

Odyssey				Page 1																																																																																																																																																																																																																			
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<u>Summary of Results for 5 year Return Period</u> Half Drain Time : 836 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>0.103</td><td>0.103</td><td>0.6</td><td>20.9</td><td>O K</td></tr><tr><td>30 min Summer</td><td>0.134</td><td>0.134</td><td>0.6</td><td>27.3</td><td>O K</td></tr><tr><td>60 min Summer</td><td>0.167</td><td>0.167</td><td>0.6</td><td>33.9</td><td>O K</td></tr><tr><td>120 min Summer</td><td>0.208</td><td>0.208</td><td>0.6</td><td>42.3</td><td>O K</td></tr><tr><td>180 min Summer</td><td>0.230</td><td>0.230</td><td>0.6</td><td>46.7</td><td>O K</td></tr><tr><td>240 min Summer</td><td>0.244</td><td>0.244</td><td>0.6</td><td>49.4</td><td>O K</td></tr><tr><td>360 min Summer</td><td>0.257</td><td>0.257</td><td>0.6</td><td>52.0</td><td>O K</td></tr><tr><td>480 min Summer</td><td>0.260</td><td>0.260</td><td>0.6</td><td>52.7</td><td>O K</td></tr><tr><td>600 min Summer</td><td>0.259</td><td>0.259</td><td>0.6</td><td>52.5</td><td>O K</td></tr><tr><td>720 min Summer</td><td>0.255</td><td>0.255</td><td>0.6</td><td>51.8</td><td>O K</td></tr><tr><td>960 min Summer</td><td>0.249</td><td>0.249</td><td>0.6</td><td>50.5</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>0.236</td><td>0.236</td><td>0.6</td><td>47.9</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>0.218</td><td>0.218</td><td>0.6</td><td>44.3</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>0.203</td><td>0.203</td><td>0.6</td><td>41.3</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>0.180</td><td>0.180</td><td>0.6</td><td>36.5</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>0.161</td><td>0.161</td><td>0.6</td><td>32.7</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>0.147</td><td>0.147</td><td>0.6</td><td>29.7</td><td>O K</td></tr><tr><td>8640 min 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Summer	0.134	0.134	0.6	27.3	O K	60 min Summer	0.167	0.167	0.6	33.9	O K	120 min Summer	0.208	0.208	0.6	42.3	O K	180 min Summer	0.230	0.230	0.6	46.7	O K	240 min Summer	0.244	0.244	0.6	49.4	O K	360 min Summer	0.257	0.257	0.6	52.0	O K	480 min Summer	0.260	0.260	0.6	52.7	O K	600 min Summer	0.259	0.259	0.6	52.5	O K	720 min Summer	0.255	0.255	0.6	51.8	O K	960 min Summer	0.249	0.249	0.6	50.5	O K	1440 min Summer	0.236	0.236	0.6	47.9	O K	2160 min Summer	0.218	0.218	0.6	44.3	O K	2880 min Summer	0.203	0.203	0.6	41.3	O K	4320 min Summer	0.180	0.180	0.6	36.5	O K	5760 min Summer	0.161	0.161	0.6	32.7	O K	7200 min Summer	0.147	0.147	0.6	29.7	O K	8640 min Summer	0.134	0.134	0.6	27.3	O K	10080 min Summer	0.125	0.125	0.6	25.3	O K	15 min Winter	0.116	0.116	0.6	23.5	O K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	50.441	0.0	22	30 min Summer	33.112	0.0	37	60 min Summer	20.892	0.0	66	120 min Summer	13.409	0.0	124	180 min Summer	10.147	0.0	184	240 min Summer	8.257	0.0	244	360 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Odyssey				Page 2	
Tuscany House		Stakers Farm, Yapton 19-156			
White Hart Lane		POS A - Infiltration Blanket			
Baskingstoke RG21 4AF		Rev B			
Date 05/10/2020 11:23		Designed by AK			
File POS_A Infiltration		Checked by			
XP Solutions		Source Control 2020.1			
<u>Summary of Results for 5 year Return Period</u>					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	0.151	0.151	0.6	30.6	O K
60 min Winter	0.188	0.188	0.6	38.1	O K
120 min Winter	0.235	0.235	0.6	47.7	O K
180 min Winter	0.261	0.261	0.6	52.9	O K
240 min Winter	0.277	0.277	0.6	56.1	O K
360 min Winter	0.293	0.293	0.6	59.4	Flood Risk
480 min Winter	0.299	0.299	0.6	60.6	Flood Risk
600 min Winter	0.299	0.299	0.6	60.7	Flood Risk
720 min Winter	0.297	0.297	0.6	60.3	Flood Risk
960 min Winter	0.288	0.288	0.6	58.5	Flood Risk
1440 min Winter	0.271	0.271	0.6	54.9	O K
2160 min Winter	0.245	0.245	0.6	49.7	O K
2880 min Winter	0.221	0.221	0.6	44.9	O K
4320 min Winter	0.181	0.181	0.6	36.7	O K
5760 min Winter	0.149	0.149	0.6	30.1	O K
7200 min Winter	0.122	0.122	0.6	24.8	O K
8640 min Winter	0.101	0.101	0.6	20.5	O K
10080 min Winter	0.084	0.084	0.6	17.0	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	33.112	0.0	36		
60 min Winter	20.892	0.0	64		
120 min Winter	13.409	0.0	122		
180 min Winter	10.147	0.0	180		
240 min Winter	8.257	0.0	240		
360 min Winter	6.100	0.0	356		
480 min Winter	4.878	0.0	470		
600 min Winter	4.089	0.0	582		
720 min Winter	3.536	0.0	690		
960 min Winter	2.808	0.0	894		
1440 min Winter	2.035	0.0	1108		
2160 min Winter	1.486	0.0	1560		
2880 min Winter	1.200	0.0	1996		
4320 min Winter	0.906	0.0	2852		
5760 min Winter	0.754	0.0	3632		
7200 min Winter	0.662	0.0	4392		
8640 min Winter	0.600	0.0	5104		
10080 min Winter	0.555	0.0	5840		
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Tuscany House White Hart Lane Baskingstoke RG21 4AF	Stakers Farm, Yapton 19-156 POS A - Infiltration Blanket Rev B	
Date 05/10/2020 11:23 File POS_A Infiltration	Designed by AK Checked by	
XP Solutions Source Control 2020.1		

Rainfall Details

Rainfall Model	FEH
Return Period (years)	5
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 %	+0

Time Area Diagram

Total Area (ha) 0.227

Time (mins)	Area	Time (mins)	Area
From:	To: (ha)	From:	To: (ha)
0	4 0.154	4	8 0.073

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Model Details

Storage is Online Cover Level (m) 0.580

Complex Structure

Infiltration Blanket

Infiltration Coefficient Base (m/hr)	0.00648	Diameter/Width (m)	26.0
Safety Factor	2.0	Length (m)	26.0
Porosity	0.30	Cap Volume Depth (m)	0.330
Invert Level (m)	0.000		

Infiltration Basin

Invert Level (m)	0.430	Safety Factor	2.0
Infiltration Coefficient Base (m/hr)	0.00000	Porosity	1.00
Infiltration Coefficient Side (m/hr)	0.00000		

Depth (m)	Area (m ²)	Depth (m)	Area (m ²)
0.000	680.0	0.150	728.0

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