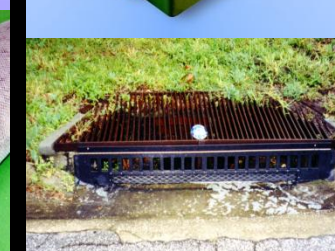
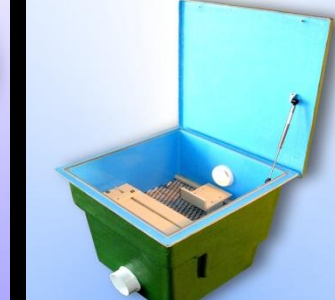




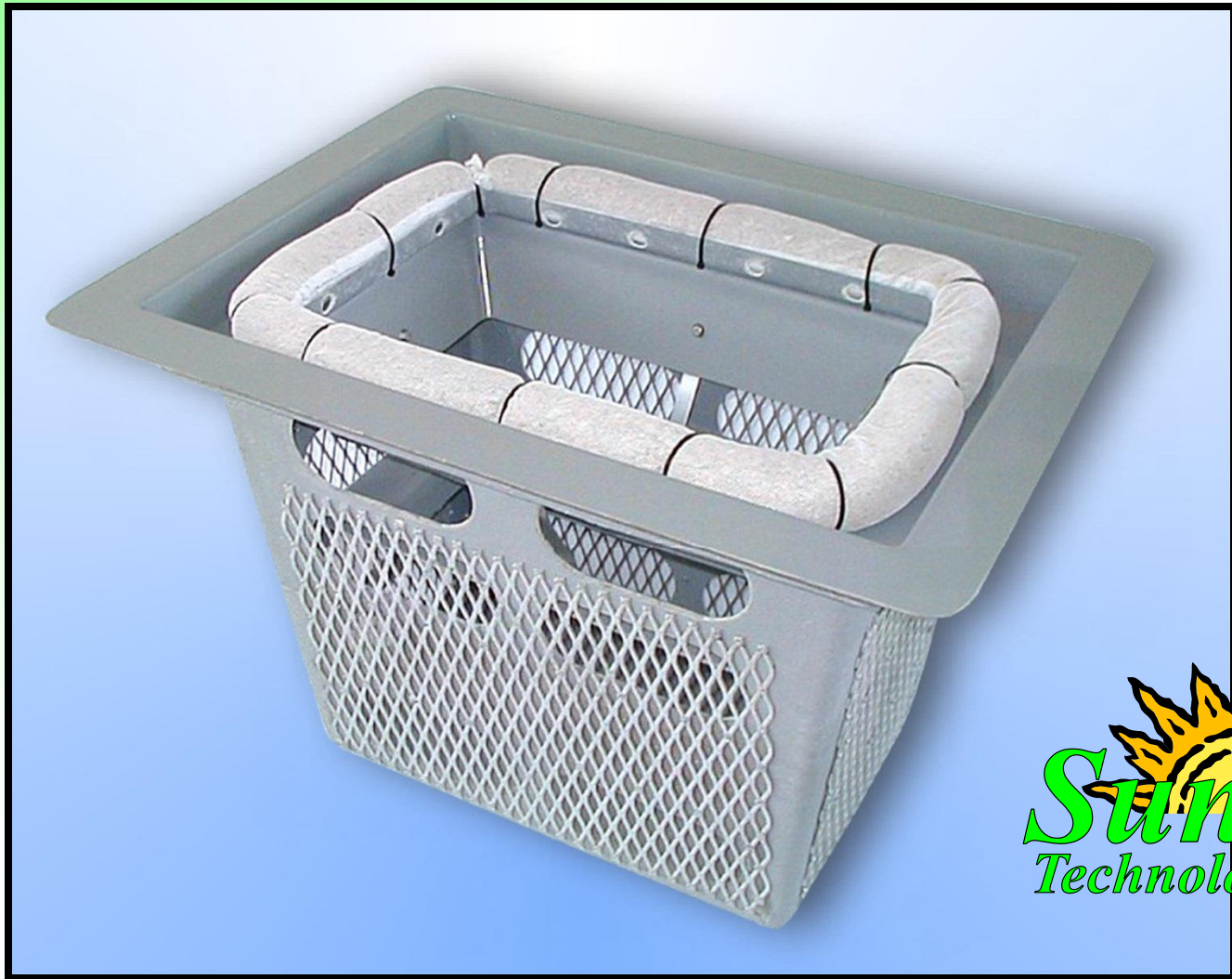
798 Clearlake Road, Cocoa, FL 32922
Ph: 321-637-7552 FAX: 321-637-7554
www.suntreetech.com

CELEBRATING OUR **20TH** ANNIVERSARY



Stormwater Filtration Systems

Grate Inlet Skimmer Box




Suntree
Technologies Inc.

For Grated Inlets

Grate Inlet Skimmer Box Features

Florida Type C Inlet

Storm Boom

***Built Strong
To Last!***

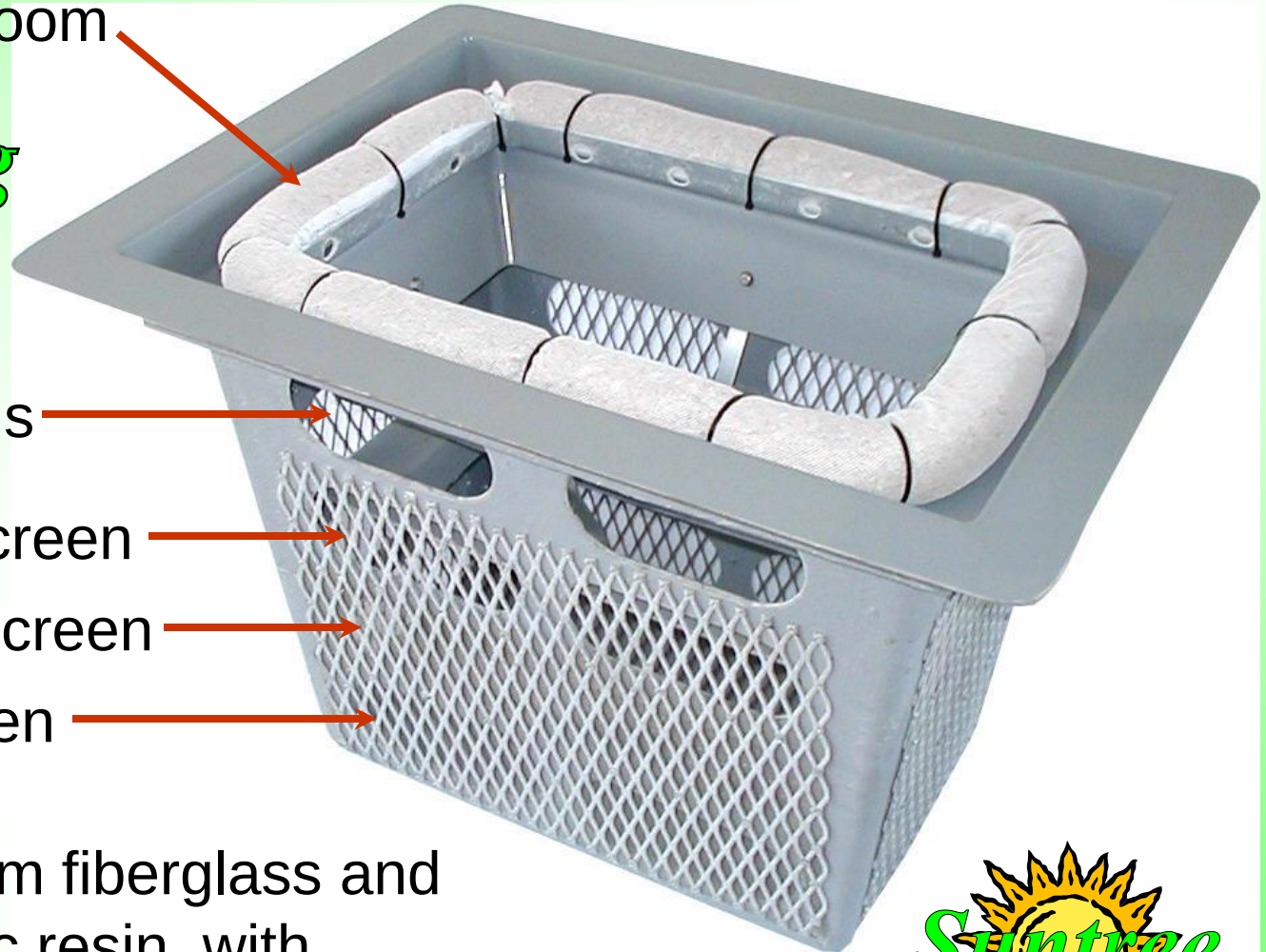
Bypass Openings

Coarse Sieve Screen

Medium Sieve Screen

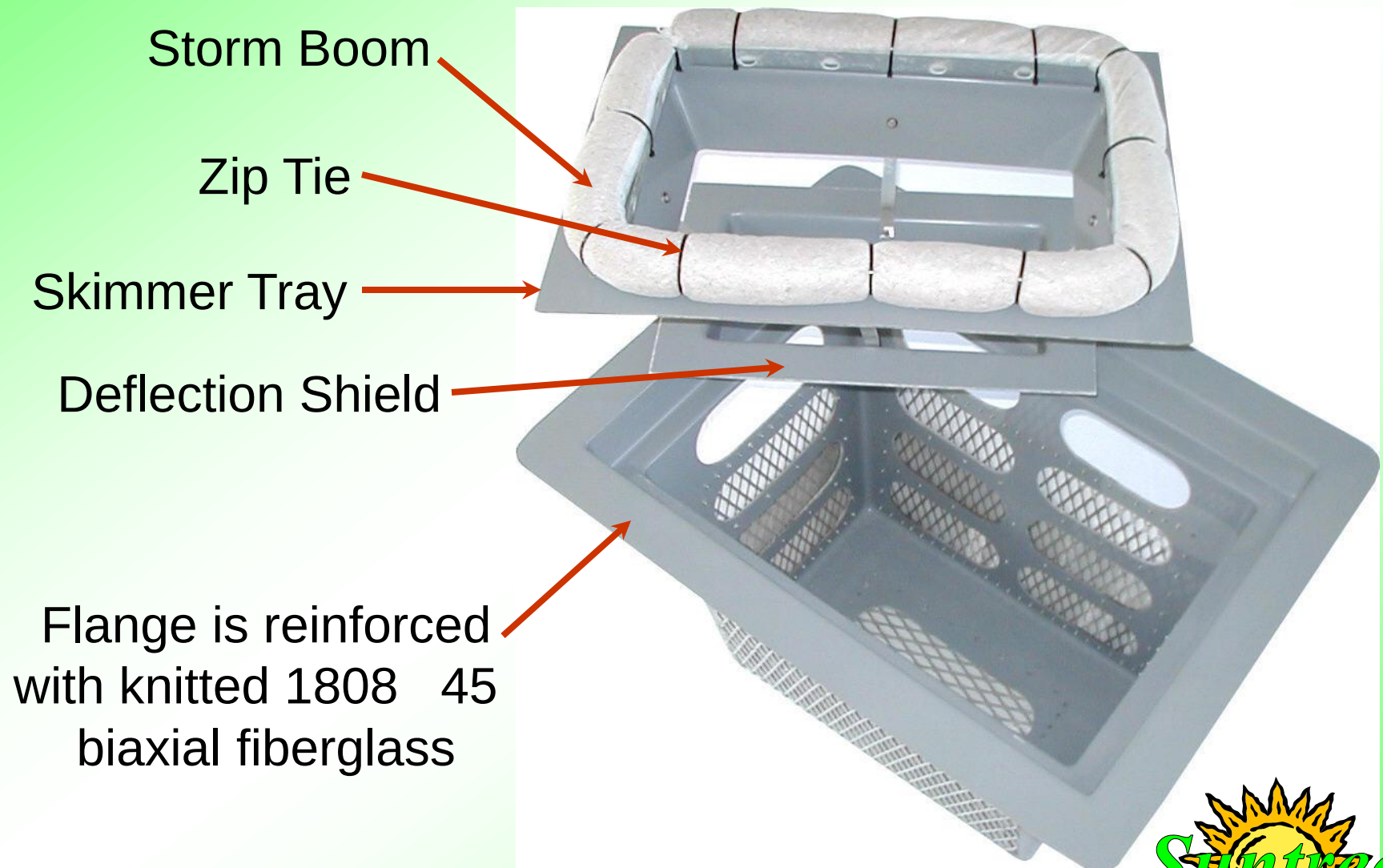
Fine Sieve Screen

Body made from fiberglass and
Isophthalic resin, with
gelcoated finish + UV filter.



