

Attachment J03

Fort Rucker Water Distribution System

Table of Contents

J03.1	Fort Rucker Area Overview	J03-1
J03.2	Water Distribution System Description.....	J03-1
J03.2.1	Water Distribution System Fixed Equipment Inventory.....	J03-2
J03.2.1.1	Water Distribution System Inventory.....	J03-3
J03.2.1.1.A	Water Distribution System Inventory – Main Post	J03-3
J03.2.1.1.B	Water Distribution System Inventory – Basefields.....	J03-9
J03.2.1.1.C	Water Distribution System Inventory – Outlying Stagefields.....	J03-10
J03.2.2	Water Distribution System Non-Fixed Equipment and Specialized Tools Inventory.....	J03-14
J03.2.3	Water Distribution System Manuals, Drawings, and Records Inventory	J03-15
J03.3	Current Service Arrangements.....	J03-15
J03.4	Secondary Metering	J03-15
J03.4.1	Existing Secondary Meters.....	J03-15
J03.4.2	Required New Secondary Meters	J03-16
J03.5	Monthly Submittals.....	J03-17
J03.6	Energy Savings and Conservation Projects	J03-18
J03.7	Service Area	J03-18
J03.8	Off-Installation Sites.....	J03-19
J03.9	Specific Transition Requirements	J03-19
J03.10	Water Distribution System Points of Demarcation.....	J03-22
J03.10.1	Unique Points of Demarcation	J03-22
J03.11	Treatment Plants and Storage Tanks.....	J03-23

List of Tables

1	Fixed Inventory Water Distribution System – Fort Rucker Main Post	J03-3
2	Fixed Inventory Water Distribution System – Ech Stagefield	J03-4
3	Fixed Inventory Water Distribution System – Hammond Range	J03-5
4	Fixed Inventory Water Distribution System – Hatch Stagefield.....	J03-5
5	Fixed Inventory Water Distribution System – Hooper Stagefield	J03-5

6	Fixed Inventory Water Distribution System – Archery Range	J03-6
7	Fixed Inventory Water Distribution System – East Beach.....	J03-6
8	Fixed Inventory Water Distribution System – Engineer’s Beach.....	J03-6
9	Fixed Inventory Water Distribution System – Singing Pines.....	J03-7
10	Fixed Inventory Water Distribution System – West Beach	J03-7
11	Fixed Inventory Water Distribution System – Wildlife	J03-7
12	Fixed Inventory Water Distribution System – Matteson Range	J03-8
13	Fixed Inventory Water Distribution System – Molinelli Forward Arming and Refueling Point	J03-8
14	Fixed Inventory Water Distribution System – Range Control	J03-8
15	Fixed Inventory Water Distribution System – Tabernacle Stagefield.....	J03-9
16	Fixed Inventory Water Distribution System – Cairns Army Airfield	J03-9
17	Fixed Inventory Water Distribution System – Shell Army Heliport.....	J03-9
18	Fixed Inventory Water Distribution System – 10-C Stagefield	J03-10
19	Fixed Inventory Water Distribution System – Allen Stagefield	J03-10
20	Fixed Inventory Water Distribution System – Brown Stagefield	J03-10
21	Fixed Inventory Water Distribution System – Goldberg Stagefield	J03-11
22	Fixed Inventory Water Distribution System – High Bluff Stagefield	J03-11
23	Fixed Inventory Water Distribution System – High Falls Stagefield.....	J03-11
24	Fixed Inventory Water Distribution System – Hunt Stagefield	J03-12
25	Fixed Inventory Water Distribution System – Louisville Stagefield	J03-12
26	Fixed Inventory Water Distribution System – Skelly Stagefield	J03-12
27	Fixed Inventory Water Distribution System – Stinson Stagefield	J03-13

28	Fixed Inventory Water Distribution System – TAC-Runkle Stagefield.....	J03-13
29	Fixed Inventory Water Distribution System – TAC-X Stagefield	J03-13
30	Fixed Inventory Water Distribution – Toth Stagefield.....	J03-14
31	Spare Parts Water Distribution System – Fort Rucker	J03-14
32	Specialized Equipment and Vehicles Water Distribution System – Fort Rucker	J03-14
33	Manuals, Drawings, and Records Water Distribution System – Fort Rucker	J03-15
34	Existing Secondary Meters Water Distribution System – Fort Rucker	J03-15
35	New Secondary Meters Water Distribution System – Fort Rucker	J03-17
36	Service Areas Water Distribution System – Fort Rucker Stagefields.....	J03-18
37	Service Connections and Disconnections Water Distribution System – Fort Rucker	J03-19
38	System Improvement Projects Water Distribution System – Fort Rucker	J03-19
39	System Improvement Projects Water Distribution System – Shell Army Heliport.....	J03-22
40	Points of Demarcation Water Distribution System – Fort Rucker	J03-22
41	Unique Points of Demarcation Water Distribution System – Fort Rucker	J03-22
42	Water Treatment Plants and Storage Tanks Water Distribution System – Fort Rucker	J03-23
43	Water Treatment Plants and Storage Tanks Water Distribution System – Fort Rucker Stagefields.....	J03-23

J03 Fort Rucker Water Distribution System

J03.1 Fort Rucker Area Overview

Fort Rucker, Alabama is a U.S. Army Installation situated approximately 90 miles south of Montgomery, the state capital, and thirty miles northwest of Dothan. The cities of Enterprise, Daleville, and Ozark are just west, south, and east respectively. Occupying over 63,000 acres in the southeastern Alabama countryside, Fort Rucker was established in 1942 in response to the outbreak of World War II. Named after Confederate General Edmund W. Rucker, a Tennessee native, Fort Rucker became involved in Army aviation in August of 1954 when the U.S. Army Aviation School moved there from Fort Sill, Oklahoma. The Installation's population today is 11,000, with more than 4,900 active-duty personnel and 3,300 family members.

