

**SAN ANTONIO WATER SYSTEM
SAN ANTONIO, TEXAS**

**SPECIFICATIONS FOR WATER METER BOXES
(5/8", 3/4", 1", 1-1/2" AND 2" Meters)
REVISED December 2007**

1. **SCOPE**

This specification covers meter boxes for 5/8", 3/4", 1", 1-1/2" and 2" meters.

2. **GENERAL REQUIREMENTS**

For non-traffic bearing locations, the meter box assembly for 5/8" through 1" meters shall be made from 100% high-quality recycling plastic. The meter box and lid shall be black and constructed out of modified polyethylene material for maximum durability and corrosion resistance. The black material is for maximum UV protection. The black material shall be uniform throughout the meter box and lid for maximum longevity and not have a foaming agent that creates air pockets within the plastic wall. The body and lid shall withstand 20,500 lbs loading in a non-deliberate and incidental traffic.

For traffic bearing locations, the meter box assembly for 5/8" through 2" meters shall consist of a cast-iron rectangular box and a steel checkered plate rectangular cover with raised lug pattern in accordance with the attached San Antonio Water System Drawing listed below:

Meter Size
5/8" thru 2"

San Antonio Water System Drawing
DA-11-01

3. **SPECIFIC REQUIREMENTS**

Plastic Lid

Plastic lid shall have the following:

- a. "Water Meter" and "SAWS" molded into the lid.
- b. Seat securely and evenly inside the meter box and shall not overlap the top edge of the meter box.
- c. "Overlap" securely and evenly on the existing SAWS cast iron meter box with like dimensions.

METER BOXES
SPECIFICATION NUMBER 10-30

- d. A diamond pattern for skid resistance and an AMR Slide Mount molded into the lid on the underneath side and off center for placement of an AMR transponder to help in the protection of the radio antenna.
- e. A brass worn gear lock that will secure to existing SAWS cast iron meter box of like dimensions and secure to the plastic meter box. See specification drawing.
- f. A molded receptacle for placement of SAWS key.
- g. One (1) piece of ½” rebar secured in lid. See specification drawing.

Plastic Body

Plastic body shall have the following:

- a. A crush resistant ribbing along the outside of the box.
- b. A flange around the top opening to help prevent setting and aide in the adjustment to grade.
- c. Designed to accommodate all plastic lids.

Cast Iron Rectangular Box for Traffic Bearing Locations

Cast Iron Body shall have the following:

- a. Ultimate tensile strength of 25,000 psi and shall not be brittle.
- b. “As cast” clean smooth surface and be free from internal porosity; castings that are made smooth by grinding will not be considered.
- c. Be dipped in a coal tar at a temperature of 350 degrees and the metal shall be at a temperature of 300 degrees prior to dipping. The casting shall be dipped and cured independently and the coating shall have ceased to be "tacky" within 72 hours after dipping.

METER BOXES
SPECIFICATION NUMBER 10-30

- d. The steel checkered plate rectangular cover shall be hot dip galvanized after fabrication.

4. Quality Assurance

If on receipt of meter box(s) or lid(s) they are found to be non-compliant, the manufacturer shall replace the defective box(s) or lid(s) with a replacement that meets the San Antonio Water System's specifications, at no charge to San Antonio Water System. Any visible defect or failure to meet the quality standards herein will be ground for rejecting the entire order.

Product that is non-compliant will be returned to the manufacturer, freight collect and the manufacturer will replace the defective product, freight prepaid within thirty (30) days from receipt of the defective product.

