

ATTACHMENT J30

Ellington Field ANGB Wastewater Collection System

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J30 Ellington Field ANGB Wastewater Collection System

J30.1 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.

J30.2 Wastewater Collection System Description

J30.2.1 Wastewater Collection System Fixed Equipment Inventory

The Ellington Field ANGB wastewater collection system consists of all appurtenances physically connected to the collection system from the point of demarcation defined by the Right of Way to point in which the collection system exits the Installation. The system may include, but is not limited to, pipelines, manholes, lift stations, valves, and controls. The actual inventory of items sold will be established 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 collection 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 wastewater collection system privatization are:

- Oil water separators
- Septic systems
- Storm sewers
- Grease Traps

J30.2.1.1 Description

The wastewater collection system at Ellington Field ANGB consists of less than 4 miles of collection mains and services and four lift stations. The City of Houston provides wastewater treatment for Ellington Field ANGB. There are no wastewater treatment

facilities on the installation. Most of the pipe is vitrified clay pipe that was installed during the construction of the Base.

Other tenant organizations at Ellington Field include TXANG, the Coast Guard, NASA, and the City of Houston. No meters are present on any of the wastewater collection system to monitor flows to individual facilities. An 8-inch and a 10-inch line serve most of the buildings on the southwest corner of the Base. On the eastern side, 6- and 8-inch trunk lines serve the buildings. Secondary 6- and 8-inch lines serve the remainder of the western side of the Base. All wastewater flows exiting the Base are directed through a 10-inch gravity main at the south end of the Base.

Three of the four lift stations are a standard flooded duplex type, while the fourth is an air-operated lift station. Pump controls for the flooded duplexes are based on float switches placed at varying levels.

Forty manholes located on Ellington Field ANGB are in good condition and are generally the same age as the pipelines. Most of the manholes are of brick construction, but newer installations are constructed of pre-cast concrete sections.

J30.2.1.2 Inventory

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

TABLE 1
Fixed Inventory
Wastewater Collection System, Ellington Field ANGB

Item	Size (in.)	Quantity	Unit	Approximate Year of Construction
PVC pipe	4	200	lf	1974
PVC pipe (forced mains)	2	695	lf	1989
Ductile iron pipe	4	120	lf	1988
	6	405	lf	1988
Cast iron pipe	3	290	lf	1942
	4	370	lf	1978
	6	380	lf	1987
	8	50	lf	1987
Vitrified clay pipe	4	640	lf	1968
	6	7,345	lf	1958
	8	3,655	lf	1960
	10	240	lf	1955
Clean Outs	6	520	lf	1961
	8	480	lf	1973
Standard sanitary sewer manhole		40	ea	1961
Wastewater lift/pump station		4	ea	1982

PVC = Polyvinyl Chloride LF = Linear Feet
EA = Each

J30.2.2 Wastewater Collection 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
Wastewater Collection 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
Wastewater Collection System, Ellington Field ANGB

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

J30.2.3 Wastewater Collection 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
Wastewater Collection System, Ellington Field ANGB

Qty	Item	Description	Remarks
1	CD	Utility System Drawings	Wastewater Collection 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.

J30.3 Specific Service Requirements

The service requirements for the Ellington Field ANGB wastewater collection system are as defined in the Section C, *Description/Specifications/Work Statement*. The following requirements are specific to the Ellington Field ANGB wastewater collection 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 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.

J30.4 Current Service Arrangement

Ellington Field ANGB currently has no meters on Base to measure wastewater flows. The peak wastewater demand was conservatively assumed to be 100 percent of the peak water system flows.

As noted in Section J30.1, key projects planned for Ellington Field may increase the total square footage of buildings on Base by about 11 percent.

J30.5 Secondary Metering

The city is responsible for the wastewater meters that are used to bill the government for the wastewater service. The city is responsible for maintaining these meters.

There are currently no requirements for secondary metering of wastewater included in this contract. Any future wastewater secondary metering requested by the Government will be IAW Paragraph C.3, Future Secondary Meters.

J30.6 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. Blockage Report. The Contractor's monthly blockage report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Blockage reports shall be submitted by the 25th of each month for the previous month. Blockage reports shall be submitted to:

Name:

Address:

Phone number:

J30.7 Infiltration and Inflow (I&I) Projects

IAW Paragraph C.3, Utility Service Requirement, the following projects have been implemented by the Government for managing and monitoring I&I.

- None

J30.8 Service Area

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

J30.9 Off-Installation Sites

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

J30.10 Specific Transition Requirements

IAW Paragraph C.13, Transition Plan, **Table 5** provides a listing of service connections and disconnections required upon transfer.

TABLE 5
Service Connections and Disconnections
Wastewater Collection System Ellington Field ANGB

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

J30.11 Government Recognized System Deficiencies

Table 6 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 wastewater collection system. If the collection 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 6
System Deficiencies
Wastewater Collection System, Ellington Field ANGB

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