Basefields and stagefields were added to the installation's holdings as the years passed to support aviation training practices. The addition of new stagefields and changes to existing stagefields have been made to include additional acreage, update facilities and handle new equipment or other requirements. Cairns Army Airfield is located about 2 miles south of the Daleville Gate along Highway 85. The airfield is 1,297 acres in size with approximately 90 buildings. The field was acquired in 1952. Shell Army Heliport is an integral part of the operations at Fort Rucker and is located to the southwest of the Fort. Shell Army Heliport is 293 acres in size and was first acquired in 1962. The stagefields are located in several southeastern Alabama counties surrounding the Main Post. Allen Stagefield is the closest to the Daleville gate of Fort Rucker (about 4 ½ miles SW) and Louisville Stagefield is the furthest from the same gate (about 20 ½ miles NNE). There are 14 total stagefields including both the active and inactive sites. Most are within an eight-mile radius of the City of Enterprise. Refer to Section J03.7 for a complete listing of the stagefields. The stagefields are activated and deactivated in response to Army Aviation training requirements. The most recent additions were Brown, Stinson, and 10-C Stagefields in 1987.

J03.2 Water Distribution System Description

The Fort Rucker water distribution systems comprise all appurtenances physically connected to the systems from the point in which the Government ownership currently starts to the point of demarcation defined in part J03.10 of this Section. The systems may include, but are not limited to the wells, storage tanks, distribution piping and appurtenances. The following description and inventory is included to provide the Offeror with a general understanding of the size and configuration of the distribution systems. Under no circumstances shall the successful Contractor be entitled to any rate adjustments based on the accuracy of the following description and inventory.

Water system permits are not transferable. When the Contractor assumes operation of the water system, it is the responsibility of the Contractor to file an application for transfer of the permit. The application must be received by the Alabama Department of Environmental Management at least six weeks before new operation of the systems are to begin.

The Contractor shall comply with all applicable federal, state, and local regulations governing the operation of the water systems.

J03.2.1 Water Distribution System Fixed Equipment Inventory

The water distribution system at the Fort Rucker Main Post area consists of ground water supply, treatment, storage, and piping. The original water distribution system dates back to the 1940's, but improvements have been made as needed since that time. The Main Post area is served by seven active wells ranging from 425 gallons per minute (gpm) capacity to 800 gpm capacity. Chlorination facilities are located at each well (with safety equipment) for treatment of the groundwater. Treated water is subsequently pumped directly into the distribution system. Each of the wells is inspected daily to ensure that the water meets safe drinking water standards. Water production at the Main Post in FY 2000 totaled approximately 2.5 million gallons per day.

There are two 500,000 gallon ground storage tanks and two 500,000 gallon elevated storage tanks on the Main Post area. The elevated storage tanks have the same water level overflows. At the ground storage tanks there is a pumping station that boosts water from the ground storage tanks into the distribution system. This pumping station consists of four horizontal split case pumps rated at 1,000 gallons per minute each, with emergency power provided to three of the four pumps. Operation of the pumps is carried out manually, both during peak flow periods and periodically to refresh the water in the ground storage tanks. The elevated water storage tanks have had lead based paint removed and were repainted in 1995.

The Main Post area includes approximately 373,000 feet of piping varying from less than 2 inches to 16 inches in diameter. Within the distribution system are approximately 1,200 service connections. The average pressure in the system is 60 psi. The age of the piping in the system is from 2 to 40 years.

The water distribution system at Cairns Army Airfield consists of ground water supply, treatment, storage, and piping. The original water distribution system dates back to the 1950's, but improvements have been made as needed since that time. The Cairns Army Airfield area includes approximately 25,600 feet of piping varying from less than 2 inches to 16 inches in diameter. Within the distribution system are approximately 15 service connections. The average age of the piping in the system is approximately 50 years.

The water distribution system at Shell Army Heliport consists of approximately 3,000 feet of piping, 8 building services, 20 main valves and 5 hydrants. Shell Army Heliport is served by the City of Enterprise.

The water distribution systems at the stagefields mostly consist of ground water supply, treatment, storage, and piping; otherwise, water is supplied by a nearby municipal utility. The original water distribution systems date back to the acquisition of the stagefield, but improvements have been made as needed since those times.

Bacterial monitoring and sampling is performed at each well and at specific areas in the distribution system monthly. The Contractor shall be required to perform and analyze samples in accordance with all local, state and federal regulations regarding drinking water quality. Samples are currently analyzed at the Army Preventive Medicine Laboratory located on the Fort.

The Army Preventive Medicine Laboratory does not analyze samples from entities other than the host installation.

Backup emergency generators that serve specific equipment of the water distribution system, such as pumping stations and wells, shall be conveyed as part of that particular system.

J03.2.1.1 Water Distribution System Inventory

Tables 1-31 provide a general listing of the major water distribution system fixed assets for Fort Rucker. The system will be sold in an “as is, where is” condition without any warrant, representation, or obligation on the part of Government to make any alterations, repairs, or improvements. Ancillary equipment attached to, and necessary for, operating the system, though not specifically mentioned herein, is considered part of the purchased utility.

