

ATTACHMENT J2

# General Mitchell Field ARS (440<sup>th</sup> AW) Water Distribution System

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# J2 General Mitchell Field ARS (440th AW) Water Distribution System

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## J2.1 General Mitchell Field ARS (440th AW) Overview

The Air Force Reserve Station (ARS) at General Mitchell Field is home to the 440<sup>th</sup> Air Force Reserve Airlift Wing (AW). The installation is located about 7 miles south of the center of Milwaukee, and 3 miles west of Lake Michigan. The 440<sup>th</sup> AW's mission is to maintain operational readiness for the airlift of tactical units, airborne units, personnel, supplies and equipment into prepared or unprepared areas by landing or airdrop. The Wing's command is the Air Force Reserve Command and the aircraft currently assigned are C-130H Hercules transports. The resulting economic impact is over \$79.9 million on the surrounding Milwaukee area.

The 440<sup>th</sup> AW encompasses 102 acres of federally owned land in the southwestern portion of the General Mitchell International Airport. Construction of the base began in the 1950's, and has been expanded as the years passed.

The 440<sup>th</sup> AW has a total of 75 buildings, 47 industrial and 28 administrative, on the base totaling 418,000 square feet. There are no living quarters on the base. The 440<sup>th</sup> AW employs 1500 personnel, including 1,100 Reservists and 260 full time civilians. Future growth of the base is expected to be limited in the future with square footage additions generally offset by demolition of existing buildings.

## J2.2 Water Distribution System Description

### J2.2.1 Water Distribution System Fixed Equipment Inventory

The General Mitchell Field ARS (440th 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:

- AFFF Fire Suppression systems associated with Building 217 and Building 302, including the pipe delivering water from Building 120 to these buildings, and pumps used to increase pressure for AFFF system operations.
- Meters owned by Milwaukee Water Works

### J2.2.1.1 Description

Water is supplied to the 440<sup>th</sup> AW by the City of Milwaukee at 3 locations. The first 10-inch main enters the base from Howell Avenue and travels along First Avenue. The second 10-inch main enters the base from College Avenue and travels along B Street. The third 1-inch main enters the base from College and serves Building 207. Ownership of the system begins at the curb line on each pipe. The 10-inch main entering from College Avenue passes through a government owned metering pit and backflow preventers that will be privatized. The 10-inch main coming from Howell Avenue enters Building 120. Building 120 will not be privatized but access will be provided. Once the mains have passed through City of Milwaukee owned meters they enter the 440<sup>th</sup> AW water distribution system.

The water distribution system consists of water mains and service laterals. The mains are made of Polyvinyl Chloride (PVC) pipe and cast iron pipe, constructed in the 1990s and 1970s respectfully, ranging in size from 6 to 10 inches in diameter. The service laterals use the smaller diameter copper pipe. The backflow preventers at each meter are part of the privatization contract.

Most of the water distribution system is laid out in a grid/loop, however there are some dead end lines. Water pressure for the system generally ranges from 60 to 80 psig. Most of the pipes in this system are expected to range in depth from 4 to 8 feet below the ground surface, although the actual range may vary.

### J2.2.1.2 Inventory

**Table 1** provides a general listing of the major water distribution system fixed assets for the General Mitchell Field ARS water distribution system included in the sale.

**TABLE 1**  
Fixed Inventory  
*Water Distribution System General Mitchell Field ARS (440th AW)*

Item	Size (in.)	Quantity	Unit	Approximate Year of Construction
<u>Piping</u>				
PVC Pipe	6.0	4,115	LF	1993
PVC Pipe	8.0	292	LF	1993
PVC Pipe	10.0	2,212	LF	1993
Cast Iron Pipe	6.0	7,925	LF	1974

Item	Size (in.)	Quantity	Unit	Approximate Year of Construction
Cast Iron Pipe	8.0	2,408	LF	1974
Cast Iron Pipe	10.0	625	LF	1974
Copper Pipe	1.0	112	LF	1993
Copper Pipe	1.5	131	LF	1993
Copper Pipe	2.0	313	LF	1993
<u>Valves</u>				
Cast Iron Gate Valve	1.0	1	EA	1993
Cast Iron Gate Valve	1.5	1	EA	1993
Cast Iron Gate Valve	2.0	1	EA	1993
Cast Iron Gate Valve	6.0	3	EA	1975
Cast Iron Gate Valve	6.0	50	EA	1980
Cast Iron Gate Valve	8.0	12	EA	1976
Cast Iron Gate Valve	10.0	12	EA	1989
Post Indicator Valves		13	EA	1980
<u>Backflow Preventers</u>				
Backflow Preventer	3"	1	EA	1985
Backflow Preventer	10"	2	EA	1985
<u>Miscellaneous</u>				
Fire Hydrants (4.5-inch Valve Size)		42	EA	1968
Meter Vault		1	EA	1974

**Notes:**

PVC = Polyvinyl chloride

EA = Each

GAL= Gallon

HP = Horsepower

LF = Linear Feet

**J2.2.2 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 System General Mitchell Field ARS (440th AW)*

Qty	Item	Make/Model	Description	Remarks
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Qty	Item	Make/Model	Description	Remarks
None	No spare parts exist to transfer with this system.			

