

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

1. Pipe inflow area (Drawn as 24" RCP) — 3.14 sq.ft.

SCREEN SPECIFICATIONS:

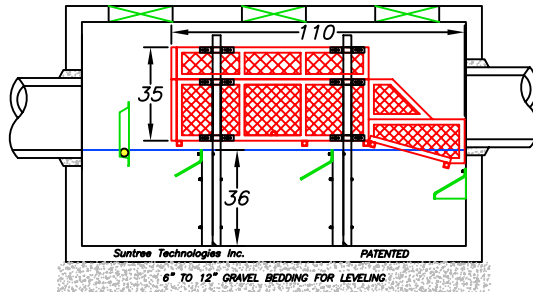
- 2. Open orifice area in screen system — 34.76 sq.ft.
- 3. Open orifice area in screen system with 50% blockage — 17.38 sq.ft.
- 4. Open orifice area in screen system with 75% blockage — 8.69 sq.ft.
- 5. Minimum by-pass through screen system below the top surface of the pipe — 6.37 sq.ft.
- 6. Minimum by-pass around screen system below the top surface of the pipe — 5.69 sq.ft.
- 7. Screen system storage volume — 72.45 cu.ft.

SEDIMENT STORAGE:

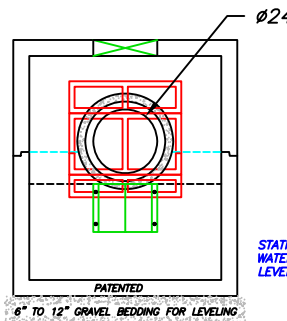
- 8. Volume of first sediment chamber — 69 cu.ft.
- 9. Volume of second sediment chamber — 67.5 cu.ft.
- 10. Volume of third sediment chamber — 67.5 cu.ft.
- 11. Total sediment volume — 204 cu.ft.

SKIMMER SPECIFICATIONS:

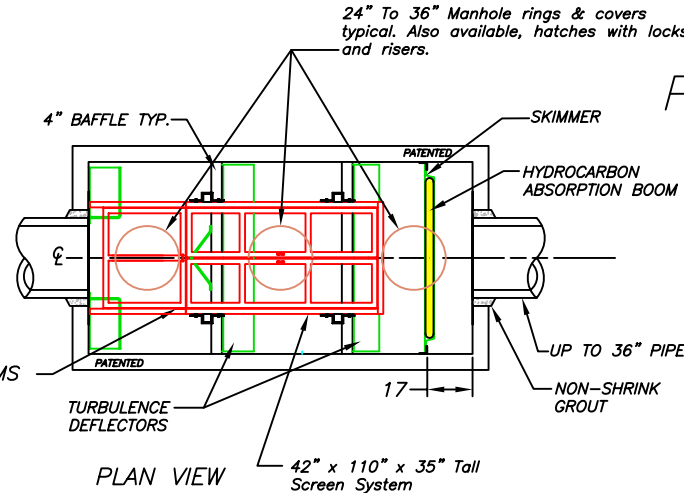
- 12. Flow area under skimmer — 7.4 sq.ft.
- 13. Area of pipe in line with skimmer — 2.53 sq.ft.
- 14. Area between the skimmer and the outflow pipe parallel with the surface of the pipe — 6.87 sq.ft.



