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Willow Cottage Herne Lane Rustington BN16 3EE	Springfield House Springfield Road East Preston	
Date 22.7.18 File Permeable paving.SRCX	Designed by RTFC Checked by	
Micro Drainage	Source Control 2016.1	

Summary of Results for 100 year Return Period (+40%)

Half Drain Time : 14 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m ³)	Status
15 min Summer	7.357	0.087	6.8	8.1	Flood Risk
30 min Summer	7.376	0.106	6.8	9.8	Flood Risk
60 min Summer	7.380	0.110	6.8	10.2	Flood Risk
120 min Summer	7.363	0.093	6.8	8.6	Flood Risk
180 min Summer	7.342	0.072	6.8	6.7	0 K
240 min Summer	7.327	0.057	6.8	5.3	0 K
360 min Summer	7.313	0.043	5.9	4.0	0 K
480 min Summer	7.306	0.036	4.9	3.4	0 K
600 min Summer	7.301	0.031	4.2	2.9	0 K
720 min Summer	7.298	0.028	3.8	2.6	0 K
960 min Summer	7.293	0.023	3.1	2.1	0 K
1440 min Summer	7.287	0.017	2.3	1.6	0 K
2160 min Summer	7.282	0.012	1.7	1.2	0 K
2880 min Summer	7.280	0.010	1.3	0.9	0 K
4320 min Summer	7.277	0.007	1.0	0.7	0 K
5760 min Summer	7.276	0.006	0.8	0.5	0 K
7200 min Summer	7.275	0.005	0.6	0.4	0 K
8640 min Summer	7.274	0.004	0.6	0.4	0 K
10080 min Summer	7.274	0.004	0.5	0.3	0 K
15 min Winter	7.371	0.101	6.8	9.4	Flood Risk

Storm Event	Rain (mm/hr)	Flooded Volume (m ³)	Time-Peak (mins)
15 min Summer	124.633	0.0	14
30 min Summer	83.789	0.0	23
60 min Summer	53.779	0.0	40
120 min Summer	33.337	0.0	74
180 min Summer	24.832	0.0	104
240 min Summer	20.006	0.0	132
360 min Summer	14.706	0.0	190
480 min Summer	11.818	0.0	250
600 min Summer	9.966	0.0	310
720 min Summer	8.665	0.0	370
960 min Summer	6.943	0.0	490
1440 min Summer	5.071	0.0	736
2160 min Summer	3.696	0.0	1100
2880 min Summer	2.949	0.0	1468
4320 min Summer	2.142	0.0	2188
5760 min Summer	1.705	0.0	2904
7200 min Summer	1.427	0.0	3544
8640 min Summer	1.235	0.0	4272
10080 min Summer	1.093	0.0	5048
15 min Winter	124.633	0.0	15

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Summary of Results for 100 year Return Period (+40%)					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	7.390	0.120	6.8	11.2	Flood Risk
60 min Winter	7.389	0.119	6.8	11.1	Flood Risk
120 min Winter	7.358	0.088	6.8	8.1	Flood Risk
180 min Winter	7.328	0.058	6.8	5.4	0 K
240 min Winter	7.316	0.046	6.2	4.2	0 K
360 min Winter	7.305	0.035	4.7	3.2	0 K
480 min Winter	7.298	0.028	3.8	2.6	0 K
600 min Winter	7.294	0.024	3.2	2.2	0 K
720 min Winter	7.291	0.021	2.8	1.9	0 K
960 min Winter	7.287	0.017	2.3	1.5	0 K
1440 min Winter	7.282	0.012	1.7	1.1	0 K
2160 min Winter	7.279	0.009	1.3	0.8	0 K
2880 min Winter	7.277	0.007	1.0	0.7	0 K
4320 min Winter	7.275	0.005	0.7	0.5	0 K
5760 min Winter	7.274	0.004	0.6	0.4	0 K
7200 min Winter	7.274	0.004	0.5	0.3	0 K
8640 min Winter	7.273	0.003	0.4	0.3	0 K
10080 min Winter	7.273	0.003	0.4	0.2	0 K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	83.789	0.0	25		
60 min Winter	53.779	0.0	44		
120 min Winter	33.337	0.0	78		
180 min Winter	24.832	0.0	106		
240 min Winter	20.006	0.0	132		
360 min Winter	14.706	0.0	192		
480 min Winter	11.818	0.0	250		
600 min Winter	9.966	0.0	314		
720 min Winter	8.665	0.0	374		
960 min Winter	6.943	0.0	492		
1440 min Winter	5.071	0.0	736		
2160 min Winter	3.696	0.0	1108		
2880 min Winter	2.949	0.0	1416		
4320 min Winter	2.142	0.0	2204		
5760 min Winter	1.705	0.0	2800		
7200 min Winter	1.427	0.0	3768		
8640 min Winter	1.235	0.0	4152		
10080 min Winter	1.093	0.0	5080		
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<u>Rainfall Details</u> <table> <tr> <td>Rainfall Model</td> <td>FSR</td> <td>Winter Storms</td> <td>Yes</td> </tr> <tr> <td>Return Period (years)</td> <td>100</td> <td>Cv (Summer)</td> <td>0.750</td> </tr> <tr> <td>Region</td> <td>England and Wales</td> <td>Cv (Winter)</td> <td>0.840</td> </tr> <tr> <td>M5-60 (mm)</td> <td>19.000</td> <td>Shortest Storm (mins)</td> <td>15</td> </tr> <tr> <td>Ratio R</td> <td>0.350</td> <td>Longest Storm (mins)</td> <td>10080</td> </tr> <tr> <td>Summer Storms</td> <td>Yes</td> <td>Climate Change %</td> <td>+40</td> </tr> </table> <u>Time Area Diagram</u> Total Area (ha) 0.056 <table> <tr> <th colspan="2">Time (mins)</th> <th>Area</th> </tr> <tr> <th>From:</th> <th>To:</th> <th>(ha)</th> </tr> <tr> <td>0</td> <td>4</td> <td>0.056</td> </tr> </table>			Rainfall Model	FSR	Winter Storms	Yes	Return Period (years)	100	Cv (Summer)	0.750	Region	England and Wales	Cv (Winter)	0.840	M5-60 (mm)	19.000	Shortest Storm (mins)	15	Ratio R	0.350	Longest Storm (mins)	10080	Summer Storms	Yes	Climate Change %	+40	Time (mins)		Area	From:	To:	(ha)	0	4	0.056
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Model Details

Storage is Online Cover Level (m) 7.650

Porous Car Park Structure

Infiltration Coefficient Base (m/hr)	0.11783
Membrane Percolation (mm/hr)	1000
Max Percolation (l/s)	86.1
Safety Factor	1.5
Porosity	0.30
Invert Level (m)	7.270
Width (m)	20.0
Length (m)	15.5
Slope (1:X)	0.0
Depression Storage (mm)	5
Evaporation (mm/day)	3
Membrane Depth (m)	0

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