**TABLE 3**  
Specialized Vehicles and Tools  
*Water Distribution System General Mitchell Field ARS (440th AW)*

Description	Quantity	Location	Maker
No Vehicles or Tools exist to be transferred with this system.			

### J2.2.3 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 General Mitchell Field ARS (440th AW)*

Qty	Item	Description	Remarks
1	Maps	Water Distribution System, maps of the installation and utility system will be provided at the time of the pre-proposal meeting.	AUTOCAD

## J2.3 Specific Service Requirements

The service requirements for the General Mitchell Field ARS (440th AW) water distribution system are as defined in the Section C, *Description/Specifications/Work Statement*. The following requirements are specific to the General Mitchell Field ARS (440th 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 440<sup>th</sup> AW fire protection requirements. (Current fire protection requirements are presented in the 440<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.
- In accordance with Paragraph C.9.8, *Exercises and Crisis Situations Requiring Utility Support*, the Contractor shall provide support as directed by the 440<sup>th</sup> AW Control

Center for exercises and crisis situations. Contact information for the 440<sup>th</sup> AW Control Center will be provided upon award.

- The Contractor shall coordinate changes to the water distribution system (including fire hydrants) that may affect water supply and fire protection with the Base Fire Department and Contracting Officer's designated representative. Contractor shall submit a written request with engineering plans to the describing proposed changes, and shall not start work until the Contracting Officer's designated representative has approved changes in writing.
- 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 continue to deliver water to the Air Force at a pressure similar to current operating pressures. Provide the Air Force sufficient information for review of the possible changes in system performance as part of the package proposing a pressure change. Allow the Contracting Officer's designated representative, a minimum of ten days to review the proposed change. Any proposed change in the pressure of water must be approved by the Installation Commander before the change is implemented.
- 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.
- Permits are required for any digging or welding activity. Coordinate with BCE before beginning work to obtain appropriate permits.
- Painting of fire hydrants shall meet base standards
- Perform periodic water pressure testing of all fire hydrants to ensure water pressure and flow rate are meet fire department requirements.

## J2.4 Current Service Arrangement

The City of Milwaukee is the water commodity provider to the 440<sup>th</sup> AW. The FY2002 annual water usage was 5,400 kGal. The average monthly usage is 452 kgal with a maximum occurring in August 2002 with 1,300 kgal and the minimum occurring in November 2001 with 196 kgal.

## J2.5 Secondary Metering

### J2.5.1 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 J2.6 below.

**TABLE 5**  
Existing Secondary Meters  
*Water Distribution System General Mitchell Field ARS (440th AW)*

Meter Location	Meter Description (Type)
None	

### J2.5.2 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 J2.6 below.

**TABLE 6**  
New Secondary Meters  
*Water Distribution System General Mitchell Field ARS (440th AW)*

Meter Location	Meter Description
Building 107 (access will be given to allow meter installation inside the building)	Meters shall meet the performance needs of the installation be sized appropriately, and meet the standard of practice for water meters in industrial applications.
Building 111	Same as above
Building 215	Same as above

## J2.6 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:

*Name:* Waheed Farooki, 440 MSG /CEC

*Address:* Gen Mitchell ARS , 300 E College Ave, Milwaukee, WI 53207-6299

*Phone number:* (414) 482-560 6

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:

*Name:* Waheed Farooki, 440 MSG /CEC

*Address:* Gen Mitchell ARS , 300 E College Ave, Milwaukee, WI 53207-6299

*Phone number:* (414) 482-5606

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 15<sup>th</sup> of each month for the previous month. Meter reading reports shall be submitted to:

*Name:* Waheed Farooki, 440 MSG /CEC

*Address:* Gen Mitchell ARS , 300 E College Ave, Milwaukee, WI 53207-6299

*Phone number:* (414) 482-5606-

## J2.7 Water Conservation Projects

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

- None

## J2.8 Service Area

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the General Mitchell Field ARS (440th AW) boundaries.

## J2.9 Off-Installation Sites

No off-installation sites are included in the sale of the General Mitchell Field ARS (440th AW) water distribution system.

## J2.10 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 General Mitchell Field ARS (440th AW)*

Location	Description
No Service connections or disconnections are anticipated at	

the time of transition.

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## J2.11 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 General Mitchell Field ARS (440th 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 General Mitchell Field ARS (440th AW)*

Project Location	Project Description
Three locations on the water distribution system.	Three isolation valves are inoperable. These valves need to be replaced to allow the system to be properly managed in the event of a line break. Locations of these valves are shown in the technical library.