

Preparing Base for
"Rain Guardian – Bunker"
(by Anoka Conservation District)



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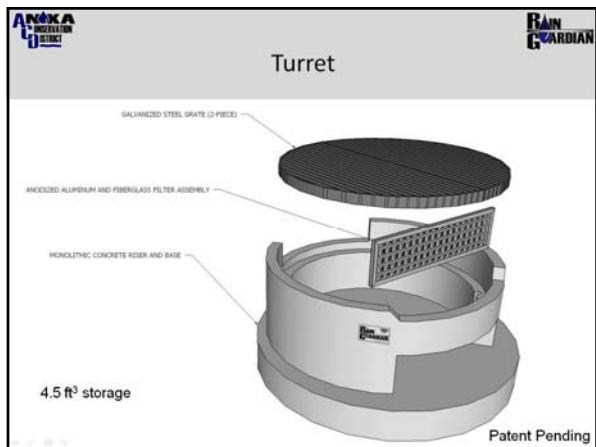
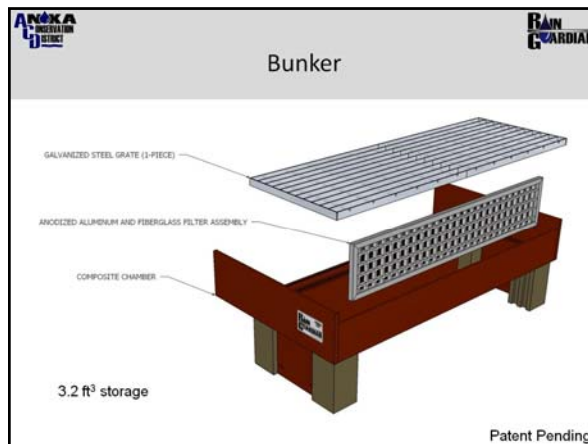
"Rain Guardian – Bunker"
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Captures larger sediment loads



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Sediment Removal Quantification:

2012 Cleanout of Pre-Treatment Boxes in Golden Meadow Neighborhood (28 acres)

1 person & Equipment: light-duty truck (or old squad), cordless driver, soil scoop, buckets

Removed 1,390 lbs of Sediment (from May & October Cleanings) **from 25 rain-garden inlet boxes** (5 minutes / box)

- 60 lb. avg / rain garden
- Low: 11 lbs; High: 226 lbs
- avg. of 0.008 lbs / ft² of Direct-Impervious Drainage Area (from 2012 data)

Labor & Materials:

Anoka Box or Trench Box Cleanout
Scenario: if 56 rain-gardens @ 10 minutes each (with travel time between)

1 person & Materials: light-duty truck (or old squad), cordless driver, soil scoop, buckets

9.5 person-hours/Cleaning x \$65/hour = \$617.50 / Cleaning for 56

...if 3 Cleanings/year = \$1,852.50 (April, July, November)

...if 4 Cleanings/year = \$2,470.00 (April, June, August, November)

Labor & Materials:

Sumped Catch-Basin Inlet Cleanout
Scenario: if 56 rain-gardens @ 25 minutes each (with travel time between)

2 person crew & Materials: Vactor Truck

48 person-hours/Cleaning x \$65/hour = \$3,120 (Labor)
24 hours (Vactor Truck Rental) x \$225/hour = \$5,400 (Equipment)

= \$8,520 / Cleaning for 56

...if 2 Cleanings/year = \$17,040.00 (April, September)

...if 15 minutes each = \$4,970 for 1 Cleaning / year