Grate Inlet Skimmer Box Features

Florida Type C Inlet



5 Year Warranty

The Strength of Stainless Steel
and Fiberglass...

...to capture and keep
hundreds of pounds of debris...

...indefinitely!

*Built Strong
To Last!*



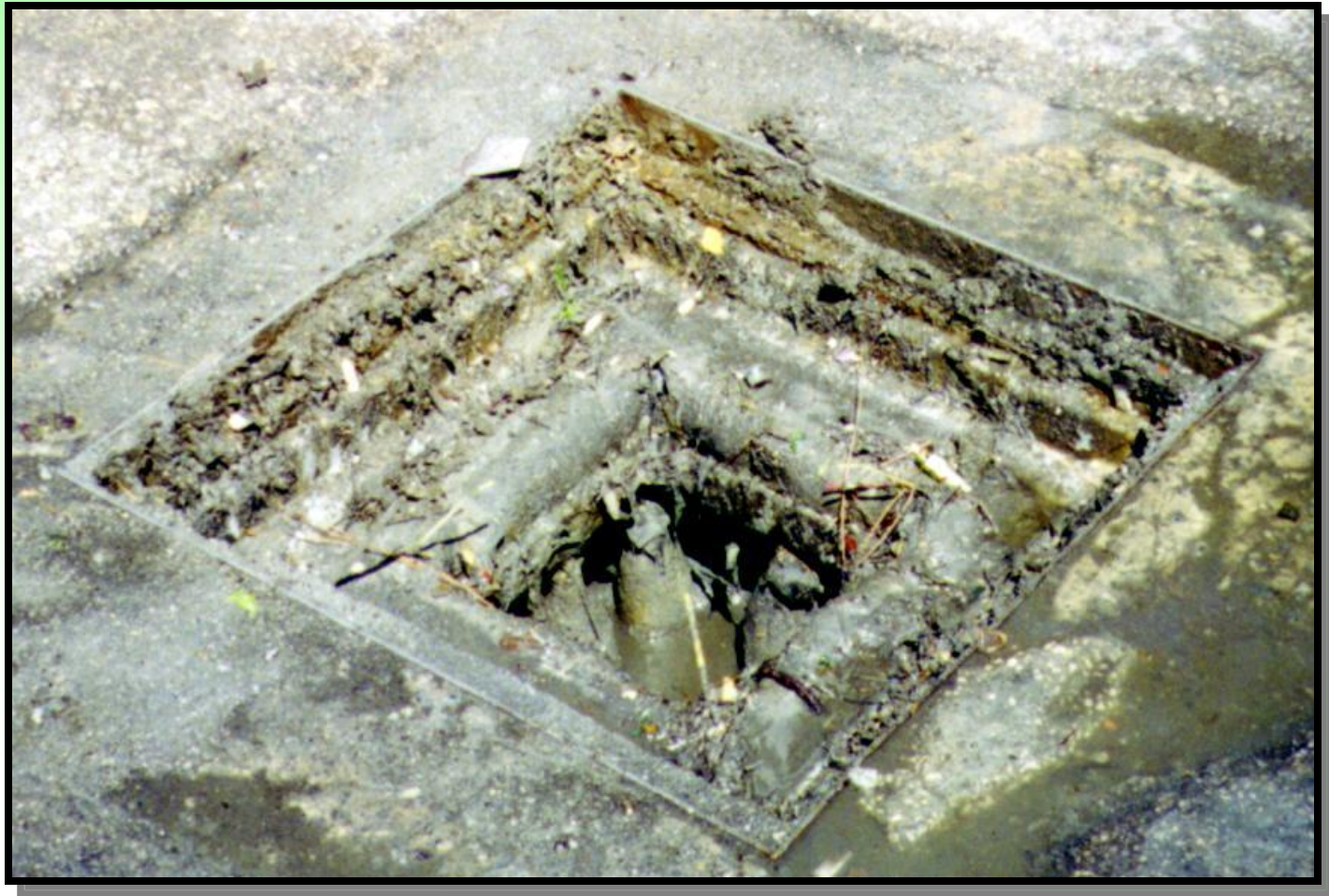
Grate Inlet Skimmer Box – Reedy Creek

24" X 24" Grate

Very heavy
hydrocarbon
pollutant load

Adjacent to
door mat
wash down
area

A simulated
storm event
every night



View immediately after grate
was removed

Grate Inlet Skimmer Box – Reedy Creek

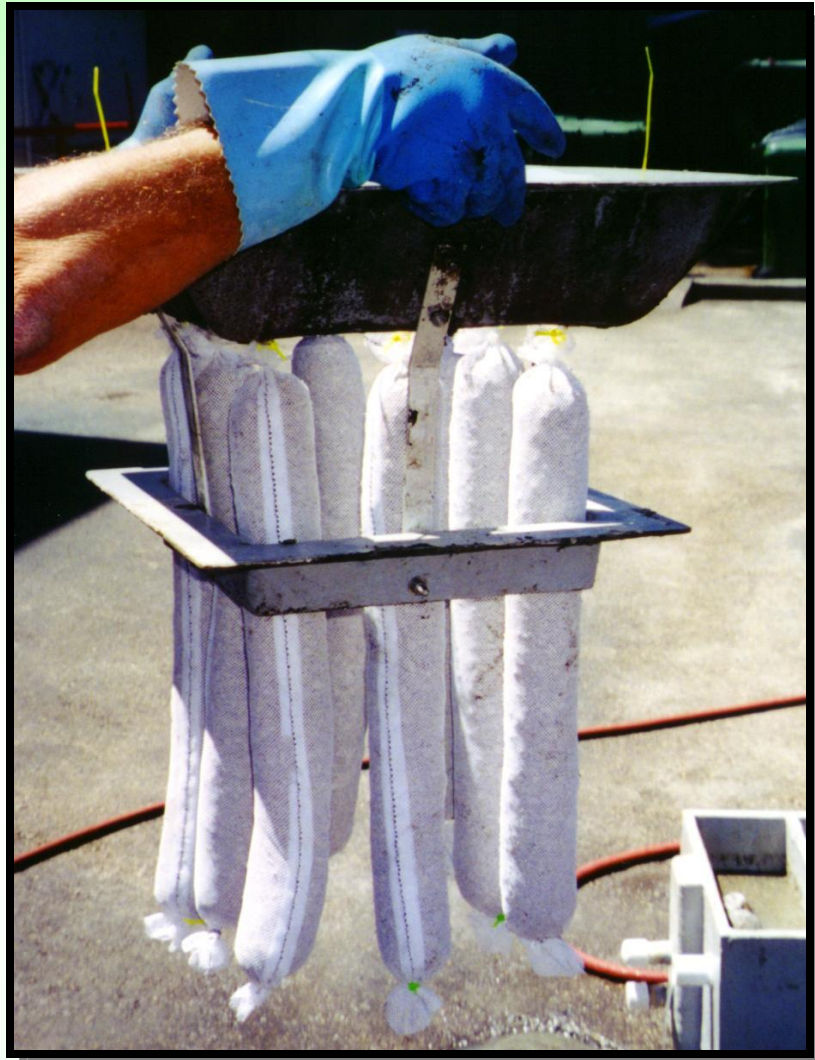
24" X 24" Grate



Completely full and in by-pass mode
after just 45 days – 78 quarts of debris
weighing 232 pounds were removed.

