

Eastwood & Partners Ltd					Page 1																																																																																																																																																																																																																			
St Andrew's House 23 Kingfield Road Sheffield S11 9AS			Miller Homes Scholes Plot Soakaway 100m2																																																																																																																																																																																																																					
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Summary of Results for 100 year Return Period (+30%) Half Drain Time : 1389 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>268.538</td><td>0.538</td><td>0.1</td><td>10.5</td><td>O K</td></tr><tr><td>30 min Summer</td><td>268.729</td><td>0.729</td><td>0.1</td><td>14.3</td><td>O K</td></tr><tr><td>60 min Summer</td><td>268.941</td><td>0.941</td><td>0.1</td><td>18.4</td><td>O K</td></tr><tr><td>120 min Summer</td><td>269.163</td><td>1.163</td><td>0.2</td><td>22.8</td><td>O K</td></tr><tr><td>180 min Summer</td><td>269.288</td><td>1.288</td><td>0.2</td><td>25.2</td><td>O K</td></tr><tr><td>240 min Summer</td><td>269.368</td><td>1.368</td><td>0.2</td><td>26.8</td><td>O K</td></tr><tr><td>360 min Summer</td><td>269.476</td><td>1.476</td><td>0.2</td><td>28.9</td><td>O K</td></tr><tr><td>480 min Summer</td><td>269.543</td><td>1.543</td><td>0.2</td><td>30.2</td><td>O K</td></tr><tr><td>600 min Summer</td><td>269.586</td><td>1.586</td><td>0.3</td><td>31.1</td><td>O K</td></tr><tr><td>720 min Summer</td><td>269.612</td><td>1.612</td><td>0.3</td><td>31.6</td><td>O K</td></tr><tr><td>960 min Summer</td><td>269.639</td><td>1.639</td><td>0.3</td><td>32.1</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>269.671</td><td>1.671</td><td>0.3</td><td>32.8</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>269.686</td><td>1.686</td><td>0.3</td><td>33.0</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>269.676</td><td>1.676</td><td>0.3</td><td>32.8</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>269.624</td><td>1.624</td><td>0.3</td><td>31.8</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>269.557</td><td>1.557</td><td>0.2</td><td>30.5</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>269.492</td><td>1.492</td><td>0.2</td><td>29.2</td><td>O K</td></tr><tr><td>8640 min Summer</td><td>269.429</td><td>1.429</td><td>0.2</td><td>28.0</td><td>O K</td></tr><tr><td>10080 min Summer</td><td>269.371</td><td>1.371</td><td>0.2</td><td>26.9</td><td>O K</td></tr><tr><td>15 min Winter</td><td>268.603</td><td>0.603</td><td>0.1</td><td>11.8</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>113.008</td><td>0.0</td><td>19</td></tr><tr><td>30 min Summer</td><td>76.858</td><td>0.0</td><td>34</td></tr><tr><td>60 min Summer</td><td>49.937</td><td>0.0</td><td>64</td></tr><tr><td>120 min Summer</td><td>31.309</td><td>0.0</td><td>124</td></tr><tr><td>180 min Summer</td><td>23.447</td><td>0.0</td><td>182</td></tr><tr><td>240 min Summer</td><td>18.944</td><td>0.0</td><td>242</td></tr><tr><td>360 min Summer</td><td>14.023</td><td>0.0</td><td>362</td></tr><tr><td>480 min Summer</td><td>11.314</td><td>0.0</td><td>482</td></tr><tr><td>600 min Summer</td><td>9.569</td><td>0.0</td><td>600</td></tr><tr><td>720 min Summer</td><td>8.341</td><td>0.0</td><td>720</td></tr><tr><td>960 min Summer</td><td>6.708</td><td>0.0</td><td>858</td></tr><tr><td>1440 min Summer</td><td>4.924</td><td>0.0</td><td>1096</td></tr><tr><td>2160 min Summer</td><td>3.605</td><td>0.0</td><td>1492</td></tr><tr><td>2880 min Summer</td><td>2.886</td><td>0.0</td><td>1900</td></tr><tr><td>4320 min Summer</td><td>2.104</td><td>0.0</td><td>2724</td></tr><tr><td>5760 min Summer</td><td>1.680</td><td>0.0</td><td>3520</td></tr><tr><td>7200 min Summer</td><td>1.413</td><td>0.0</td><td>4328</td></tr><tr><td>8640 min Summer</td><td>1.226</td><td>0.0</td><td>5104</td></tr><tr><td>10080 min Summer</td><td>1.088</td><td>0.0</td><td>5856</td></tr><tr><td>15 min Winter</td><td>113.008</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	268.538	0.538	0.1	10.5	O K	30 min Summer	268.729	