J03.2.1.1.A Water Distribution System Inventory – Main Post

Table 1
Fixed Inventory
Water Distribution System – Fort Rucker Main Post

Item	Material	Size (inches)	Quantity	Unit	Approximate Year of Construction
Piping	Unknown	<2	140	Linear Feet	1952
	Cast Iron	2	300	Linear Feet	1952
	PVC	2	330	Linear Feet	1980
	PVC	2	600	Linear Feet	1996
	Cast Iron	2 ½	200	Linear Feet	1942
	Cast Iron	2 ½	280	Linear Feet	1961
	Unknown	2 ½	1,460	Linear Feet	1952
	Galvanized Steel	3	25,640	Linear Feet	1942
	Cast Iron	3	710	Linear Feet	1942
	Cast Iron	3	580	Linear Feet	1952
	PVC	3	510	Linear Feet	1980
	PVC	3	4,400	Linear Feet	1996
	Cast Iron	4	1,020	Linear Feet	1942
	Cast Iron	4	480	Linear Feet	1952
	PVC	4	1,200	Linear Feet	1996
	Cast Iron	6	98,145	Linear Feet	1942
	Cast Iron	6	6,520	Linear Feet	1952
	Cast Iron	6	24,785	Linear Feet	1960
	Cast Iron	6	19,270	Linear Feet	1961
	PVC	6	4,840	Linear Feet	1980
	Cast Iron	6	15,385	Linear Feet	1996
	Asbestos Cement	8	26,640	Linear Feet	1942
	Cast Iron	8	11,490	Linear Feet	1942
	Cast Iron	8	2,130	Linear Feet	1952
	Cast Iron	8	9,750	Linear Feet	1960
	Cast Iron	8	15,815	Linear Feet	1961
	Cast Iron	8	15,105	Linear Feet	1996
	Cast Iron	10	10,710	Linear Feet	1942
	Cast Iron	10	20,160	Linear Feet	1952
	Cast Iron	10	2,595	Linear Feet	1961
	PVC	10	6,755	Linear Feet	1980
	Cast Iron	10	1,500	Linear Feet	1996
Cast Iron	12	9,450	Linear Feet	1942	

	Cast Iron	12	600	Linear Feet	1952
	Cast Iron	12	2,100	Linear Feet	1960
	Cast Iron	12	555	Linear Feet	1961
	Cast Iron	14	6,160	Linear Feet	1942
	Cast Iron	14	680	Linear Feet	1952
	Cast Iron	16	6,530	Linear Feet	1942
	Cast Iron	16	980	Linear Feet	1952
	Cast Iron	16	880	Linear Feet	1960
	Cast Iron	16	2,320	Linear Feet	1996
Piping Total			359,700	Linear Feet	
Building Services			1,114	Each	1942-present
Hydrants			495	Each	1942-present
Main Valves			437	Each	1942-present
Well #3			461,000	Gallons per day	1944
Well #6			720,000	Gallons per day	1944
Well #7			1,181,000	Gallons per day	1979
Well #8			893,000	Gallons per day	1982
Well #9			720,000	Gallons per day	1982
Well #10			864,000	Gallons per day	1982
Well #11			850,000	Gallons per day	1984
Ground Storage Tank			500,000	Gallons	1943
Ground Storage Tank			500,000	Gallons	1943
Elevated Storage Tank			500,000	Gallons	1943
Elevated Storage Tank			500,000	Gallons	1943
Pump Station			6	Million gallons per day	1943

Ech Stagefield

This stagefield is currently served by its own groundwater well with chlorination as the treatment method.

Table 2
Fixed Inventory
Water Distribution System – Ech Stagefield

Item	Material	Size (inches)	Quantity	Unit	Approximate Year of Construction
Piping	Unknown	<2	140	Linear Feet	1975
	PVC	<2	50	Linear Feet	1999
Piping Total			190	Linear Feet	
Building Services			3	Each	1975, 1999
Well	Permitted		28,800	Gallons per day	1975

Hammond Range

This range is currently unutilized. This range was served by an onsite well.

Table 3
Fixed Inventory
Water Distribution System – Hammond Range

Item	Material	Size (inches)	Quantity	Unit	Approximate Year of Construction
Piping	PVC	<2	130	Linear Feet	1984
Piping Total			130	Linear Feet	
Building Services			1	Each	1984
Main Valves			1	Each	1984

Hatch Stagefield

This stagefield is currently unutilized. The existing well is not in use but is available for reactivation.

Table 4
Fixed Inventory
Water Distribution System – Hatch Stagefield

Item	Material	Size (inches)	Quantity	Unit	Approximate Year of Construction
Piping	Unknown	<2	195	Linear Feet	1975
Piping Total			195	Linear Feet	
Building Services			1	Each	1975
Main Valves			1	Each	1975
Well	Not Permitted		28,800	Gallons per day	1974

Hooper Stagefield

This stagefield receives water service from the City of Ozark.

Table 5
Fixed Inventory
Water Distribution System – Hooper Stagefield

Item	Material	Size (inches)	Quantity	Unit	Approximate Year of Construction
Piping	Unknown	<2	20	Linear Feet	1979
	Unknown	<2	70	Linear Feet	1999
	Unknown	2	240	Linear Feet	1957
	Unknown	2	1,000	Linear Feet	1975
Piping Total			1,330	Linear Feet	
Building Services			4	Each	1957-1999

Lake Tholocco Recreation Area: Archery Range

This area is served by its own groundwater well with chlorination as the treatment method. The existing well is currently inoperative.

Table 6
Fixed Inventory
Water Distribution System – Archery Range

Item	Material	Size (inches)	Quantity	Unit	Approximate Year of Construction
Piping	Unknown	<2	600	Linear Feet	1970
Piping Total			600	Linear Feet	
Building Services			2	Each	1970
Well	Not Permitted		Unknown	Gallons per day	1970

Lake Tholocco Recreation Area: East Beach

This area is currently served by two (2) groundwater wells with chlorination as the treatment method.

