

ATTACHMENT J3

# Pittsburgh ARS, 911th AW Water Distribution System

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# J3 Pittsburgh ARS, 911th AW Water Distribution System

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## J3.1 Pittsburgh ARS, 911th AW Overview

The Pittsburgh Air Reserve Station (ARS) is home to the 911<sup>th</sup> Airlift Wing (AW). The installation is located in the western portion of Allegheny County, Pennsylvania, within the Pittsburgh International Airport (IAP). The Base is approximately 16 miles northwest of downtown Pittsburgh located along Business Route 60. The 911<sup>th</sup> AW's mission is to train Air Force Reserve personnel to respond to national interests with equipment and supplies through air drop, landing, and cargo extraction. The base currently is assigned nine C-130 H "Hercules" cargo/transport aircraft which are used for joint service training, support to active duty training, and transport of combat troops, supplies, and equipment during missions. The resulting economic impact on the surrounding Pittsburgh area is over \$82 million.

The 911th AW encompasses approximately 115 acres (12 acres government owned and 103 acres leased from Allegheny County) in the eastern portion of the Pittsburgh IAP. Construction for the base began in 1942 and has seen several different units and mission changes over its life. The 911<sup>th</sup> AW has been operating at the Pittsburgh ARS since January 1963.

The 911th AW has a total of 59 buildings with an estimated 511,366 square feet which is further subdivided into 139,148 square feet dedicated to industrial activities and 47,616 square feet for administrative purposes. No housing facilities are located on the base. The 911th AW employs 1,675 personnel, including 1,221 Reservists/Trainees and 320 full time civilians. Future plans for the base include the construction of a new headquarters facility consisting of approximately 22,000 square feet. Other activities on the base include utilization of training facilities by the US Navy Reserve Seabees and the Civil Air Patrol. The US Army Corps of Engineers also maintains an office on the station..

## J3.2 Water Distribution System Description

### J3.2.1 Water Distribution System Fixed Equipment Inventory

The 911th AW 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, storage facilities, exterior backflow devices, pumps, and meters. 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:

- The 1.5 million gallon elevated storage tank, shut off valves, and pair of backflow preventers on the 10" main coming from the storage tank are located on the 911<sup>th</sup> property but are owned by the Moon Township Municipal Authority (MTMA))
- Post indicator valves are not part of the privatization.
- The 165,000-gallon water storage tank and associated piping and pumps that makes up the fire fighting protection system are not part of this contract.
- The master meter where the water line enters the installation is owned by the MTMA and is excluded from privatization.

### **J3.2.1.1 Description**

Water is supplied to the 911th AW from the Moon Township Municipal Authority (MTMA) via a 12-inch main. The 12-inch main enters the Base south of the main gate on Business Route 60 and splits into two 12-inch mains which feed the elevated water storage tank, the Base's back-up metering pit, in addition to the Pennsylvania Air National Guard water metering pit (both located near the entrance gate to the 911<sup>th</sup> AW base).

The 1.5 million gallon elevated water storage tank is located on the north west side of the base, but is owned and operated by the MTMA. The storage tank serves both the local community and the installation, and the MTMA reserves 300,000 gallons of water exclusively for the Base's fire protection requirements. The Base's primary water supply comes from the MTMA storage tank, is metered and then delivered into the distribution system through the Base's 8-inch main with an average pressure of 90 psig. The MTMA owns all lines and equipment up to the demand side of the backflow preventers leaving the water tower and entering the Base.

In the event that the storage tank cannot provide water to the base, water is supplied through the Base's back-up water metering pit located on Defense Avenue. This water main is owned and operated by MTMA up to and including the master meter inside this pit. The pair of backflow preventers are downstream of the meter and are included in the privatization contract.

The Base water distribution system consists of water mains and service laterals in good condition. The majority of the mains were upgraded in 1991 with polyvinyl chloride (PVC); the remaining original system is ductile iron. Depth of cover over the water collection pipes generally varies from 3 to 8 feet in Pittsburgh, although, the actual depth may vary. Most of the Base's original system was abandoned in place during the upgrade. The majority of the 911th AW water lines distribute water through a looped system; however, the system has some dead end lines. The dead ends do not appear to create maintenance problems.

