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Lancaster Court 8 Barnes Wallis Road Fareham PO15 5TU	020.5360 CATCHMENT C Fontwell Avenue, Eastergate Infil. Trench Rear Garden N	
Date 07.08.2020 File catchment C.SRCX	Designed by SH Checked by RW	
XP Solutions	Source Control 2014.1	

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

Half Drain Time : 153 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	16.376	0.441	0.2	2.2	O K
30 min Summer	16.514	0.579	0.2	2.9	O K
60 min Summer	16.638	0.703	0.3	3.5	O K
120 min Summer	16.708	0.773	0.3	3.9	O K
180 min Summer	16.721	0.786	0.3	3.9	O K
240 min Summer	16.717	0.782	0.3	3.9	O K
360 min Summer	16.695	0.760	0.3	3.8	O K
480 min Summer	16.665	0.730	0.3	3.6	O K
600 min Summer	16.634	0.699	0.3	3.5	O K
720 min Summer	16.603	0.668	0.3	3.3	O K
960 min Summer	16.546	0.611	0.2	3.0	O K
1440 min Summer	16.446	0.511	0.2	2.5	O K
2160 min Summer	16.327	0.392	0.2	2.0	O K
2880 min Summer	16.237	0.302	0.2	1.5	O K
4320 min Summer	16.112	0.177	0.2	0.9	O K
5760 min Summer	16.035	0.100	0.1	0.5	O K
7200 min Summer	15.992	0.057	0.1	0.3	O K
8640 min Summer	15.981	0.046	0.1	0.2	O K
10080 min Summer	15.976	0.041	0.1	0.2	O K
15 min Winter	16.431	0.496	0.2	2.5	O K
30 min Winter	16.589	0.654	0.3	3.3	O K
60 min Winter	16.734	0.799	0.3	4.0	O K
120 min Winter	16.822	0.887	0.3	4.4	O K
180 min Winter	16.833	0.898	0.3	4.5	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
15 min Summer	125.250	0.0	18
30 min Summer	85.368	0.0	32
60 min Summer	55.544	0.0	62
120 min Summer	34.816	0.0	108
180 min Summer	26.038	0.0	138
240 min Summer	21.042	0.0	172
360 min Summer	15.601	0.0	242
480 min Summer	12.593	0.0	310
600 min Summer	10.656	0.0	380
720 min Summer	9.290	0.0	448
960 min Summer	7.475	0.0	580
1440 min Summer	5.489	0.0	838
2160 min Summer	4.021	0.0	1212
2880 min Summer	3.220	0.0	1584
4320 min Summer	2.348	0.0	2292
5760 min Summer	1.878	0.0	3000
7200 min Summer	1.581	0.0	3672
8640 min Summer	1.373	0.0	4400
10080 min Summer	1.219	0.0	5120
15 min Winter	125.250	0.0	18
30 min Winter	85.368	0.0	32
60 min Winter	55.544	0.0	60
120 min Winter	34.816	0.0	114
180 min Winter	26.038	0.0	144

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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	16.826	0.891	0.3	4.4	O K
360 min Winter	16.791	0.856	0.3	4.3	O K
480 min Winter	16.744	0.809	0.3	4.0	O K
600 min Winter	16.696	0.761	0.3	3.8	O K
720 min Winter	16.650	0.715	0.3	3.6	O K
960 min Winter	16.565	0.630	0.2	3.1	O K
1440 min Winter	16.424	0.489	0.2	2.4	O K
2160 min Winter	16.269	0.334	0.2	1.7	O K
2880 min Winter	16.158	0.223	0.2	1.1	O K
4320 min Winter	16.018	0.083	0.1	0.4	O K
5760 min Winter	15.980	0.045	0.1	0.2	O K
7200 min Winter	15.973	0.038	0.1	0.2	O K
8640 min Winter	15.968	0.033	0.1	0.2	O K
10080 min Winter	15.964	0.029	0.1	0.1	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m ³)	Time-Peak (mins)
240 min Winter	21.042	0.0	182
360 min Winter	15.601	0.0	260
480 min Winter	12.593	0.0	334
600 min Winter	10.656	0.0	408
720 min Winter	9.290	0.0	478
960 min Winter	7.475	0.0	618
1440 min Winter	5.489	0.0	882
2160 min Winter	4.021	0.0	1272
2880 min Winter	3.220	0.0	1640
4320 min Winter	2.348	0.0	2332
5760 min Winter	1.878	0.0	2904
7200 min Winter	1.581	0.0	3672
8640 min Winter	1.373	0.0	4376
10080 min Winter	1.219	0.0	5096

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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) 0.010

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

0	4	0.010
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Model Details

Storage is Online Cover Level (m) 18.200

Trench Soakaway Structure

Infiltration Coefficient Base (m/hr)	0.30852	Trench Width (m)	1.5
Infiltration Coefficient Side (m/hr)	0.30852	Trench Length (m)	3.5
Safety Factor	4.0	Slope (1:X)	0.0
Porosity	0.95	Cap Volume Depth (m)	0.000
Invert Level (m)	15.935	Cap Infiltration Depth (m)	0.000