

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE GENERAL SPECIFICATIONS**

(Texas)

**IRRIGATION RESERVOIR
INSTALLATION OF NEW WELDED STEEL TANK**

(No.)

Code 436

1. SCOPE

The work shall consist of designing, furnishing and installing a new welded steel tank for water storage including the foundation, tank, coating system and engineering certification. It does not include any distribution pipelines, valves, electrical or tank level controls.

2. PUBLIC AND PRIVATE UTILITIES

Utilities are defined to be overhead and underground power or communication lines, and pipelines. All utilities discovered to be in the work area are shown on the drawings or sketches. However, the absence of indicators on the drawings or sketches does not assure the nonexistence of utilities in the work area. The contractor is alerted to conduct his/her own search and discovery for utilities in order to lessen or avoid potential damages. The owner/operator shall complete TX-EN-80B, "Cooperator Confirmation of the One Call Utility Safety System", prior to layout or any ground disturbance and return it to an NRCS representative.

3. AMERICAN WATER WORKS ASSOCIATION STANDARDS

The welded steel tank for water storage shall meet American Water Works Association (AWWA) Standard D100-96. This shall include, but is not limited to: materials, general design, sizing, accessories, welding, shop fabrication, erection, inspection/testing and foundation design.

The coating systems for coating the inside and outside surfaces of the steel tank shall meet American Water Works Association (AWWA) Standard D102-97. This standard is for steel tanks used for potable water storage in water supply service.

4. ENGINEERING CERTIFICATION

An engineering certification, wet stamped by an engineer licensed in the state of Texas, shall be furnished to USDA-NRCS. The certification shall state that the steel tank, foundation, and installation meet AWWA D100-96 and that the coating system installed on the inside and outside surfaces of the steel tank meet AWWA D102-97.

The engineering certification shall also provide the tank capacity (net volume) in U.S gallons. Capacity of the tank is defined by AWWA D100-96, as the net volume that may be removed from the tank filled to the top capacity level (TCL) and emptied to bottom capacity level (BCL). In a ground-supported tank, the BCL shall be the water level in the tank when the tank is emptied through the specified discharge fitting.

NRCS, TEXAS

April, 2011

5. MEASUREMENT

The tank capacity (net volume) rounded to the nearest whole U.S. gallon, will be based on the engineering certification as required in Section 4.

An onsite check of the completed steel tank and installation will be performed by a USDANRCS engineer licensed in the state of Texas.

6. TANK ACCESSORIES (Section 7 AWWA Standard D100-96)

Two (2) shell manholes shall be provided in the first ring of the tank at locations designated by the purchaser.

The size and point of attachment of the pipe connections shall be specified by the purchaser. Pipe connections shall be protected from freezing by insulation or other methods.

The tank shall be equipped with an overflow device placed down the side of the tank to convey any tank overflow to the ground as specified by the tank designer. The overflow device point of discharge at ground level shall be designated by the purchaser.

The tank shall be equipped with an outside tank ladder as specified in section 7.4 of AWWA D100-96.

The tank shall be equipped with roof openings as specified in section 7.6 of AWWA D100-96.

The tank shall be equipped with tank vents as specified in section 7.7 of AWWA D100-96.

7. GUARANTEE (Section 1.3 AWWA Standard D100-96)

The Constructor shall guarantee the structure against any defective materials or workmanship, including paint and painting for a period of one year from the date of completion. If any materials or workmanship prove to be defective within one year, they shall be replaced or repaired by the constructor.

8. CONSTRUCTION DETAILS:

TANK MINIMUM REQUIRED CAPACITY (NET VOLUME) AS SPECIFIED IN:

EQUIP CONTRACT NO. _____

CONTRACT ITEM NUMBER _____

Irrigation Reservoir (436) GALLONS _____