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41 Ancton Way Elmer West Sussex		
Date 26.3.19 File Geocell G1.SRCX	Designed by Checked by	
Micro Drainage	Source Control 2016.1	

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

Half Drain Time : 1195 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	3.146	0.126	0.1	2.7	O K
30 min Summer	3.188	0.168	0.1	3.6	O K
60 min Summer	3.232	0.212	0.1	4.5	O K
120 min Summer	3.276	0.256	0.1	5.5	O K
180 min Summer	3.299	0.279	0.1	6.0	O K
240 min Summer	3.314	0.294	0.1	6.3	O K
360 min Summer	3.332	0.312	0.1	6.7	O K
480 min Summer	3.342	0.322	0.1	6.9	O K
600 min Summer	3.347	0.327	0.1	7.0	O K
720 min Summer	3.349	0.329	0.1	7.0	O K
960 min Summer	3.348	0.328	0.1	7.0	O K
1440 min Summer	3.342	0.322	0.1	6.9	O K
2160 min Summer	3.328	0.308	0.1	6.6	O K
2880 min Summer	3.313	0.293	0.1	6.3	O K
4320 min Summer	3.282	0.262	0.1	5.6	O K
5760 min Summer	3.253	0.233	0.1	5.0	O K
7200 min Summer	3.227	0.207	0.1	4.4	O K
8640 min Summer	3.203	0.183	0.1	3.9	O K
10080 min Summer	3.182	0.162	0.1	3.5	O K
15 min Winter	3.161	0.141	0.1	3.0	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
15 min Summer	131.851	0.0	19
30 min Summer	88.566	0.0	34
60 min Summer	56.713	0.0	64
120 min Summer	35.004	0.0	124
180 min Summer	25.973	0.0	182
240 min Summer	20.877	0.0	242
360 min Summer	15.365	0.0	362
480 min Summer	12.341	0.0	482
600 min Summer	10.402	0.0	600
720 min Summer	9.042	0.0	720
960 min Summer	7.241	0.0	896
1440 min Summer	5.284	0.0	1128
2160 min Summer	3.848	0.0	1516
2880 min Summer	3.068	0.0	1932
4320 min Summer	2.226	0.0	2764
5760 min Summer	1.771	0.0	3568
7200 min Summer	1.483	0.0	4328
8640 min Summer	1.284	0.0	5104
10080 min Summer	1.137	0.0	5848
15 min Winter	131.851	0.0	19

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<u>Rainfall Details</u>											
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)	20.000	Shortest Storm (mins) 15									
Ratio R	0.350	Longest Storm (mins) 10080									
Summer Storms	Yes	Climate Change % +40									
<u>Time Area Diagram</u>											
Total Area (ha) 0.011											
<table border="0"> <thead> <tr> <th colspan="2">Time (mins)</th> <th>Area</th> </tr> <tr> <th>From:</th> <th>To:</th> <th>(ha)</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>4</td> <td>0.011</td> </tr> </tbody> </table>			Time (mins)		Area	From:	To:	(ha)	0	4	0.011
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Model Details

Storage is Online Cover Level (m) 3.820

Cellular Storage Structure

Invert Level (m) 3.020
 Infiltration Coefficient Base (m/hr) 0.01465
 Infiltration Coefficient Side (m/hr) 0.01465
 Safety Factor 2.0
 Porosity 0.95

Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	22.5	22.5	0.500	0.0	30.1
0.400	22.5	30.1			