

Robert Clark Associates				Page 1	
Willow Cottage Herne Lane Rustington BN16 3EE		WAlborton Farm SA2			
Date 9.6.26 File SA2 calcs 30yr rain.SRCX		Designed by RTFC Checked by			
Micro Drainage		Source Control 2016.1			
Summary of Results for 30 year Return Period (+45%)					
Half Drain Time : 79 minutes.					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	12.731	0.756	1.2	8.0	O K
30 min Summer	12.868	0.893	1.4	9.5	O K
60 min Summer	12.975	1.000	1.5	10.6	O K
120 min Summer	13.064	1.089	1.7	11.5	O K
180 min Summer	13.095	1.120	1.7	11.9	O K
240 min Summer	13.101	1.126	1.7	11.9	O K
360 min Summer	13.079	1.104	1.7	11.7	O K
480 min Summer	13.041	1.066	1.6	11.3	O K
600 min Summer	13.000	1.025	1.6	10.8	O K
720 min Summer	12.960	0.985	1.5	10.4	O K
960 min Summer	12.844	0.869	1.3	9.2	O K
1440 min Summer	12.684	0.709	1.1	7.5	O K
2160 min Summer	12.537	0.562	0.9	5.9	O K
2880 min Summer	12.442	0.467	0.7	4.9	O K
4320 min Summer	12.354	0.379	0.6	4.0	O K
5760 min Summer	12.297	0.322	0.5	3.4	O K
7200 min Summer	12.258	0.283	0.4	3.0	O K
8640 min Summer	12.228	0.253	0.4	2.7	O K
10080 min Summer	12.205	0.230	0.4	2.4	O K
15 min Winter	12.732	0.757	1.2	8.0	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
15 min Summer	107.925	0.0	18		
30 min Summer	67.597	0.0	31		
60 min Summer	42.338	0.0	52		
120 min Summer	26.518	0.0	84		
180 min Summer	20.169	0.0	118		
240 min Summer	16.609	0.0	154		
360 min Summer	12.632	0.0	220		
480 min Summer	10.403	0.0	286		
600 min Summer	8.948	0.0	350		
720 min Summer	7.912	0.0	414		
960 min Summer	6.205	0.0	540		
1440 min Summer	4.405	0.0	782		
2160 min Summer	3.127	0.0	1148		
2880 min Summer	2.452	0.0	1504		
4320 min Summer	1.857	0.0	2248		
5760 min Summer	1.524	0.0	2944		
7200 min Summer	1.308	0.0	3680		
8640 min Summer	1.154	0.0	4408		
10080 min Summer	1.038	0.0	5144		
15 min Winter	107.925	0.0	17		
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Micro Drainage		Source Control 2016.1			
Summary of Results for 30 year Return Period (+45%)					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	12.872	0.897	1.4	9.5	O K
60 min Winter	12.980	1.005	1.5	10.6	O K
120 min Winter	13.054	1.079	1.7	11.4	O K
180 min Winter	13.064	1.089	1.7	11.5	O K
240 min Winter	13.050	1.075	1.6	11.4	O K
360 min Winter	12.997	1.022	1.6	10.8	O K
480 min Winter	12.936	0.961	1.5	10.2	O K
600 min Winter	12.879	0.904	1.4	9.6	O K
720 min Winter	12.826	0.851	1.3	9.0	O K
960 min Winter	12.701	0.726	1.1	7.7	O K
1440 min Winter	12.538	0.563	0.9	6.0	O K
2160 min Winter	12.398	0.423	0.6	4.5	O K
2880 min Winter	12.316	0.341	0.5	3.6	O K
4320 min Winter	12.240	0.265	0.4	2.8	O K
5760 min Winter	12.195	0.220	0.3	2.3	O K
7200 min Winter	12.165	0.190	0.3	2.0	O K
8640 min Winter	12.143	0.168	0.3	1.8	O K
10080 min Winter	12.126	0.151	0.2	1.6	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	67.597	0.0	31		
60 min Winter	42.338	0.0	56		
120 min Winter	26.518	0.0	90		
180 min Winter	20.169	0.0	128		
240 min Winter	16.609	0.0	164		
360 min Winter	12.632	0.0	234		
480 min Winter	10.403	0.0	302		
600 min Winter	8.948	0.0	368		
720 min Winter	7.912	0.0	432		
960 min Winter	6.205	0.0	558		
1440 min Winter	4.405	0.0	808		
2160 min Winter	3.127	0.0	1172		
2880 min Winter	2.452	0.0	1532		
4320 min Winter	1.857	0.0	2252		
5760 min Winter	1.524	0.0	2992		
7200 min Winter	1.308	0.0	3680		
8640 min Winter	1.154	0.0	4416		
10080 min Winter	1.038	0.0	5144		
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Rainfall Details

Rainfall Model	FEH
Return Period (years)	30
Site Location	493650 105600 SU 93650 05600
C (1km)	-0.026
D1 (1km)	0.413
D2 (1km)	0.243
D3 (1km)	0.402
E (1km)	0.310
F (1km)	2.325
Summer Storms	Yes
Winter Storms	Yes
Cv (Summer)	1.000
Cv (Winter)	1.000
Shortest Storm (mins)	15
Longest Storm (mins)	10080
Climate Change %	+45

Time Area Diagram

Total Area (ha) 0.032

Time (mins)	Area
From:	To: (ha)
0	4 0.032

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Model Details

Storage is Online Cover Level (m) 13.600

Lined Soakaway Structure

Infiltration Coefficient Base (m/hr)	0.00000	Ring Diameter (m)	1.80
Infiltration Coefficient Side (m/hr)	0.30262	Pit Multiplier	1.9
Safety Factor	1.5	Number Required	2
Porosity	0.30	Cap Volume Depth (m)	0.000
Invert Level (m)	11.975	Cap Infiltration Depth (m)	0.000

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