Table 7
Fixed Inventory
Water Distribution System – East Beach

Item	Material	Size (inches)	Quantity	Unit	Approximate Year of Construction
Piping	Unknown	<2	1,200	Linear Feet	Unknown
	Unknown	4	860	Linear Feet	Unknown
Piping Total			2,060	Linear Feet	
Building Services			8	Each	Unknown
Hydrants			1	Each	Unknown
Main Valves			4	Each	Unknown
Well	Not Permitted		18,000	Gallons per day	Unknown
Well	Not Permitted		18,000	Gallons per day	Unknown
Elevated Storage Tank			10,000	Gallons	1978

Lake Tholocco Recreation Area: Engineer's Beach

This area is currently served by its own groundwater well with chlorination as the treatment method.

Table 8
Fixed Inventory
Water Distribution System – Engineer's Beach

Item	Material	Size (inches)	Quantity	Unit	Approximate Year of Construction
Piping	Unknown	<2	1,600	Linear Feet	Unknown
Piping Total			1,600	Linear Feet	
Building Services			20	Each	Unknown
Well	Not Permitted		29,000	Gallons per day	1973

Lake Tholocco Recreation Area: Singing Pines

This area is currently served by its own groundwater well with chlorination as the treatment method.

Table 9
Fixed Inventory
Water Distribution System – Singing Pines

Item	Material	Size (inches)	Quantity	Unit	Approximate Year of Construction
Piping	Unknown	<2	360	Linear Feet	Unknown
Piping Total			360	Linear Feet	
Building Services			3	Each	Unknown
Well	Not Permitted		29,000	Gallons per day	1985

Lake Tholocco Recreation Area: West Beach

This area is currently served by two (2) groundwater wells with chlorination as the treatment method.

Table 10
Fixed Inventory
Water Distribution System – West Beach

Item	Material	Size (inches)	Quantity	Unit	Approximate Year of Construction
Piping	Unknown	<2	1,200	Linear Feet	Unknown
Piping Total			1,200	Linear Feet	
Building Services			2	Each	
Well	Not Permitted		19,000	Gallons per day	Unknown
Well	Not Permitted		19,000	Gallons per day	Unknown

Lake Tholocco Recreation Area: Wildlife

This area is currently served by its own groundwater well with chlorination as the treatment method.

Table 11
Fixed Inventory
Water Distribution System – Wildlife

Item	Material	Size (inches)	Quantity	Unit	Approximate Year of Construction
Piping	Unknown	<2	240	Linear Feet	Unknown
Piping Total			240	Linear Feet	
Building Services			3	Each	Unknown
Well	Not Permitted		36,000	Gallons per day	1976

Matteson Range

This range is currently unutilized. The existing well is not in use, but is available for reactivation.

Table 12
Fixed Inventory
Water Distribution System – Matteson Range

Item	Material	Size (inches)	Quantity	Unit	Approximate Year of Construction
Piping	PVC	<2	1,150	Linear Feet	1986
Piping Total			1,150	Linear Feet	
Building Services			2	Each	1986
Well	Not Permitted		57,600	Gallons per day	1986

Molinelli Forward Arming and Refueling Point

This range receives water service from the Dale County Water Authority.

Table 13
Fixed Inventory
Water Distribution System – Molinelli Forward Arming and Refueling Point

Item	Material	Size (inches)	Quantity	Unit	Approximate Year of Construction
Piping	Unknown	2	650	Linear Feet	1991
	Unknown	3	2,615	Linear Feet	1991
Piping Total			3,265	Linear Feet	
Building Services			6	Each	1991
Hydrants			1	Each	1991
Main Valves			7	Each	1991

Range Control

This field is currently served by three (3) groundwater wells with chlorination as the treatment method.

Table 14
Fixed Inventory
Water Distribution System – Range Control

Item	Material	Size (inches)	Quantity	Unit	Approximate Year of Construction
Piping	Galvanized Steel	2	165	Linear Feet	1984
	Unknown	2	635	Linear Feet	1991
Piping Total			800	Linear Feet	
Building Services			3	Each	1984, 1991
Well	Permitted		12,000	Gallons per day	Unknown
Well	Permitted		12,000	Gallons per day	Unknown
Well	Permitted		12,000	Gallons per day	Unknown

Tabernacle Stagefield

This stagefield is currently served by its own groundwater well with chlorination as the treatment method.

Table 15
Fixed Inventory
Water Distribution System – Tabernacle Stagefield

Item	Material	Size (inches)	Quantity	Unit	Approximate Year of Construction
Piping	Unknown	2	100	Linear Feet	1981
Piping Total			100	Linear Feet	
Building Services			1	Each	1981
Well	Not Permitted		28,800	Gallons per day	1981

J03.2.1.1.B Water Distribution System Inventory – Basefields

Cairns Army Airfield

Cairns Army Airfield currently receives water service from the City of Daleville. The existing well is available for reactivation.

Table 16
Fixed Inventory
Water Distribution System – Cairns Army Airfield

Item	Material	Size (inches)	Quantity	Unit	Approximate Year of Construction
Piping	Cast Iron	<2	120	Linear Feet	1952
	Cast Iron	2	5,460	Linear Feet	1952
	Galvanized Steel	3	120	Linear Feet	1952
	Cast Iron	6	10,380	Linear Feet	1952
	Cast Iron	8	3,620	Linear Feet	1952
	Cast Iron	10	1,260	Linear Feet	1952
	Asbestos Cement	10	3,000	Linear Feet	1952
	Cast Iron	12	600	Linear Feet	1952
	Cast Iron	14	960	Linear Feet	1952
	Cast Iron	16	140	Linear Feet	1952
Piping Total			25,660	Linear Feet	
Building Services			15	Each	1952
Hydrants			24	Each	1952
Main Valves			14	Each	1952
Well	Not Permitted		720,000	Gallons per day	1984

Shell Army Heliport

This basefield currently receives water service from the City of Enterprise.

