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Willow Cottage Herne Lane Rustington BN16 3EE	Castle View Storage Old Mead Road Surface Water Drainage	
Date 28.4.19 File Geocell G1-3 with FOS of 6.5.SRCX	Designed by Checked by	
Micro Drainage	Source Control 2016.1	

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

Half Drain Time : 313 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	2.545	0.185	1.5	26.0	0 K
30 min Summer	2.604	0.244	1.5	34.3	0 K
60 min Summer	2.662	0.302	1.6	42.4	0 K
120 min Summer	2.709	0.349	1.7	49.0	0 K
180 min Summer	2.724	0.364	1.7	51.2	0 K
240 min Summer	2.726	0.366	1.7	51.4	0 K
360 min Summer	2.722	0.362	1.7	50.9	0 K
480 min Summer	2.716	0.356	1.7	50.0	0 K
600 min Summer	2.707	0.347	1.7	48.8	0 K
720 min Summer	2.698	0.338	1.6	47.5	0 K
960 min Summer	2.679	0.319	1.6	44.8	0 K
1440 min Summer	2.640	0.280	1.6	39.4	0 K
2160 min Summer	2.588	0.228	1.5	32.1	0 K
2880 min Summer	2.544	0.184	1.5	25.8	0 K
4320 min Summer	2.476	0.116	1.4	16.3	0 K
5760 min Summer	2.433	0.073	1.3	10.3	0 K
7200 min Summer	2.411	0.051	1.3	7.2	0 K
8640 min Summer	2.405	0.045	1.2	6.3	0 K
10080 min Summer	2.400	0.040	1.0	5.6	0 K
15 min Winter	2.568	0.208	1.5	29.2	0 K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
15 min Summer	124.633	0.0	18
30 min Summer	83.789	0.0	33
60 min Summer	53.779	0.0	62
120 min Summer	33.337	0.0	122
180 min Summer	24.832	0.0	180
240 min Summer	20.006	0.0	228
360 min Summer	14.706	0.0	286
480 min Summer	11.818	0.0	350
600 min Summer	9.966	0.0	418
720 min Summer	8.665	0.0	486
960 min Summer	6.943	0.0	626
1440 min Summer	5.071	0.0	896
2160 min Summer	3.696	0.0	1296
2880 min Summer	2.949	0.0	1668
4320 min Summer	2.142	0.0	2376
5760 min Summer	1.705	0.0	3056
7200 min Summer	1.427	0.0	3680
8640 min Summer	1.235	0.0	4408
10080 min Summer	1.093	0.0	5136
15 min Winter	124.633	0.0	18

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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	2.635	0.275	1.6	38.6	0 K
60 min Winter	2.701	0.341	1.7	47.9	0 K
120 min Winter	2.757	0.397	1.7	55.8	0 K
180 min Winter	2.783	0.423	1.7	58.8	0 K
240 min Winter	2.794	0.434	1.7	59.6	0 K
360 min Winter	2.782	0.422	1.7	58.7	0 K
480 min Winter	2.770	0.410	1.7	57.5	0 K
600 min Winter	2.757	0.397	1.7	55.9	0 K
720 min Winter	2.744	0.384	1.7	54.0	0 K
960 min Winter	2.715	0.355	1.7	49.9	0 K
1440 min Winter	2.657	0.297	1.6	41.7	0 K
2160 min Winter	2.579	0.219	1.5	30.9	0 K
2880 min Winter	2.516	0.156	1.4	21.9	0 K
4320 min Winter	2.429	0.069	1.3	9.7	0 K
5760 min Winter	2.405	0.045	1.2	6.3	0 K
7200 min Winter	2.398	0.038	1.0	5.3	0 K
8640 min Winter	2.393	0.033	0.8	4.6	0 K
10080 min Winter	2.389	0.029	0.8	4.1	0 K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	83.789	0.0	33		
60 min Winter	53.779	0.0	62		
120 min Winter	33.337	0.0	120		
180 min Winter	24.832	0.0	176		
240 min Winter	20.006	0.0	232		
360 min Winter	14.706	0.0	330		
480 min Winter	11.818	0.0	374		
600 min Winter	9.966	0.0	450		
720 min Winter	8.665	0.0	528		
960 min Winter	6.943	0.0	676		
1440 min Winter	5.071	0.0	966		
2160 min Winter	3.696	0.0	1364		
2880 min Winter	2.949	0.0	1756		
4320 min Winter	2.142	0.0	2380		
5760 min Winter	1.705	0.0	2952		
7200 min Winter	1.427	0.0	3672		
8640 min Winter	1.235	0.0	4408		
10080 min Winter	1.093	0.0	5120		
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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 %	+40

Time Area Diagram

Total Area (ha) 0.116

Time (mins)	Area
From:	To: (ha)
0	4 0.116

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Model Details

Storage is Online Cover Level (m) 3.290

Cellular Storage Structure

Invert Level (m)	2.360
Infiltration Coefficient Base (m/hr)	0.19346
Infiltration Coefficient Side (m/hr)	0.19346
Safety Factor	6.5
Porosity	0.95

Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	148.0	148.0	0.500	0.0	208.8
0.400	148.0	208.8			

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