

ATTACHMENT J2

# Tinker AFB Natural Gas Distribution System

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# J2 Tinker AFB Natural Gas Distribution System

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## J2.1 Tinker AFB Overview

Centrally located in Oklahoma County, Tinker AFB occupies 5,041 acres on the southeast edge of Oklahoma City, Oklahoma. Tinker AFB is the logistics leader in providing specialized logistics support, management, maintenance, and distribution to defense weapons systems worldwide. Tinker AFB is located near the intersection of three major interstate highway systems. The Base is bounded by Midwest City to the north, Del City to the west, and Oklahoma City to the east, south, and southwest. Tinker AFB maintains a close relationship with local communities and provides a substantial economic impact on the surrounding region.

### J2.1.1 Installation History

In 1940, a group of Oklahoma City civic leaders and businessmen learned that the War Department was considering the central United States as a location for a maintenance and supply depot. The City leaders targeted a 480-acre site and acquired an option for 960 additional acres of land adjoining SE 29th Street. On 8 April 1941, the order was officially signed awarding the depot to Oklahoma City.

In 1942, the new installation was named Tinker Field in honor of Major General Clarence L. Tinker of Pawhuska, Oklahoma. General Tinker lost his life while leading a flight of LB-30 “Liberators” on a long-range strike against Japanese forces on Wake Island during the early months of World War II.

Immediately following World War II, Tinker expanded to include the Douglas aircraft assembly plant and was named the Oklahoma City Air Materiel Area (OCAMA). The Base remained an important logistics center as it began to service jet engines of the modern Air Force, and became an all jet maintenance facility by 1953. In June of 1954, Tinker accepted delivery of its first B-52 Stratofortress.

Throughout the Korean conflict, Tinker continued its output, keeping planes flying and funneling supplies to the Far East. In 1955, Tinker gained a major tenant with the addition of the 506th Tactical Fighter Wing.

By the end of the 1950s, OCAMA received a complete management system overhaul to accommodate the latest Air Force weapons – the B-52 bomber and the KC-135 tanker.

During the 1960s, Tinker’s support of additional aircraft grew. During that decade the depot became the single place for overhauling the J57, TF30, and J79 engines, as well as new communications and electronics systems. Tinker’s Combat Control Station played a major role during the Cuban Missile Crisis. In 1966, Tinker became the world’s largest jet engine repair and overhaul facility when it took on the maintenance of the TF30 engines which powered the swing-winged F-111 Aardvark. Tinker was designated an inland aerial port of embarkation (APOE) in December 1967 in recognition of Tinker’s importance as a logistic hub.

During the 1970s, the Base took on management of new weapons including the A-7D Corsair, the E-3A Airborne Warning and Control (AWAC) aircraft, the E-4 Airborne Command Post aircraft, and the BGM 109 Ground Launched Cruise Missile. In 1974 the depot was renamed the Oklahoma City Air Logistics Center.

In the 1980s, the revitalized B-1B Lancer, the Air Launched Cruise Missile, and the KC-10 Extender were added to an already impressive list of OC-ALC management responsibilities. In the mid-1980s the 552nd Airborne Warning and Control Division upgraded to the E-3 Sentry, became a Wing once again, and was placed under the 28th Air Division.

In 1991, two Navy E-6 squadrons were activated at Tinker AFB to maintain a flying communications link between the National Command Authority and ballistic missile submarines around the world.

Tinker AFB and OC-ALC provided front line support to the forces engaged in Operation Desert Shield and Desert Storm in the early 1990s. In 1993, two significant changes occurred at Tinker when the Aerial Port of Embarkation closed, and the new B-2 Stealth Bomber Weapons Systems Support Center opened. In 1997, Tinker received the first shipment of equipment to support the core engine workload previously done at Kelly Air Force Base.

Today, Tinker AFB's mega aviation complex contains over 700 buildings (excluding housing), 2 operational runways, 234 acres of ramp space, and 48 miles of roadways. The Base is a multi-faceted member of the Air Force team containing several diversified organizations and missions including the Oklahoma City Air Logistics Center, and the Navy.

### J2.1.2 Physical Assets

Facilities at the Base encompass two runways, associated taxiways and parking aprons; administrative areas; industrial facilities; dormitories and housing areas; and recreational facilities and open space. The physical profile of Tinker AFB is shown in the following table.

<b>Installation Assets</b>	
Land Area	5,041 Acres
Buildings	750; 15,625,507 SF
Military Family Housing	730 Units; 1,083,972 SF
Surface Roads	48 Miles
Runway 17/35	11,100 Feet
Runway 12/30	10,000 Feet
Aircraft Ramp Space	234 Acres
Indoor Maintenance	136 Acres
Covered Storage	79 Acres

Nearly all of the Tinker AFB land area is fee owned, including two GSUs. The one exception is the Glenwood Area GSU, a 343-acre leased plot located north of Interstate Highway 40.

