

Odyssey					Page 1																																																																																																																																																																																																																			
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Summary of Results for 10 year Return Period Half Drain Time : 718 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>0.190</td><td>0.190</td><td>0.2</td><td>7.4</td><td>O K</td></tr><tr><td>30 min Summer</td><td>0.228</td><td>0.228</td><td>0.3</td><td>10.6</td><td>Flood Risk</td></tr><tr><td>60 min Summer</td><td>0.257</td><td>0.257</td><td>0.3</td><td>14.1</td><td>Flood Risk</td></tr><tr><td>120 min Summer</td><td>0.282</td><td>0.282</td><td>0.3</td><td>17.7</td><td>Flood Risk</td></tr><tr><td>180 min Summer</td><td>0.294</td><td>0.294</td><td>0.3</td><td>19.7</td><td>Flood Risk</td></tr><tr><td>240 min Summer</td><td>0.301</td><td>0.301</td><td>0.3</td><td>20.9</td><td>Flood Risk</td></tr><tr><td>360 min Summer</td><td>0.307</td><td>0.307</td><td>0.3</td><td>22.0</td><td>Flood Risk</td></tr><tr><td>480 min Summer</td><td>0.309</td><td>0.309</td><td>0.3</td><td>22.3</td><td>Flood Risk</td></tr><tr><td>600 min Summer</td><td>0.308</td><td>0.308</td><td>0.3</td><td>22.2</td><td>Flood Risk</td></tr><tr><td>720 min Summer</td><td>0.308</td><td>0.308</td><td>0.3</td><td>22.0</td><td>Flood Risk</td></tr><tr><td>960 min Summer</td><td>0.306</td><td>0.306</td><td>0.3</td><td>21.7</td><td>Flood Risk</td></tr><tr><td>1440 min Summer</td><td>0.301</td><td>0.301</td><td>0.3</td><td>20.8</td><td>Flood Risk</td></tr><tr><td>2160 min Summer</td><td>0.292</td><td>0.292</td><td>0.3</td><td>19.4</td><td>Flood Risk</td></tr><tr><td>2880 min Summer</td><td>0.284</td><td>0.284</td><td>0.3</td><td>18.1</td><td>Flood Risk</td></tr><tr><td>4320 min Summer</td><td>0.270</td><td>0.270</td><td>0.3</td><td>15.9</td><td>Flood Risk</td></tr><tr><td>5760 min Summer</td><td>0.259</td><td>0.259</td><td>0.3</td><td>14.3</td><td>Flood Risk</td></tr><tr><td>7200 min Summer</td><td>0.250</td><td>0.250</td><td>0.3</td><td>13.1</td><td>Flood Risk</td></tr><tr><td>8640 min Summer</td><td>0.243</td><td>0.243</td><td>0.3</td><td>12.3</td><td>Flood Risk</td></tr><tr><td>10080 min Summer</td><td>0.237</td><td>0.237</td><td>0.3</td><td>11.6</td><td>Flood Risk</td></tr><tr><td>15 min Winter</td><td>0.206</td><td>0.206</td><td>0.3</td><td>8.7</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>62.586</td><td>0.0</td><td>19</td></tr><tr><td>30 min Summer</td><td>41.202</td><td>0.0</td><td>34</td></tr><tr><td>60 min Summer</td><td>26.034</td><td>0.0</td><td>64</td></tr><tr><td>120 min Summer</td><td>16.170</td><td>0.0</td><td>122</td></tr><tr><td>180 min Summer</td><td>12.091</td><td>0.0</td><td>182</td></tr><tr><td>240 min Summer</td><td>9.769</td><td>0.0</td><td>242</td></tr><tr><td>360 min Summer</td><td>7.145</td><td>0.0</td><td>362</td></tr><tr><td>480 min Summer</td><td>5.686</td><td>0.0</td><td>480</td></tr><tr><td>600 min Summer</td><td>4.751</td><td>0.0</td><td>558</td></tr><tr><td>720 min Summer</td><td>4.098</td><td>0.0</td><td>606</td></tr><tr><td>960 min Summer</td><td>3.242</td><td>0.0</td><td>724</td></tr><tr><td>1440 min Summer</td><td>2.335</td><td>0.0</td><td>982</td></tr><tr><td>2160 min Summer</td><td>1.695</td><td>0.0</td><td>1388</td></tr><tr><td>2880 min Summer</td><td>1.362</td><td>0.0</td><td>1792</td></tr><tr><td>4320 min Summer</td><td>1.021</td><td>0.0</td><td>2592</td></tr><tr><td>5760 min Summer</td><td>0.845</td><td>0.0</td><td>3344</td></tr><tr><td>7200 min Summer</td><td>0.738</td><td>0.0</td><td>4040</td></tr><tr><td>8640 min Summer</td><td>0.667</td><td>0.0</td><td>4832</td></tr><tr><td>10080 min Summer</td><td>0.615</td><td>0.0</td><td>5544</td></tr><tr><td>15 min 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White Hart Lane		19-156			
Basingstoke RG21 4AF		Plots 29-32 and road			
Date 29/07/2020 13:51		Designed by AK			
File Road 3_including Plots		Checked by			
Micro Drainage		Source Control 2020.1			
<u>Summary of Results for 10 year Return Period</u>					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	0.244	0.244	0.3	12.3	Flood Risk
60 min Winter	0.272	0.272	0.3	16.2	Flood Risk
120 min Winter	0.298	0.298	0.3	20.4	Flood Risk
180 min Winter	0.311	0.311	0.3	22.7	Flood Risk
240 min Winter	0.319	0.319	0.3	24.1	Flood Risk
360 min Winter	0.326	0.326	0.3	25.5	Flood Risk
480 min Winter	0.328	0.328	0.3	25.9	Flood Risk
600 min Winter	0.329	0.329	0.3	26.0	Flood Risk
720 min Winter	0.327	0.327	0.3	25.8	Flood Risk
960 min Winter	0.324	0.324	0.3	25.0	Flood Risk
1440 min Winter	0.317	0.317	0.3	23.7	Flood Risk
2160 min Winter	0.304	0.304	0.3	21.5	Flood Risk
2880 min Winter	0.292	0.292	0.3	19.3	Flood Risk
4320 min Winter	0.269	0.269	0.3	15.8	Flood Risk
5760 min Winter	0.250	0.250	0.3	13.2	Flood Risk
7200 min Winter	0.237	0.237	0.3	11.6	Flood Risk
8640 min Winter	0.225	0.225	0.3	10.4	Flood Risk
10080 min Winter	0.215	0.215	0.3	9.4	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	41.202	0.0	33		
60 min Winter	26.034	0.0	62		
120 min Winter	16.170	0.0	120		
180 min Winter	12.091	0.0	180		
240 min Winter	9.769	0.0	238		
360 min Winter	7.145	0.0	352		
480 min Winter	5.686	0.0	466		
600 min Winter	4.751	0.0	576		
720 min Winter	4.098	0.0	680		
960 min Winter	3.242	0.0	778		
1440 min Winter	2.335	0.0	1070		
2160 min Winter	1.695	0.0	1516		
2880 min Winter	1.362	0.0	1936		
4320 min Winter	1.021	0.0	2728		
5760 min Winter	0.845	0.0	3464		
7200 min Winter	0.738	0.0	4248		
8640 min Winter	0.667	0.0	4936		
10080 min Winter	0.615	0.0	5744		
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Date 29/07/2020 13:51 File Road 3_including Plots	Designed by AK Checked by	
Micro Drainage 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 %	+0

