**ATTACHMENT J5**

# Tulsa International Airport (ANG) Water Distribution System

## Table of Contents



## List of Tables

# J5 Tulsa International Airport (ANG) Water Distribution System

## J5.1 Tulsa International Airport (ANG) Overview

The 138th Fighter Wing (FW) of the Oklahoma Air National Guard (OANG) occupies 81 acres on the Tulsa International Airport, located approximately 7 miles northeast of downtown Tulsa, Oklahoma. The unit currently flies the F-16 Falcon. The 138th FW occupies 15 administrative, 24 industrial, and 5 services buildings totaling approximately 327,000 square feet. There are two construction projects in progress that when complete (both estimated to be complete by Jan 2002) will increase the base's building square footage by 32,500 square feet. There are currently 328 full-time personnel and unit-training drills conducted once each month result in a surge of up to a total of 1150 personnel.

## J5.2 Water Distribution System Description

### J5.2.1 Water Distribution System Fixed Equipment Inventory

The Tulsa International Airport (ANG) water distribution system consists of all appurtenances physically connected to the distribution system from the point in which the distribution system enters the Installation and Government ownership currently starts to the point of demarcation, defined by the Right of Way. The system may include, but is not limited to, pipelines, valves, fire hydrants, and exterior backflow devices. The actual inventory of items sold will be in the bill of sale at the time the system is transferred. The following description and inventory is included to provide the Contractor with a general understanding of the size and configuration of the distribution system. The Government makes no representation that the inventory is accurate. The Contractor shall base its proposal on site inspections, information in the technical library, other pertinent information, and to a lesser degree the following description and inventory. Under no circumstances shall the Contractor be entitled to any service charge adjustments based on the accuracy of the following description and inventory.

Specifically excluded from the water distribution system privatization are:

Lawn sprinkler systems

Fire suppression systems

City of Tulsa owned main located in south-west corner of base which feeds the base owned lateral to building #603.

#### J5.2.1.1 Description

Water is supplied by the City of Tulsa and enters the base at three points. The configuration is a looped system with some dead-end branches, with water delivered at 125 psig and reduced at the buildings to 80 psig. The distribution system consists of approximately 1,750 linear feet of PVC pipe, 3,700 linear feet of ductile iron pipe, 3,800 linear feet of cast iron pipe, 2,300 linear feet of copper pipe, 70 linear feet of steel pipe, and 430 linear feet of concrete pipe. Piping diameters range from ¾ to 10 inches and pipes are buried at an average depth of four feet with the use of tracer wire

and/or marking tape. The system also has 25 cast iron gate valves, 4 bronze gate valves, 18 fire hydrant assemblies, and one exterior backflow preventer. Base personnel indicate the capacity of the current system is adequate for present and future needs.

### J5.2.1.2 Inventory

**Table 1** provides a general listing of the major water distribution system fixed assets for the Tulsa International Airport (ANG) water distribution system included in the sale.

**TABLE 1**
Fixed Inventory
Water Distribution System Tulsa International Airport (ANG)

| Item | Size | Quantity | Unit | Approximate Year of Construction |
|---|---|---|---|---|
| **PVC Pipe** | (in) | | | |
| | 4 | 600 | LF | 1990 |
| | 6 | 194 | LF | 1990 |
| | 8 | 263 | LF | 1997 |
| | 8 | 304 | LF | 1990 |
| | 8 | 250 | LF | 1994 |
| | 8 | 137 | LF | 1982 |
| **Ductile Iron Pipe** | (in) | | | |
| | 2 | 95 | LF | 2001 |
| | 6 | 425 | LF | 1985 |
| | 6 | 185 | LF | 1996 |
| | 6 | 62 | LF | 1997 |
| | 8 | 315 | LF | 1977 |
| | 8 | 1336 | LF | 2001 |
| | 8 | 1240 | LF | 1985 |
| **Cast Iron Pipe** | (in) | | | |
| | 2 | 193 | LF | 1961 |
| | 2 | 75 | LF | 1959 |
| | 3 | 140 | LF | 1965 |
| | 3 | 432 | LF | 1962 |
| | 6 | 583 | LF | 1965 |
| | 6 | 174 | LF | 1959 |
| | 6 | 278 | LF | 1980 |
| | 8 | 1288 | LF | 1959 |