Approved Plastic Meter Box and Lid Manufacturer:

Manufacturers

Model Numbers

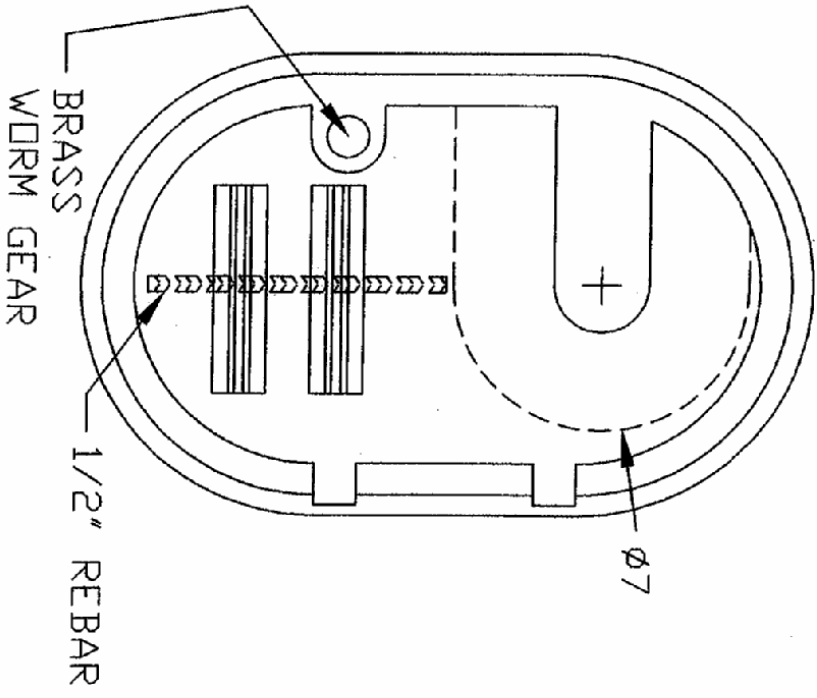
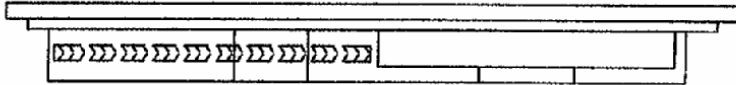
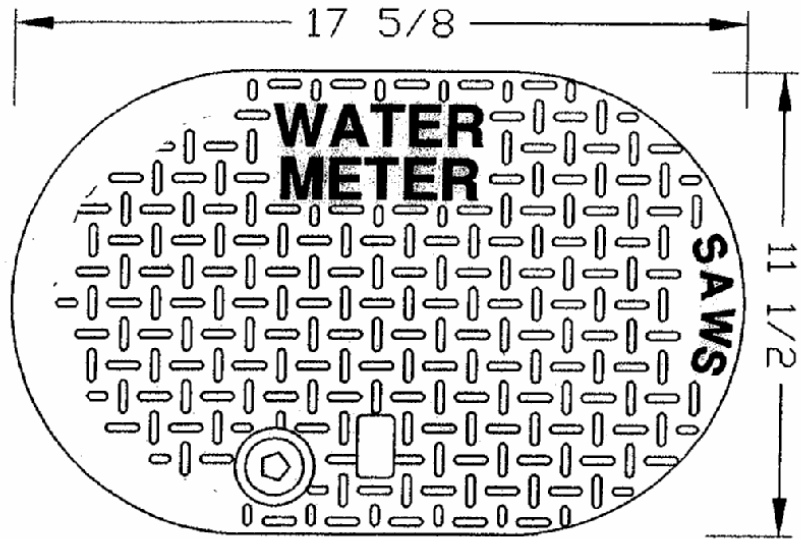
DFW Plastics Inc.

