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Willow Cottage Herne Lane Rustington BN16 3EE		4 Arundel Way Elmer Sands Rear Soakaway				
Date 25.1.18 File Rear geocell.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 : 168 minutes.						
Storm Event		Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer		7.404	0.204	0.2	2.0	O K
30 min Summer		7.465	0.265	0.2	2.6	O K
60 min Summer		7.519	0.319	0.2	3.2	O K
120 min Summer		7.551	0.351	0.2	3.5	O K
180 min Summer		7.554	0.354	0.2	3.5	O K
240 min Summer		7.550	0.350	0.2	3.5	O K
360 min Summer		7.537	0.337	0.2	3.4	O K
480 min Summer		7.521	0.321	0.2	3.2	O K
600 min Summer		7.505	0.305	0.2	3.0	O K
720 min Summer		7.488	0.288	0.2	2.9	O K
960 min Summer		7.457	0.257	0.2	2.6	O K
1440 min Summer		7.402	0.202	0.2	2.0	O K
2160 min Summer		7.338	0.138	0.2	1.4	O K
2880 min Summer		7.293	0.093	0.2	0.9	O K
4320 min Summer		7.250	0.050	0.2	0.5	O K
5760 min Summer		7.240	0.040	0.1	0.4	O K
7200 min Summer		7.234	0.034	0.1	0.3	O K
8640 min Summer		7.229	0.029	0.1	0.3	O K
10080 min Summer		7.226	0.026	0.1	0.3	O K
15 min Winter		7.429	0.229	0.2	2.3	O K
Storm Event		Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
15 min Summer		115.731	0.0	18		
30 min Summer		77.804	0.0	33		
60 min Summer		49.937	0.0	62		
120 min Summer		30.956	0.0	118		
180 min Summer		23.058	0.0	148		
240 min Summer		18.577	0.0	180		
360 min Summer		13.656	0.0	248		
480 min Summer		10.974	0.0	316		
600 min Summer		9.254	0.0	386		
720 min Summer		8.046	0.0	454		
960 min Summer		6.447	0.0	586		
1440 min Summer		4.709	0.0	840		
2160 min Summer		3.432	0.0	1208		
2880 min Summer		2.739	0.0	1556		
4320 min Summer		1.989	0.0	2204		
5760 min Summer		1.583	0.0	2936		
7200 min Summer		1.325	0.0	3672		
8640 min Summer		1.147	0.0	4400		
10080 min Summer		1.015	0.0	5112		
15 min Winter		115.731	0.0	18		
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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	7.500	0.300	0.2	3.0	0 K
60 min Winter	7.563	0.363	0.2	3.6	0 K
120 min Winter	7.605	0.405	0.2	4.0	Flood Risk
180 min Winter	7.609	0.409	0.2	4.1	Flood Risk
240 min Winter	7.603	0.403	0.2	4.0	Flood Risk
360 min Winter	7.583	0.383	0.2	3.8	0 K
480 min Winter	7.560	0.360	0.2	3.6	0 K
600 min Winter	7.535	0.335	0.2	3.3	0 K
720 min Winter	7.510	0.310	0.2	3.1	0 K
960 min Winter	7.463	0.263	0.2	2.6	0 K
1440 min Winter	7.383	0.183	0.2	1.8	0 K
2160 min Winter	7.296	0.096	0.2	1.0	0 K
2880 min Winter	7.250	0.050	0.2	0.5	0 K
4320 min Winter	7.237	0.037	0.1	0.4	0 K
5760 min Winter	7.229	0.029	0.1	0.3	0 K
7200 min Winter	7.225	0.025	0.1	0.2	0 K
8640 min Winter	7.221	0.021	0.1	0.2	0 K
10080 min Winter	7.219	0.019	0.1	0.2	0 K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	77.804	0.0	32		
60 min Winter	49.937	0.0	60		
120 min Winter	30.956	0.0	116		
180 min Winter	23.058	0.0	168		
240 min Winter	18.577	0.0	190		
360 min Winter	13.656	0.0	268		
480 min Winter	10.974	0.0	342		
600 min Winter	9.254	0.0	416		
720 min Winter	8.046	0.0	490		
960 min Winter	6.447	0.0	626		
1440 min Winter	4.709	0.0	892		
2160 min Winter	3.432	0.0	1236		
2880 min Winter	2.739	0.0	1496		
4320 min Winter	1.989	0.0	2204		
5760 min Winter	1.583	0.0	2936		
7200 min Winter	1.325	0.0	3672		
8640 min Winter	1.147	0.0	4408		
10080 min Winter	1.015	0.0	5144		
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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) 0.010

Time (mins)	Area (ha)
From:	To:
0	4 0.010

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Model Details

Storage is Online Cover Level (m) 7.900

Cellular Storage Structure

Invert Level (m)	7.200
Infiltration Coefficient Base (m/hr)	0.07700
Infiltration Coefficient Side (m/hr)	0.07700
Safety Factor	1.5
Porosity	0.95

Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	10.5	10.5	0.500	0.0	15.7
0.400	10.5	15.7			

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