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Willow Cottage Herne Lane Rustington BN16 3EE		72 Ancton Way Elmer Sands				
Date 21.1.18 File Permeable paving front44.SRCX		Designed by RTFC Checked by				
Micro Drainage		Source Control 2016.1				
<u>Summary of Results for 100 year Return Period (+30%)</u> Half Drain Time : 1212 minutes.						
Storm Event		Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer		2.836	0.086	0.0	2.0	0 K
30 min Summer		2.870	0.120	0.0	2.8	0 K
60 min Summer		2.906	0.156	0.0	3.7	Flood Risk
120 min Summer		2.943	0.193	0.0	4.5	Flood Risk
180 min Summer		2.963	0.213	0.0	5.0	Flood Risk
240 min Summer		2.975	0.225	0.0	5.3	Flood Risk
360 min Summer		2.991	0.241	0.0	5.6	Flood Risk
480 min Summer		3.000	0.250	0.0	5.9	Flood Risk
600 min Summer		3.005	0.255	0.0	6.0	Flood Risk
720 min Summer		3.008	0.258	0.0	6.0	Flood Risk
960 min Summer		3.008	0.258	0.0	6.0	Flood Risk
1440 min Summer		3.004	0.254	0.0	5.9	Flood Risk
2160 min Summer		2.993	0.243	0.0	5.7	Flood Risk
2880 min Summer		2.981	0.231	0.0	5.4	Flood Risk
4320 min Summer		2.954	0.204	0.0	4.8	Flood Risk
5760 min Summer		2.928	0.178	0.0	4.2	Flood Risk
7200 min Summer		2.904	0.154	0.0	3.6	Flood Risk
8640 min Summer		2.882	0.132	0.0	3.1	Flood Risk
10080 min Summer		2.864	0.114	0.0	2.7	0 K
15 min Winter		2.848	0.098	0.0	2.3	0 K
Storm Event		Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
15 min Summer		115.731	0.0	19		
30 min Summer		77.804	0.0	34		
60 min Summer		49.937	0.0	64		
120 min Summer		30.956	0.0	124		
180 min Summer		23.058	0.0	182		
240 min Summer		18.577	0.0	242		
360 min Summer		13.656	0.0	362		
480 min Summer		10.974	0.0	482		
600 min Summer		9.254	0.0	600		
720 min Summer		8.046	0.0	720		
960 min Summer		6.447	0.0	914		
1440 min Summer		4.709	0.0	1140		
2160 min Summer		3.432	0.0	1516		
2880 min Summer		2.739	0.0	1932		
4320 min Summer		1.989	0.0	2728		
5760 min Summer		1.583	0.0	3520		
7200 min Summer		1.325	0.0	4320		
8640 min Summer		1.147	0.0	5016		
10080 min Summer		1.015	0.0	5752		
15 min Winter		115.731	0.0	19		
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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	2.886	0.136	0.0	3.2	Flood Risk
60 min Winter	2.927	0.177	0.0	4.2	Flood Risk
120 min Winter	2.969	0.219	0.0	5.1	Flood Risk
180 min Winter	2.992	0.242	0.0	5.7	Flood Risk
240 min Winter	3.006	0.256	0.0	6.0	Flood Risk
360 min Winter	3.025	0.275	0.0	6.4	Flood Risk
480 min Winter	3.036	0.286	0.0	6.7	Flood Risk
600 min Winter	3.043	0.293	0.0	6.9	Flood Risk
720 min Winter	3.047	0.297	0.0	7.0	Flood Risk
960 min Winter	3.050	0.300	0.0	7.0	Flood Risk
1440 min Winter	3.043	0.293	0.0	6.9	Flood Risk
2160 min Winter	3.029	0.279	0.0	6.5	Flood Risk
2880 min Winter	3.010	0.260	0.0	6.1	Flood Risk
4320 min Winter	2.970	0.220	0.0	5.1	Flood Risk
5760 min Winter	2.930	0.180	0.0	4.2	Flood Risk
7200 min Winter	2.893	0.143	0.0	3.4	Flood Risk
8640 min Winter	2.862	0.112	0.0	2.6	0 K
10080 min Winter	2.836	0.086	0.0	2.0	0 K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	77.804	0.0	33		
60 min Winter	49.937	0.0	62		
120 min Winter	30.956	0.0	122		
180 min Winter	23.058	0.0	180		
240 min Winter	18.577	0.0	240		
360 min Winter	13.656	0.0	356		
480 min Winter	10.974	0.0	472		
600 min Winter	9.254	0.0	586		
720 min Winter	8.046	0.0	700		
960 min Winter	6.447	0.0	922		
1440 min Winter	4.709	0.0	1326		
2160 min Winter	3.432	0.0	1644		
2880 min Winter	2.739	0.0	2104		
4320 min Winter	1.989	0.0	2984		
5760 min Winter	1.583	0.0	3808		
7200 min Winter	1.325	0.0	4544		
8640 min Winter	1.147	0.0	5272		
10080 min Winter	1.015	0.0	5944		
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Micro Drainage Source Control 2016.1		

Rainfall Details

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 %	+30

Time Area Diagram

Total Area (ha) 0.011

Time (mins)	Area
From:	To: (ha)
0	4 0.011

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Model Details

Storage is Online Cover Level (m) 3.180

Porous Car Park Structure

Infiltration Coefficient Base (m/hr)	0.00392
Membrane Percolation (mm/hr)	1000
Max Percolation (l/s)	18.6
Safety Factor	1.5
Porosity	0.35
Invert Level (m)	2.750
Width (m)	9.7
Length (m)	6.9
Slope (1:X)	0.0
Depression Storage (mm)	5
Evaporation (mm/day)	3
Membrane Depth (m)	0

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