Tinker AFB is comprised of several geographically defined sub-areas. These architectural/planning districts contain functionally related facilities, similar architectural treatments, and function as a useful geographical identifiers. These districts are defined as follows:

- North Side Industrial District (Area A)
- Southeast Munitions District (Area B)
- Northeast Industrial District (Area C)
- 38 EIG District (Area D)
- West Community District (Area E)
- South Forty (Southwestern/Navy) District
- Airfield District

### **J2.1.3 Mission, Organization, and Associate Units**

The primary mission of Tinker Air Force Base is to provide for the management, storage, and depot level maintenance of all components and the end items of all major weapon systems assigned to the Air Logistics Center.

Tinker AFB's largest organization is the OC-ALC, one of three depot repair centers in the Air Force Materiel Command (AFMC), with headquarters at Wright-Patterson AFB, Ohio. Tinker AFB is also home to several major Department of Defense, Air Force, and Navy activities with critical national defense missions.

The OC-ALC is the worldwide manager for a broad range of aircraft, engines, missiles and commodity items. The OC-ALC manages over 40 aircraft types including the B-1B Lancer, B-52 Stratofortress, B-2 Spirit, E-3 Sentry and KC-135 series, in addition to providing logistics support for the Air Launched Cruise Missile, Short Range Attack Missile, Harpoon and Advanced Cruise Missiles. Overall, the center manages and maintains an inventory of more than 13,000 engines, 3,000 missile systems and 42,000 components supporting 9,100 aircraft.

Major units at TAFB include:

- 552 Air Control Wing (ACW)
- 507<sup>th</sup> Air Refueling Wing (ARW)
- Navy's Strategic Communications wing ONE
- 3<sup>rd</sup> Combat Communications Group (CCG)
- 38<sup>th</sup> Engineering Installations Group (EIG)
- 72<sup>nd</sup> Air Base Wing (ABW)
- Defense Distribution Depot
- Defense Megacenter Oklahoma City

## J2.1.4 Population

The Base population profile is as shown in the following table:

Category	Population
Active Duty U.S. Military	7,791
Air National Guard/Air Force Reserve	1,368
Appropriated Fund Civilians (including Reserve technicians)	12,765
Non-appropriated Fund Civilians	2,271
<b>Total Employees</b>	<b>24,195</b>
On/Off Base Dependents	18,237

## J2.1.5 Housing

Military Family Housing consists of 730 dwelling units located in four neighborhood areas; Twining Fields, Vandenberg Hills, McNarney Manor, and Mitchell Heights. Units are a combination of multiplex (2-8 units per structure) and single family units.

Currently, many of the units are projected to be renovated, many are to be demolished (flood zone siting issues), and additional units will be constructed. All of this work is expected to be done in concert with, or as part of, an ongoing Housing Privatization (HP) initiative. The total number of units currently supported by the Housing Requirement Market Analysis and included as the total HP requirement will be 858 units. Because of the anticipated widespread changes to the housing layout, all military family housing utilities will be included in the HP package and excluded from this UP package.

## J2.1.6 Geographically Separated Units

Other geographically separated units (GSUs) are summarized below:

### **38<sup>TH</sup> ENGINEERING INSTALLATION GROUP (EIG)**

The 38th EIG has worldwide responsibility for engineering and installation of all AF electronic and communications facilities. This GSU is situated on approximately 120 acres located about ½ mile east of the Douglas Avenue (Tinker's eastern border) and south of SE 59th Street.

### **COMPREHENSIVE HANDS-ON TRAINING (CHOT) SITE**

This site is a remote training site for the 3<sup>rd</sup> Combat Communications Group on a 14-acre plot located a few hundred feet east of the EIG and also south of SE 59th Street.

### **GLENWOOD**

As mentioned earlier, Glenwood is a leased 343-acre parcel situated a few hundred feet north of Tinker AFB. This property (formerly an off-base residential area) was purchased in 1985 by the County of Oklahoma. Residences were demolished and the parcel was leased

for one dollar to Tinker AFB for a period of 50 years. This former residential area was in Accident Potential Zone One (APZ-1) of the main runway (north end) and presented a serious encroachment problem. Oklahoma County officials took this action to resolve this encroachment problem and to solidify the future viability of Tinker AFB. Because Glenwood is part of APZ-1, usage is limited to periodic troop bivouac activities and there will never be permanent facility development there.

## J2.2 Natural Gas Distribution System Description

### J2.2.1 Natural Gas Distribution System Fixed Equipment Inventory

The Tinker AFB natural gas 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, regulators, meters, and cathodic protection. 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.

There are three gas mains that traverse the Base, which are owned by Koch Natural Gas, Williams Natural Gas, and Sinclair Gas. These lines do not supply gas to the Base and are not interconnected to the Base's natural gas distribution system.

Specifically excluded from the gas distribution system privatization:

- Vehicular compressed natural gas (CNG) filling stations.
- Natural gas lines that traverse the Base that are not owned by the Base.
- All natural gas components serving the housing areas.