D-1218-RWSBSM (Complete box)
D-1218-RWSBSM-Lid
D-1218-Body

PREVIOUS SPECIFICATIONS DATES

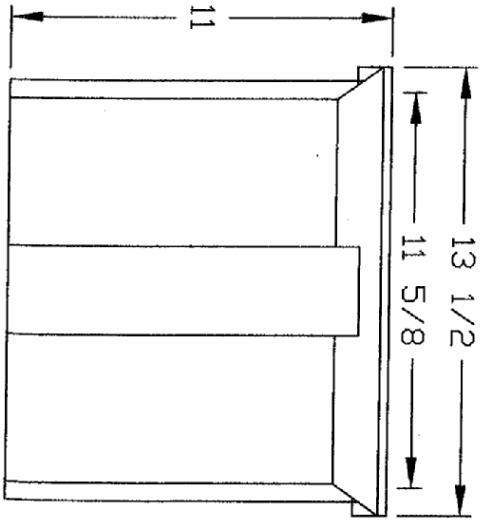
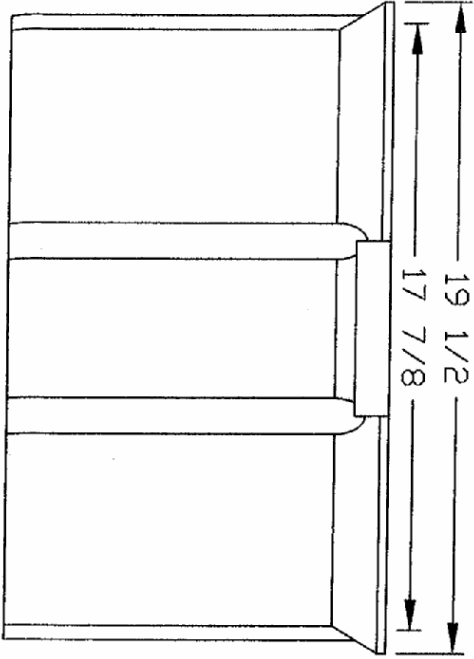
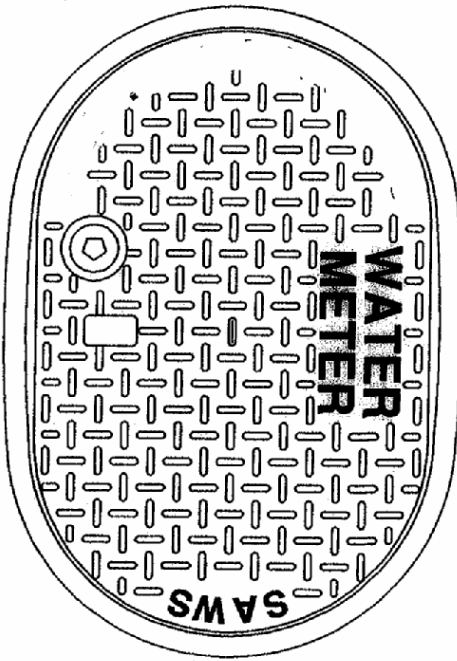
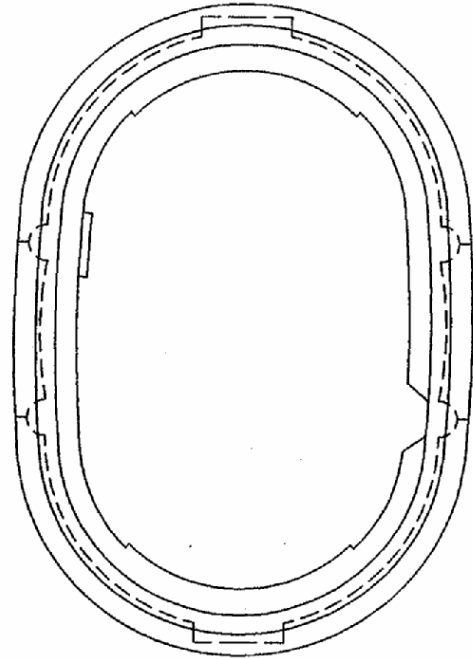
MAY 92