Table 17
Fixed Inventory
Water Distribution System – Shell Army Heliport

Item	Material	Size (inches)	Quantity	Unit	Approximate Year of Construction
Piping	Cast Iron	<2	580	Linear Feet	1962
	Cast Iron	2	200	Linear Feet	1962
	Cast Iron	2 ½	120	Linear Feet	1962
	Cast Iron	3	240	Linear Feet	1962
	Cast Iron	6	1,000	Linear Feet	1962
	Cast Iron	10	880	Linear Feet	1962
Piping Total			3,020	Linear Feet	
Building Services			8	Each	1962
Hydrants			5	Each	1962
Main Valves			20	Each	1962

J03.2.1.1.C Water Distribution System Fixed Inventory – Outlying Stagefields

10-C Stagefield

This stagefield receives water service from the New Brockton Water Authority.

Table 18
Fixed Inventory
Water Distribution System – 10-C Stagefield

Item	Material	Size (inches)	Quantity	Unit	Approximate Year of Construction
Piping	Unknown	<2	195	Linear Feet	1987
	Unknown	2	510	Linear Feet	1987
Piping Total			705	Linear Feet	
Building Services			3	Each	1987

Allen Stagefield

This stagefield receives water service from its own groundwater well with chlorination as the treatment method.

Table 19
Fixed Inventory
Water Distribution System Inventory – Allen Stagefield

Item	Material	Size (inches)	Quantity	Unit	Approximate Year of Construction
Piping	Unknown	<2	270	Linear Feet	1974
	PVC	<2	50	Linear Feet	1999
Piping Total			320	Linear Feet	
Building Services			3	Each	1974, 1999
Well	Permitted		28,800	Gallons per day	1974

Brown Stagefield

This stagefield receives water service from the New Brockton Water Authority.

Table 20
Fixed Inventory
Water Distribution System – Brown Stagefield

Item	Material	Size (inches)	Quantity	Unit	Approximate Year of Construction
Piping	PVC	<2	300	Linear Feet	1987
	PVC	3	2,850	Linear Feet	1987
Piping Total			3,150	Linear Feet	
Building Services			3	Each	1987

Goldberg Stagefield

This stagefield receives water service from Dale County Water Authority.

Table 21
Fixed Inventory
Water Distribution System – Goldberg Stagefield

Item	Material	Size (inches)	Quantity	Unit	Approximate Year of Construction
Piping	Unknown	<2	120	Linear Feet	1961
	Unknown	<2	130	Linear Feet	1975
	PVC	<2	55	Linear Feet	1999
	PVC	4	1,600	Linear Feet	1999
	Ductile Iron	4	10	Linear Feet	1999
Piping Total			1,915	Linear Feet	
Building Services			3	Each	1961-1999
Hydrants			1	Each	1999

High Bluff Stagefield

This stagefield receives water service from its own groundwater well with chlorination as the treatment method.

Table 22
Fixed Inventory
Water Distribution System – High Bluff Stagefield

Item	Material	Size (inches)	Quantity	Unit	Approximate Year of Construction
Piping	PVC	<2	90	Linear Feet	1999
	Unknown	2	250	Linear Feet	1974
Piping Total			340	Linear Feet	
Building Services			3	Each	1974, 1999
Well	Permitted		28,800	Gallons per day	1974

High Falls Stagefield

This stagefield is currently unutilized, but receives water service from its own groundwater well with chlorination as the treatment method.

Table 23
Fixed Inventory
Water Distribution System – High Falls Stagefield

Item	Material	Size (inches)	Quantity	Unit	Approximate Year of Construction
Piping	Unknown	<2	140	Linear Feet	1973
Piping Total			140	Linear Feet	
Building Services			3	Each	1973
Well	Not Permitted		28,800	Gallons per day	1999

Hunt Stagefield

This stagefield receives water service from the City of Newton.

Table 24
Fixed Inventory
Water Distribution System – Hunt Stagefield

Item	Material	Size (inches)	Quantity	Unit	Approximate Year of Construction
Piping	Unknown	<2	120	Linear Feet	1960
	Unknown	<2	150	Linear Feet	1975
	Unknown	<2	70	Linear Feet	1989
	PVC	<2	60	Linear Feet	1999
	Unknown	Unknown	800	Linear Feet	1999
Piping Total			1,200	Linear Feet	
Building Services			3	Each	1960-1999
Main Valves			1	Each	1975

Louisville Stagefield

This stagefield is currently unutilized. The existing well at this stagefield is not in use but is available for reactivation.

Table 25
Fixed Inventory
Water Distribution System – Louisville Stagefield

Item	Material	Size (inches)	Quantity	Unit	Approximate Year of Construction
Piping	Unknown	2	100	Linear Feet	1981
Piping Total			100	Linear Feet	
Building Services			1	Each	1981
Well	Not Permitted		28,800	Gallons per day	1981

Skelly Stagefield

This stagefield receives water service from its own groundwater well with chlorination as the treatment method.

Table 26
Fixed Inventory
Water Distribution System – Skelly Stagefield

Item	Material	Size (inches)	Quantity	Unit	Approximate Year of Construction
Piping	Unknown	<2	180	Linear Feet	1973
	PVC	<2	70	Linear Feet	1999
Piping Total			250	Linear Feet	
Building Services			3	Each	1973, 1999
Well	Permitted		28,800	Gallons per day	1973

Stinson Stagefield

This stagefield receives water service from the New Brockton Water Authority.

