

ATTACHMENT J29

Ellington Field ANGB Water Distribution System

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J29 Ellington Field ANGB Water Distribution System

J29.1 Ellington Field ANGB Overview

Ellington Field ANGB is located 17 miles southeast of the City of Houston in Harris County, Texas, adjacent to a joint civil/military airport, called Ellington Field, that is operated by the City of Houston Department of Aviation. Ellington Field was deactivated by the Air Force in 1976, and the City of Houston acquired the property in 1984 excluding the 213 acres belonging to the ANGB. Ellington Field ANGB is owned and operated by the USAF with the primary tenant the 147th Fighter Wing (FW) Texas Air National Guard (TXANG), which is under the operational control of the Commander in Chief, North American Aerospace Defense Command (CINCNORAD). The 147th FW is a general purpose Fighter Wing responsible for the overall command, direction, planning, and management of subordinate squadrons that provide air defense of the southeastern and southwestern sectors of the United States. Other tenant organizations located on Ellington Field ANGB are the Texas Army National Guard (TXARNG), and the Federal Aviation Administration (FAA). Other major tenants at the City of Houston owned Ellington Field includes:

- U.S. Coast Guard (USCG)
- National Aeronautics and Space Agency (NASA)
- City of Houston
- Continental Express
- United Parcel Service (UPS)

Ellington Field occupies an area of 1,869 acres with the ANGB occupying approximately 209 acres on the western side of the installation and two smaller sections containing the Base Fire Station and POL Storage Area totaling approximately 4 acres – making a combined total of approximately 213 acres. Ellington Field ANGB contains approximately 64 buildings with a total of over 433,000 square feet.¹ Three runways bound Ellington Field to the east. The primary runway, 17R/35L, is 9,000 feet long and is the main runway used by the TXANG; runway 17L/35R is 4,680 feet long and is used by smaller aircraft and helicopters; and runway 04/22 serves as the cross-wind runway and is 8,000 feet in length. All three runways are constructed of concrete.

The Ellington Field ANGB population is comprised mainly from the activities of the 147th FW. The 147th FW has a total population of approximately 319, including military personnel, civilian employees, and support personnel. During unit training activity (UTA) weekend, the 147th FW population increases to over 100 assigned officers and over 1,000 enlisted personnel at the facility.

¹ The structures include administrative offices, industrial maintenance and repair facilities, warehouses, petroleum storage facilities, and a fire station.

Projected future mission requirements and a steady increase in the base population have necessitated the construction of new facilities and the renovation or demolition of older facilities. The Future Development Plan for Ellington Field ANGB lists several new facilities to be constructed on the main base, including the following:

- A communications facility and Supply/Logistics complex, west of the existing hangar.
- A BCE complex and HQ complex south of the existing medical training and dining facility.
- An Aircraft Support Equipment (ASE) Complex west of the fuel systems maintenance dock.

To estimate the percentage by which the Base planned to expand or contract, a short-range plan over the next five years was studied. For the short term, an estimated 100,270 square feet of construction is planned. However, an estimated 51,014 square feet of demolition is also planned for this same time period, leaving a net construction square footage of 49,256 square feet. Comparing this net construction value to the Base's current building square footage of 433,902 from the inventory list, an 11 percent growth is anticipated for Ellington Field ANGB.

J29.2 Water Distribution System Description

J29.2.1 Water Distribution System Fixed Equipment Inventory

The Ellington Field ANGB 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 meters. The actual inventory of items to be transferred will be established via a 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 the 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:

- Irrigation systems

J29.2.1.1 Description

The City of Houston, Texas supplies potable water to Ellington Field ANGB to satisfy domestic, irrigation, and industrial requirements. Potable water enters the Base through several metered taps, including an 8-inch tap on Kirk Avenue, a 6-inch tap on the northeast corner of Kirk Avenue and Sneider Street, an 8-inch tap on the northeast corner of Sneider Street and Brantly Avenue, and a 12-inch tap on the east side of Building 1395. Potable water is also delivered to the Base through two 16-inch mains. The flows within the Base

are metered at three different locations. Water pressures in the Base’s looped system are good and vary between 57 and 60 psi.

The main water distribution system for Ellington Field ANGB consists of 23,000 lf of piping. The diameters of the distribution piping vary from 1.5 to 12 inches but are mostly in the 6- to 12-inch range. Most of the pipeline is ductile iron pipe, although a portion of the system consists of polyvinyl chloride (PVC) pipe.

J29.2.1.2 Inventory

Table 1 provides a general listing of the major water distribution system fixed assets for the Ellington Field ANGB water distribution system included in the sale.

TABLE 1
Fixed Inventory
Water Distribution System, Ellington Field ANGB

Item	Size (in)	Quantity	Unit	Weighted Year of Construction
PVC pipe	1.5	50	lf	1988
	2	1,676	lf	1982
	2.5	38	lf	1987
	3	242	lf	1977
	8	570	lf	1988
Ductile iron pipe	6	4,823	lf	1968
	12	3,620	lf	1977
	4	65	lf	1956
	6	7,956	lf	1949
	10	820	lf	1942
Steel pipe	0.75	145	lf	1942
	1	628	lf	1958
	1.25	655	lf	1957
	1.5	802	lf	1955
	2	805	lf	1948
Cast iron gate valve	1	2	ea	1984
	1.25	1	ea	1951
	1.5	9	ea	1964
	1.75	-	ea	1999
	2	7	ea	1971
	6	40	ea	1959
	8	1	ea	1988
	10	3	ea	1942
	12	2	ea	1974
Fire hydrants (4.5-inch valve size)		30	ea	1955

PVC = Polyvinyl chloride EA = Each
 GAL= Gallon HP = Horsepower
 LF = Linear Feet

J29.2.2 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 sale. 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, Ellington Field ANGB

Qty	Item	Make/Model	Description	Remarks
	No spare parts are included in the privatization of this utility system.			