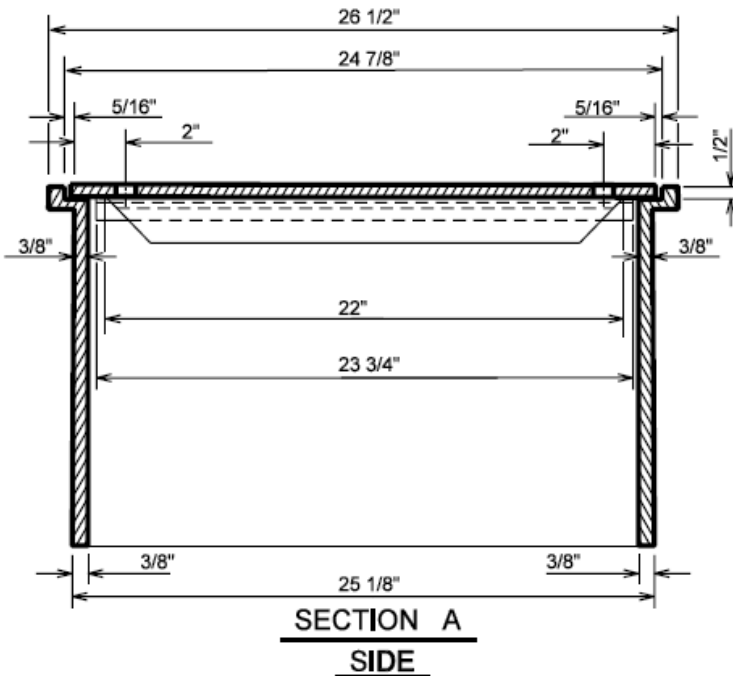
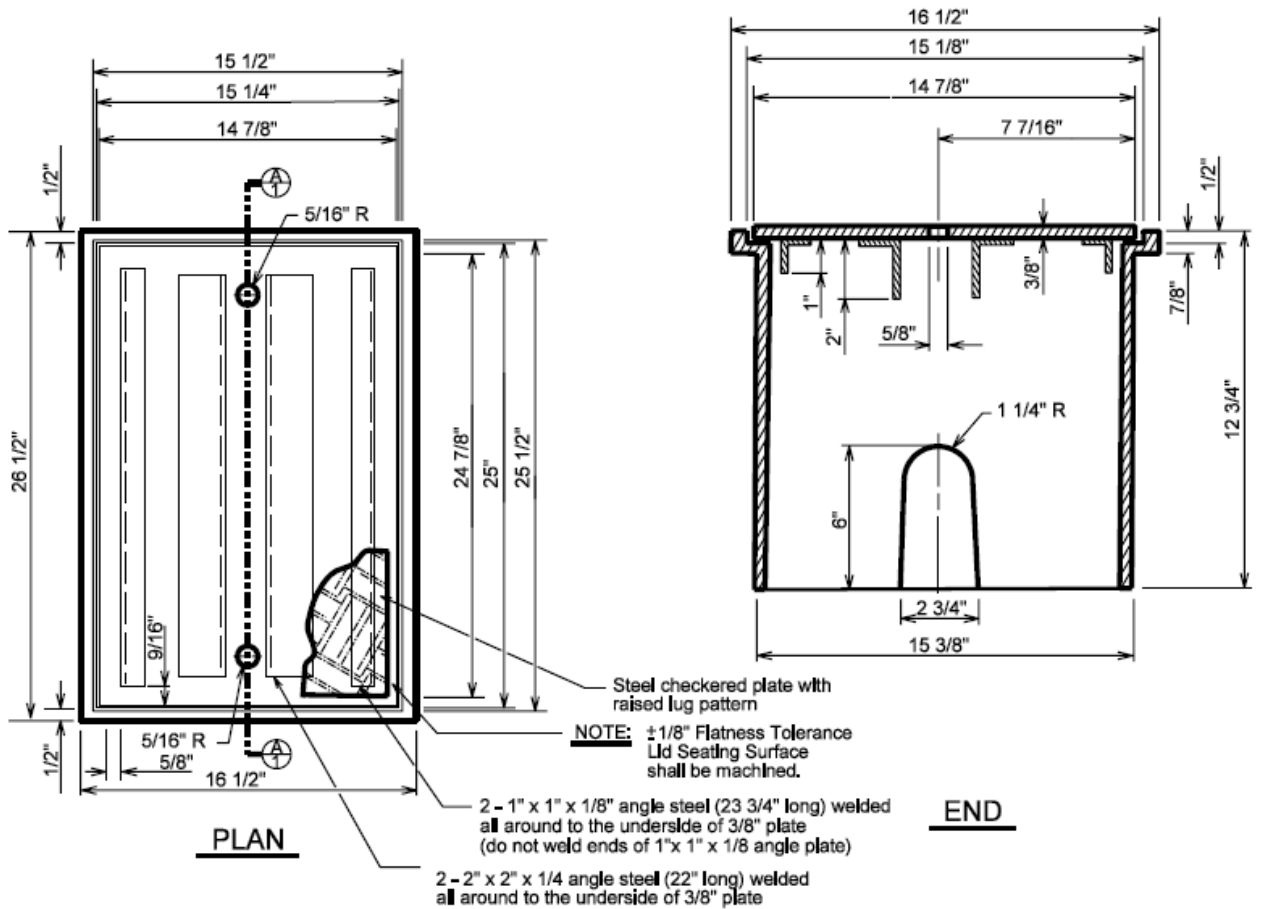
DEC 06