Flow volume and system pressures meet base requirements. Pressures at the fire hydrants are consistently in the 90-100 psig range, with good flow. Valves, which are generally older than the distribution lines, are accessible and in good operating condition. There are no known code violations.

### J3.2.1.2 Inventory

**Table 1** provides a general listing of the major water distribution system fixed assets for the 911th AW water distribution system included in the sale.

**TABLE 1**  
Fixed Inventory  
*Water Distribution System 911th AW, ARS*

Item	Size (in.)	Quantity	Unit	Approximate Year of Construction
<u>PVC Piping</u>				
PVC Pipe	0.75	60	LF	1991
PVC Pipe	1.0	280	LF	1991
PVC Pipe	1.5	380	LF	1991
PVC Pipe	2.0	1,290	LF	1991
PVC Pipe	2.5	530	LF	1991
PVC Pipe	3.0	640	LF	1991
PVC Pipe	4.0	1,110	LF	1991
PVC Pipe	6.0	7,380	LF	1991
PVC Pipe	8.0	8,125	LF	1991
PVC Pipe	10.0	1,870	LF	1998
<u>Iron Piping</u>				
Ductile Iron Pipe	2.5	220	LF	1959
Cast Iron Pipe	0.75	40	LF	1965

<b>Item</b>	<b>Size (in.)</b>	<b>Quantity</b>	<b>Unit</b>	<b>Approximate Year of Construction</b>
Cast Iron Pipe	1.5	50	LF	1965
Cast Iron Pipe	2.0	200	LF	1965
Cast Iron Pipe	3.0	490	LF	1965
Cast Iron Pipe	6.0	1,530	LF	1960
Cast Iron Pipe	8.0	1,520	LF	1960
<u>Copper Piping</u>				
Copper Pipe	2.0	150	LF	1980
<u>Bronze Gate Valves</u>				
Gate Valve	1.0	2	EA	1970
Gate Valve	1.0	1	EA	1985
Gate Valve	1.5	3	EA	1979
<u>Cast Iron Gate Valves</u>				
Cast Iron Gate Valve	2.0	15	EA	1979
Cast Iron Gate Valve	2.5	4	EA	1979
Cast Iron Gate Valve	3.0	7	EA	1979
Cast Iron Gate Valve	4.0	6	EA	1979
Cast Iron Gate Valve	6.0	30	EA	1979
Cast Iron Gate Valve	8.0	30	EA	1979
Cast Iron Gate Valve	10.0	2	EA	1979
Cast Iron Gate Valve	2.5	3	EA	1965

Item	Size (in.)	Quantity	Unit	Approximate Year of Construction
Cast Iron Gate Valve	3.0	7	EA	1965
Cast Iron Gate Valve	4.0	4	EA	1965
Cast Iron Gate Valve	6.0	18	EA	1965
Cast Iron Gate Valve	8.0	26	EA	1965
Cast Iron Gate Valve	10.0	2	EA	1965
<u>3 Way Fire Hydrants</u>				
Fire Hydrants	6' deep	30	EA	1965
Fire Hydrants	6' deep	26	EA	1980
Fire Hydrants	6' deep	4	EA	1998
Backflow Preventer	10"	2	EA	1991

## Notes:

PVC = Polyvinyl chloride

EA = Each

GAL= Gallon

HP = Horsepower

LF = Linear Feet

### J3.2.2 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 911th AW, ARS

Qty	Item	Make/Model	Description	Remarks
	None			

**TABLE 3**

Specialized Vehicles and Tools

Water Distribution System 911th AW, ARS

Description	Quantity	Location	Maker
None			

### J3.2.3 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 911th AW, ARS*

Qty	Item	Description	Remarks
1 Set	Water Distribution System, Tab G-1	Installation map depicting the Water Distribution System	

## J3.3 Specific Service Requirements

The service requirements for the 911th AW water distribution system are as defined in the Section C, *Description/Specifications/Work Statement*. The following requirements are specific to the 911th AW water distribution system and are in addition to those found in Section C. If there is a conflict between requirements described below and Section C, the requirements listed below take precedence over those found in Section C.