| Item | Size | Quantity | Unit | Approximate Year of Construction |
|---|---|---|---|---|
| | 8 | 402 | LF | 1969 |
| | 10 | 216 | LF | 1959 |
| **Copper pipe** | (in) | | | |
| | 3/4 | 263 | LF | 1961 |
| | 3/4 | 105 | LF | 1988 |
| | 3/4 | 75 | LF | 1972 |
| | 1 | 114 | LF | 1997 |
| | 1 | 170 | LF | 1985 |
| | 1.25 | 243 | LF | 1986 |
| | 1.5 | 65 | LF | 1977 |
| | 2 | 210 | LF | 1996 |
| | 2 | 260 | LF | 1989 |
| | 2 | 60 | LF | 1959 |
| | 2 | 245 | LF | 1987 |
| | 2.5 | 340 | LF | 1989 |
| | 2.5 | 104 | LF | 1978 |
| **Steel pipe** | (in) | | | |
| | 2 | 70 | LF | 1980 |
| **Concrete pipe** | (in) | | | |
| | 8 | 432 | LF | 1975 |
| **Bronze Gate Valve s** | (in) | | | |
| | 1 | 1 | LF | 1985 |
| | 2 | 1 | LF | 1987 |
| | 2.5 | 2 | LF | 1989 |
| **Cast Iron Gate Valves** | (in) | | | |
| | 0.75 | 1 | LF | 1972 |
| | 0.75 | 1 | LF | 1988 |
| | 1.25 | 1 | LF | 1986 |
| | 2 | 1 | LF | 1959 |
| | 6 | 2 | LF | 1985 |
| | 6 | 1 | LF | 1997 |
| | 6 | 1 | LF | 1996 |

| Item | Size | Quantity | Unit | Approximate Year of Construction |
|---|---|---|---|---|
| | 6 | 2 | LF | 1959 |
| | 8 | 2 | LF | 2001 |
| | 8 | 5 | LF | 1975 |
| | 8 | 2 | LF | 1990 |
| | 8 | 2 | LF | 1997 |
| | 8 | 3 | LF | 1959 |
| | 10 | 1 | LF | 1959 |
| **Fire Hydrant Assemblies** | | | | |
| | | 3 | EA | 1959 |
| | | 1 | EA | 1965 |
| | | 1 | EA | 1969 |
| | | 2 | EA | 1975 |
| | | 1 | EA | 1977 |
| | | 1 | EA | 1980 |
| | | 3 | EA | 1985 |
| | | 1 | EA | 1990 |
| | | 1 | EA | 1992 |
| | | 2 | EA | 1994 |
| | | 2 | EA | 1997 |
| **Backflow Devices** | (in) | | | |
| **Exterior** | 10 | 1 | EA | 1959 |

Notes:
PVC = Polyvinyl Chloride
EA = Each
LF = Linear Feet
IN = Inches

## J5.2.2 Water Distribution System Non-Fixed Equipment and Specialized Tools

**Table 2** lists other ancillary equipment (spare parts) and **Table 3** lists specialized vehicles and tools included in the purchase. Offerors shall field verify all equipment, vehicles, and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment, vehicles, and tools.

