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3 Worsley Court Walkden Manchester M28 3NJ	Berry Hill Road Adderbury Infiltration Basin	
Date 09/10/2019 File Berry Hill Road Basin 19...	Designed by srg Checked by	
Micro Drainage	Source Control 2019.1	

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

Half Drain Time : 40 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m ³)	Status
15 min Summer	103.234	0.234	71.0	212.1	O K
30 min Summer	103.273	0.273	72.3	249.4	O K
60 min Summer	103.282	0.282	72.6	257.9	O K
120 min Summer	103.254	0.254	71.7	230.9	O K
180 min Summer	103.223	0.223	70.7	201.5	O K
240 min Summer	103.193	0.193	69.7	173.1	O K
360 min Summer	103.138	0.138	68.0	122.6	O K
480 min Summer	103.096	0.096	66.6	83.9	O K
600 min Summer	103.066	0.066	65.7	57.7	O K
720 min Summer	103.050	0.050	65.2	43.7	O K
960 min Summer	103.040	0.040	52.2	35.0	O K
1440 min Summer	103.029	0.029	37.7	25.2	O K
2160 min Summer	103.021	0.021	26.7	17.8	O K
2880 min Summer	103.016	0.016	20.8	13.9	O K
4320 min Summer	103.012	0.012	15.0	10.0	O K
5760 min Summer	103.009	0.009	11.8	7.9	O K
15 min Winter	103.265	0.265	72.0	241.3	O K


Storm Event	Rain (mm/hr)	Flooded Volume (m ³)	Time-Peak (mins)
15 min Summer	147.224	0.0	17
30 min Summer	96.292	0.0	30
60 min Summer	60.186	0.0	46
120 min Summer	35.833	0.0	80
180 min Summer	26.390	0.0	114
240 min Summer	21.172	0.0	146
360 min Summer	15.400	0.0	208
480 min Summer	12.203	0.0	266
600 min Summer	10.147	0.0	320
720 min Summer	8.709	0.0	370
960 min Summer	6.813	0.0	492
1440 min Summer	4.792	0.0	734
2160 min Summer	3.361	0.0	1088
2880 min Summer	2.620	0.0	1448
4320 min Summer	1.864	0.0	2152
5760 min Summer	1.478	0.0	2864
15 min Winter	147.224	0.0	18

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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
30 min Winter	103.313	0.313	73.5	288.2	O K
60 min Winter	103.322	0.322	73.8	296.8	O K
120 min Winter	103.280	0.280	72.5	256.0	O K
180 min Winter	103.232	0.232	71.0	209.9	O K
240 min Winter	103.186	0.186	69.5	166.4	O K
360 min Winter	103.106	0.106	67.0	93.6	O K
480 min Winter	103.055	0.055	65.3	48.2	O K
600 min Winter	103.044	0.044	57.5	38.2	O K
720 min Winter	103.038	0.038	49.6	32.9	O K
960 min Winter	103.030	0.030	39.0	26.0	O K
1440 min Winter	103.021	0.021	27.3	18.3	O K
2160 min Winter	103.015	0.015	19.5	13.0	O K
2880 min Winter	103.012	0.012	15.0	10.0	O K
4320 min Winter	103.009	0.009	11.2	7.3	O K
5760 min Winter	103.007	0.007	8.6	5.7	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m ³)	Time-Peak (mins)
30 min Winter	96.292	0.0	30
60 min Winter	60.186	0.0	50
120 min Winter	35.833	0.0	88
180 min Winter	26.390	0.0	122
240 min Winter	21.172	0.0	156
360 min Winter	15.400	0.0	216
480 min Winter	12.203	0.0	262
600 min Winter	10.147	0.0	310
720 min Winter	8.709	0.0	370
960 min Winter	6.813	0.0	490
1440 min Winter	4.792	0.0	736
2160 min Winter	3.361	0.0	1124
2880 min Winter	2.620	0.0	1420
4320 min Winter	1.864	0.0	2204
5760 min Winter	1.478	0.0	2872

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Rainfall Details

Rainfall Model	FEH
Return Period (years)	100
FEH Rainfall Version	2013
Site Location	GB 446944 234772 SP 46944 34772
Data Type	Point
Summer Storms	Yes
Winter Storms	Yes
Cv (Summer)	0.750
Cv (Winter)	0.840
Shortest Storm (mins)	15
Longest Storm (mins)	5760
Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.970

Time (mins)	Area	Time (mins)	Area
From:	To: (ha)	From:	To: (ha)
0	4 0.798	4	8 0.172

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Model Details

Storage is Online Cover Level (m) 104.000

Infiltration Basin Structure

Invert Level (m) 103.000 Safety Factor 2.0
 Infiltration Coefficient Base (m/hr) 0.53280 Porosity 1.00
 Infiltration Coefficient Side (m/hr) 0.00000

Depth (m)	Area (m ²)	Depth (m)	Area (m ²)
0.000	859.0	1.000	1290.0