Grate Inlet Skimmer Box – Reedy Creek

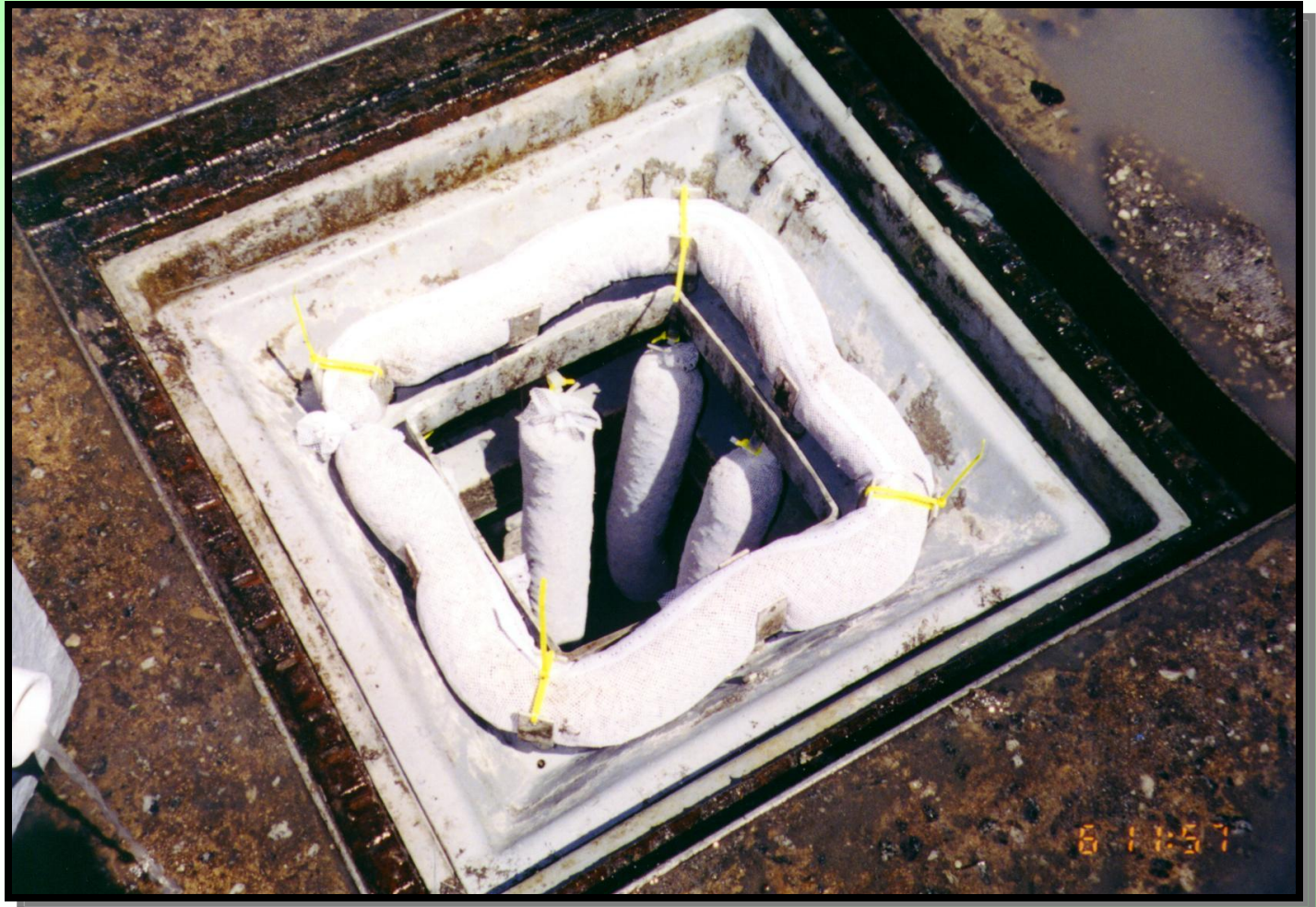
24" X 24" Grate



Over 17 feet of Storm Boom Used

Grate Inlet Skimmer Box – Reedy Creek

24" X 24" Grate



Serviced and ready for the next storm event

Curb Inlet Basket

High Capacity

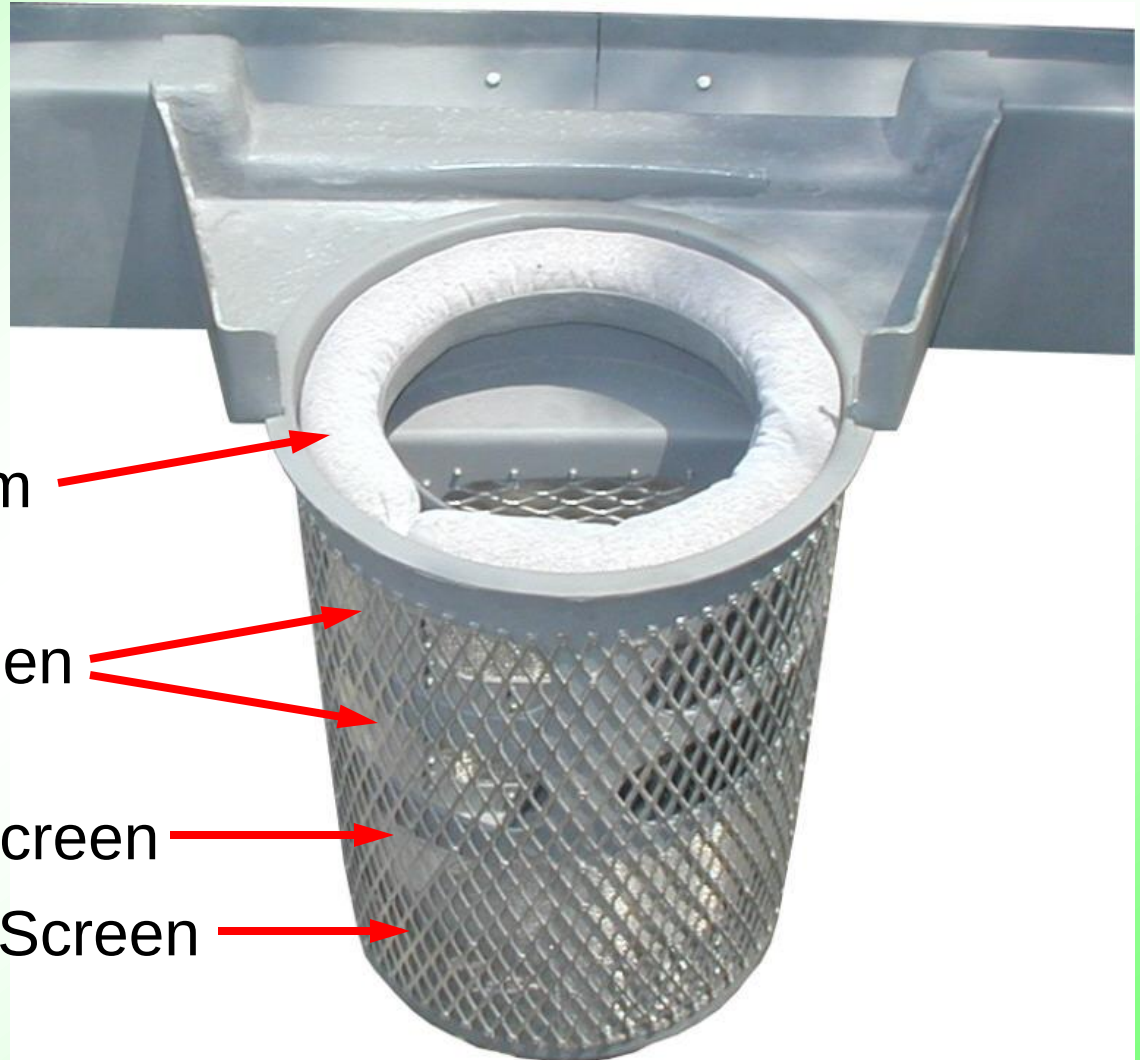
The Round Basket
Optimizes the Fit
Through the Manhole

Storm Boom

Coarse Sieve Screen

Medium Sieve Screen

Fine Sieve Screen



High Capacity Curb Inlet Basket

Lakeland, FL



The only access is through the manhole.

High Capacity Curb Inlet Basket

Lakeland, FL



A lift handle provides an easy method for removal.



View of Manhole With High Capacity Curb Inlet Basket Inside

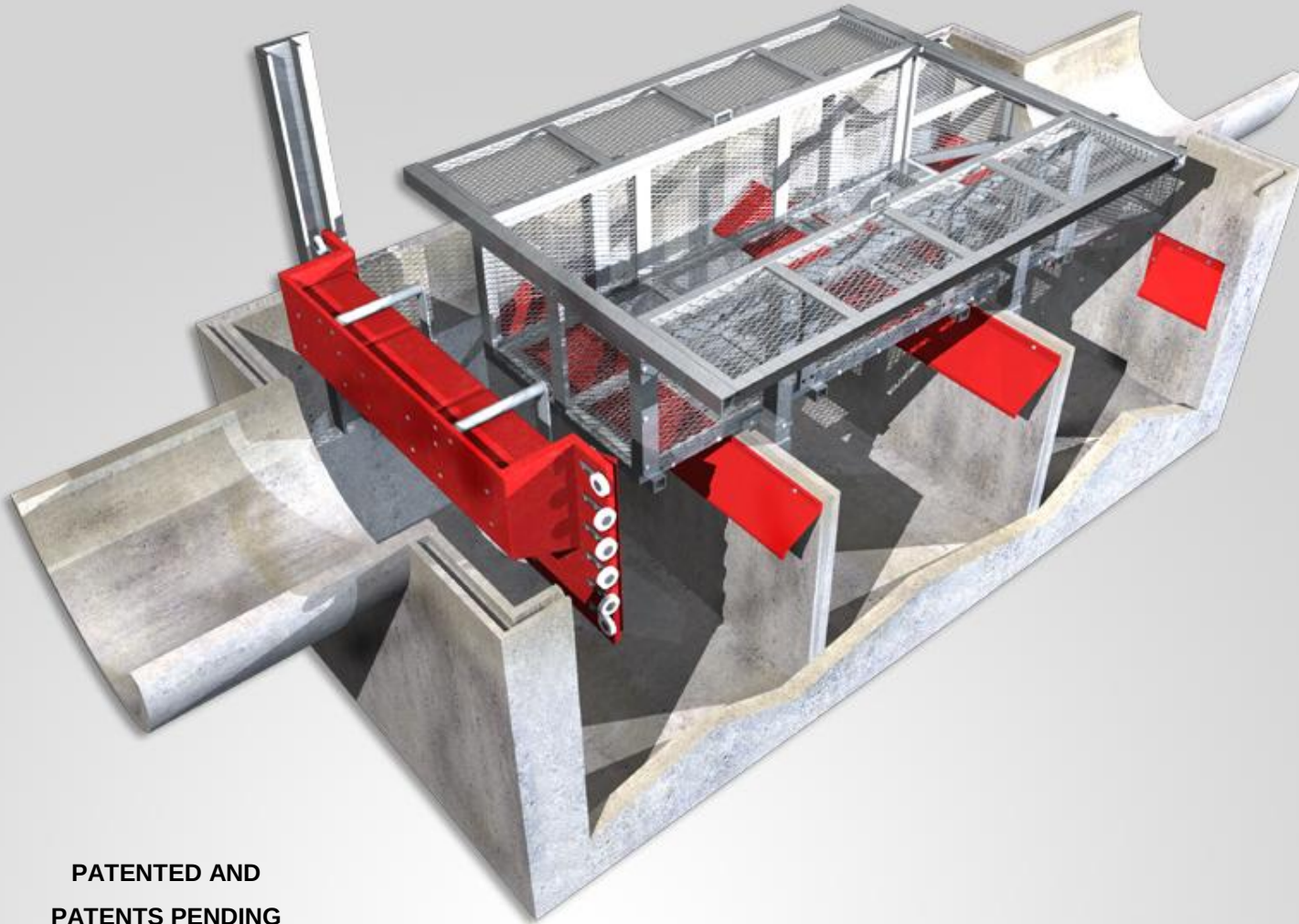
High Capacity Curb Inlet Basket

Lakeland, FL



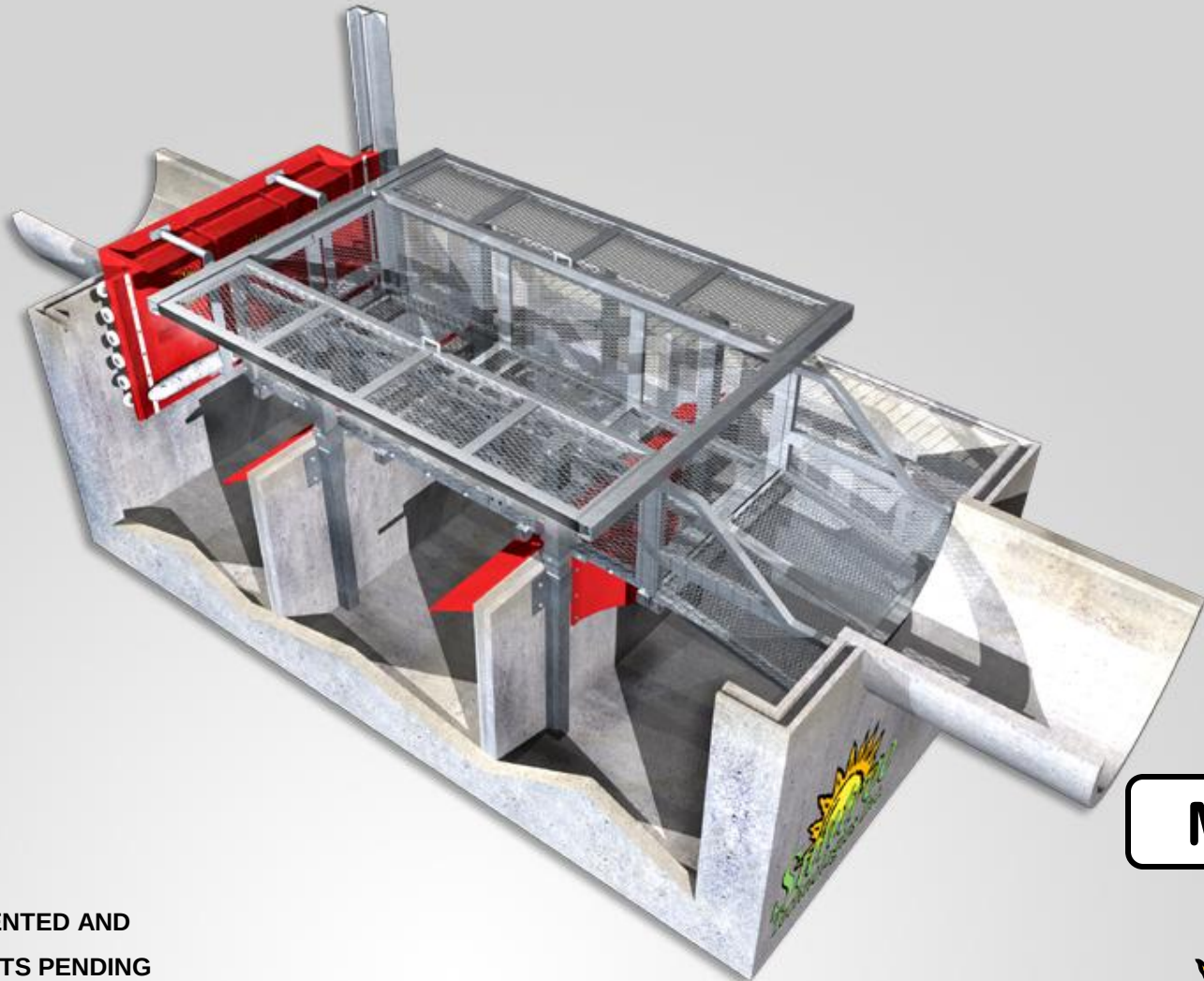
Contains 140 pounds of foliage, 56 pounds of sediment, and 4 pounds of litter.