#### J2.2.1.1 Description

##### **MAIN BASE**

Natural gas is utilized in the heating plants, industrial process and in residential facilities. Tinker AFB purchases natural gas via a Government-wide supply contract administered by Defense Energy Supply Center (DESC). The current supply contractor is Geary Energy. Oklahoma Natural Gas Company (ONG) delivers odorized natural gas to Tinker AFB at three metered delivery points. The delivery points are:

- On the north boundary near Turnbull Gate;
- On the east boundary between Lancer Gate and the Industrial wastewater plant , and

- On the west boundary near the 5000 series Military Family Housing west of Twining Drive.

At these delivery points, the natural gas pressure is regulated to 45 to 50 pounds per square inch gauge (psig) and metered. Delivery points, along with the pressure regulator-meter stations, are owned and operated by ONG. The regulator-meter stations are fenced in and the base takes ownership of the gas pipeline downstream of the meter at the fence perimeter. The average depth of the natural gas pipes in the Base is three feet. There are pressure regulators at the service line to each of the buildings and one common pressure regulator for each residential building (some residential buildings have multiple units but are served by a common regulator).

The natural gas pressure regulator-meter station near Turnbull Gate primarily supplies the buildings north of the runway in Area A. Most of the gas piping is cast iron installed in 1943. The condition of the cast iron pipe is commensurate with 50-year-old pipe and there have been 12 pipe failures in the past three years. The distribution system isolation valves are in varied condition. The maintenance personnel indicated there are some sections of pipe that do not have sufficient isolation valves. In this section any system shutdown for maintenance would take many buildings out of service; installation of strategically located isolation valves would reduce this problem.

The east side natural gas pressure regulator-meter station near Lancer Gate supplies the buildings on the east side of the Base in Area C and the EIG GSU Area D includes the steam plant and Building 3001, the largest building on Base. A 6-inch steel aboveground natural gas distribution line runs longitudinally through Building 3001. The majority of the pipe on the east side of the Base is cast iron and steel pipe installed in the late 1940s.

The Military Family Housing area regulator-meter station is the smallest of the three supply points. This station supplies the housing and other non-housing buildings west of the runway including buildings located on the southwest side of the Base. There is some polyethylene (PE) gas pipe serving newer construction in parts of this area.

Although the entire distribution system is interconnected, connecting pipeline segments in places are inadequately sized to transfer gas from one area to the other in the event of supply failure at any one of the supply points. During peak demand periods the southern portion of the distribution system has low-pressure problems. The low-pressure problem could be resolved with a new gas supply point in the southwestern part of the Base. There are currently no projects planned to address this situation.

There is currently an active cathodic protection program at the Base. This program has identified many problems in the system such as inadequate insulation unions and flanges; PE pipe sections installed between metal pipes without jumper wires; and old anode beds that cannot be located. The gas distribution system has both sacrificial anode and impressed current cathodic protection systems. PE pipe is installed with tracer wire and warning tape. However, some sections of PE pipes have problems with tracer wires that were not installed properly. The problem being that the wire was sometimes not carefully aligned with the pipe but rather simply tossed in the trench. In some cases the trench was rather wide and the tracer wire may be as much as two to three feet offset from the pipe itself.

One unusual feature of the gas system is an aboveground 6-inch steel natural gas line that runs longitudinally (north/south) through Building 3001 for approximately 3,500 feet. This main is an integral part of the gas distribution network on the east side. This gas main is part of the privatization package, but interior branches off this main will remain the property of the AF.

There is no Supervisory Control and Data Acquisition (SCADA) system or Energy Monitoring and Control System (EMCS) used to be included in the natural gas privatization package.

**GSUs**

**EIG.** Receives natural gas from an AF-owned pipeline extending from the Tinker east side gas distribution network. This pipeline parallels SE 59th street traversing non-DoD property for approximately ½ mile. The AF has been granted an easement by the City of Oklahoma City for this connecting pipeline.

**CHOT Site.** Uses no natural gas and there are no AF-owned natural gas components on this site.

**Glenwood.** Uses no natural gas and there are no AF-owned natural gas components on this parcel.

**J2.2.1.2 Inventory**

**Table 1** provides a general listing of the major natural gas distribution system fixed assets for the Tinker AFB natural gas distribution system included in the privatization package.