Table 27
Fixed Inventory
Water Distribution System – Stinson Stagefield

Item	Material	Size (inches)	Quantity	Unit	Approximate Year of Construction
Piping	Unknown	<2	350	Linear Feet	1987
	Unknown	2	360	Linear Feet	1987
Piping Total			710	Linear Feet	
Building Services			3	Each	1987

TAC-Runkle Stagefield

This stagefield is currently unutilized. The existing well is not in use but is available for reactivation.

Table 28
Fixed Inventory
Water Distribution System – TAC-Runkle Stagefield

Item	Material	Size (inches)	Quantity	Unit	Approximate Year of Construction
Piping	Unknown	<2	820	Linear Feet	1974
Piping Total			820	Linear Feet	
Building Services			2	Each	1974
Main Valves			1	Each	1974
Well	Permitted		72,000	Gallons per day	2000

TAC-X Stagefield

This stagefield is currently unutilized. The existing well is not in use but is available for reactivation.

Table 29
Fixed Inventory
Water Distribution System – TAC-X Stagefield

Item	Material	Size (inches)	Quantity	Unit	Approximate Year of Construction
Piping	Unknown	<2	1,350	Linear Feet	1966
	Unknown	<2	175	Linear Feet	1991
Piping Total			1,525	Linear Feet	
Building Services			1	Each	1991
Well	Not Permitted		28,800	Gallons per day	1974

Toth Stagefield

This stagefield receives water service from its own groundwater well with chlorination as the treatment method.

Table 30
Fixed Inventory
Water Distribution System – Toth Stagefield

Item	Material	Size (inches)	Quantity	Unit	Approximate Year of Construction
Piping	Unknown	<2	400	Linear Feet	1963
	Unknown	<2	450	Linear Feet	1974
	Unknown	<2	40	Linear Feet	1989
Piping Total			890	Linear Feet	
Building Services			2	Each	1963-1989
Well	Permitted		28,800	Gallons per day	1974

J03.2.2 Water Distribution System Non-Fixed Equipment and Specialized Tools Inventory

Table 31 lists other ancillary equipment (spare parts) and **Table 32** lists specialized vehicles and tools included in the purchase. Offerors shall field verify all equipment and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment and tools. The successful Contractor shall provide any and all equipment, vehicles, and tools, whether included in the purchase or not, to maintain a fully operating system under the terms of this contract.

Table 31
Spare Parts
Water Distribution System – Fort Rucker

Qty	Item	Make/Model	Description	Remarks
None.				

Table 32
Specialized Equipment and Vehicles
Water Distribution System – Fort Rucker

Description	Quantity	Location	Maker
None.			

J03.2.3 Water Distribution System Manuals, Drawings, and Records Inventory

Table 33 lists the manuals, drawings, and records that will be transferred with the system.

Table 33
Manuals, Drawings, and Records
Water Distribution System – Fort Rucker

Qty	Item	Description	Remarks
			The installation maintains a limited collection of manuals, drawings and records on installed components of the water distribution systems. This information or copies thereof will be transferred during the transition period.

J03.3 Current Service Arrangements

The Main Post of Fort Rucker currently receives all of its water supply from groundwater wells owned and operated by the Installation, which also serve Hanchey Stagefield and Knox Army Heliports. The Cairns Army Airfield currently receives all of its water supply from the City of Daleville. There is a well on-site that is not currently used. Shell Army Heliport currently receives all of its water supply from the City of Enterprise. The stagefields currently receive water supply from groundwater wells owned and operated by the Installation or from nearby utilities. Currently there are arrangements with the New Brockton Water Authority, the Dale County Water Authority, and the City of Newton.

J03.4 Secondary Metering

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

J03.4.1 Existing Secondary Meters

Table 34 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 C.3 and J03.5 below.

Table 34
Existing Secondary Meters
Water Distribution System – Fort Rucker

Meter Location:	Building Number	Description
Housing and Other Agencies		
	112	Officer's Club Pool
	113	Officer's Club
	301	Lyster Army Hospital Meter #1
	301	Lyster Army Hospital Meter #2

301	Lyster Army Hospital Meter #3
301	Lyster Army Hospital Meter #4
530	DAPS
2906	Class Six Store
2908	NCO Club
4300	Burger King
4405	Dental Clinic
5401	Multi Media Group, National Guard
6600	Enlisted Mini-Mall
6901	USAARL
7204	Vet Clinic
8937	Credit Union Meter #1
8937	Credit Union Meter #2 (Sprinkler)
9207	CB&T
9214	PX Boiler Room
9214	PX Shoppette
9227	Bowling Center
9400	Southeastern Vet Command
20090	Equestrian Center
21036A	65 Red Cloud Road
21037	Elementary School
21145A	31 Olsen Drive
21205A	30 Olsen Drive
21336A	11 Fowler Lane
21513	10 Faith Lane
21514	11 Faith Lane
21612B	30 Logan Street
21613A	32 Logan Street
21638A	18 Ferguson Lane
21661A	11 Ferguson Lane
21927A	27 Diamond Avenue
22016A	32 Booker Street
22633B	12 Anderson Street
22647B	13 Anderson Street
22834A	54 Epps Street
22844A	59 Epps Street

J03.4.2 Required New Secondary Meters

The Contractor shall install and calibrate new secondary meters as listed in **Table 35**. New secondary meters shall be installed IAW Clause C.13, Operational Transition Plan. After installation, the Contractor shall maintain and read these meters IAW Clauses C.3 and J03.5 below. The following table represents the total number of required new secondary meters at a minimum. Additional new secondary meters may be required.