Time Area Diagram

Total Area (ha) 0.093

	Time (mins)	Area
From:	To:	(ha)
	0	4 0.093

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<u>Model Details</u> Storage is Online Cover Level (m) 0.520 <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>5.4</td> </tr> <tr> <td>Membrane Percolation (mm/hr)</td> <td>1000</td> <td>Length (m)</td> <td>63.0</td> </tr> <tr> <td>Max Percolation (l/s)</td> <td>94.5</td> <td>Slope (1:X)</td> <td>252.0</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>Cap Volume Depth (m)</td> <td>0.220</td> </tr> </table> <u>Porous Car Park</u> <table> <tr> <td>Infiltration Coefficient Base (m/hr)</td> <td>0.00000</td> <td>Width (m)</td> <td>5.4</td> </tr> <tr> <td>Membrane Percolation (mm/hr)</td> <td>1000</td> <td>Length (m)</td> <td>63.0</td> </tr> <tr> <td>Max Percolation (l/s)</td> <td>94.5</td> <td>Slope (1:X)</td> <td>252.0</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>0.95</td> <td>Evaporation (mm/day)</td> <td>3</td> </tr> <tr> <td>Invert Level (m)</td> <td>0.220</td> <td>Membrane Depth (m)</td> <td>0</td> </tr> </table>			Infiltration Coefficient Base (m/hr)	0.00648	Width (m)	5.4	Membrane Percolation (mm/hr)	1000	Length (m)	63.0	Max Percolation (l/s)	94.5	Slope (1:X)	252.0	Safety Factor	2.0	Depression Storage (mm)	5	Porosity	0.30	Evaporation (mm/day)	3	Invert Level (m)	0.000	Cap Volume Depth (m)	0.220	Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	5.4	Membrane Percolation (mm/hr)	1000	Length (m)	63.0	Max Percolation (l/s)	94.5	Slope (1:X)	252.0	Safety Factor	2.0	Depression Storage (mm)	5	Porosity	0.95	Evaporation (mm/day)	3	Invert Level (m)	0.220	Membrane Depth (m)	0
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