LID

BODY





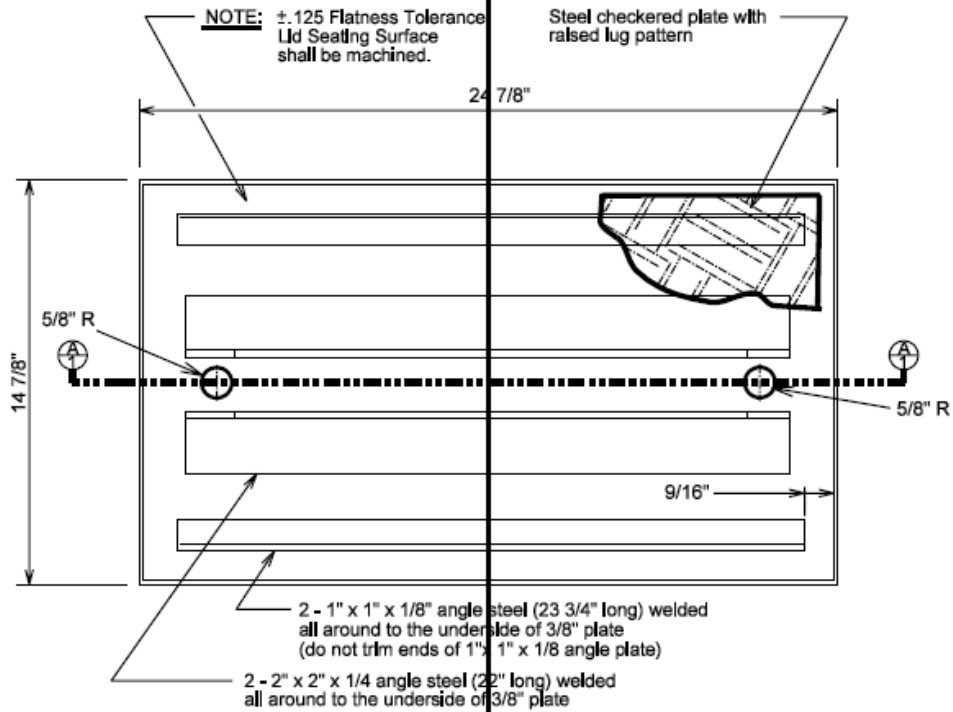
NOTE: The meter box assembly shall consist of a cast iron rectangular meter box and a steel rectangular cover.

$\pm .0625$ Casting Tolerance
Lid Seating Surface shall be machined.

