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Lancaster Court 8 Barnes Wallis Road Fareham PO15 5TU	PLOT 27 SIDE INFILTRATION ONLY INFILTRATION CRATES	
Date 09.07.2021 File 108.5009 - PLOT 27.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 : 402 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	16.705	0.255	0.1	2.5	O K
30 min Summer	16.793	0.343	0.1	3.4	O K
60 min Summer	16.886	0.436	0.1	4.3	O K
120 min Summer	16.970	0.520	0.1	5.2	O K
180 min Summer	17.006	0.556	0.2	5.5	O K
240 min Summer	17.021	0.571	0.2	5.7	O K
360 min Summer	17.039	0.589	0.2	5.9	O K
480 min Summer	17.049	0.599	0.2	6.0	O K
600 min Summer	17.054	0.604	0.2	6.0	O K
720 min Summer	17.055	0.605	0.2	6.0	O K
960 min Summer	17.051	0.601	0.2	6.0	O K
1440 min Summer	17.031	0.581	0.2	5.8	O K
2160 min Summer	16.992	0.542	0.2	5.4	O K
2880 min Summer	16.954	0.504	0.1	5.0	O K
4320 min Summer	16.891	0.441	0.1	4.4	O K
5760 min Summer	16.844	0.394	0.1	3.9	O K
7200 min Summer	16.807	0.357	0.1	3.6	O K
8640 min Summer	16.777	0.327	0.1	3.3	O K
10080 min Summer	16.752	0.302	0.1	3.0	O K
15 min Winter	16.735	0.285	0.1	2.8	O K
30 min Winter	16.835	0.385	0.1	3.8	O K
60 min Winter	16.939	0.489	0.1	4.9	O K
120 min Winter	17.035	0.585	0.2	5.8	O K
180 min Winter	17.076	0.626	0.2	6.2	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	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	238
360 min Summer	15.601	0.0	288
480 min Summer	12.593	0.0	350
600 min Summer	10.656	0.0	418
720 min Summer	9.290	0.0	486
960 min Summer	7.475	0.0	624
1440 min Summer	5.489	0.0	896
2160 min Summer	4.021	0.0	1296
2880 min Summer	3.220	0.0	1676
4320 min Summer	2.348	0.0	2424
5760 min Summer	1.878	0.0	3176
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	120
180 min Winter	26.038	0.0	176

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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	17.095	0.645	0.2	6.4	O K
360 min Winter	17.110	0.660	0.2	6.6	O K
480 min Winter	17.119	0.669	0.2	6.7	O K
600 min Winter	17.121	0.671	0.2	6.7	O K
720 min Winter	17.117	0.667	0.2	6.7	O K
960 min Winter	17.104	0.654	0.2	6.5	O K
1440 min Winter	17.065	0.615	0.2	6.1	O K
2160 min Winter	17.004	0.554	0.2	5.5	O K
2880 min Winter	16.952	0.502	0.1	5.0	O K
4320 min Winter	16.870	0.420	0.1	4.2	O K
5760 min Winter	16.812	0.362	0.1	3.6	O K
7200 min Winter	16.769	0.319	0.1	3.2	O K
8640 min Winter	16.735	0.285	0.1	2.8	O K
10080 min Winter	16.709	0.259	0.1	2.6	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m ³)	Time-Peak (mins)
240 min Winter	21.042	0.0	230
360 min Winter	15.601	0.0	296
480 min Winter	12.593	0.0	368
600 min Winter	10.656	0.0	446
720 min Winter	9.290	0.0	520
960 min Winter	7.475	0.0	672
1440 min Winter	5.489	0.0	954
2160 min Winter	4.021	0.0	1364
2880 min Winter	3.220	0.0	1760
4320 min Winter	2.348	0.0	2548
5760 min Winter	1.878	0.0	3288
7200 min Winter	1.581	0.0	4040
8640 min Winter	1.373	0.0	4760
10080 min Winter	1.219	0.0	5544

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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) 0.011

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

0	4	0.011
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Model Details

Storage is Online Cover Level (m) 18.000

Cellular Storage Structure

Invert Level (m) 16.450 Safety Factor 4.0
Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.30852

Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	10.5	10.5	0.800	10.5	20.9	0.801	0.0	20.9