Table 35
New Secondary Meters
Water Distribution System – Fort Rucker

Meter Location: Building Number	Description
All Housing units	The Contractor shall install a meter at each individual housing unit that
Total = Approximately 1,500	does not currently possess a water meter.
(trailer)	Bill Harbert Construction Company
(trailer)	Whitesell-Green, Inc.
308	MWR Lounge
514	Supply Services
613	Area Engineer
1010	Medical Facilities
1313	PX Warehouse
4106	PX Launderette
6211	U-Haul Rental/PX Service Station
6620	Air Force 23 rd Fighter Wing Flight Training
6621	Air Force 23 rd Fighter Wing Flight Training
6800	Barracks
8915	Bragg Lines
9000	U.S. Postal Service
9213	Commissary
20067	MWR Golf Course
22210	Primary School
22305	PX Triangle Shoppette
25102	Reserve Component, 81 st Regional Support Command
25109	Reserve Component, 81 st Regional Support Command
30305	Lyster Army Hospital Flatiron Ready
30311	Lyster Army Hospital Flatiron Building

J03.5 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following: 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 the Contracting Officer's designee. (This information will be provided upon award.)

Outage Report. The Contractor's monthly outage report will be presented in a 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 the Contracting Officer's designee. (This information will be provided upon award.)

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 15th of each month for the previous month. Meter reading reports shall be submitted to the Contracting Officer's designee. (This information will be provided upon award.)

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 25th of each month for the previous month. System efficiency reports shall be submitted to the Contracting Officer's designee. (This information will be provided upon award.)

J03.6 Energy Savings and Conservation Projects

IAW C.3, Utility Service Requirement. No projects have been currently implemented by the Installation for energy conservation purposes.

J03.7 Service Area

IAW Clause C.4, Service Area. The service area is defined as the cantonment area of Fort Rucker, otherwise known as the Main Post, as well as the three housing areas (Allen Heights, Bowden Terrace, and Munson Heights). The Hanchey, Knox, Lowe, Ech, Hammond, Matteson, Molinelli, Range Control, Tabernacle, Hooper, Lake Tholocco, and Hatch sites are also included in the service area as well as Cairns Army Airfield and Shell Army Heliport.

In the case of the stagefields, the service area is defined as the boundaries of each stagefield. To provide an overview the following table lists approximate distances to the Daleville gate of Fort Rucker by air, direction from gate, size of the stagefield in acres, number of buildings, and date acquired.

Table 36
Service Areas
Water Distribution System – Fort Rucker Stagefields

Stagefield	Distance (Miles)	Direction	Size (Acres)	Numbers of Buildings	Date Acquired
10-C Stagefield	13	W, SW	180	5	1987
Allen Stagefield	4½	S, SW	114	6	1960
Brown Stagefield	9	W, NW	176	5	1987
Goldberg Stagefield	9½	E, NE	100	8	1961
High Bluff Stagefield	7½	S	190	6	1966
High Falls Stagefield	10	S, SW	40	3	1967
Hunt Stagefield	5	E, NE	153	5	-
Louisville Stagefield	21	N	104	8	1970
Skelly Stagefield	15	W, SW	194	5	-
Stinson Stagefield	10	W	191	5	1987
TAC-Runkle Stagefield	14½	W	235	13	-
TAC-X Stagefield	13	SW	111	4	-
Toth Stagefield	6½	SE	128	5	-

J03.8 Off-Installation Sites

There are no off-installation sites included in this package.

J03.9 Specific Transition Requirements

IAW Clause C.13, Operational Transition Plan. **Table 37** lists service connections and disconnections required upon transfer, and **Tables 38 and 39** lists the improvement projects required upon transfer of the Fort Rucker water system.

Table 37
Service Connections and Disconnections
Water Distribution System – Fort Rucker

Location	Description
None.	

Table 38
System Improvement Projects
Water Distribution System – Fort Rucker

Location	Description	Year of Completion
Housing Areas	Installation of secondary meters at each unit, approximately 1,500 in number. Refer to Table 36.	To be coordinated with installation.
Replace Family Housing Area 1 Water System	7,200 LF of 6-inch Distribution Main 9,600 LF of 8-inch Distribution Main 13 EA 6-inch Valves 16 EA 8-inch Valves 33 Fire Hydrants	2008
Replace Family Housing Area 2 Water System	12,800 LF of 6-inch Distribution Main 6,400 LF of 8-inch Distribution Main 400 LF of 10-inch Distribution Main 28 EA 6-inch Valves 15 EA 8-inch Valves 1 EA 10-inch Valve 39 Fire Hydrants	2003
Replace Main Post Area C Water System	1,200 LF of 3-inch Distribution Main 1,200 LF of 4-inch Distribution Main 10,000 LF of 6-inch Distribution Main 7,200 LF of 8-inch Distribution Main 1,600 LF of 12-inch Distribution Main 3,200 LF of 16-inch Distribution Main 2 EA 3-inch Valves 1 EA 4-inch Valve 21 EA 6-inch Valves 15 EA 8-inch Valves 1 EA 12-inch Valve 3 EA 16-inch Valves 51 Fire Hydrants	2003