TABLE 1  
 Fixed Inventory  
 Natural Gas Distribution System - Tinker AFB

Component	Size	Quantity	Unit	Approximate Year of Construction
<b>MAIN BASE</b>				
<b>Pipe</b>				
Black Steel, C&W	<2"	20,600	LF	1943
Black Steel, C&W	<2"	3,000	LF	1997
Black Steel, C&W	2"	27,600	LF	1943
Black Steel, C&W	2"	5,100	LF	1997
Black Steel, C&W	2-2½"	28,000	LF	1943
Black Steel, C&W	2-2½"	2,400	LF	1997
Black Steel, C&W	3"	13,400	LF	1943
Black Steel, C&W	3"	13,500	LF	1997
Black Steel, C&W	4"	16,300	LF	1943
Black Steel, C&W	6"	26,750	LF	1943
Black Steel, C&W	6"	9,250	LF	1997
Black Steel, C&W	8"	17,100	LF	1943
Black Steel, C&W	8"	3,650	LF	1997
HDPE	<2"	400	LF	1995
HDPE	2"	1,400	LF	1993

Component	Size	Quantity	Unit	Approximate Year of Construction
HDPE	2"	1,000	LF	1995
HDPE	3"	2,200	LF	1995
HDPE	4"	250	LF	1993
HDPE	6"	3,370	LF	1993
<b>Services and Valves</b>				
Regulators (Services)	2"	276	EA	1943
Regulators (Services)	2"	14	EA	1993
Regulators (Services)	2"	10	EA	1995
Regulators (Services)	2"	51	EA	1997
Plug Valves (Services)	2"	552	EA	1943
Plug Valves (Services)	2"	28	EA	1993
Plug Valves (Services)	2"	20	EA	1995
Plug Valves (Services)	2"	102	EA	1997
Main Valves – Steel	<2"	23	EA	1943
Main Valves – Steel	<2"	3	EA	1997
Main Valves – Steel	2"	65	EA	1943
Main Valves – Steel	2"	12	EA	1997
Main Valves – Steel	3"	9	EA	1943
Main Valves – Steel	3"	9	EA	1997
Main Valves – Steel	4"	12	EA	1943
Main Valves – Steel	6"	46	EA	1943
Main Valves – Steel	6"	17	EA	1997
Main Valves – Steel	8"	11	EA	1943
Main Valves – Steel	8"	2	EA	1997
Main Valves - HDPE	<2"	1	EA	1995
Main Valves - HDPE	2"	3	EA	1993
Main Valves - HDPE	2"	3	EA	1995
Main Valves - HDPE	3"	2	EA	1995
Main Valves - HDPE	4"	1	EA	1993
Main Valves - HDPE	6"	6	EA	1993
<b>Meters</b>				
Meters		124	EA	
<b>INSIDE BLDG. 3001</b>				
Black Steel, C&W	6"	3,500	LF	1976
Main Valves – Steel	6"	7	EA	1976
<b>EIG AREA</b>				
Black Steel, C&W	<2"	900	LF	1951
Black Steel, C&W	2-2½"	3,500	LF	1951
Black Steel, C&W	4"	1,900	LF	1951
Black Steel, C&W	6"	3,000	LF	1943
Regulators (Services)	2"	31	EA	1951
Plug Valves (Services)	2"	62	EA	1951
Main Valves – Steel	<2"	3	EA	1951
Main Valves – Steel	2"	2	EA	1951
Main Valves – Steel	4"	8	EA	1951

Component	Size	Quantity	Unit	Approximate Year of Construction
Main Valves – Steel	6"	15	EA	1943

Notes:  
 C&W = coated and wrapped  
 EA = each  
 HDPE = polyethylene  
 LF = linear feet

### J2.2.2 Natural Gas Distribution System Non-Fixed Equipment and Specialized Tools

**Table 2** lists other ancillary equipment (spare parts) and **Table 3** lists specialized vehicles and tools potentially available 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  
*Natural Gas Distribution System - Tinker AFB*

Item	Description	Remarks
Fusion Couplings	Various sizes	Quantity Varies
Misc. Valves & Fittings	Various sizes	Quantity Varies
Poly Pipe	Various sizes	Quantity Varies

TABLE 3  
 Specialized Vehicles and Tools  
*Natural Gas Distribution System - Tinker AFB*

Description	Quantity	Location
None		

### J2.2.3 Natural Gas 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  
*Natural Gas Distribution System - Tinker AFB*

Quantity	Item	Description	Remarks
1	Utility Maps	Base Gas Lines, 2004, Scale 1" = 100'	Sheets 1 - 54
1	Utility Map	Cathodic Protection Systems	

Quantity	Item	Description	Remarks
1	Report	Annual Cathodic Report, 2002	
1	Planning Document	General Plan	One Volume
1	Planning Document	Comprehensive Plan	Multiple Volumes

