

T J Booth Associates		Page 1
104 Yorkshire St Rochdale Lancashire OL16 1JY	SUDS basin & control B&L Homes Schofield St Heywood	
Date may 2026 - revision 1 File CALC-T~1.SRC	Designed By DS Checked By	
Micro Drainage	Source Control W.10.4	

Summary of Results for 1 year Return Period

Storm Duration (mins)	Maximum Control (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m³)	Status
15 Summer	5.0	5.0	124.7458	0.0958	1.3	O K
30 Summer	5.0	5.0	124.7458	0.0958	1.3	O K
60 Summer	5.0	5.0	124.7272	0.0773	0.8	O K
120 Summer	5.0	5.0	124.6797	0.0297	0.1	O K
180 Summer	4.5	4.5	124.6500	0.0000	0.0	O K
240 Summer	3.8	3.8	124.6500	0.0000	0.0	O K
360 Summer	2.9	2.9	124.6500	0.0000	0.0	O K
480 Summer	2.5	2.5	124.6500	0.0000	0.0	O K
600 Summer	2.1	2.1	124.6500	0.0000	0.0	O K
720 Summer	1.9	1.9	124.6500	0.0000	0.0	O K
960 Summer	1.6	1.6	124.6500	0.0000	0.0	O K
1440 Summer	1.2	1.2	124.6500	0.0000	0.0	O K
2160 Summer	1.0	1.0	124.6500	0.0000	0.0	O K
2880 Summer	0.8	0.8	124.6500	0.0000	0.0	O K
4320 Summer	0.6	0.6	124.6500	0.0000	0.0	O K
5760 Summer	0.5	0.5	124.6500	0.0000	0.0	O K
7200 Summer	0.5	0.5	124.6500	0.0000	0.0	O K
8640 Summer	0.4	0.4	124.6500	0.0000	0.0	O K
10080 Summer	0.4	0.4	124.6500	0.0000	0.0	O K
15 Winter	5.0	5.0	124.7542	0.1043	1.5	O K
30 Winter	5.0	5.0	124.7467	0.0968	1.3	O K
60 Winter	5.0	5.0	124.7083	0.0583	0.5	O K
120 Winter	4.2	4.2	124.6500	0.0000	0.0	O K
180 Winter	3.3	3.3	124.6500	0.0000	0.0	O K
240 Winter	2.7	2.7	124.6500	0.0000	0.0	O K
360 Winter	2.1	2.1	124.6500	0.0000	0.0	O K
480 Winter	1.8	1.8	124.6500	0.0000	0.0	O K
600 Winter	1.6	1.6	124.6500	0.0000	0.0	O K
720 Winter	1.4	1.4	124.6500	0.0000	0.0	O K
960 Winter	1.2	1.2	124.6500	0.0000	0.0	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
15 Summer	28.17	13
30 Summer	19.18	21
60 Summer	12.80	38
120 Summer	8.41	66
180 Summer	6.56	0
240 Summer	5.47	0
360 Summer	4.21	0
480 Summer	3.50	0
600 Summer	3.03	0
720 Summer	2.70	0
960 Summer	2.25	0
1440 Summer	1.73	0
2160 Summer	1.33	0
2880 Summer	1.11	0
4320 Summer	0.85	0
5760 Summer	0.71	0
7200 Summer	0.61	0
8640 Summer	0.54	0
10080 Summer	0.49	0
15 Winter	28.17	14
30 Winter	19.18	23
60 Winter	12.80	38
120 Winter	8.41	0
180 Winter	6.56	0
240 Winter	5.47	0
360 Winter	4.21	0
480 Winter	3.50	0
600 Winter	3.03	0
720 Winter	2.70	0
960 Winter	2.25	0

Summary of Results for 1 year Return Period

Storm Duration (mins)	Maximum Control (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m³)	Status
1440 Winter	0.9	0.9	124.6500	0.0000	0.0	O K
2160 Winter	0.7	0.7	124.6500	0.0000	0.0	O K
2880 Winter	0.6	0.6	124.6500	0.0000	0.0	O K
4320 Winter	0.5	0.5	124.6500	0.0000	0.0	O K
5760 Winter	0.4	0.4	124.6500	0.0000	0.0	O K
7200 Winter	0.3	0.3	124.6500	0.0000	0.0	O K
8640 Winter	0.3	0.3	124.6500	0.0000	0.0	O K
10080 Winter	0.3	0.3	124.6500	0.0000	0.0	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
1440 Winter	1.73	0
2160 Winter	1.33	0
2880 Winter	1.11	0
4320 Winter	0.85	0
5760 Winter	0.71	0
7200 Winter	0.61	0
8640 Winter	0.54	0
10080 Winter	0.49	0

T J Booth Associates		Page 3
104 Yorkshire St Rochdale Lancashire OL16 1JY	SUDS basin & control B&L Homes Schofield St Heywood	
Date may 2026 - revision 1 File CALC-T~1.SRC	Designed By DS Checked By	
Micro Drainage	Source Control W.10.4	

Rainfall Details

Region	ENG+WAL	Cv (Summer)	0.750	Summer Storms	Yes
Return Period (years)	1	Cv (Winter)	0.840	Winter Storms	Yes
M5-60 (mm)	20.000	Shortest Storm (mins)	15	Climate Change %	+0
Ratio-R	0.300	Longest Storm (mins)	10080		

Pipe Network

Volume in Pipe Network (m³)	2	Dia of Outfall Pipe (m)	0.200
Slope of Outfall Pipe (1:x)	150.0	Roughness of Outfall Pipe	0.060

Time / Area Diagram

Total Area (ha) = 0.085

Time	(mins)	Area
from:	to:	(ha)
0	4	0.085

Tank/Pond Details

Invert Level (m) 124.650 Ground Level (m) 125.350

Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)
0.00	0.0	0.50	55.8	1.00	500.0	1.50	500.0	2.00	500.0	2.50	500.0
0.10	28.3	0.60	63.2	1.10	500.0	1.60	500.0	2.10	500.0		
0.20	34.8	0.70	71.0	1.20	500.0	1.70	500.0	2.20	500.0		
0.30	41.5	0.80	500.0	1.30	500.0	1.80	500.0	2.30	500.0		
0.40	48.5	0.90	500.0	1.40	500.0	1.90	500.0	2.40	500.0		

Depth / Flow Outflow Control

Invert Level of Control 124.410

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.10	3.5	0.60	4.2	1.60	5.9	2.60	7.6	5.00	10.5	7.50	12.9
0.20	4.9	0.80	4.6	1.80	6.3	3.00	8.1	5.50	11.0	8.00	13.3
0.30	5.0	1.00	5.1	2.00	6.6	3.50	8.8	6.00	11.5	8.50	13.7
0.40	4.9	1.20	5.1	2.20	7.0	4.00	9.4	6.50	12.0	9.00	14.1
0.50	4.7	1.40	5.7	2.40	7.3	4.50	10.0	7.00	12.4	9.50	14.5