0.729	0.1	14.3	O K	60 min Summer	268.941	0.941	0.1	18.4	O K	120 min Summer	269.163	1.163	0.2	22.8	O K	180 min Summer	269.288	1.288	0.2	25.2	O K	240 min Summer	269.368	1.368	0.2	26.8	O K	360 min Summer	269.476	1.476	0.2	28.9	O K	480 min Summer	269.543	1.543	0.2	30.2	O K	600 min Summer	269.586	1.586	0.3	31.1	O K	720 min Summer	269.612	1.612	0.3	31.6	O K	960 min Summer	269.639	1.639	0.3	32.1	O K	1440 min Summer	269.671	1.671	0.3	32.8	O K	2160 min Summer	269.686	1.686	0.3	33.0	O K	2880 min Summer	269.676	1.676	0.3	32.8	O K	4320 min Summer	269.624	1.624	0.3	31.8	O K	5760 min Summer	269.557	1.557	0.2	30.5	O K	7200 min Summer	269.492	1.492	0.2	29.2	O K	8640 min Summer	269.429	1.429	0.2	28.0	O K	10080 min Summer	269.371	1.371	0.2	26.9	O K	15 min Winter	268.603	0.603	0.1	11.8	O K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	113.008	0.0	19	30 min Summer	76.858	0.0	34	60 min Summer	49.937	0.0	64	120 min Summer	31.309	0.0	124	180 min Summer	23.447	0.0	182	240 min Summer	18.944	0.0	242	360 min Summer	14.023	0.0	362	480 min Summer	11.314	0.0	482	600 min Summer	9.569	0.0	600	720 min Summer	8.341	0.0	720	960 min Summer	6.708	0.0	858	1440 min Summer	4.924	0.0	1096	2160 min Summer	3.605	0.0	1492	2880 min Summer	2.886	0.0	1900	4320 min Summer	2.104	0.0	2724	5760 min Summer	1.680	0.0	3520	7200 min Summer	1.413	0.0	4328	8640 min Summer	1.226	0.0	5104	10080 min Summer	1.088	0.0	5856	15 min Winter	113.008	0.0	19
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St Andrew's House 23 Kingfield Road Sheffield S11 9AS		Miller Homes Scholes Plot Soakaway 100m2			
Date 10.03.18 File Plots 27-31 grouped.srcx		Designed by CH Checked by			
Micro Drainage		Source Control 2016.1			
Summary of Results for 100 year Return Period (+30%)					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	268.817	0.817	0.1	16.0	O K
60 min Winter	269.054	1.054	0.2	20.7	O K
120 min Winter	269.303	1.303	0.2	25.5	O K
180 min Winter	269.444	1.444	0.2	28.3	O K
240 min Winter	269.534	1.534	0.2	30.1	O K
360 min Winter	269.656	1.656	0.3	32.5	O K
480 min Winter	269.734	1.734	0.3	34.0	Flood Risk
600 min Winter	269.784	1.784	0.3	35.0	Flood Risk
720 min Winter	269.817	1.817	0.3	35.6	Flood Risk
960 min Winter	269.851	1.851	0.3	36.3	Flood Risk
1440 min Winter	269.872	1.872	0.3	36.7	Flood Risk
2160 min Winter	269.870	1.870	0.3	36.6	Flood Risk
2880 min Winter	269.836	1.836	0.3	36.0	Flood Risk
4320 min Winter	269.736	1.736	0.3	34.0	Flood Risk
5760 min Winter	269.630	1.630	0.3	31.9	O K
7200 min Winter	269.532	1.532	0.2	30.0	O K
8640 min Winter	269.443	1.443	0.2	28.3	O K
10080 min Winter	269.363	1.363	0.2	26.7	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	76.858	0.0	34		
60 min Winter	49.937	0.0	64		
120 min Winter	31.309	0.0	122		
180 min Winter	23.447	0.0	180		
240 min Winter	18.944	0.0	238		
360 min Winter	14.023	0.0	356		
480 min Winter	11.314	0.0	470		
600 min Winter	9.569	0.0	584		
720 min Winter	8.341	0.0	694		
960 min Winter	6.708	0.0	904		
1440 min Winter	4.924	0.0	1126		
2160 min Winter	3.605	0.0	1580		
2880 min Winter	2.886	0.0	2044		
4320 min Winter	2.104	0.0	2900		
5760 min Winter	1.680	0.0	3752		
7200 min Winter	1.413	0.0	4608		
8640 min Winter	1.226	0.0	5368		
10080 min Winter	1.088	0.0	6160		
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<u>Model Details</u> Storage is Online Cover Level (m) 270.000 <u>Lined Soakaway Structure</u> <table> <tr> <td>Infiltration Coefficient Base (m/hr)</td> <td>0.00000</td> <td>Ring Diameter (m)</td> <td>4.00</td> </tr> <tr> <td>Infiltration Coefficient Side (m/hr)</td> <td>0.03560</td> <td>Pit Multiplier</td> <td>1.5</td> </tr> <tr> <td>Safety Factor</td> <td>1.5</td> <td>Number Required</td> <td>1</td> </tr> <tr> <td>Porosity</td> <td>0.30</td> <td>Cap Volume Depth (m)</td> <td>0.000</td> </tr> <tr> <td>Invert Level (m)</td> <td>268.000</td> <td>Cap Infiltration Depth (m)</td> <td>0.000</td> </tr> </table>			Infiltration Coefficient Base (m/hr)	0.00000	Ring Diameter (m)	4.00	Infiltration Coefficient Side (m/hr)	0.03560	Pit Multiplier	1.5	Safety Factor	1.5	Number Required	1	Porosity	0.30	Cap Volume Depth (m)	0.000	Invert Level (m)	268.000	Cap Infiltration Depth (m)	0.000
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