Nutrient Separating Baffle Box^δ



PATENTED AND
PATENTS PENDING

Nutrient Separating Baffle Box^δ



PATENTED AND
PATENTS PENDING

Movie

5 Year Warranty

The Strength of Stainless Steel,
Concrete, Aluminum, and Fiberglass...

...to capture and keep
thousands of pounds of debris...

...indefinitely!

*Built Strong
To Last!*



Lake Adair In Orlando - All Lids Closed



Lake Adair In Orlando - All Doors Open



Lake Adair In Orlando - Finished Installation



Lake Adair In Orlando - Opening screened lids



Lake Adair In Orlando - Captured Leaves





St Petersburg





St Petersburg



Leveraged nuts allow for easy adjustments



Servicing



Open manholes and open the screened lids.

Servicing



Open manholes and open the screened lids.

Servicing



Remove debris from screen system.

Servicing



Remove debris from screen system.

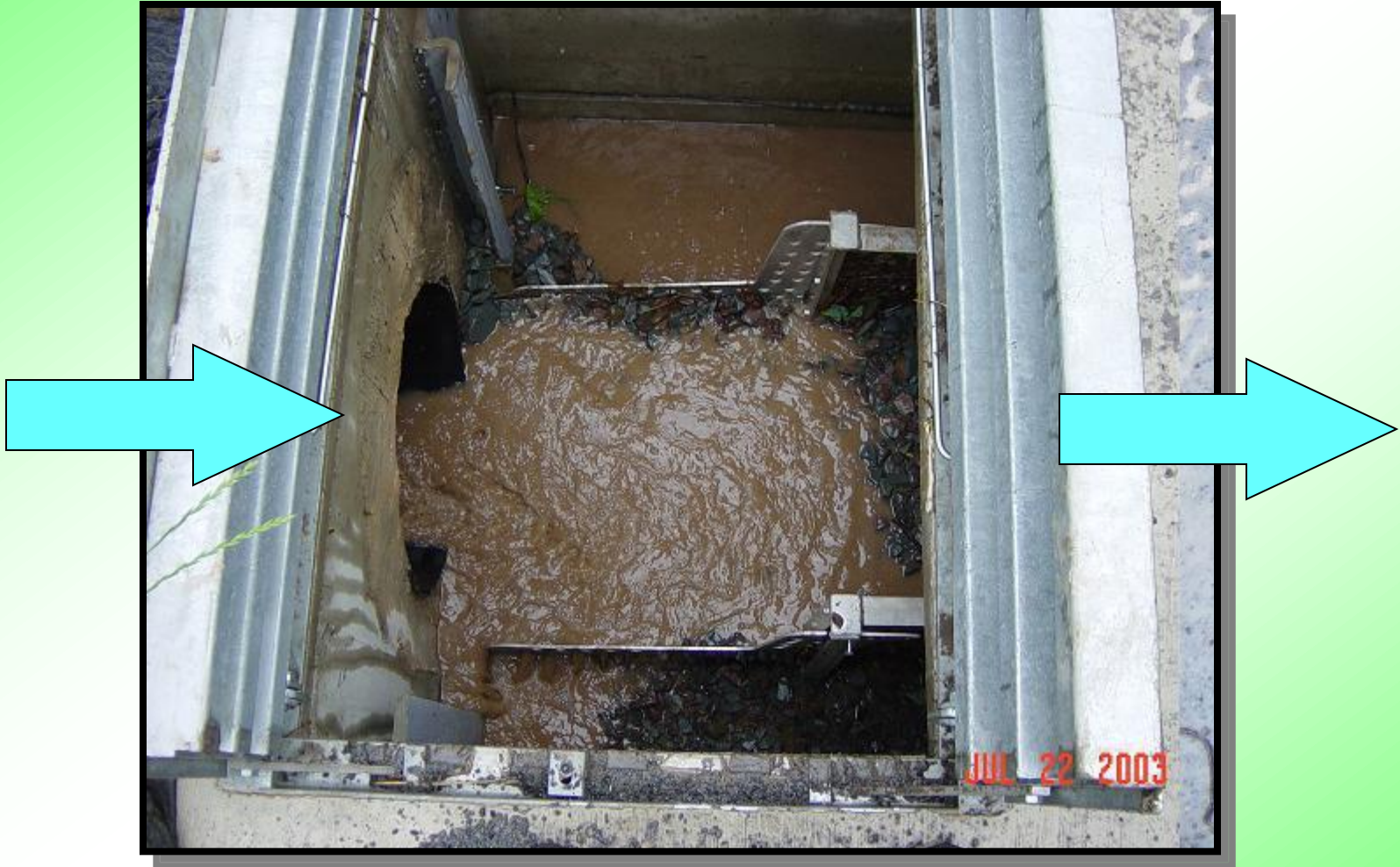
Servicing



Vacuum out lower sediment chambers.

