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Robin Hill Farm Clay Lane Fishbourne Chichester PO18 8AB	Field Place Aldingbourne West Soakaway Cellular Trench	
Date 25/4/22 File P2-2.src	Designed By AT Checked By	
Micro Drainage	Source Control W.11.2	

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

Half Drain Time : 22 minutes

Storm Duration (mins)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m ³)	Status
15 Summer	0.4	0.4	9.3987	0.2987	0.6	O K
30 Summer	0.4	0.4	9.4467	0.3467	0.7	O K
60 Summer	0.4	0.4	9.4632	0.3632	0.7	O K
120 Summer	0.4	0.4	9.4357	0.3357	0.6	O K
180 Summer	0.4	0.4	9.4007	0.3007	0.6	O K
240 Summer	0.3	0.3	9.3707	0.2707	0.5	O K
360 Summer	0.3	0.3	9.3277	0.2277	0.4	O K
480 Summer	0.2	0.2	9.2973	0.1972	0.4	O K
600 Summer	0.2	0.2	9.2748	0.1747	0.3	O K
720 Summer	0.2	0.2	9.2573	0.1572	0.3	O K
960 Summer	0.2	0.2	9.2318	0.1318	0.3	O K
1440 Summer	0.1	0.1	9.2013	0.1013	0.2	O K
2160 Summer	0.1	0.1	9.1763	0.0763	0.1	O K
2880 Summer	0.1	0.1	9.1618	0.0618	0.1	O K
4320 Summer	0.1	0.1	9.1453	0.0452	0.1	O K
5760 Summer	0.0	0.0	9.1363	0.0362	0.1	O K
7200 Summer	0.0	0.0	9.1303	0.0302	0.1	O K
8640 Summer	0.0	0.0	9.1263	0.0262	0.0	O K
10080 Summer	0.0	0.0	9.1233	0.0233	0.0	O K
15 Winter	0.4	0.4	9.4357	0.3357	0.6	O K
30 Winter	0.5	0.5	9.4832	0.3832	0.7	O K
60 Winter	0.5	0.5	9.4867	0.3867	0.7	O K
120 Winter	0.4	0.4	9.4367	0.3367	0.6	O K
180 Winter	0.3	0.3	9.3887	0.2887	0.5	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
15 Summer	131.85	19
30 Summer	88.57	27
60 Summer	56.71	44
120 Summer	35.00	76
180 Summer	25.97	108
240 Summer	20.88	140
360 Summer	15.37	200
480 Summer	12.34	262
600 Summer	10.40	322
720 Summer	9.04	382
960 Summer	7.24	504
1440 Summer	5.28	742
2160 Summer	3.85	1108
2880 Summer	3.07	1472
4320 Summer	2.23	2204
5760 Summer	1.77	2912
7200 Summer	1.48	3672
8640 Summer	1.28	4320
10080 Summer	1.14	5048
15 Winter	131.85	19
30 Winter	88.57	28
60 Winter	56.71	46
120 Winter	35.00	80
180 Winter	25.97	112

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Storm Duration (mins)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m ³)	Status
240 Winter	0.3	0.3	9.3507	0.2507	0.5	O K
360 Winter	0.2	0.2	9.3003	0.2002	0.4	O K
480 Winter	0.2	0.2	9.2673	0.1672	0.3	O K
600 Winter	0.2	0.2	9.2443	0.1443	0.3	O K
720 Winter	0.2	0.2	9.2273	0.1273	0.2	O K
960 Winter	0.1	0.1	9.2038	0.1038	0.2	O K
1440 Winter	0.1	0.1	9.1768	0.0768	0.1	O K
2160 Winter	0.1	0.1	9.1563	0.0563	0.1	O K
2880 Winter	0.1	0.1	9.1453	0.0452	0.1	O K
4320 Winter	0.0	0.0	9.1328	0.0327	0.1	O K
5760 Winter	0.0	0.0	9.1263	0.0262	0.0	O K
7200 Winter	0.0	0.0	9.1223	0.0222	0.0	O K
8640 Winter	0.0	0.0	9.1193	0.0192	0.0	O K
10080 Winter	0.0	0.0	9.1168	0.0168	0.0	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
240 Winter	20.88	144
360 Winter	15.37	206
480 Winter	12.34	268
600 Winter	10.40	328
720 Winter	9.04	388
960 Winter	7.24	506
1440 Winter	5.28	752
2160 Winter	3.85	1108
2880 Winter	3.07	1476
4320 Winter	2.23	2208
5760 Winter	1.77	2888
7200 Winter	1.48	3648
8640 Winter	1.28	4328
10080 Winter	1.14	5136

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Rainfall Details

Region	ENG+WAL	Shortest Storm (mins)	15
Return Period (years)	100	Longest Storm (mins)	10080
M5-60 (mm)	20.000	Summer Storms	Yes
Ratio-R	0.350	Winter Storms	Yes
Cv (Summer)	0.750	Climate Change %	+40
Cv (Winter)	0.840		

Time / Area Diagram

Total Area (ha) = 0.003

Time from:	(mins) to:	Area (ha)	Time from:	(mins) to:	Area (ha)
0	4	0.000	4	8	0.003

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Infiltration Trench Details

Infil Coef - Base (m/hr)	0.000000	Length (m)	2.0
Infil Coef - Sides (m/hr)	1.440000	Invert Level (m)	9.100
Safety Factor	2.0	Cover Level (m)	10.000
Porosity	0.95	Slope (1:x)	0.0
Width (m)	1.0	Cap Volume (m)	9.500