risk
180 min Winter	0.278	0.278	0.1	5.0	Flood Risk
240 min Winter	0.288	0.288	0.1	5.2	Flood Risk
360 min Winter	0.297	0.297	0.1	5.5	Flood Risk
480 min Winter	0.299	0.299	0.1	5.5	Flood Risk
600 min Winter	0.297	0.297	0.1	5.4	Flood Risk
720 min Winter	0.292	0.292	0.1	5.3	Flood Risk
960 min Winter	0.285	0.285	0.1	5.1	Flood Risk
1440 min Winter	0.268	0.268	0.1	4.7	Flood Risk
2160 min Winter	0.242	0.242	0.1	4.1	Flood Risk
2880 min Winter	0.219	0.219	0.1	3.5	Flood Risk
4320 min Winter	0.184	0.184	0.1	2.6	O K
5760 min Winter	0.161	0.161	0.1	2.0	O K
7200 min Winter	0.149	0.149	0.1	1.7	O K
8640 min Winter	0.139	0.139	0.1	1.5	O K
10080 min Winter	0.132	0.132	0.1	1.4	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	57.683	0.0	33		
60 min Winter	36.448	0.0	62		
120 min Winter	22.639	0.0	120		
180 min Winter	16.928	0.0	178		
240 min Winter	13.676	0.0	236		
360 min Winter	10.003	0.0	352		
480 min Winter	7.960	0.0	462		
600 min Winter	6.652	0.0	570		
720 min Winter	5.738	0.0	666		
960 min Winter	4.539	0.0	750		
1440 min Winter	3.269	0.0	1052		
2160 min Winter	2.374	0.0	1492		
2880 min Winter	1.907	0.0	1900		
4320 min Winter	1.430	0.0	2640		
5760 min Winter	1.183	0.0	3344		
7200 min Winter	1.034	0.0	4104		
8640 min Winter	0.933	0.0	4832		
10080 min Winter	0.861	0.0	5544		
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Tuscany House White Hart Lane Baskingstoke RG21 4AF	Stakers Farm, Yapton - 19-156 Road 1_Rev_B Chainage 44-100, Every 14m	
Date 10/12/2020 12:40 File Road 1_Rev_B_chainage	Designed by AK Checked by	
XP Solutions Source Control 2020.1		

Rainfall Details

Rainfall Model	FEH
Return Period (years)	10
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) 0.014

	Time (mins)	Area
From:	To:	(ha)
	0	4 0.014

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Odyssey		Page 4																								
Tuscany House White Hart Lane Basingstoke RG21 4AF	Stakers Farm, Yapton - 19-156 Road 1_Rev_B Chainage 44-100, Every 14m																									
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XP Solutions Source Control 2020.1																										
<u>Model Details</u> Storage is Online Cover Level (m) 0.510 <u>Complex Structure</u> <u>Porous Car Park</u> <table> <tr> <td>Infiltration Coefficient Base (m/hr)</td> <td>0.00648</td> <td>Width (m)</td> <td>6.0</td> </tr> <tr> <td>Membrane Percolation (mm/hr)</td> <td>1000</td> <td>Length (m)</td> <td>14.0</td> </tr> <tr> <td>Max Percolation (l/s)</td> <td>23.3</td> <td>Slope (1:X)</td> <td>87.0</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)	0.00648	Width (m)	6.0	Membrane Percolation (mm/hr)	1000	Length (m)	14.0	Max Percolation (l/s)	23.3	Slope (1:X)	87.0	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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