BOREHOLE INFILTRATION TESTING

Project Name: East Street Commercial Plaza
Site: Someplace, Vermont
Date: 8/18/2016
Percolation Test By: Jimmy James, ST #0000
Calculation By: Jimmy James, ST #0000

Infiltration Test No.: I-1

Existing elevation: 98
Proposed practice area elev. 93
Thickness of filter bed 2
Proposed bottom of practice = 91
Test/Bottom of borehole elev = 89 (2 ft below bottom of practice)

Borehole Characteristics: 6" diameter, 24-inch solid casing

Presoak Borehole for 24-hrs.
Presoak Start Time: 8/16/2016 8:00 AM
Presoak End Time: 8/17/2016 8:15 AM

Cycle No.	Start Time H	M	S	End Time H	M	S	Measured drop from top of casing (inches)	Rate (in/hr)
1	8	30	0	9	30	0	5.50	5.50
2	9	45	5	10	45	55	7.00	6.90
3	11	0	0	12	1	0	6.50	6.39
4	12	15	48	13	16	0	6.00	5.98

Average Infiltration Rate = 6.19

Design Infiltration Rate = 3.10 (Factor of safety of 2)

Infiltration Test No.: I-2

Existing elevation: 95
Proposed practice area elev. 93
Thickness of filter bed 2
Proposed bottom of practice = 91
Test/Bottom of borehole elev = 89 (2 ft below bottom of practice)

Borehole Characteristics: 6" diameter, 24-inch solid casing

Presoak Borehole for 24-hrs.
Presoak Start Time: 8/16/2016 8:15 AM
Presoak End Time: 8/17/2016 8:45 AM

Cycle No.	Start Time H	M	S	End Time H	M	S	Measured drop from top of casing (inches)	Rate (in/hr)
1	8	45	0	9	50	0	6.25	5.77
2	9	56	5	11	1	0	6.75	6.24
3	12	5	0	13	10	0	4.50	4.15
4	13	15	48	14	20	0	6.50	6.07

Average Infiltration Rate = 5.56

Design Infiltration Rate = 2.78 (Factor of safety of 2)

Infiltration Test No.: **I-3**

Existing elevation: 97.2

Proposed practice area elev. 96.8

Thickness of filter bed 2

Proposed bottom of practice = 94.8

Test/Bottom of borehole elev = 92.8 (2 ft below bottom of practice)

Borehole Characteristics: 6" diameter, 24-inch solid casing

Presoak Borehole for 24-hrs.

Presoak Start Time: 8/16/2016 8:20 AM

Presoak End Time: 8/17/2016 8:50 AM

Cycle No.	Start Time H	Start Time M	Start Time S	End Time H	End Time M	End Time S	Measured drop from top of casing (inches)	Rate (in/hr)
1	8	55	0	10	0	0	7.50	6.92
2	10	5	5	11	8	1	7.00	6.67
3	11	15	0	12	15	5	7.00	6.99
4	12	20	48	13	25	0	6.75	6.31

Average Infiltration Rate = 6.72

Design Infiltration Rate = 3.36 (Factor of safety of 2)