Nutrient Separating Baffle Box™

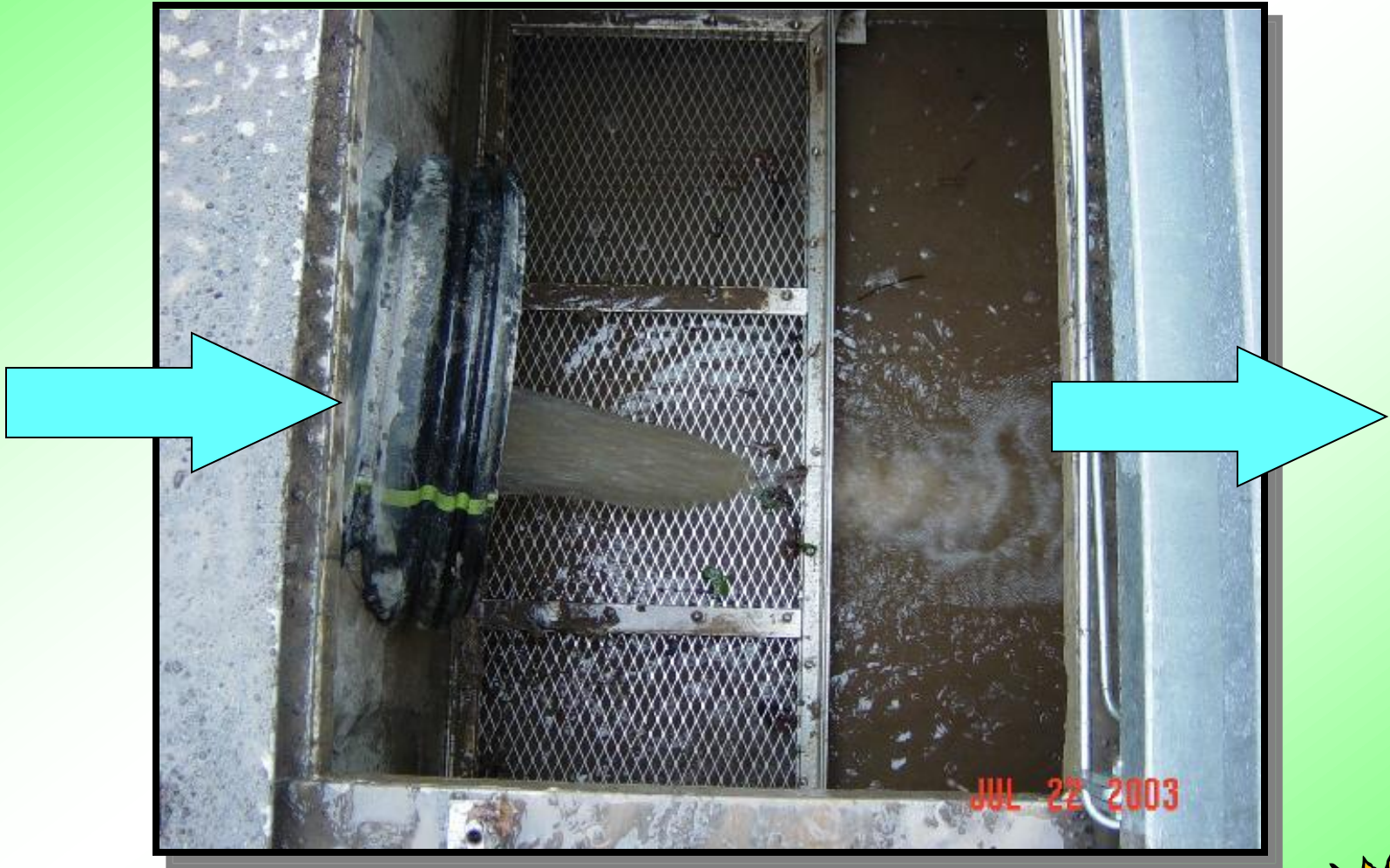
Lake Harvey, PA



Inflow

Nutrient Separating Baffle Box™

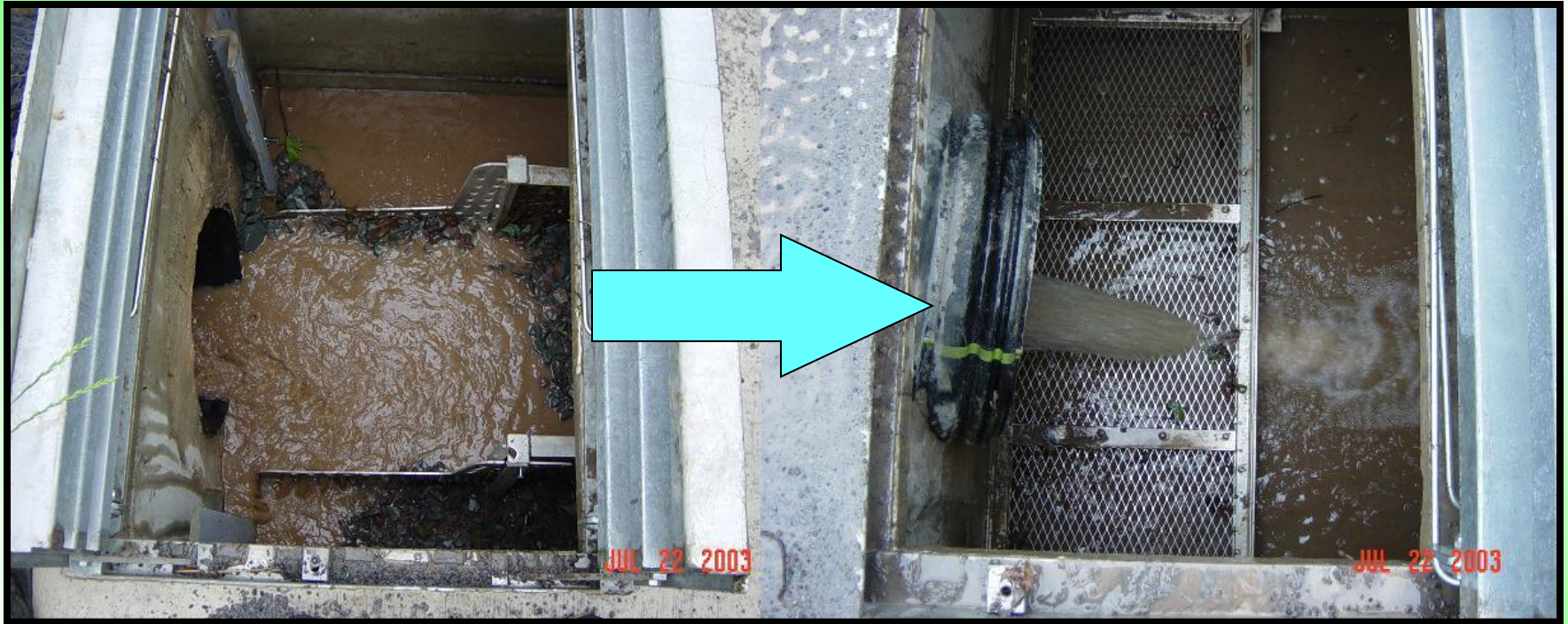
Lake Harvey, PA



Outflow

Nutrient Separating Baffle Box™

Lake Harvey, PA



Inflow

Outflow

Nutrient Separating Baffle Box™

Fits in Ditch Line



Nutrient Separating Baffle Box™

University of Central Florida



Nutrient Separating Baffle Box™

University of Central Florida



Nutrient Separating Baffle Box™

University of Central Florida



Nutrient Separating Baffle Box

Washington, IN - **CSO** retrofit



Nutrient Separating Baffle Box^δ

Washington, IN - **CSO** retrofit



Nutrient Separating Baffle Box^δ

Washington, IN - **CSO** retrofit



Hydro-Variant Technology

***When the hydrology of a
treatment system changes to
reduce headloss while the
flow rate is increasing.***

SkimBoss™

Hydro-Variantδ Technology
Patented

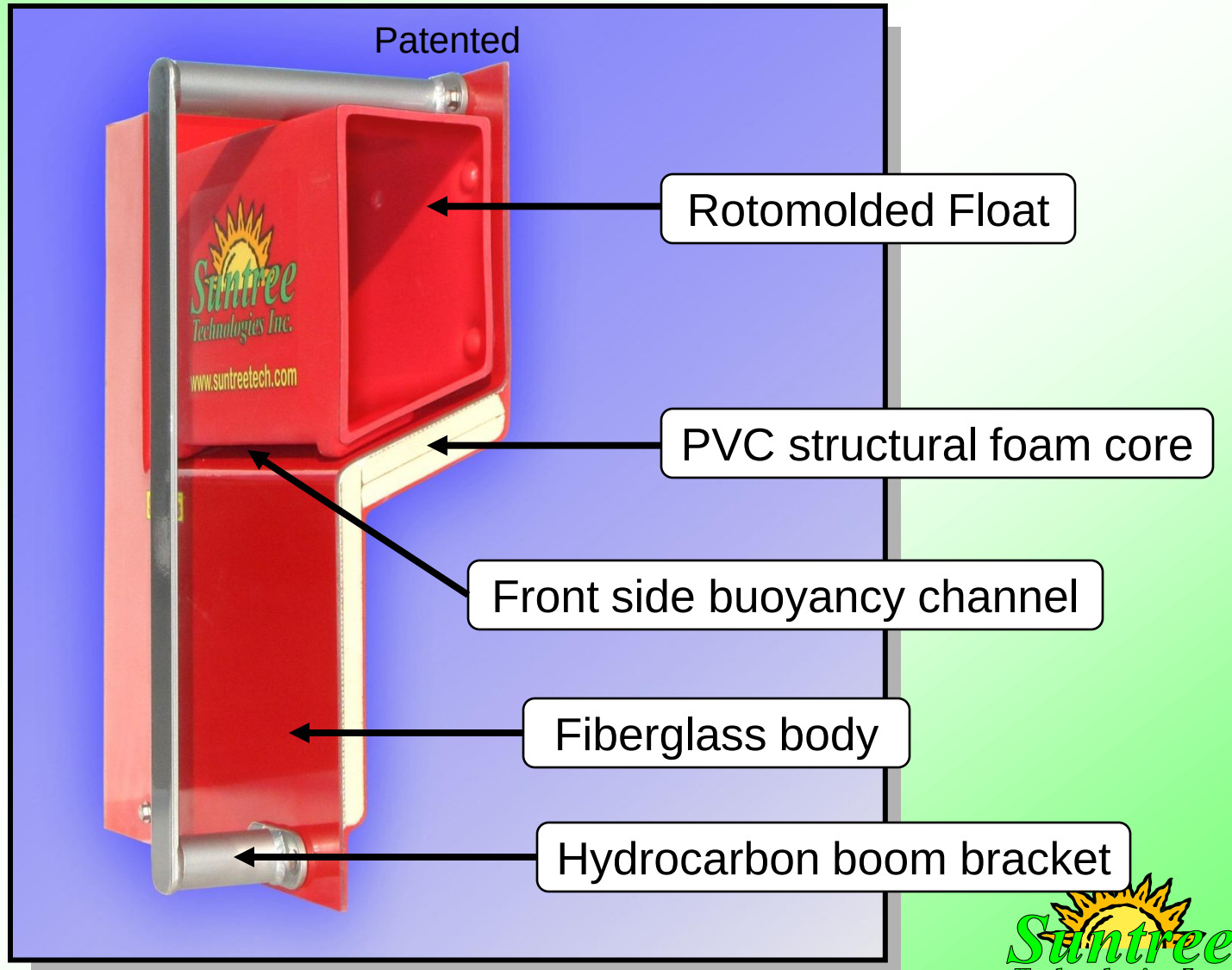


Exclusively available only with the
Nutrient Separating Baffle Box

SkimBoss™

Hydro-Variant δ Technology

*Cut-away
View*



SkimBossTM

Hydro-Variant δ Technology



Delrin wheels roll on stainless steel axles.

Marine quality wheels engineered with ultralow friction components are attached to the ends of the skimmer to virtually eliminate resistance of vertical movement in the track system.

