

Archibald Shaw Limited		Page 1
One Little London Chichester Sussex PO19 1PP	MEADOW VIEW BARNHAM 310 SQ M CONTRIBUTING	
Date MAR 2019	Designed By PF	
File 310 SQ M CONTRIBUTING.SRC	Checked By	
Micro Drainage		Source Control W.11.2

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

Half Drain Time : 590 minutes

Storm Duration (mins)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m³)	Status
15 Summer	0.3	0.3	100.1048	0.1048	7.5	O K
30 Summer	0.3	0.3	100.1393	0.1393	9.9	O K
60 Summer	0.3	0.3	100.1748	0.1747	12.5	O K
120 Summer	0.3	0.3	100.2077	0.2077	14.8	O K
180 Summer	0.3	0.3	100.2227	0.2227	15.9	O K
240 Summer	0.3	0.3	100.2302	0.2302	16.4	O K
360 Summer	0.3	0.3	100.2367	0.2367	16.9	O K
480 Summer	0.3	0.3	100.2367	0.2367	16.9	O K
600 Summer	0.3	0.3	100.2357	0.2357	16.8	O K
720 Summer	0.3	0.3	100.2337	0.2337	16.6	O K
960 Summer	0.3	0.3	100.2282	0.2282	16.2	O K
1440 Summer	0.3	0.3	100.2142	0.2142	15.3	O K
2160 Summer	0.3	0.3	100.1917	0.1917	13.7	O K
2880 Summer	0.3	0.3	100.1702	0.1702	12.1	O K
4320 Summer	0.3	0.3	100.1318	0.1318	9.4	O K
5760 Summer	0.3	0.3	100.1012	0.1013	7.2	O K
7200 Summer	0.3	0.3	100.0782	0.0783	5.6	O K
8640 Summer	0.3	0.3	100.0618	0.0618	4.4	O K
10080 Summer	0.3	0.3	100.0512	0.0512	3.7	O K
15 Winter	0.3	0.3	100.1178	0.1178	8.4	O K
30 Winter	0.3	0.3	100.1568	0.1567	11.2	O K
60 Winter	0.3	0.3	100.1967	0.1967	14.0	O K
120 Winter	0.3	0.3	100.2347	0.2347	16.7	O K
180 Winter	0.3	0.3	100.2527	0.2527	18.0	O K
240 Winter	0.3	0.3	100.2622	0.2622	18.7	O K
360 Winter	0.3	0.3	100.2717	0.2717	19.4	O K
480 Winter	0.3	0.3	100.2742	0.2742	19.5	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
15 Summer	131.85	23
30 Summer	88.57	37
60 Summer	56.71	68
120 Summer	35.00	126
180 Summer	25.97	186
240 Summer	20.88	246
360 Summer	15.37	364
480 Summer	12.34	452
600 Summer	10.40	506
720 Summer	9.04	568
960 Summer	7.24	696
1440 Summer	5.28	970
2160 Summer	3.85	1368
2880 Summer	3.07	1764
4320 Summer	2.23	2552
5760 Summer	1.77	3232
7200 Summer	1.48	3960
8640 Summer	1.28	4584
10080 Summer	1.14	5240
15 Winter	131.85	23
30 Winter	88.57	37
60 Winter	56.71	66
120 Winter	35.00	124
180 Winter	25.97	182
240 Winter	20.88	240
360 Winter	15.37	354
480 Winter	12.34	464

Archibald Shaw Limited		Page 2
One Little London Chichester Sussex PO19 1PP	MEADOW VIEW BARNHAM 310 SQ M CONTRIBUTING	
Date MAR 2019 File 310 SQ M CONTRIBUTING.SRC	Designed By PF Checked By	
Micro Drainage	Source Control W.11.2	

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

Storm Duration (mins)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m ³)	Status
600 Winter	0.3	0.3	100.2722	0.2722	19.4	O K
720 Winter	0.3	0.3	100.2682	0.2682	19.1	O K
960 Winter	0.3	0.3	100.2612	0.2612	18.6	O K
1440 Winter	0.3	0.3	100.2412	0.2412	17.2	O K
2160 Winter	0.3	0.3	100.2073	0.2072	14.8	O K
2880 Winter	0.3	0.3	100.1748	0.1747	12.4	O K
4320 Winter	0.3	0.3	100.1178	0.1178	8.4	O K
5760 Winter	0.3	0.3	100.0758	0.0758	5.4	O K
7200 Winter	0.3	0.3	100.0508	0.0508	3.6	O K
8640 Winter	0.2	0.2	100.0443	0.0442	3.2	O K
10080 Winter	0.2	0.2	100.0393	0.0392	2.8	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
600 Winter	10.40	570
720 Winter	9.04	656
960 Winter	7.24	746
1440 Winter	5.28	1056
2160 Winter	3.85	1496
2880 Winter	3.07	1908
4320 Winter	2.23	2684
5760 Winter	1.77	3344
7200 Winter	1.48	3824
8640 Winter	1.28	4504
10080 Winter	1.14	5248