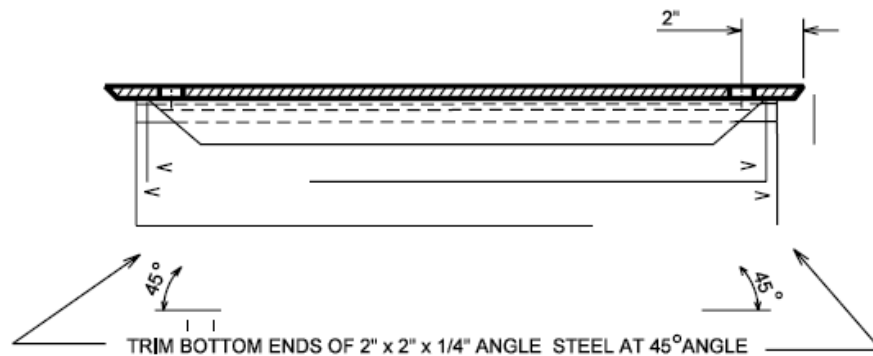
Lid edges must be free of drippings which prevent proper fitting of cover in box.

Rectangular Meter Box

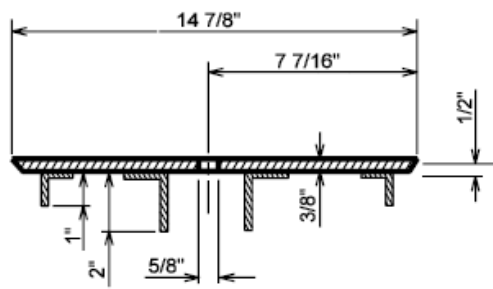
5/8", 3/4", 1" and 1 1/2" meters in all locations.



PLAN



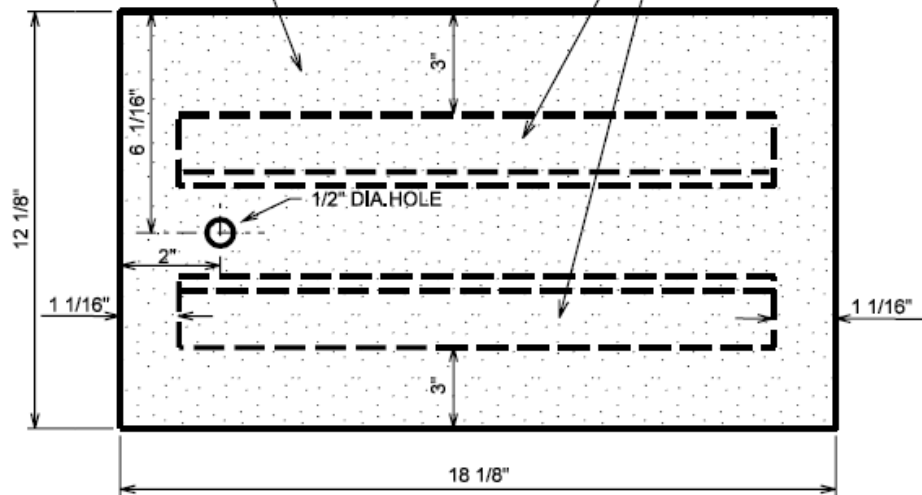
SIDE ELEVATION



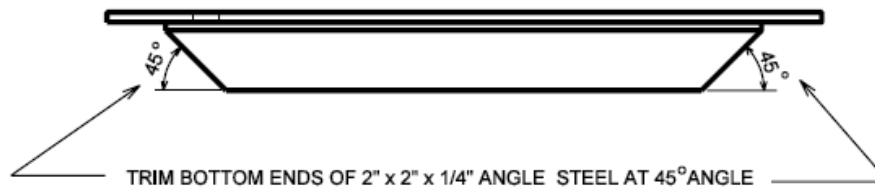
END ELEVATION

1/4" STEEL SAFETY FLOOR PLATE

2 - 2" x 2" x 1/4" ANGLE STEEL
(16" LONG) WELDED TO THE
UNDERSIDE OF PLATE



PLAN



TRIM BOTTOM ENDS OF 2" x 2" x 1/4" ANGLE STEEL AT 45° ANGLE

ELEVATION

NOTE: ±.125 Flatness Tolerance
Lid Seating Surface
shall be machined.