## J2.3 Specific Service Requirements

The service requirements for the Tinker AFB natural gas distribution system are as defined in the Section C, *Description/Specifications/Work Statement*. The following requirements are specific to the Tinker AFB natural gas 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 will be required to mark his own utilities and will be responsible for initiating, officiating, and tracking digging permits for his own utilities. The Contractor will provide not less than 5 and not more that 15 working days notice of any needed excavations to 72<sup>nd</sup> Civil Engineers and to said Utilities Privatization Administrative Contracting Officer so the location of underground utilities may be located and marked by the applicable utility owner.
- IAW Condition C of Attachment 1 to the ROW, the Contractor shall follow the Base digging permit process. The Contractor shall obtain all necessary authorizations, permits and line locates prior to performing any excavations on Base.
- The Contractor shall support the Base digging permit process by routinely accepting and promptly processing digging permit requests which may impact on the integrity of the Contractor’s utility system and/or the safety of the requestors. The Contractor shall be a participant of the Base digging permit process and shall attend any meetings called in support of the process. Contractor shall be responsible to locate and mark their utilities in the affected areas. The digging permit process involves weekly attendance at the scheduled meeting and subsequent appointments for location and marking of utilities throughout the week.
- The Contractor will be required to conduct odorization testing of the natural gas system IAW Department of Transportation (DOT) Final Rule RSPA-02-13208, §192.625 Odorization of gas.
- Because of the critical nature of many Tinker AFB mission requirements, response to natural gas emergencies must be immediate. The Contractor must have a first response on the scene not later than 20 minutes after notification during duty hours and not later than 1 hour after notification during non-duty hours.
- The Contractor’s representative that responds to emergency service requests shall be knowledgeable of the utility system and the Contractor’s Service Interruption/Contingency Plan. The representative shall be able to assess damages and estimate the time it will take to make temporary or full-service repairs. In accordance

with Paragraph H.6, Rights of the Government to Perform Function with Its Own Personnel, the Government reserves the right to substitute or supplement the Contractor's efforts during emergency situations where the Contractor's failure or inability to perform is beyond the Contractor's control and without the Contractor's fault or negligence. In this situation, the Contractor would not be held responsible for costs incurred by the Government. However, the Contractor could be held financially responsible if the Government substitutes or supplements the Contractor's efforts during emergency situations and the Contractor's failure or inability to perform was the result of the fault or negligence of the Contractor.

- Leak detection surveys shall be performed IAW 49 CFR 192, Paragraph 723. Tinker AFB shall be considered a business district for the purposes of leak detection requirements. The Contractor shall submit copies of all submittals and correspondence to federal, state, and local agencies concerning leak detection testing. Copies shall be provided within 5 working days following submittal to the respective agency.
- The Contractor shall provide monthly meter reading reports IAW Paragraph J2.6. The Contractor shall keep a meter book(s) and record monthly consumption and demand (if applicable) for each meter being read. The Contractor shall coordinate with the Government to determine the format of the meter books to be submitted.
- When new meters are installed, to include meters installed for temporary service connections, the Contractor shall include with the meter reading report a report identifying the new meters installed during the prior month. The Contractor shall coordinate with the Government to determine the format of the report to be submitted.
- Upon reasonable request and with reasonable notice from the Base Civil Engineer, the Contractor shall provide escorted tours to provide instruction and demonstration of the natural gas distribution system operations, maintenance and construction. The natural gas distribution system includes valves, gauges, pipes, and other natural gas distribution system devices, and the Contractor's shop(s) and storage areas.
- IAW Paragraph C.5.1.3, and in compliance with Base architectural standards, new and renewal distribution piping shall normally be installed using the most economical trenching method unless otherwise prohibited by the Government. Excavation of paved surfaces is prohibited without consultation and approval from the Base Civil Engineer.
- IAW Paragraph C.9, Coordination of Work, the Contractor shall coordinate scheduled outages using the Civil Engineer Outage Form.
- In addition to Section 8 of the ROW, the utility contractor (grantee) shall repair at no cost to the Government any utilities improperly marked by the contractor and subsequently damaged as a result of the incorrect marking by other contractors or Government organizations working in the area. Property damaged by the contractor in the conduct of his business shall be corrected in accordance with ROW Section 8.
- IAW Section 12 of the ROW, the Contractor is responsible for all supporting utilities that may be required to own, operate and maintain the utility system being privatized. For example, electricity is needed to power substation lighting. Supporting utilities are defined as the supply of electricity, natural gas, water, or wastewater collection, and any

infrastructure or materials necessary to connect to the supply of electricity, natural gas, water, or wastewater collection. The Contractor shall coordinate with the Tinker AFB Civil Engineer and the Contracting Officer for any supporting utilities to be provided by the Government.