- The Contractor shall abide by current and future 911<sup>th</sup> AW fire protection requirements. (Current fire protection requirements are presented in the 911<sup>th</sup> AW Technical Library) The utility system purchased by the Contractor may include facilities that may or may not include fire alarm systems. The Contractor shall permit Fire Department personnel access to their facilities to perform fire inspections and emergency response.
- The Contractor shall acquire and maintain system identification numbers, and approvals required by the Pennsylvania Environmental Protection Agency (Pennsylvania DEP) to own and operate the water distribution system. Provide licensed system operators as required by Pennsylvania DEP.
- The Contractor shall perform all water distribution system testing as required by applicable standards, regulations, rules, codes, and permits. In addition, the Contractor shall, when requested, provide the Contracting Officer's designated representative with a copy of water distribution system testing information and reports submitted to any regulatory agencies.
- The Contractor shall use Air Force Form 332, Base Civil Engineer Work Request, to coordinate work on the water distribution system with the Contracting Officer's designated representative.
- The Contractor shall ensure that water system provides an ample amount pressure and flow for general water supply, fire protection, and other emergencies.

- The Contractor shall conform to the base spill plan (copy located in the Technical Library) and provide a copy of their EPCRA report(s) to the base on request.
- The Contractor shall perform EIAP or NEPA reviews and reporting as required for additions or modifications to the water system.
- Provide marks on the ground to show locations of water distribution lines on an as needed basis as other entities request. Mark utilities in the field to show location and depth.

## J3.4 Current Service Arrangement

The Moon Township Municipal Authority is the water commodity provider to the 911th AW. The FY 2002 annual water usage was 6,800kgal. The average monthly usage is 570kgal with a maximum occurring in September with 728kgal and the minimum occurring in December with 450kgal. The 911<sup>th</sup> water is metered separately from the 171<sup>st</sup> water. The water metering separation between the 911<sup>th</sup> and the 171<sup>st</sup> occurs near the main entrance of the installation.

## J3.5 Secondary Metering

### J3.5.1 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 J3.6 below.

**TABLE 5**  
Existing Secondary Meters  
*Water Distribution System 911th AW, ARS*

Meter Location	Meter Description (Type)
No exterior meters	

### J3.5.2 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 J3.6 below.

**TABLE 6**  
New Secondary Meters  
*Water Distribution System 911th AW, ARS*

Meter Location	Meter Description
No new exterior meters	

## J3.6 Monthly Submittals

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

1. Invoice (IAW 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 25<sup>th</sup> of each month for the previous month. Invoices shall be submitted to:

911th AW, ARS/LGC  
Pittsburgh International Airport  
1100 Herman Avenue  
Coraopolis, PA 15108-4421  
412-474-8120

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 25<sup>th</sup> of each month for the previous month. Outage reports shall be submitted to:

911th AW, ARS/LGC  
Pittsburgh International Airport  
1100 Herman Avenue  
Coraopolis, PA 15108-4421  
412-474-8573

## J3.7 Water Conservation Projects

IAW Paragraph C.3, Utility Service Requirement, the following projects have been implemented by the Government for conservation purposes.

- No water conservation projects were identified.

## J3.8 Service Area

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the 911th AW boundaries.

## J3.9 Off-Installation Sites

No off-installation sites are included in the sale of the 911th AW water distribution system.

## J3.10 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 911th AW, ARS*

Location	Description
None	New connections are not anticipated at the time of transition

## J3.11 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 911th AW 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 Renewal and Replacement Plan process and will be recovered through [Schedule L-3](#). Renewal and Replacement projects will be recovered through [Sub-CLIN AC](#).

**TABLE 8**  
System Deficiencies  
*Water Distribution System 911th AW, ARS*

Project Location	Project Description
	There are no deficiencies identified to this system