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Lancaster Court 8 Barnes Wallis Road Fareham PO15 5TU	1:100+40%CC PLOT 15 SIDE INFILTRATION ONLY INFILTRATION CRATES	
Date 01.02.2022 File 108.5009 - Plot 15-rw.SRCX	Designed by RD Checked by RW	
XP Solutions	Source Control 2014.1	

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

Half Drain Time : 359 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m ³)	Status
15 min Summer	15.271	0.291	0.1	2.8	O K
30 min Summer	15.372	0.392	0.1	3.7	O K
60 min Summer	15.476	0.496	0.1	4.7	O K
120 min Summer	15.568	0.588	0.2	5.6	O K
180 min Summer	15.605	0.625	0.2	5.9	O K
240 min Summer	15.619	0.639	0.2	6.1	O K
360 min Summer	15.638	0.658	0.2	6.3	O K
480 min Summer	15.648	0.668	0.2	6.3	O K
600 min Summer	15.652	0.672	0.2	6.4	O K
720 min Summer	15.652	0.672	0.2	6.4	O K
960 min Summer	15.644	0.664	0.2	6.3	O K
1440 min Summer	15.615	0.635	0.2	6.0	O K
2160 min Summer	15.566	0.586	0.2	5.6	O K
2880 min Summer	15.522	0.542	0.2	5.1	O K
4320 min Summer	15.449	0.469	0.1	4.5	O K
5760 min Summer	15.396	0.416	0.1	4.0	O K
7200 min Summer	15.355	0.375	0.1	3.6	O K
8640 min Summer	15.322	0.342	0.1	3.3	O K
10080 min Summer	15.296	0.316	0.1	3.0	O K
15 min Winter	15.306	0.326	0.1	3.1	O K
30 min Winter	15.419	0.439	0.1	4.2	O K
60 min Winter	15.536	0.556	0.2	5.3	O K
120 min Winter	15.641	0.661	0.2	6.3	O K
180 min Winter	15.684	0.704	0.2	6.7	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m ³)	Time-Peak (mins)
15 min Summer	125.250	0.0	19
30 min Summer	85.368	0.0	33
60 min Summer	55.544	0.0	62
120 min Summer	34.816	0.0	122
180 min Summer	26.038	0.0	180
240 min Summer	21.042	0.0	220
360 min Summer	15.601	0.0	278
480 min Summer	12.593	0.0	340
600 min Summer	10.656	0.0	410
720 min Summer	9.290	0.0	478
960 min Summer	7.475	0.0	616
1440 min Summer	5.489	0.0	882
2160 min Summer	4.021	0.0	1280
2880 min Summer	3.220	0.0	1672
4320 min Summer	2.348	0.0	2420
5760 min Summer	1.878	0.0	3168
7200 min Summer	1.581	0.0	3896
8640 min Summer	1.373	0.0	4664
10080 min Summer	1.219	0.0	5352
15 min Winter	125.250	0.0	19
30 min Winter	85.368	0.0	33
60 min Winter	55.544	0.0	62
120 min Winter	34.816	0.0	118
180 min Winter	26.038	0.0	174

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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 (m ³)	Status
240 min Winter	15.702	0.722	0.2	6.9	O K
360 min Winter	15.718	0.738	0.2	7.0	O K
480 min Winter	15.725	0.745	0.2	7.1	O K
600 min Winter	15.723	0.743	0.2	7.1	O K
720 min Winter	15.717	0.737	0.2	7.0	O K
960 min Winter	15.696	0.716	0.2	6.8	O K
1440 min Winter	15.646	0.666	0.2	6.3	O K
2160 min Winter	15.573	0.593	0.2	5.6	O K
2880 min Winter	15.512	0.532	0.2	5.1	O K
4320 min Winter	15.420	0.440	0.1	4.2	O K
5760 min Winter	15.356	0.376	0.1	3.6	O K
7200 min Winter	15.310	0.330	0.1	3.1	O K
8640 min Winter	15.274	0.294	0.1	2.8	O K
10080 min Winter	15.246	0.266	0.1	2.5	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m ³)	Time-Peak (mins)
240 min Winter	21.042	0.0	228
360 min Winter	15.601	0.0	286
480 min Winter	12.593	0.0	362
600 min Winter	10.656	0.0	438
720 min Winter	9.290	0.0	514
960 min Winter	7.475	0.0	662
1440 min Winter	5.489	0.0	940
2160 min Winter	4.021	0.0	1360
2880 min Winter	3.220	0.0	1756
4320 min Winter	2.348	0.0	2508
5760 min Winter	1.878	0.0	3280
7200 min Winter	1.581	0.0	4032
8640 min Winter	1.373	0.0	4752
10080 min Winter	1.219	0.0	5448

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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)	19.600	Shortest Storm (mins)	15
Ratio R	0.322	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.012

Time (mins)	Area
From:	To: (ha)

0	4	0.012
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Model Details

Storage is Online Cover Level (m) 16.500

Trench Soakaway Structure

Infiltration Coefficient Base (m/hr)	0.00000	Trench Width (m)	2.0
Infiltration Coefficient Side (m/hr)	0.30852	Trench Length (m)	5.0
Safety Factor	4.0	Slope (1:X)	0.0
Porosity	0.95	Cap Volume Depth (m)	0.000
Invert Level (m)	14.980	Cap Infiltration Depth (m)	0.000