Cape Canaveral - Installing floating skimmer





Cape Canaveral - Installed floating skimmer



Cape Canaveral - Roller track system





Cape Canaveral - Skimmer with media



Cape Canaveral - Finished project



Nutrient Separating Baffle Box^δ

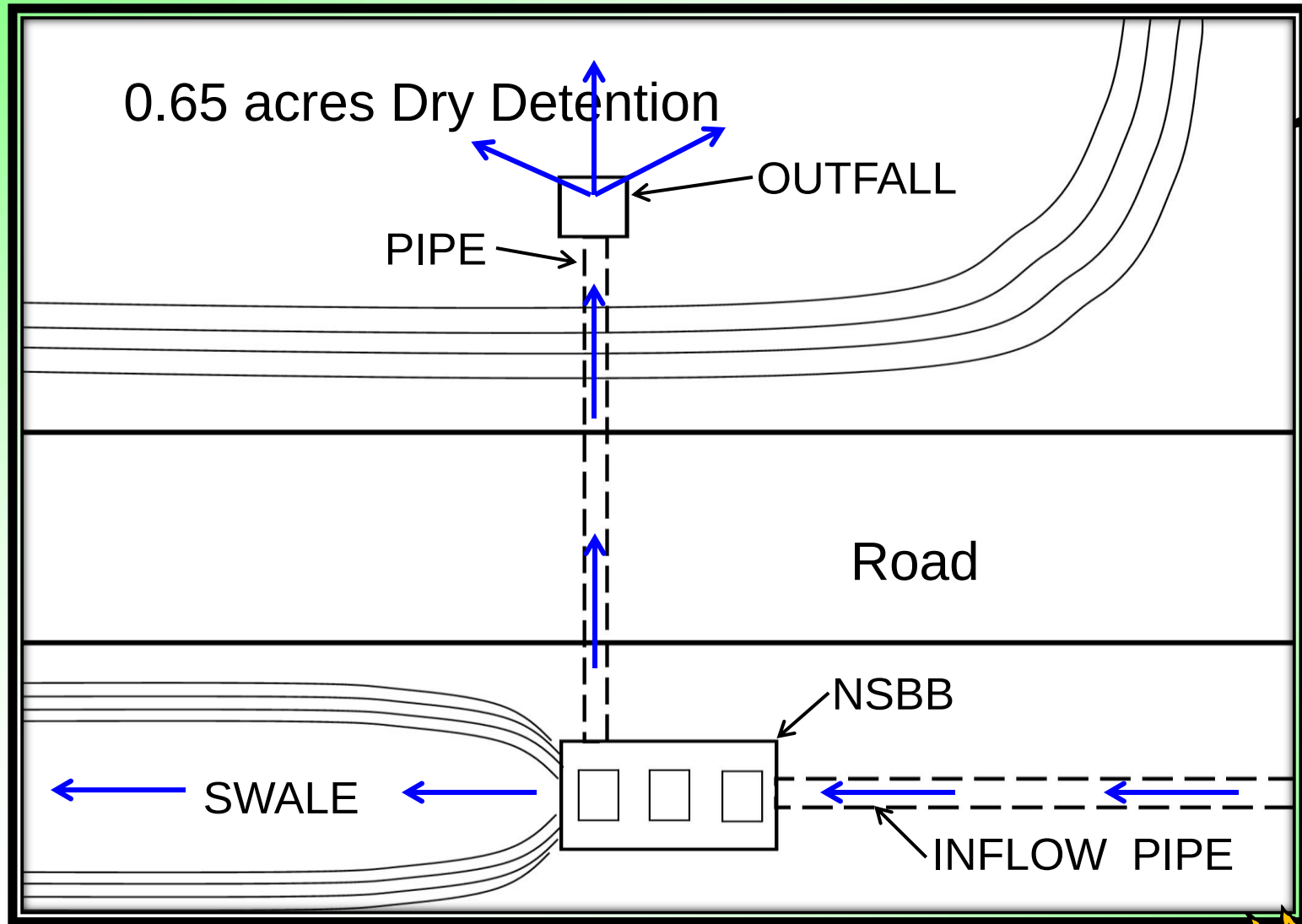
With

SkimBossTM ***Diversion Weir***

Hydro-Variant^δ Technology

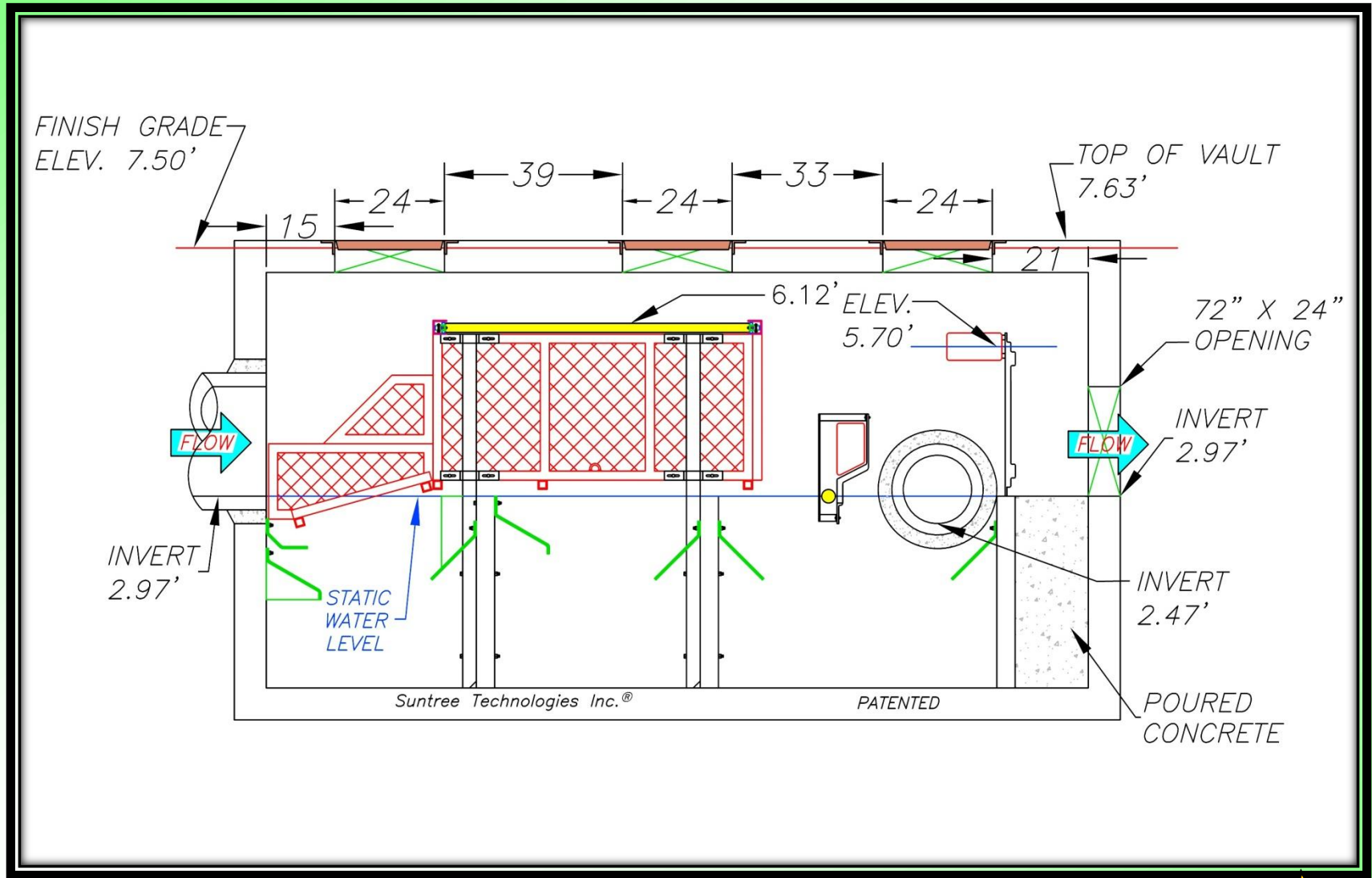


Nutrient Separating Baffle Box^δ



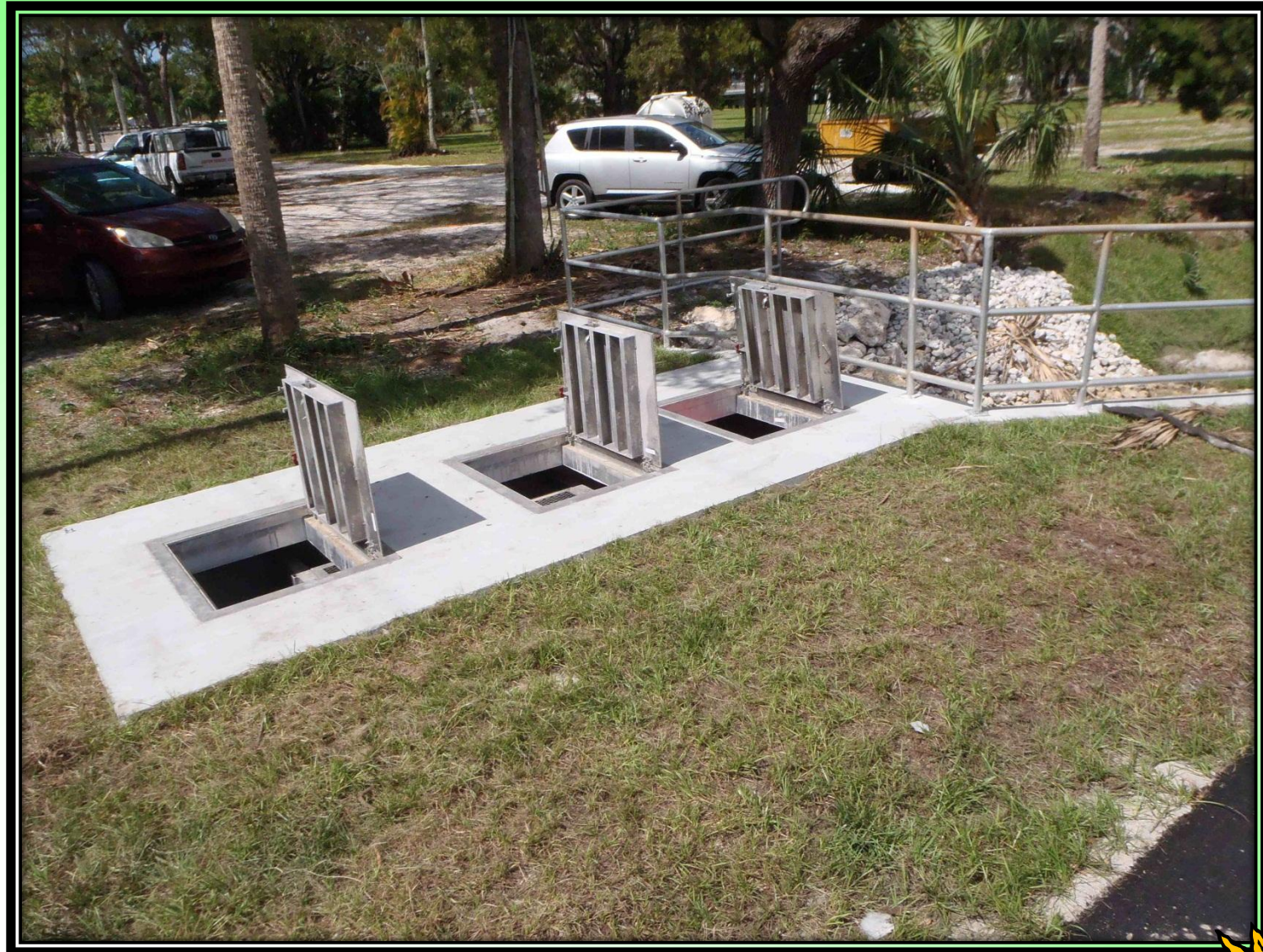
Plan view of treatment train.

SkimBoss™ Diversion Weir



Side view of NSBB with SkimBoss Diversion Weir

SkimBoss™ *Diversion Weir*



NSBB with SkimBoss Diversion Weir

SkimBoss™ *Diversion Weir*



Outflow end flowing into ditch.

SkimBoss™ *Diversion Weir*



View of SkimBoss Diversion Weir

SkimBoss™ *Diversion Weir*



Outfall structure in detention area.

SkimBoss™ *Diversion Weir*

Outfall



Dry detention area.