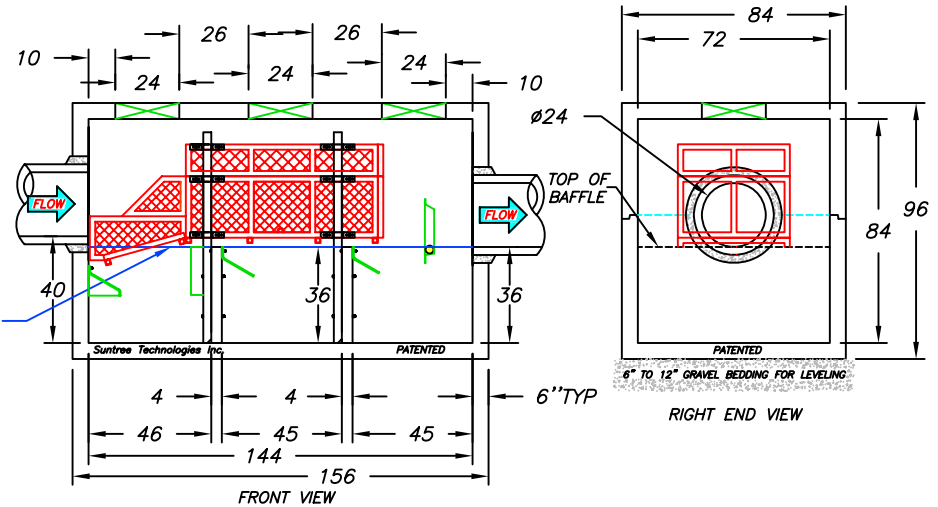
REAR VIEW



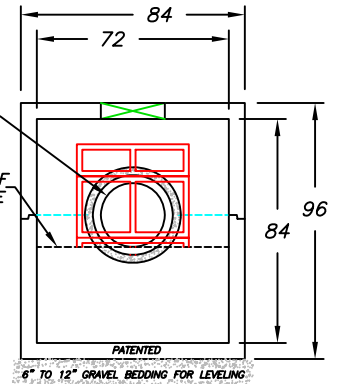
LEFT END VIEW



PLAN VIEW 42" x 110" x 35" Tall Screen System



FRONT VIEW



RIGHT END VIEW

PATENTED

- INSTALLATION NOTES:**
- 1. INFLOW AND OUTFLOW PIPES ARE TO BE FLUSH WITH THE INSIDE SURFACE OF THE CONCRETE STRUCTURE. (CAN NOT INTRUDE BEYOND FLUSH)
 - 2. INVERT OF OUTFLOW PIPE SHOULD BE EVEN WITH THE TOP OF THE BAFFLES.
 - 3. BAFFLES SHOULD BE SEALED WITH GROUT.
 - 4. THE BOTTOM OF THE SKIMMER SHOULD BE 6" BELOW THE INVERT OF THE OUTFLOW PIPE.
 - 5. INVERT OF THE INFLOW PIPE SHOULD NOT BE BELOW THE INVERT OF THE OUTFLOW PIPE.

Suntree Technologies Inc.
798 Clearlake Road, Cocoa, Florida 32922
PH: 321-637-7952 Fax: 321-637-7954

- Notes:
- 1. CONCRETE 28 DAY COMPRESSIVE STRENGTH f_c —5,000 PSI.
 - 2. REINFORCING: ASTM A-615, GRADE 60.
 - 3. SUPPORTS AN H2O LOADING AS INDICATED BY AASHTO.
 - 4. JOINT SEALANT: BUTYL RUBBER SS-S-00210
 - 5. ALL WALLS, TOP, AND BOTTOM ARE 6" THICK.
 - 6. INFLOW AND OUTFLOW PIPES ARE TO BE FLUSH WITH THE INSIDE SURFACE OF THE CONCRETE STRUCTURE. (CAN NOT INTRUDE BEYOND FLUSH)
 - 7. HINGED LIDS FOR THE SCREEN SYSTEM ARE AVAILABLE UPON REQUEST.
 - 8. BAFFLES WILL BE SEALED WITH GROUT TO FORM THREE WATER TIGHT CHAMBERS.

PEAK TREATMENT DESIGN FLOW
24 ft³/sec

PEAK DESIGN FLOW
46 ft³/sec

SUNTREE TECHNOLOGIES, INC. 798 CLEARLAKE RD, SUITE #2 COCOA, FL. 32922		PROJECT:
NUTRIENT SEPARATING BAFFLE BOX MODEL NO: NSBB-6-12-84		DRAWING #: 2-03-23-08-02
DATE: 3/23/08	SCALE: SF = 72	FILE NAME: NSBB-6-12-84
DRAFTER: T.H.H.	UNITS = INCHES	REVISIONS:
		DATE: