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Robin Hill Farm Clay Lane Fishbourne Chichester PO18 8AB	G6445 Tile Barn Farm Barnham	
Date 13/8/21 File G6445 Run 9b Trench.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 : 1725 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	0.0	0.0	9.1952	0.3952	4.3	O K
30 Summer	0.1	0.1	9.3222	0.5222	5.6	O K
60 Summer	0.1	0.1	9.4548	0.6548	7.1	O K
120 Summer	0.1	0.1	9.5868	0.7868	8.5	O K
180 Summer	0.1	0.1	9.6583	0.8583	9.3	O K
240 Summer	0.1	0.1	9.7028	0.9028	9.7	O K
360 Summer	0.1	0.1	9.7628	0.9628	10.4	O K
480 Summer	0.1	0.1	9.7998	0.9998	10.8	O K
600 Summer	0.1	0.1	9.8223	1.0223	11.0	FLOOD RISK
720 Summer	0.1	0.1	9.8363	1.0363	11.2	FLOOD RISK
960 Summer	0.1	0.1	9.8468	1.0468	11.3	FLOOD RISK
1440 Summer	0.1	0.1	9.8338	1.0338	11.2	FLOOD RISK
2160 Summer	0.1	0.1	9.8023	1.0023	10.8	FLOOD RISK
2880 Summer	0.1	0.1	9.7668	0.9668	10.4	O K
4320 Summer	0.1	0.1	9.6963	0.8963	9.7	O K
5760 Summer	0.1	0.1	9.6328	0.8328	9.0	O K
7200 Summer	0.1	0.1	9.5743	0.7743	8.4	O K
8640 Summer	0.1	0.1	9.5198	0.7198	7.8	O K
10080 Summer	0.1	0.1	9.4708	0.6708	7.2	O K
15 Winter	0.0	0.0	9.2427	0.4427	4.8	O K
30 Winter	0.1	0.1	9.3853	0.5852	6.3	O K
60 Winter	0.1	0.1	9.5348	0.7348	7.9	O K
120 Winter	0.1	0.1	9.6843	0.8843	9.6	O K
180 Winter	0.1	0.1	9.7658	0.9658	10.4	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
15 Summer	135.07	23
30 Summer	89.67	38
60 Summer	56.71	68
120 Summer	34.61	128
180 Summer	25.55	188
240 Summer	20.45	246
360 Summer	14.96	366
480 Summer	11.97	486
600 Summer	10.05	606
720 Summer	8.72	726
960 Summer	6.96	964
1440 Summer	5.05	1288
2160 Summer	3.66	1664
2880 Summer	2.91	2048
4320 Summer	2.10	2860
5760 Summer	1.67	3696
7200 Summer	1.39	4536
8640 Summer	1.20	5352
10080 Summer	1.06	6144
15 Winter	135.07	23
30 Winter	89.67	38
60 Winter	56.71	68
120 Winter	34.61	126
180 Winter	25.55	184

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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	0.1	0.1	9.8173	1.0173	11.0	FLOOD RISK
360 Winter	0.1	0.1	9.8883	1.0883	11.8	FLOOD RISK
480 Winter	0.1	0.1	9.9323	1.1323	12.2	FLOOD RISK
600 Winter	0.1	0.1	9.9613	1.1613	12.5	FLOOD RISK
720 Winter	0.1	0.1	9.9803	1.1803	12.7	FLOOD RISK
960 Winter	0.1	0.1	9.9998	1.1998	13.0	FLOOD RISK
1440 Winter	0.1	0.1	9.9968	1.1968	12.9	FLOOD RISK
2160 Winter	0.1	0.1	9.9563	1.1563	12.5	FLOOD RISK
2880 Winter	0.1	0.1	9.9143	1.1143	12.0	FLOOD RISK
4320 Winter	0.1	0.1	9.8178	1.0178	11.0	FLOOD RISK
5760 Winter	0.1	0.1	9.7258	0.9258	10.0	O K
7200 Winter	0.1	0.1	9.6408	0.8408	9.1	O K
8640 Winter	0.1	0.1	9.5623	0.7623	8.2	O K
10080 Winter	0.1	0.1	9.4918	0.6918	7.5	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
240 Winter	20.45	244
360 Winter	14.96	362
480 Winter	11.97	478
600 Winter	10.05	594
720 Winter	8.72	708
960 Winter	6.96	936
1440 Winter	5.05	1372
2160 Winter	3.66	1732
2880 Winter	2.91	2192
4320 Winter	2.10	3116
5760 Winter	1.67	3984
7200 Winter	1.39	4896
8640 Winter	1.20	5712
10080 Winter	1.06	6552

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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	0.375	Winter Storms	Yes
Cv (Summer)	0.750	Climate Change %	+40
Cv (Winter)	0.840		

Time / Area Diagram

Total Area (ha) = 0.017

Time from:	(mins) to:	Area (ha)	Time from:	(mins) to:	Area (ha)
0	4	0.000	4	8	0.017

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Infiltration Trench Details

Infil Coef - Base (m/hr)	0.007200	Length (m)	12.0
Infil Coef - Sides (m/hr)	0.007200	Invert Level (m)	8.800
Safety Factor	2.0	Cover Level (m)	10.000
Porosity	0.30	Slope (1:x)	0.0
Width (m)	3.0		