SkimBoss™ Filtration System



Movie

SkimBoss™ *Filtration System*

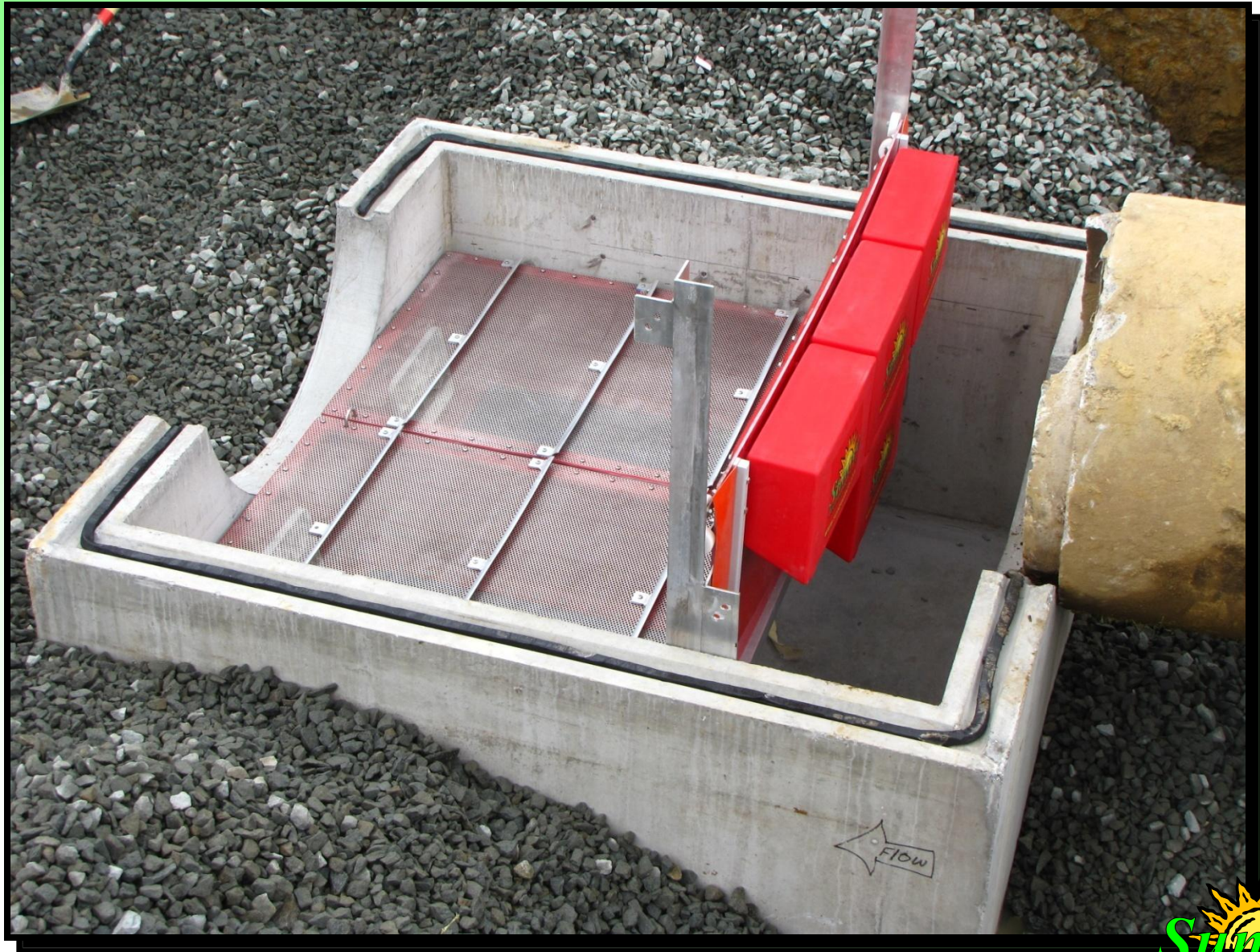


Treatment Train

SkimBoss™ *Filtration System*



SkimBoss™ *Filtration System*



SkimBoss™ *Filtration System*



Bold and GoldTM

Filtration Media

Developed By

UNIVERSITY OF CENTRAL FLORIDA

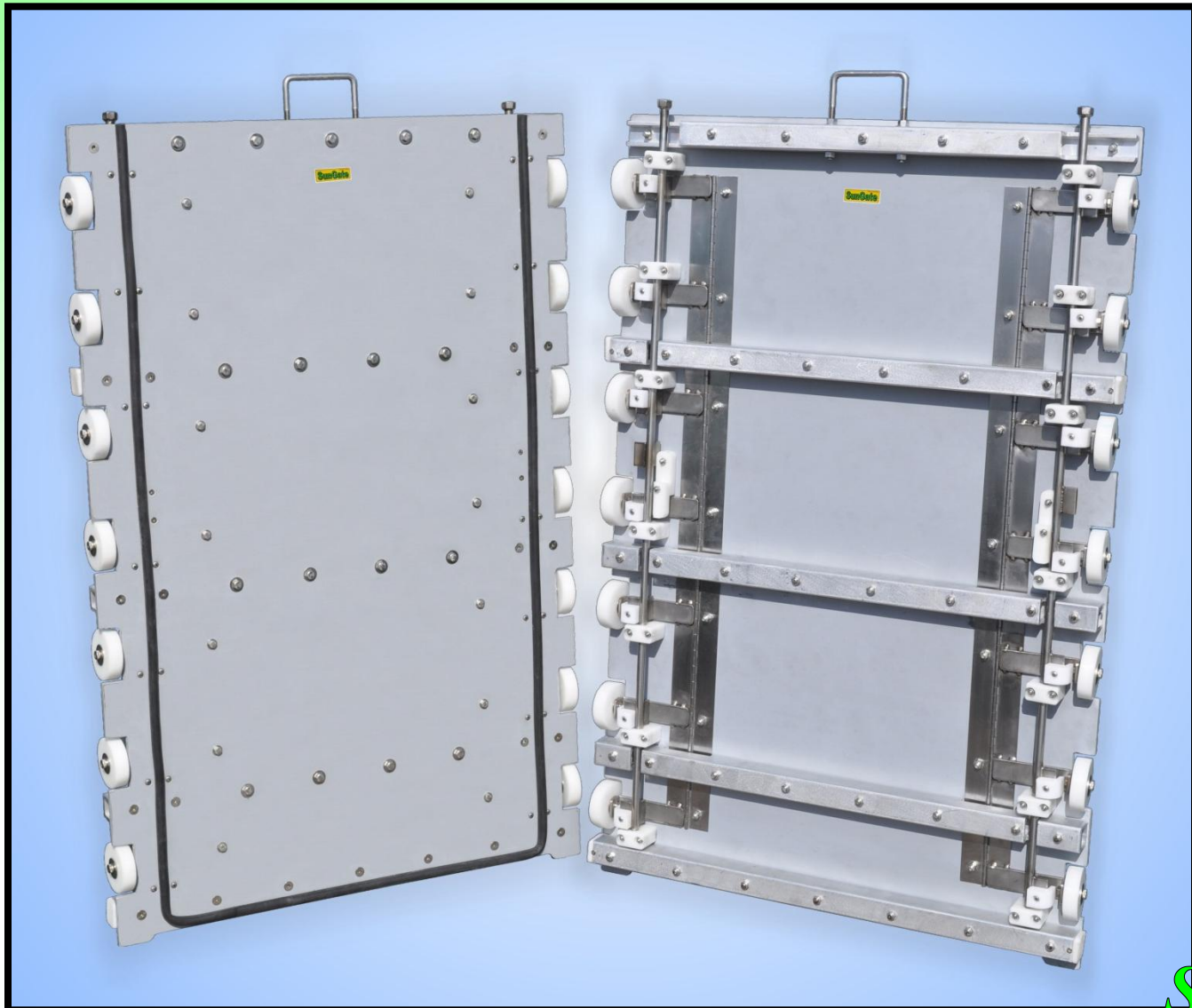
Stormwater Management ACADEMY



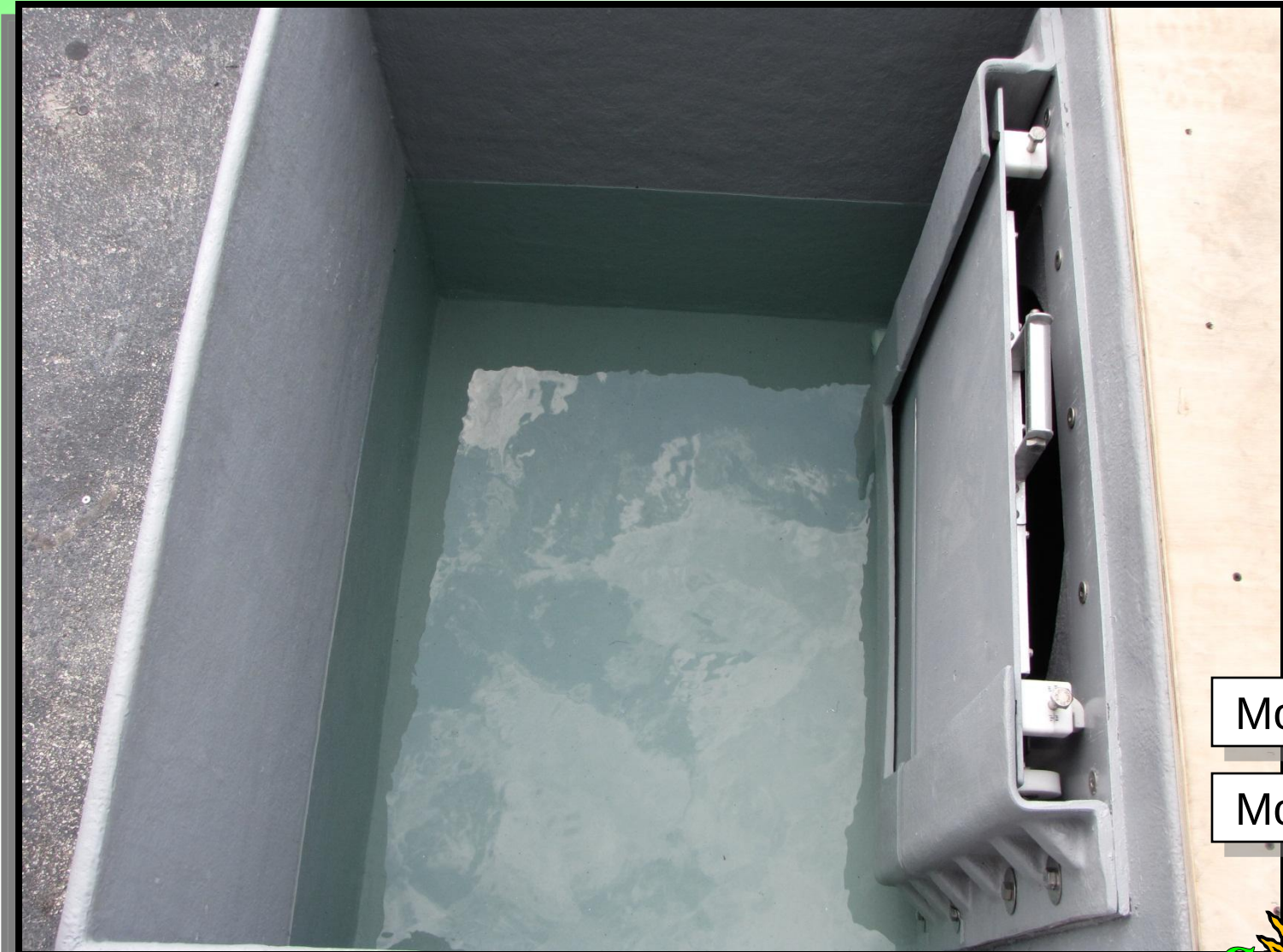
SkimBoss™ *Filtration System*

- Dr. Wanalista did a study on a lake along Red Bug Road in Orlando
- Sampled 28 storm events and 7 baseflows over 9 months
- 35% turbidity (NTU) reduction
- 45% Ortho-phosphorous (OP) reduction
- 25% total phosphorous (TP) reduction
- 17% Nitrogen (TN) reduction
- 45% Total Suspended Solids (TSS) reduction

*SunGate*TM



*SunGate*TM



Movie 1

Movie 2


Suntree
Technologies Inc.



The finished installation.



Lowering the SunGate through the hatch.



The SunGate is resting at the bottom of the track system.



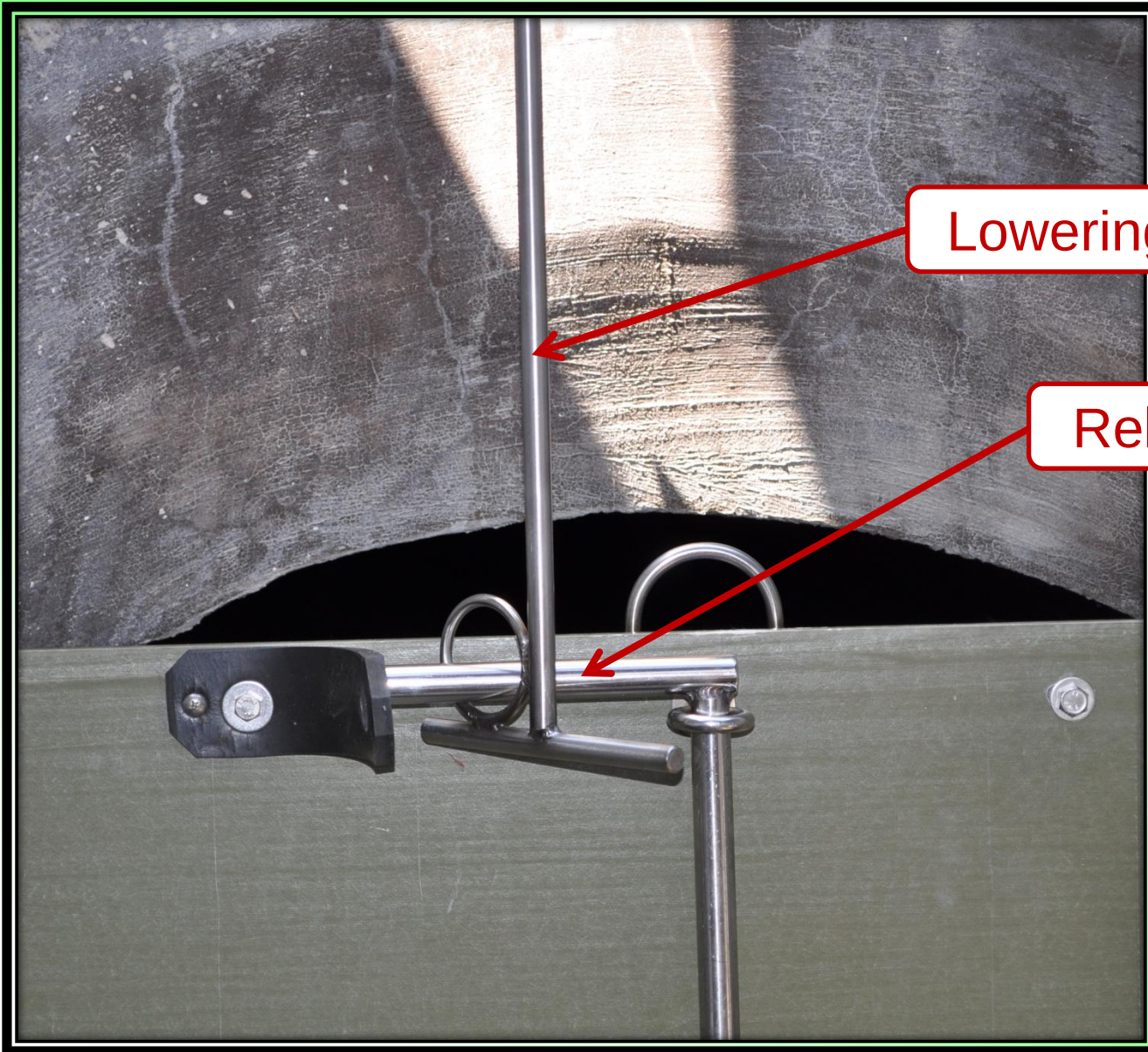
Cams are rotated to lock the SunGate and make the seal.



Lowering Tool

Release Handle

To open the relief valve, reach in with the lowering tool and hook onto the relief valve's release handle.