- The Contractor shall enter into a Memorandum of Understanding (MOU) with the Base Fire Department for fire protection of all facilities included in the purchase of the utility. The MOU shall be completed during the transition period and a copy provided to the Contracting Officer.
- The Contractor shall abide by Base fire protection requirements. The utility system purchased by the Contractor includes facilities. These facilities may or may not include fire alarm systems. Where required by federal, state or local regulation, the Contractor shall maintain the fire alarm system for all facilities owned and operated by the Contractor. 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 Base Civil Engineer for exercises and crisis situations.
- The Contractor shall ensure that employees understand, implement and enforce Force Protection Condition (FPCON) requirements specified in AFI 10-245. The Contractor is advised that FORCE PROTECTION conditions vary and that these changes may cause delays in access to Tinker AFB. These conditions are outlined in the Tinker AFB FPCON Checklist. This checklist will be available in the technical library. The Contractor will plan accordingly to provide uninterrupted support. Compliance with and staffing in support of FORCE PROTECTION condition changes shall not result in service charge adjustments to the contract.
- IAW Section 8 of the ROW, the Contractor shall maintain existing security mechanisms (i.e., locks, fences) to protect the utility systems. The security mechanisms should prevent tampering and sabotage. Should the Contractor become aware of any suspicious incident, security breach or act of sabotage at or against the utility system, or any of its associated facilities, they will immediately contact the Security Police Squadron and the Civil Engineers.
- Due to heightened security concerns on military installations, all Contractor and subcontractor personnel who must enter Tinker AFB to perform this contract must undergo a background check. Background checks will be conducted using the following information: name, drivers license number, social security number, and date of birth. These procedures are considered permanent. Any Contractor or subcontractor employee that does not consent to this background investigation will not be allowed access to Tinker AFB. Any derogatory information resulting from the investigation, or which otherwise becomes known to the contracting officer, may also result in such individuals being prevented from entering the installation. However, nothing in this requirement shall excuse the Contractor from proceeding with any resulting contract as required.
- The Contractor shall ensure their employees, and those of their subcontractors, have the proper credentials allowing them to work in the United States. Employees must have

valid Social Security Cards. Non-US Citizens must have current and valid permission from the Bureau of Immigration and Naturalization. Persons found to be undocumented or illegal aliens will be remanded to the proper authorities. The Contractor shall not be entitled to any compensation for delays or expenses associated with complying with the provisions of this requirement. Contractor personnel and their subcontractors must identify themselves as Contractors or subcontractors during meetings, telephone conversations, in electronic messages, or correspondence related to this contract. Contractor occupied facilities on Tinker AFB such as offices, separate rooms, or cubicles must be clearly identified with Contractor-supplied signs, name plates or other identification, showing that these are work areas for Contractor or subcontractor personnel.

- The Contractor shall notify OC-ALC/SEG (Safety Office) and the Contracting Officer, or a designated Government Representative (GR) within one (1) hour of all mishaps or incidents at or exceeding \$2,000 (material + labor) in damage to DOD property or contractor-owned property located on Tinker AFB. This notification requirement shall also include physiological mishaps/incidents. A written or e-mail copy of this mishap/incident notification shall be sent within three calendar days to the GR, who will forward it to OC-ALC/SEG (Safety Office). For information not available at the time of initial notification, the Contractor shall provide the remaining information not later than 20 calendar days after the mishap, unless extended by the Contracting Officer. Mishap notifications shall contain, as a minimum, the following information:
  - a) Contract, Contract Number, Name and Title of Person(s) Reporting
  - b) Date, Time and exact location of mishap/incident
  - c) Brief Narrative of mishap/incident (Events leading to accident/incident)
  - d) Cause of mishap/incident, if known
  - e) Estimated cost of mishap/incident (material and labor to repair/replace)
  - f) Nomenclature of equipment and personnel involved in mishap/incident
  - g) Corrective actions (taken or proposed)
  - h) Other pertinent information.
- If requested by Government Personnel or designated Government representative, the Contractor shall immediately secure the mishap scene/damaged property and impound pertinent maintenance and training records, until released by the OC-ALC Safety Office. Also, the Contractor and their subcontractors shall cooperate fully and assist government personnel until the investigation is finalized and closed out. Safety requirements listed in this package that do not relate to the Contractor's operations or services shall be considered self-deleting as mutually agreed by the Contractor and the Contracting Officer.
- The Contracting Officer is the only individual authorized to incur Government obligations and to make changes to contracts. The Administrative Contracting Officer (ACO) may make certain obligations and changes as provided by the Federal

Acquisition Regulation part 42.302 (and supplements) or as may be specifically designated in writing by the Procuring CO. The Contracting Officer’s Technical Representative (COTR), if designated, is strictly limited to the authority described in the designation letter executed by the CO. The Installation Commander’s duly authorized representative is strictly limited to the tasks described and under no circumstance is authorized to incur additional obligations on behalf of the Government. The DESC is the procuring agent, and after appropriate post-award contract management transition, the Contracting Directorate, Oklahoma City Air Logistics Center, shall assume the procuring and administration contracting authority.

- IAW Condition F of Attachment 1 to the ROW, the Contractor shall be responsible for grounds maintenance (except for grass cutting) of all areas within the boundaries of the ROW in accordance with Base standards. Maintenance problems caused by others (AF or third party) will not be the Contractor’s responsibility.
- IAW ROW, the Contractor shall not deliberately injure or kill protected species of wildlife (i.e., non-domesticated animals) without permission from the Contracting Officer, or other representative(s) as designated by the Contracting Officer.
- IAW Condition J of Attachment 1 to the ROW, the provisions of ROW Sections 15, 17 and 18 also cover sites identified under the Resource Conservation Recovery Act (RCRA) Corrective Action program.
- The Contractor shall not perform alterations to any building or structure deemed to be eligible or potentially eligible for placement on the National Register of Historic Places until approved by said officer.