One Little London
Chichester
Sussex PO19 1PP

MEADOW VIEW
BARNHAM
310 SQ M CONTRIBUTING



Date MAR 2019

Designed By PF

File 310 SQ M CONTRIBUTING.SRC

Checked By

Micro Drainage

Source Control W.11.2

Rainfall Details

Region	ENG+WAL	Cv (Summer)	0.750	Summer Storms	Yes
Return Period (years)	100	Cv (Winter)	0.840	Winter Storms	Yes
M5-60 (mm)	20.000	Shortest Storm (mins)	15	Climate Change %	+40
Ratio-R	0.350	Longest Storm (mins)	10080		

Time / Area Diagram

Total Area (ha) = 0.031

Time from:	(mins) to:	Area (ha)	Time from:	(mins) to:	Area (ha)
0	4	0.000	4	8	0.031

One Little London
Chichester
Sussex PO19 1PP

MEADOW VIEW
BARNHAM
310 SQ M CONTRIBUTING



Date MAR 2019

Designed By PF

File 310 SQ M CONTRIBUTING.SRC

Checked By

Micro Drainage

Source Control W.11.2

Trench Soakaway Details

Infil Coef - Base (m/hr)	0.018100	Length (m)	15.0
Infil Coef - Sides (m/hr)	0.018100	Invert Level (m)	100.000
Safety Factor	1.5	Cover Level (m)	100.600
Porosity	0.95	Slope (1:x)	0.0
Width (m)	5.0		

$$\text{PLAN AREA} = 5 \times 15 \text{m} = 75 \text{m}^2$$

AS USING PERMAVOID CRATES

SIZED 0.355m WIDE X 710mm LONG

$$\text{USE WIDTH} = 4.97 \text{m}$$

$$\text{LENGTH} = 15.27 \text{m}$$

$$4.97 \times 15.27 \text{m} = 75.9 \text{m}^2$$

Archibald Shaw Limited		Page 1
One Little London	MEADOW VIEW	
Chichester	BARNHAM	
Sussex PO19 1PP	120 SQ M CONTRIBUTING	
Date MAR 2019	Designed By PF	
File 120 SQ M CONTRIBUTING.SRC	Checked By	
Micro Drainage	Source Control W.11.2	

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

Half Drain Time : 585 minutes

Storm Duration (mins)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m³)	Status
15 Summer	0.1	0.1	100.1127	0.1128	2.9	O K
30 Summer	0.1	0.1	100.1503	0.1502	3.8	O K
60 Summer	0.1	0.1	100.1882	0.1882	4.8	O K
120 Summer	0.1	0.1	100.2233	0.2232	5.7	O K
180 Summer	0.1	0.1	100.2397	0.2397	6.1	O K
240 Summer	0.1	0.1	100.2477	0.2477	6.3	O K
360 Summer	0.1	0.1	100.2547	0.2547	6.5	O K
480 Summer	0.1	0.1	100.2547	0.2547	6.5	O K
600 Summer	0.1	0.1	100.2533	0.2532	6.5	O K
720 Summer	0.1	0.1	100.2513	0.2512	6.4	O K
960 Summer	0.1	0.1	100.2458	0.2457	6.3	O K
1440 Summer	0.1	0.1	100.2312	0.2312	5.9	O K
2160 Summer	0.1	0.1	100.2077	0.2077	5.3	O K
2880 Summer	0.1	0.1	100.1852	0.1852	4.8	O K
4320 Summer	0.1	0.1	100.1458	0.1458	3.7	O K
5760 Summer	0.1	0.1	100.1133	0.1133	2.9	O K
7200 Summer	0.1	0.1	100.0882	0.0883	2.3	O K
8640 Summer	0.1	0.1	100.0697	0.0698	1.8	O K
10080 Summer	0.1	0.1	100.0567	0.0568	1.5	O K
15 Winter	0.1	0.1	100.1267	0.1268	3.2	O K
30 Winter	0.1	0.1	100.1687	0.1687	4.3	O K
60 Winter	0.1	0.1	100.2117	0.2117	5.4	O K
120 Winter	0.1	0.1	100.2523	0.2522	6.5	O K
180 Winter	0.1	0.1	100.2718	0.2717	7.0	O K
240 Winter	0.1	0.1	100.2817	0.2817	7.2	O K
360 Winter	0.1	0.1	100.2922	0.2922	7.5	O K
480 Winter	0.1	0.1	100.2947	0.2947	7.6	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
15 Summer	131.85	23
30 Summer	88.57	37
60 Summer	56.71	68
120 Summer	35.00	126
180 Summer	25.97	186
240 Summer	20.88	246
360 Summer	15.37	364
480 Summer	12.34	450
600 Summer	10.40	504
720 Summer	9.04	564
960 Summer	7.24	694
1440 Summer	5.28	970
2160 Summer	3.85	1368
2880 Summer	3.07	1768
4320 Summer	2.23	2552
5760 Summer	1.77	3280
7200 Summer	1.48	3960
8640 Summer	1.28	4664
10080 Summer	1.14	5248
15 Winter	131.85	23
30 Winter	88.57	37
60 Winter	56.71	66
120 Winter	35.00	124
180 Winter	25.97	182
240 Winter	20.88	240
360 Winter	15.37	354
480 Winter	12.34	464