Lowering Tool

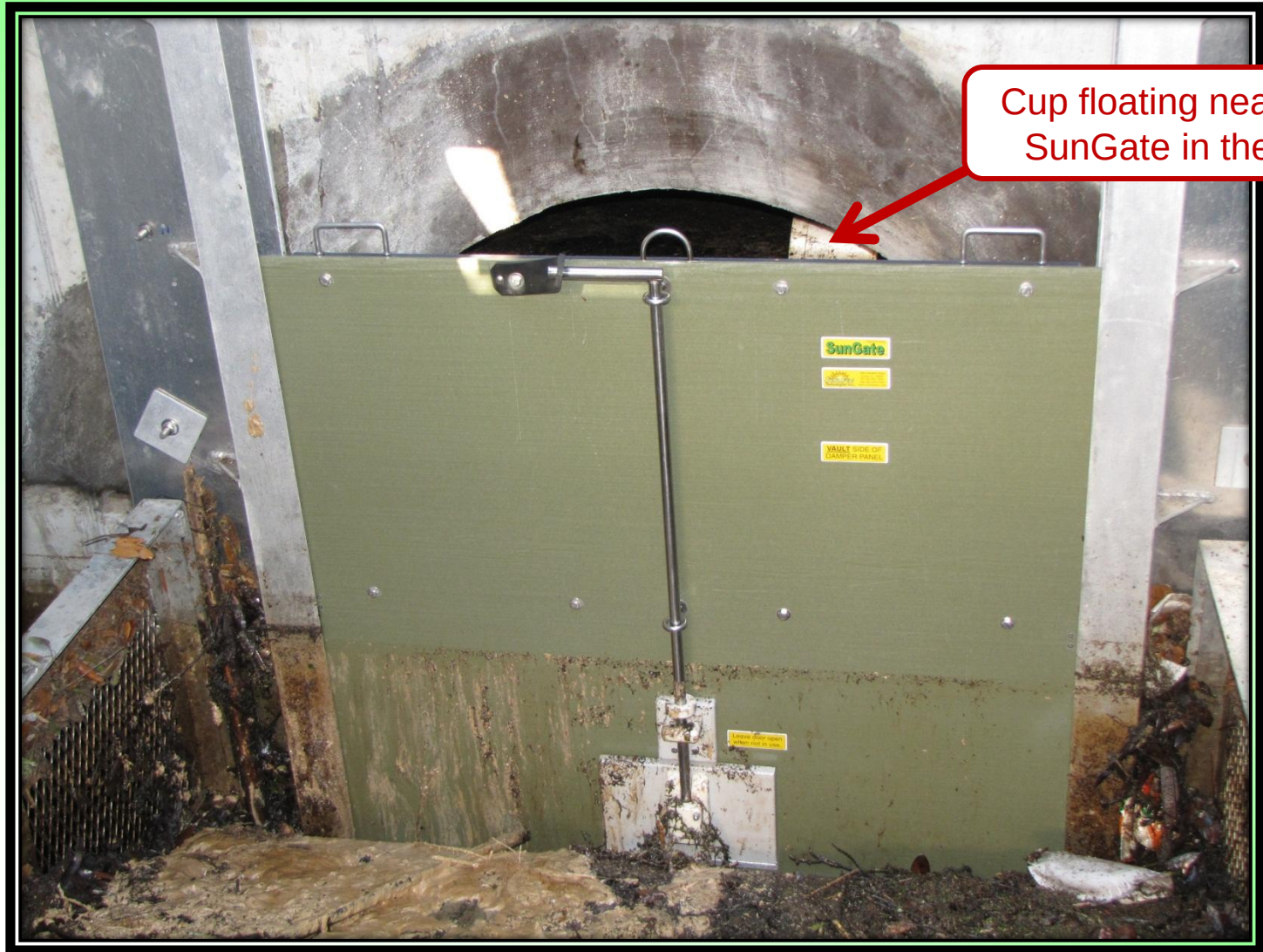
Release Handle



Water entering the vault through the relief valve.



Putting in a Tide Flex check valve at a later date.



Cup floating near top of SunGate in the pipe.

Base flow blocked off by SunGate.

5th & Rossiter – Mt Dora, FL



Basin size
approx. 120 acres

Land use is built-out
mostly residential

Basin drains into
Lake Franklin

Retrofit is a 36" pipe
draining heavy tree
canopy neighborhood

5th & Rossiter – Mt Dora

Design concerns:

- Full treatment of a high flowing 36" pipe at a steep grade.
- The resulting head loss of the treatment system must be minimal.
- Bypass in the treatment system must be big!
- Concern over an adjacent lake level that may inhibit servicing during rainy season.
- Anticipated very high leaf load...the primary pollutant of concern.

5th & Rossiter – Mt Dora

SUNTREE TECHNOLOGIES INC.®

NUTRIENT SEPARATING BAFFLE BOX™ MODEL NO: NSBB-10-18-140-5TH AVE AND ROSSITER-2

FLOW & BY-PASS SPECIFICATIONS FOR BIOMASS SEPARATING SCREEN SYSTEM, SEDIMENT COLLECTION CHAMBERS, AND SKIMMER SPECIFICATIONS

1. Pipe inflow area (Drawn as 36" RCP) — 7.06 sq.ft.

SCREEN SPECIFICATIONS:

2. Open orifice area in screen system — 69.60 sq.ft.
3. Open orifice area in screen system with 50% blockage — 34.80 sq.ft.

4. Open orifice area in screen system with 75% blockage — 17.40 sq.ft.

5. Minimum by-pass through screen system below the top surface of the pipe — 16.00 sq.ft.

6. Minimum by-pass around screen system below the top surface of the pipe — 27.16 sq.ft.

7. Screen system storage volume — 176.16 cu.ft.

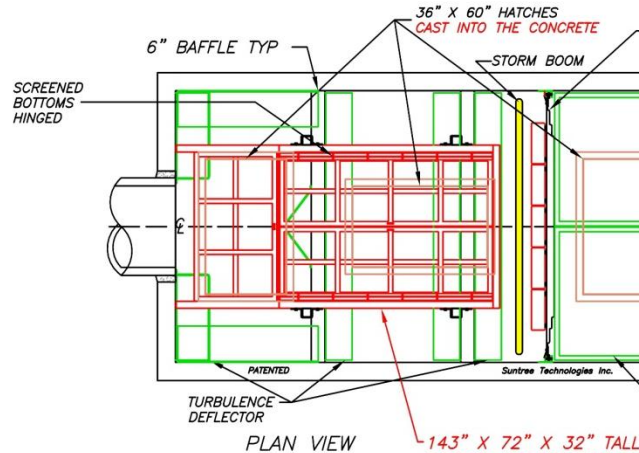
SEDIMENT STORAGE:

8. Volume of first sediment chamber — 225 cu.ft.

9. Volume of second sediment chamber — 225 cu.ft.

10. Volume of third sediment chamber — 315 cu.ft.

11. Total sediment volume — 765 cu.ft.

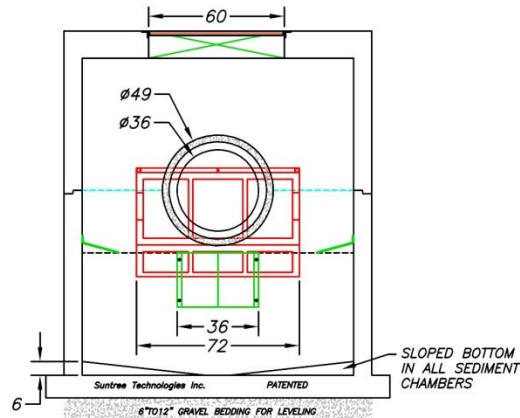


Special Features:

Screened Lids

SkimBoss Filtration System

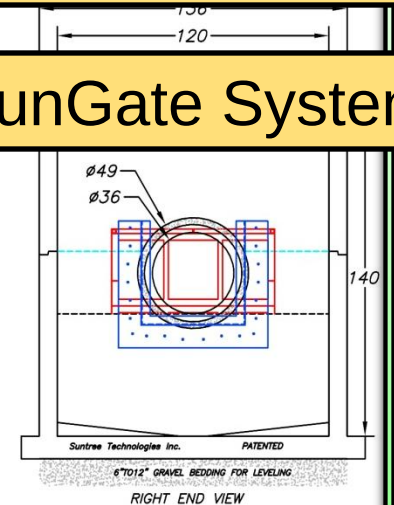
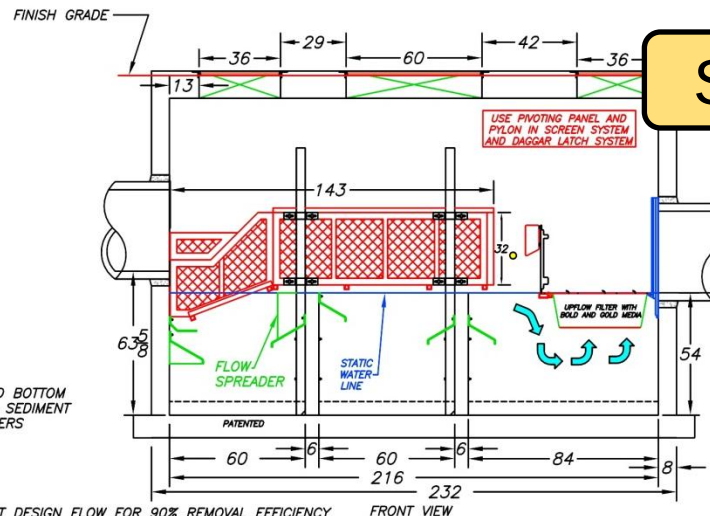
SunGate System



NOTES:

1. CONCRETE 28 DAY COMPRESSIVE STRENGTH FC=5000 PSI
2. REINFORCING: ASTM A-615 GRADE 60
3. SUPPORTS AN H2O LOADING AS INDICATED BY AASHTO.
4. JOINT SEALANT: BUTYL RUBBER SS-5-00210
5. ALL WALLS TO BE 8" THICK, BOTTOM TO BE 10" THICK. TOP TO BE 12" THICK.

6. TREATMENT DESIGN FLOW FOR 90% REMOVAL EFFICIENCY OF TSS IS 45 CFS.
7. INFLOW AND OUTFLOW PIPES ARE TO BE FLUSH WITH THE INSIDE SURFACE OF THE CONCRETE STRUCTURE. (CAN NOT INTRUDE BEYOND FLUSH)
8. BAFFLES ARE TO BE SEALED WITH GROUT TO FORM 3 WATER TIGHT CHAMBERS.
9. CAST LIFTING POINTS ON OUTSIDE OF THE BOX



SUNTREE TECHNOLOGIES, INC.
798 CLEARLAKE RD. SUITE #2
COCOA, FL. 32922
NUTRIENT SEPARATING BAFFLE BOX
MODEL NO. NSBB-10-18-140-5TH AVE AND ROSSITER-2
DATE: 01/04/10 SCALE: SF = 72
DRAFTER: T.H.2. UNITS = INCHES

PROJECT: 5TH AVE AND ROSSITER-MT. DORA, FL
DRAWING #: 2-02-18-12-03
FILE NAME: NSBB-10-18-140-5TH AVE AND ROSSITER-2
REVISIONS: DATE: REVISIONS: DATE:

5th & Rossiter – Mt Dora



Setting the
Bottom Half

5th & Rossiter – Mt Dora

Setting the
Top Half



5th & Rossiter – Mt Dora

Interior
Components
Installed



5th & Rossiter – Mt Dora



Service Driveway

5th & Rossiter – Mt Dora



5th & Rossiter – Mt Dora



***Yes...
It Can Be Done!***

**The Solution To Pollution
Is No Longer Dilution**



***A Stormwater
system that
treats only half
the flow is like
changing only
half a diaper...***

It's Just Not Enough!

Insist On Suntree!