## J2.4 Current Service Arrangement

Tinker AFB purchases natural gas via a Government-wide supply contract administered by DESC. The current supply contractor is Geary Energy. ONG delivers odorized natural gas to Tinker AFB at three metered delivery points. At these delivery points, the natural gas pressure is regulated to 45 to 50 psig and metered. The delivery points with the pressure regulator-meter station is owned and operated by ONG. The regulator-meter stations are fenced in and the Base takes ownership of the gas pipeline downstream of the meter from the fence perimeter. **Table 5** characterizes gas consumption for FY 2003:

TABLE 5  
 Average Monthly Consumption  
 Natural Gas Distribution System - Tinker AFB

Gas Consumption	MCF
Peak	279,712 (in January)
Low	74,191 (in July)
FY 2003 Total	1,870,788

## J2.5 Secondary Metering

### J2.5.1 Existing Secondary Meters

**Table 6** provides a listing of the existing 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 6  
 Existing Secondary Meters  
*Natural Gas Distribution System - Tinker AFB*

Facility No.	Location	Manufacturer
6601	W side in fence	Equimeter
6001	NW side of Bldg across road	Equimeter
6020	NW corner of Bldg	Equimeter
5935	W side of Bldg	Equimeter
5800	S of Bldg	Equimeter
5704	W side of Bldg	American Meter Co
5603	S of Bldg	American Meter Co
478	West side in fence	American Meter Co
478	W side in fence	Rockwell
477	SW corner	Rockwell
825	N side of Bldg	Rockwell
821	S side of Bldg next to road	Rockwell
4012	W side of Bldg	Equimeter
1055	W side of Bldg	Equimeter
1051	S side of Bldg	American Meter Co
1052	S side of Bldg 1054	American Meter Co
3772	N of Bldg	Equimeter
3220	SE corner of Bldg	Equimeter
3220	S side next to mech room	Equimeter
4068	S Bldg gas outside	Equimeter
3333	E side of Bldg	Roots Meter
4057	N Bldg Gas	Equimeter
4069	W of Bldg	Equimeter
4001	NW corner of Bldg	Equimeter
62511	N side of Bldg	Rockwell
5826	SE corner of Bldg	American Meter Co
5824	SW corner of Bldg	American Meter Co
506	SW corner of Bldg	Rockwell
7013	NW corner of Bldg	Equimeter
7037	NW corner of Bldg	Equimeter
7038	NE corner of Bldg	Equimeter
7036	N side of Bldg	Equimeter
7035	N side of Bldg	Equimeter
1002	S side in fence	Rockwell
1077	NW corner of Bldg	Equimeter

<b>Facility No.</b>	<b>Location</b>	<b>Manufacturer</b>
1017	S side of Bldg	Equimeter
7007	NW corner of Bldg	Equimeter
1090	inside fence	Rockwell
1083	S side of Bldg	Equimeter
1049	N side of Bldg	American Meter Co
1086	NE corner of Bldg	Rockwell
765	NE corner	Inven System
1122	NE side of Bldg	Equimeter
32101	N side of Bldg	Equimeter
987	E side of Bldg	Equimeter
985	west side of Bldg	Equimeter
986	NE corner of Bldg	Equimeter
989	NE side of Bldg	Equimeter
989	north side of Bldg	Equimeter
769	NW corner	American Meter Co
591	N side of Bldg	Rockwell
469	SW Corner	Rockwell Inlet
285	north of Bldg	Equimeter
240	SW corner, by café	Rockwell
1	Center North outside gas	Equimeter
13	NW side of building	Rockwell
2211	south west corner of Bldg	Equimeter
400	N.E. Inside wood fence	Rockwell/Broken
5905	N side of Bldg	Equimeter
4048	S Bldg Gas	Equimeter
4077	NW corner of Bldg	Equimeter
1156	N side of Bldg	Equimeter
4064	S side of Bldg	Equimeter
1093	S side of Bldg	General Electric
851	SE corner of Bldg	Equimeter
1067	SW corner of Bldg	Rockwell
1068	S side of Bldg	Equimeter
1048	SW side of Bldg	Equimeter
1047	SE corner of Bldg	Rockwell
1048	W side of Bldg	Rockwell
1043	W side of Bldg	Rockwell
1105	N side of Bldg	Equimeter
1022	W side of Bldg	Equimeter
6002	W of Bldg	Equimeter
3904	W side of Bldg	American Meter Co
847	SE side of Bldg	Equimeter
848	NW side of building	Equimeter
3902	SE side of Bldg	American Meter Co
1058	W side of Bldg	Equimeter
5803	E side of Bldg	American Meter Co
1088	SW corner of Bldg	Rockwell
3900	Secured Area	American Meter Co