Replace Main Post Area D Water System	1,800 LF of 14-inch Feeder Main 2,200 LF of 4-inch Distribution Main 2,400 LF of 8-inch Distribution Main 2 EA 4-inch Valves 2 EA 8-inch Valves 3 EA 14-inch Valves 3 Fire Hydrants	2004
Replace Family Housing Area 3 Water System	200 LF of 2 ½-inch Distribution Main 5,600 LF of 6-inch Distribution Main 10,000 LF of 8-inch Distribution Main 2,000 LF of 10-inch Distribution Main 400 LF of 12-inch Distribution Main 2 EA 2 ½-inch Valves 13 EA 6-inch Valves 15 EA 8-inch Valves 3 EA 10-inch Valves 1 EA 12-inch Valve 38 Fire Hydrants	2004
Replace Main Post Area E Water System	16,000 LF of 6-inch Distribution Main 600 LF of 8-inch Distribution Main 1,400 LF of 10-inch Distribution Main 1,200 LF of 12-inch Distribution Main 2,000 LF of 16-inch Distribution Main 18 EA 6-inch Valves 2 EA 8-inch Valves 2 EA 10-inch Valves 1 EA 12-inch Valve 3 EA 16-inch Valves 29 Fire Hydrants	2005
Replace Family Housing Area 4 Water System	800 LF of 16-inch Feeder Main 16,000 LF of 6-inch Distribution Main 5,200 LF of 8-inch Distribution Main 900 LF of 10-inch Distribution Main 2,000 LF of 12-inch Distribution Main 42 EA 6-inch Valves 13 EA 8-inch Valves 2 EA 10-inch Valves 3 EA 12-inch Valves 3 EA 16-inch Valves 59 Fire Hydrants	2005
Replace Lowe Army Heliport Water System	400 LF of 16-inch Feeder Main 200 LF of 2-inch Distribution Main 400 LF of 4-inch Distribution Main 4,800 LF of 6-inch Distribution Main 200 LF of 8-inch Distribution Main 400 LF of 12-inch Distribution Main 2 EA 2-inch Valves 3 EA 4-inch Valves 13 EA 6-inch Valves	2003

	2 EA 8-inch Valves	
	4 EA 10-inch Valves	
	2 EA 12-inch Valves	
	2 EA 16-inch Valves	
	9 Fire Hydrants	
Replace Main Post Area F Water System	400 LF of 2-inch Distribution Main	2006
	400 LF of 3-inch Distribution Main	
	400 LF of 4-inch Distribution Main	
	19,200 LF of 6-inch Distribution Main	
	4,000 LF of 8-inch Distribution Main	
	400 LF of 12-inch Distribution Main	
	2,200 LF of 14-inch Distribution Main	
	4,000 LF of 16-inch Distribution Main	
	18 EA 6-inch Valves	
	4 EA 8-inch Valves	
	2 EA 12-inch Valves	
	6 EA 14-inch Valves	
	6 EA 16-inch Valves	
	45 Fire Hydrants	
Replace Main Post Area G Water System	1,60 LF of 4-inch Distribution Main	2007
	24,400 LF of 6-inch Distribution Main	
	11,600 LF of 8-inch Distribution Main	
	2,400 LF of 10-inch Distribution Main	
	2,400 LF of 12-inch Distribution Main	
	1,660 LF of 14-inch Distribution Main	
	2 EA 4-inch Valves	
	36 EA 6-inch Valves	
	37 EA 8-inch Valves	
	5 EA 10-inch Valves	
	45 Fire Hydrants	
Replace Family Housing Area 5 Water System	7,600 LF of 6-inch Distribution Main	2007
	5,200 LF of 8-inch Distribution Main	
	14 EA 6-inch Valves	
	9 EA 8-inch Valves	
	30 Fire Hydrants	
Replace Main Post Area H Water System	12,000 LF of 6-inch Distribution Main	2008
	5,600 LF of 8-inch Distribution Main	
	2,000 LF of 10-inch Distribution Main	
	20 EA 6-inch Valves	
	8 EA 8-inch Valves	
	6 EA 10-inch Valves	
	40 Fire Hydrants	

Table 39
System Improvement Projects
Water Distribution System – Shell Army Heliport

Location	Description	Year of Completion
Shell Army Heliport	400 feet of 2-inch distribution mains 1,000 feet of 6-inch distribution mains 800 feet of 10-inch distribution mains 10, 2-inch valves 4, 6-inch valves 4, 10-inch valves 4 hydrants	2007

J03.10 Water Distribution System Points of Demarcation

The point of demarcation is defined as the point on the water distribution pipe where ownership changes from the Grantee to the building owner. The table below identifies the general locations of these points with respect to the building served.

Table 40
Points of Demarcation
Water Distribution System – Fort Rucker

Point of Demarcation	Applicable Scenario	Sketch
The point of demarcation is 5 feet away from the exterior of the structure.	All scenarios.	

J03.10.1 Unique Points of Demarcation

The following table lists anomalous points of demarcation that do not fit any of the above scenarios.

Table 41
Unique Points of Demarcation
Water Distribution System – Fort Rucker

Building No.	Point of Demarcation Description
None.	

J03.11 Treatment Plants and Storage Tanks

The following table lists all water treatment plants and storage tanks.

Table 42
Water Treatment Plants and Storage Tanks
Water Distribution System – Fort Rucker

Description	Facility #	State Coordinates	Other Information
Ground Storage Tank	9217	(available in installation mapping)	500,000-gallon capacity
Ground Storage Tank	9218	(available in installation mapping)	500,000-gallon capacity
Elevated Storage Tank	21999	(available in installation mapping)	500,000-gallon capacity
Elevated Storage Tank	328	(available in installation mapping)	500,000-gallon capacity
Elevated Storage Tank	24119	(available in installation mapping- Lake Tholocco)	10,000-gallon capacity

There are no water treatment plants at Fort Rucker. Each well is individually chlorinated.

Table 43 lists all water treatment plants and storage tanks at the stagefields.

Table 43
Water Treatment Plants and Storage Tanks
Water Distribution System – Fort Rucker Stagefields

Description	Facility #	State Coordinates	Other Information
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Wells are provided with chlorination facilities as shown in the previous tables.

There are no storage tanks at the stagefields.