TABLE 3
Specialized Vehicles and Tools
Water Distribution System, Ellington Field ANGB

Description	Quantity	Approximate Age	Location	Maker
No specialized vehicles and tools are included in the privatization of this utility system.				

J29.2.3 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, Ellington Field ANGB

Qty	Item	Description	Remarks
1	CD	Utility System Drawings	Water Distribution System
1	Record Drawings	Copies of all record drawings shall be made available onsite to Contractor as requested	Drawings will be available during normal duty hours.

J29.3 Specific Service Requirements

The service requirements for the Ellington Field ANGB water distribution system are as defined in the Section C, *Description/Specifications/Work Statement*. The following requirements are specific to the Ellington Field ANGB 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 provide monthly meter reading reports IAW Paragraph J29.6, and that meet the following requirements:

The Contractor shall keep meter books with monthly consumption and demand (if applicable) for each meter reading. Meter books shall also include building address or facility number, meter number, previous month readings, current month readings, multipliers for each meter, total monthly consumption, points of contact for meter questions, and procedure for converting meter reads into consumption (including

multipliers). The Contractor shall coordinate with the Government to determine the format for meter books to be delivered.

- IAW the Right of Way, the Contractor shall allow the Government access to operate and maintain any communication equipment, obstruction lights, beacon lighting, emergency warning equipment, public address equipment, and other Government equipment on water tanks.
- The Contractor shall enter into a Memorandum of Understanding with the Ellington Field Air National Guard Base Fire Department for fire protection of all facilities included in the purchase of the utility. The Contractor shall abide by Ellington Field ANGB fire protection requirements. The Contractor shall maintain the fire alarm system for all facilities included in the purchase of the utility. The Contractor shall permit Fire Department personnel access to their facilities to perform fire inspections and emergency response.
- IAW Paragraph C.9.8, *Exercises and Crisis Situations Requiring Utility Support*, the Contractor shall provide support as directed by the Ellington Field Air National Guard Base Civil Engineer Control Center or equivalent agency for exercises and crisis situations.
- The Contractor shall coordinate any change to the water distribution system that may affect fire protection with the Base Fire Department.
- The Contractor shall coordinate replacement or changes to fire hydrants with the Base Fire Department.
- The Contractor shall perform flow testing and maintenance of fire hydrants and water lines IAW National Fire Protection Association standards. The government reserves the right to review flow test records.
- The Contractor shall operate, maintain and test the Base water system IAW TNRCC regulations. The Contractor shall provide the Contracting Officer with a copy of any and all testing information and reports submitted to the TNRCC.

J29.4 Current Service Arrangement

Currently the City of Houston supplies Ellington Field ANGB potable water. Ellington Field ANGB has a peak water demand which has ranged from 0.10 to 0.68 million gallons per month from 1994 through 1997 (based on monthly Duers report data). The average demand throughout these years was approximately 0.32 million gallons per month. The peak demand for these years normally occurred during the summer months.

As noted in Section J29.1, key projects planned for Ellington Field ANGB may increase the total square footage of buildings on Base by about 11 percent.

J29.5 Secondary Metering

The Installation may require secondary meters for internal billings of their reimbursable customers, utility usage management, and conservation monitoring. The Contractor shall assume full ownership and responsibility for existing and future secondary meters IAW Paragraph C.3.

J29.5.1 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 once a month for all secondary meters IAW Paragraph C.3 and J29.6 below.

TABLE 5
Existing Secondary Meters
Water Distribution System, Ellington Field ANGB

Building	Building Description	Meter No.
There currently are no secondary meters on this utility system		

J29.5.2 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 J29.6 below.

TABLE 6
New Secondary Meters
Water Distribution System, Ellington Field ANGB

Meter Location	Meter Description
No new secondary meters are required at this time.	

J29.6 Submittals

The Contractor shall provide the Government 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 25th of each month for the previous month. Invoices shall be submitted to:

Name:
Address:
Phone number:

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 include the following information for Scheduled and Unscheduled outages:

Scheduled: Requestor, date, time, duration, facilities affected, feedback provided during outage, outage notification form number, and digging clearance number.

Unscheduled: Include date, time and duration, facilities affected, response time after notification, completion times, feedback provided at time of outage, specific item failure, probability of future failure, long term fix, and emergency digging clearance number.

Outage reports shall be submitted by the 25th of each month for the previous month. Outage reports shall be submitted to:

Name:
Address:
Phone number:

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:

Name:
Address:
Phone number:

J29.7 Water Conservation Projects

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

- None

J29.8 Service Area

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the Ellington Field ANGB boundaries.

J29.9 Off-Installation Sites

No off-installation sites are included in the sale of the Ellington Field ANGB water distribution system.

J29.10 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, Ellington Field ANGB

Location	Description
	The Government does not require any connection or disconnections during the transition period.

J29.11 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 Ellington ANGB water distribution system. If the water distribution 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 AB.

TABLE 8
 System Deficiencies
Water Distribution System, Ellington Field ANGB

Project Identifier/Location	Project Description
The Government has not identified any deficiencies with this system.	