

Robert Clark Associates		Page 1
Willow Cottage Herne Lane Rustington BN16 3EE	1 Deepdene Close Middleton-on-Sea Front driveway	
Date 5.4.18 File Front Drive.SRCX	Designed by RTFC Checked by	
Micro Drainage	Source Control 2016.1	

Summary of Results for 100 year Return Period (+30%)

Half Drain Time : 34 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m ³)	Status
15 min Summer	4.352	0.037	0.3	0.9	Flood Risk
30 min Summer	4.362	0.047	0.4	1.1	Flood Risk
60 min Summer	4.369	0.054	0.5	1.3	Flood Risk
120 min Summer	4.372	0.057	0.5	1.3	Flood Risk
180 min Summer	4.369	0.054	0.5	1.3	Flood Risk
240 min Summer	4.365	0.050	0.5	1.2	Flood Risk
360 min Summer	4.359	0.044	0.4	1.0	Flood Risk
480 min Summer	4.354	0.039	0.4	0.9	Flood Risk
600 min Summer	4.350	0.035	0.3	0.8	Flood Risk
720 min Summer	4.347	0.032	0.3	0.7	Flood Risk
960 min Summer	4.342	0.027	0.3	0.6	Flood Risk
1440 min Summer	4.337	0.022	0.2	0.5	Flood Risk
2160 min Summer	4.331	0.016	0.2	0.4	Flood Risk
2880 min Summer	4.328	0.013	0.1	0.3	Flood Risk
4320 min Summer	4.325	0.010	0.1	0.2	Flood Risk
5760 min Summer	4.323	0.008	0.1	0.2	Flood Risk
7200 min Summer	4.322	0.007	0.1	0.2	Flood Risk
8640 min Summer	4.321	0.006	0.1	0.1	Flood Risk
10080 min Summer	4.320	0.005	0.0	0.1	Flood Risk
15 min Winter	4.358	0.043	0.4	1.0	Flood Risk

Storm Event	Rain (mm/hr)	Flooded Volume (m ³)	Time-Peak (mins)
15 min Summer	115.731	0.0	16
30 min Summer	77.804	0.0	26
60 min Summer	49.937	0.0	42
120 min Summer	30.956	0.0	78
180 min Summer	23.058	0.0	110
240 min Summer	18.577	0.0	140
360 min Summer	13.656	0.0	202
480 min Summer	10.974	0.0	264
600 min Summer	9.254	0.0	326
720 min Summer	8.046	0.0	386
960 min Summer	6.447	0.0	510
1440 min Summer	4.709	0.0	750
2160 min Summer	3.432	0.0	1108
2880 min Summer	2.739	0.0	1472
4320 min Summer	1.989	0.0	2204
5760 min Summer	1.583	0.0	2936
7200 min Summer	1.325	0.0	3640
8640 min Summer	1.147	0.0	4288
10080 min Summer	1.015	0.0	5136
15 min Winter	115.731	0.0	16

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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	4.369	0.054	0.5	1.3	Flood Risk
60 min Winter	4.377	0.062	0.5	1.4	Flood Risk
120 min Winter	4.376	0.061	0.5	1.4	Flood Risk
180 min Winter	4.370	0.055	0.5	1.3	Flood Risk
240 min Winter	4.364	0.049	0.5	1.1	Flood Risk
360 min Winter	4.356	0.041	0.4	0.9	Flood Risk
480 min Winter	4.350	0.035	0.3	0.8	Flood Risk
600 min Winter	4.346	0.031	0.3	0.7	Flood Risk
720 min Winter	4.342	0.027	0.3	0.6	Flood Risk
960 min Winter	4.338	0.023	0.2	0.5	Flood Risk
1440 min Winter	4.332	0.017	0.2	0.4	Flood Risk
2160 min Winter	4.328	0.013	0.1	0.3	Flood Risk
2880 min Winter	4.325	0.010	0.1	0.2	Flood Risk
4320 min Winter	4.322	0.007	0.1	0.2	Flood Risk
5760 min Winter	4.321	0.006	0.1	0.1	Flood Risk
7200 min Winter	4.320	0.005	0.0	0.1	Flood Risk
8640 min Winter	4.319	0.004	0.0	0.1	Flood Risk
10080 min Winter	4.319	0.004	0.0	0.1	Flood Risk

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
30 min Winter	77.804	0.0	28
60 min Winter	49.937	0.0	46
120 min Winter	30.956	0.0	84
180 min Winter	23.058	0.0	116
240 min Winter	18.577	0.0	148
360 min Winter	13.656	0.0	210
480 min Winter	10.974	0.0	272
600 min Winter	9.254	0.0	334
720 min Winter	8.046	0.0	396
960 min Winter	6.447	0.0	512
1440 min Winter	4.709	0.0	764
2160 min Winter	3.432	0.0	1120
2880 min Winter	2.739	0.0	1476
4320 min Winter	1.989	0.0	2160
5760 min Winter	1.583	0.0	2840
7200 min Winter	1.325	0.0	3512
8640 min Winter	1.147	0.0	4208
10080 min Winter	1.015	0.0	4960

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<u>Model Details</u> Storage is Online Cover Level (m) 4.550 <u>Porous Car Park Structure</u> <table> <tr> <td>Infiltration Coefficient Base (m/hr)</td> <td>0.04400</td> </tr> <tr> <td>Membrane Percolation (mm/hr)</td> <td>1000</td> </tr> <tr> <td>Max Percolation (l/s)</td> <td>16.1</td> </tr> <tr> <td>Safety Factor</td> <td>1.5</td> </tr> <tr> <td>Porosity</td> <td>0.40</td> </tr> <tr> <td>Invert Level (m)</td> <td>4.315</td> </tr> <tr> <td>Width (m)</td> <td>4.0</td> </tr> <tr> <td>Length (m)</td> <td>14.5</td> </tr> <tr> <td>Slope (1:X)</td> <td>0.0</td> </tr> <tr> <td>Depression Storage (mm)</td> <td>5</td> </tr> <tr> <td>Evaporation (mm/day)</td> <td>3</td> </tr> <tr> <td>Membrane Depth (m)</td> <td>0</td> </tr> </table>			Infiltration Coefficient Base (m/hr)	0.04400	Membrane Percolation (mm/hr)	1000	Max Percolation (l/s)	16.1	Safety Factor	1.5	Porosity	0.40	Invert Level (m)	4.315	Width (m)	4.0	Length (m)	14.5	Slope (1:X)	0.0	Depression Storage (mm)	5	Evaporation (mm/day)	3	Membrane Depth (m)	0
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