Facility No.	Location	Manufacturer
1103	E side of Bldg	Equimeter
3001	W side boiler room upstairs	Roots
5306	E side outside fence	Equimeter
1107	NE side of Bldg	Equimeter
590	SE corner of Bldg	Equimeter
5801	NE side of Bldg	American Meter Co
5307	E side next to car port	Equimeter
7029	N side of Bldg	American Meter Co
3001	SE corner Boiler Room	
3001	SE corner Boiler Room	
963	W side of Bldg	
989	west side of Bldg in bushes	Equimeter
3212	SW corner of Bldg.	
1056	NE corner of Bldg	Equimeter
4078	N side of Bldg	Equimeter
7016	SE side of Bldg'	Equimeter
1133	N side of Bldg	Equimeter
860	NW corner of Bldg	General Electric
4028	SE corner of Bldg	Equimeter
4029	S side of Bldg	Equimeter
3334	N of Bldg	Equimeter
BK	Burger King S of Bldg	Equimeter
472	N OF BLDG	Equimeter
4019	E side of Bldg	Equimeter
5942	E side in fence	Rockwell
5801	NW side of Bldg	Equimeter
5801	NW side of Bldg	Equimeter
5307	E side next to car port	Equimeter
1081	S of Bldg	Equimeter
6001	N of Bldg	Roots Meter
4004	N side of Bldg	Equimeter
4005	SW corner of Bldg.	Equimeter
4008	NW corner of Bldg	Equimeter
478	N of Bldg	American Meter
5929	W side inside mech room	Hersey
Reserve Center	S side of Bldg	
1082	W side of Bldg	Roots Meter
5828	SW corner of Bldg	Equimeter
5828	SW corner of Bldg	Equimeter
5832	E side of Bldg	Equimeter
810	W side of Bldg	
811	NW corner of Bldg	

## J2.5.2 Required New Secondary Meters

The Contractor shall install and calibrate new secondary meters as listed in **Table 7**. 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.3.3 and J2.6 below.

TABLE 7  
 New Secondary Meters  
 Natural Gas Distribution System - Tinker AFB

Building Number	Facility	Meter Size
The Installation has identified no new, specific secondary meter requirements.		

## 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:* 72 ABW/CE  
*Address:* 7535 5<sup>th</sup> Street (Bldg 400)  
 Tinker AFB, OK 73145-9010  
*Phone number:* (405) 734-3451

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:* 72 ABW/CE  
*Address:* 7535 5<sup>th</sup> Street (Bldg 400)  
 Tinker AFB, OK 73145-9010  
*Phone number:* (405) 734-3451

3. **Meter Reading Report:** The monthly meter reading report shall show the current and previous month readings for all 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:* 72 ABW/CE  
*Address:* 7535 5<sup>th</sup> Street (Bldg 400)  
 Tinker AFB, OK 73145-9010  
*Phone number:* (405) 734-3451

4. **System Efficiency Report:** If required by Paragraph C.3, the Contractor shall submit a system efficiency report in a format proposed by the Contractor and accepted by the Contracting Officer. System efficiency reports shall be submitted by the 25<sup>th</sup> of each month for the previous month. System efficiency reports shall be submitted to:

*Name:* 72 ABW/CE  
*Address:* 7535 5<sup>th</sup> Street (Bldg 400)  
 Tinker AFB, OK 73145-9010  
*Phone number:* (405) 734-3451

## J2.7 Energy Saving Projects

There are currently no demand side management (DSM) or energy-saving performance contract (ESPC) arrangements that would have any significant effect on the natural gas distribution system.

## J2.8 Service Area

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the Tinker AFB boundaries, the boundaries of Tinker GSUs, and easements/right-of-ways granted to the AF.

## J2.9 Off-Installation Sites

Gas systems for EIG and the CHOT site are described in preceding paragraphs; there are no Government-owned natural gas assets to be considered on the other satellite locations.

## J2.10 Specific Transition Requirements

IAW Paragraph C.13, Transition Plan, **Table 8** provides a listing of service connections and disconnections required upon transfer.

**TABLE 8**  
 Service Connections and Disconnections  
*Natural Gas Distribution System - Tinker AFB*

Location	Description
None	

## J2.11 Government Recognized System Deficiencies

While the natural gas distribution system is generally adequate to meet existing needs and provide for some expansion, many lines and valves are old and deteriorated and require replacement and upgrading. Specific areas of concern are Areas D and E, and the major feed line from Building 18 to 2126. The cathodic protection program/system has a deficiency associated with the lack of reference data (maps and listings) of the sacrificial anode components. A significant deficiency in the natural gas system is the isolated service to the

South Forty District. To insure stable, uninterrupted service, the addition of a loop system between the South Forty and Area C is essential. Those projects that have some form of programming action underway are listed in **Table 9**; the latest information on these projects will be available in the technical library.

**TABLE 9**  
 System Deficiencies  
*Natural Gas Distribution System - Tinker AFB*

<b>Project Location</b>	<b>Project Description</b>	<b>Program Amount (\$000)</b>
990425	Repair Gas Valves Base Wide	\$75
930059	Replace Gas Mains, Area D	\$275
900027	Replace Gas Lines/Valves, Area E	\$400
000009	Replace 8" Gas Line Bldg 18-Bldg 2126	\$1,453