**TABLE 2**
Spare Parts
Water Distribution System Tulsa International Airport (ANG)

| Qty | Item | Make/Model | Description | Remarks |
|---|---|---|---|---|
| None | | | | |

**TABLE 3**
Specialized Vehicles and Tools
Water Distribution System Tulsa International Airport (ANG)

| Description | Quantity | Location | Maker |
|---|---|---|---|
| None | | | |

### J5.2.3 Water Distribution System Manuals, Drawings, and Records

**Table 4** lists the manuals, drawings, and records that will be transferred with the system.

**TABLE 4**
Manuals, Drawings, and Records
Water Distribution System Tulsa International Airport (ANG)

| Qty | Description | Remarks |
|---|---|---|
| 1 | Water Utility System Maps (electronic copy) | AutoCAD Release Version 2000 |

## J5.3 Specific Service Requirements

The service requirements for the Tulsa International Airport (ANG) water distribution system are as defined in the Section C, Description/Specifications/Work Statement.

## J5.4 Current Service Arrangement

**Current Provider:** City of Tulsa

**Average Annual Usage (2000):** 6,991 kGal

**Maximum Monthly Use:** 1,650 kGal

**Minimum Monthly Use:** 66 kGal

## J5.5 Secondary Metering

### J5.5.1 Existing Secondary Meters

**Table 5** provides a listing of the existing (at the time of contract award) secondary meters that will be transferred to the Contractor. The Contractor shall provide meter readings for all secondary meters IAW Paragraph C.3 and J5.6 below.

**TABLE 5**
Existing Secondary Meters
Water Distribution System Tulsa International Airport (ANG)

| Meter Location | Meter Description (Type) |
|---|---|
| None | |

### J5.5.2 Required New Secondary Meters

The Contractor shall install and calibrate new secondary meters as listed in **Table 6**. New secondary meters shall be installed IAW Paragraph C.13 Transition Plan. After installation, the Contractor shall maintain and read these meters IAW Paragraphs C.3 and J5.6 below.

**TABLE 6**
New Secondary Meters
Water Distribution System Tulsa International Airport (ANG)

| Meter Location | Meter Description |
|---|---|
| Building 313 (AAFES) | Standard 2-inch water meter |
| Building 35 (Star Base) | Standard 1-inch water meter |

## J5.6 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:

1. Invoice (IAW paragraph G.2). The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. Invoices shall be submitted by the 25th of each month for the previous month. Invoices shall be submitted to the person identified at time of contract award.

2. Outage Report. The Contractor's monthly outage report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall be submitted by the 25th of each month for the previous month. Outage reports shall be submitted to the person identified at time of contract award.

3. Meter Reading Report. The monthly meter reading report shall show the current and previous month readings for all identified secondary meters. The Contractor's monthly meter reading report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Meter reading reports shall be submitted by the 15th of each month for the previous month. Meter reading reports shall be submitted to the person identified at time of contract award.

## J5.7 Water Conservation Projects

IAW Paragraph C.3 Utility Service Requirement, the following projects have been implemented by the Government for conservation purposes: None.

## J5.8 Service Area

IAW Paragraph C.4 Service Area, the service area is defined as all areas within the Tulsa International Airport (ANG) boundaries.

# J5.9 Off-Installation Sites

No off-installation sites are included in the sale of the Tulsa International Airport (ANG) water distribution system.

# J5.10 Specific Transition Requirements

IAW Paragraph C.13 Transition Plan, **Table 7** provides a listing of service connections and disconnections required upon transfer.

**TABLE 7**
Service Connections and Disconnections
Water Distribution System Tulsa International Airport (ANG)

| Location | Description |
|---|---|
| None | |

# J5.11 Government Recognized System Deficiencies

**Table 8** provides a listing of system improvements that the Government has planned. The Government recognizes these improvement projects as representing current deficiencies associated with the Tulsa International Airport (ANG) water distribution system. If the utility system is sold, the Government will not accomplish these planned improvements. The Contractor shall make a determination as to its actual need to accomplish and the timing of any and all such planned improvements. Capital upgrade projects shall be proposed through the Capital Upgrades and Renewals and Replacements Plan process and will be recovered through Schedule L-3. Renewal and replacement projects will be recovered through Sub-CLIN AB.

**TABLE 8**
System Deficiencies
Water Distribution System Tulsa International Airport (ANG)

| Project Location | Project Description |
|---|---|
| None | |