

Paul Basham Associates		Page 1
Lancaster Court Fareham Hampshire, PO15 5TU	1:100+40% CC ROAD CATCHMENT 1 SIDE INFILTRATION ONLY	
Date 28/10/2021 09:53	Designed by CLP	
File 108.5009 - ROAD CATCHMENT 1.SRCX	Checked by RW	
Innovyze	Source Control 2020.1.3	

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

Half Drain Time : 488 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	15.457	0.377	0.3	12.5	O K
30 min Summer	15.589	0.509	0.4	16.8	O K
60 min Summer	15.730	0.650	0.5	21.4	O K
120 min Summer	15.863	0.783	0.6	25.8	O K
180 min Summer	15.925	0.845	0.6	27.9	Flood Risk
240 min Summer	15.955	0.875	0.7	28.9	Flood Risk
360 min Summer	15.985	0.905	0.7	29.9	Flood Risk
480 min Summer	16.003	0.923	0.7	30.4	Flood Risk
600 min Summer	16.013	0.933	0.7	30.8	Flood Risk
720 min Summer	16.019	0.939	0.7	31.0	Flood Risk
960 min Summer	16.019	0.939	0.7	31.0	Flood Risk
1440 min Summer	16.000	0.920	0.7	30.4	Flood Risk
2160 min Summer	15.952	0.872	0.7	28.8	Flood Risk
2880 min Summer	15.900	0.820	0.6	27.1	Flood Risk
4320 min Summer	15.810	0.730	0.6	24.1	O K
5760 min Summer	15.738	0.658	0.5	21.7	O K
7200 min Summer	15.681	0.601	0.5	19.8	O K
8640 min Summer	15.634	0.554	0.4	18.3	O K
10080 min Summer	15.596	0.516	0.4	17.0	O K
15 min Winter	15.503	0.423	0.3	14.0	O K
30 min Winter	15.651	0.571	0.4	18.8	O K
60 min Winter	15.809	0.729	0.6	24.1	O K
120 min Winter	15.960	0.880	0.7	29.0	Flood Risk
180 min Winter	16.031	0.951	0.7	31.4	Flood Risk

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
15 min Summer	125.250	0.0	26
30 min Summer	85.368	0.0	41
60 min Summer	55.544	0.0	70
120 min Summer	34.816	0.0	126
180 min Summer	26.038	0.0	184
240 min Summer	21.042	0.0	242
360 min Summer	15.601	0.0	316
480 min Summer	12.593	0.0	376
600 min Summer	10.656	0.0	438
720 min Summer	9.290	0.0	506
960 min Summer	7.475	0.0	644
1440 min Summer	5.489	0.0	916
2160 min Summer	4.021	0.0	1320
2880 min Summer	3.220	0.0	1708
4320 min Summer	2.348	0.0	2472
5760 min Summer	1.878	0.0	3232
7200 min Summer	1.581	0.0	3968
8640 min Summer	1.373	0.0	4752
10080 min Summer	1.219	0.0	5448
15 min Winter	125.250	0.0	26
30 min Winter	85.368	0.0	40
60 min Winter	55.544	0.0	68
120 min Winter	34.816	0.0	124
180 min Winter	26.038	0.0	180

Paul Basham Associates		Page 2
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Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
240 min Winter	16.067	0.987	0.8	32.6	Flood Risk
360 min Winter	16.101	1.021	0.8	33.7	Flood Risk
480 min Winter	16.114	1.034	0.8	34.1	Flood Risk
600 min Winter	16.122	1.042	0.8	34.4	Flood Risk
720 min Winter	16.123	1.043	0.8	34.4	Flood Risk
960 min Winter	16.112	1.032	0.8	34.0	Flood Risk
1440 min Winter	16.067	0.987	0.8	32.6	Flood Risk
2160 min Winter	15.987	0.907	0.7	29.9	Flood Risk
2880 min Winter	15.912	0.832	0.6	27.5	Flood Risk
4320 min Winter	15.790	0.710	0.5	23.4	O K
5760 min Winter	15.699	0.619	0.5	20.4	O K
7200 min Winter	15.630	0.550	0.4	18.2	O K
8640 min Winter	15.576	0.496	0.4	16.4	O K
10080 min Winter	15.532	0.452	0.3	14.9	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)
240 min Winter	21.042	0.0	236
360 min Winter	15.601	0.0	342
480 min Winter	12.593	0.0	386
600 min Winter	10.656	0.0	462
720 min Winter	9.290	0.0	538
960 min Winter	7.475	0.0	690
1440 min Winter	5.489	0.0	984
2160 min Winter	4.021	0.0	1408
2880 min Winter	3.220	0.0	1816
4320 min Winter	2.348	0.0	2600
5760 min Winter	1.878	0.0	3352
7200 min Winter	1.581	0.0	4112
8640 min Winter	1.373	0.0	4848
10080 min Winter	1.219	0.0	5640

Paul Basham Associates		Page 3
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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) 0.054

Time (mins)	Area	Time (mins)	Area	Time (mins)	Area
From: To:	(ha)	From: To:	(ha)	From: To:	(ha)
0 4	0.018	4 8	0.018	8 12	0.018

Paul Basham Associates		Page 4
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Model Details

Storage is Online Cover Level (m) 16.180

Infiltration Trench Structure

Infiltration Coefficient Base (m/hr)	0.00000	Trench Width (m)	2.5
Infiltration Coefficient Side (m/hr)	0.11800	Trench Length (m)	44.0
Safety Factor	4.0	Slope (1:X)	0.0
Porosity	0.30	Cap Volume Depth (m)	0.000
Invert Level (m)	15.080	Cap Infiltration Depth (m)	0.000