Archibald Shaw Limited		Page 2
One Little London Chichester Sussex PO19 1PP	MEADOW VIEW BARNHAM 120 SQ M CONTRIBUTING	
Date MAR 2019 File 120 SQ M CONTRIBUTING.SRC	Designed By PF Checked By	
Micro Drainage	Source Control W.11.2	

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

Storm Duration (mins)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m ³)	Status
600 Winter	0.1	0.1	100.2927	0.2927	7.5	O K
720 Winter	0.1	0.1	100.2882	0.2882	7.4	O K
960 Winter	0.1	0.1	100.2813	0.2812	7.2	O K
1440 Winter	0.1	0.1	100.2602	0.2602	6.7	O K
2160 Winter	0.1	0.1	100.2253	0.2252	5.8	O K
2880 Winter	0.1	0.1	100.1917	0.1917	4.9	O K
4320 Winter	0.1	0.1	100.1332	0.1333	3.4	O K
5760 Winter	0.1	0.1	100.0878	0.0878	2.3	O K
7200 Winter	0.1	0.1	100.0577	0.0578	1.5	O K
8640 Winter	0.1	0.1	100.0468	0.0467	1.2	O K
10080 Winter	0.1	0.1	100.0417	0.0417	1.1	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
600 Winter	10.40	568
720 Winter	9.04	604
960 Winter	7.24	744
1440 Winter	5.28	1046
2160 Winter	3.85	1496
2880 Winter	3.07	1908
4320 Winter	2.23	2684
5760 Winter	1.77	3392
7200 Winter	1.48	3960
8640 Winter	1.28	4504
10080 Winter	1.14	5240

Archibald Shaw Limited		Page 3
One Little London Chichester Sussex PO19 1PP	MEADOW VIEW BARNHAM 120 SQ M CONTRIBUTING	
Date MAR 2019 File 120 SQ M CONTRIBUTING.SRC	Designed By PF Checked By	
Micro Drainage	Source Control W.11.2	

Rainfall Details

Region	ENG+WAL	Cv (Summer)	0.750	Summer Storms	Yes
Return Period (years)	100	Cv (Winter)	0.840	Winter Storms	Yes
M5-60 (mm)	20.000	Shortest Storm (mins)	15	Climate Change %	+40
Ratio-R	0.350	Longest Storm (mins)	10080		

Time / Area Diagram

Total Area (ha) = 0.012

Time from:	(mins) to:	Area (ha)	Time from:	(mins) to:	Area (ha)
0	4	0.000	4	8	0.012

Archibald Shaw Limited		Page 4
One Little London Chichester Sussex PO19 1PP	MEADOW VIEW BARNHAM 120 SQ M CONTRIBUTING	
Date MAR 2019 File 120 SQ M CONTRIBUTING.SRC	Designed By PF Checked By	
Micro Drainage	Source Control W.11.2	

Trench Soakaway Details

Infil Coef - Base (m/hr)	0.018100	Length (m)	9.0
Infil Coef - Sides (m/hr)	0.018100	Invert Level (m)	100.000
Safety Factor	1.5	Cover Level (m)	100.600
Porosity	0.95	Slope (1:x)	0.0
Width (m)	3.0		

$$PLAN \ AREA = 3 \times 9m = 27m^2$$

AS USING PERMAVOID CRATES
SIZED 0.355m WIDE x 710mm LONG

$$USE \ WIDTH = 3.55m$$

$$LENGTH = 7.81m$$

$$3.55 \times 7.81m = 27.7m^2$$