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April 26, 2012

Mr. Jerry Wuetcher
Kentucky Public Service Commission
211 Sower Boulevard
P.O. Box 615
Frankfort, Kentucky 40602-0615

Re: Case No. 2011 – 00416

Dear Mr. Wuetcher:

Pursuant to your recent email request, enclosed herewith is a CD containing the entirety of the contract, plus all exhibits and attachments thereto.

If anything else is requested along these lines, please do not hesitate to contact me.

Sincerely,

SKEETERS, BENNETT, WILSON & PIKE

David T. Wilson, II

DTW:mle

Enclosure

cc: Mr. Jim Bruce

H:\mary.ernst\DTW\HCWD #1\Army Public Works\2012\4-26 J Wuetcher ltr.docx

AWARD/CONTRACT

1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350)	RATING	PAGE OF PAGES 1 | 47

2. CONTRACT NO. *(Proc. Inst. Ident.) NO*	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQUEST/PROJECT NO.
SP0600-11-C-8271	**SEE BLOCK 20C**	

5. ISSUED BY:	CODE	SP0600	6. ADMINISTERED BY *(If other than item 5)*	CODE

Defense Logistics Agency Energy
8725 John J. Kingman Road, Suite 3937
Fort Belvoir, VA 22060-6222
POC: BRIAN J. KOESSEL/DLA Energy - EF
Phone: (703) 767-1595 E-mail: brian.koessel@dla.mil

7. NAME AND ADDRESS OF CONTRACTOR *(No., street, city, county, State and ZIP code)*	8. DELIVERY 9. DISCOUNT FOR PROMPT PAYMENT	
Hardin County Water District No. 1 **1400 Rogersville Road** **Radcliff, KY 40160-9343** **Phone: (270) 351-3222 ext. 208** **Fax: (270) 352-3055** **POC: Jim Bruce, General Manager** **DUNS: 130402811**	10. SUBMIT INVOICES (4 copies unless otherwise specified) TO THE ADDRESS SHOWN IN: ▷	ITEM G.2
CODE **316V9**	FACILITY CODE	

11. SHIP TO/MARK FOR CODE		12. PAYMENT WILL BE MADE BY: CODE **HQ0105**
		Defense Finance and Accounting Services **DFAS Indianapolis Center** **8899 E. 56th Street** **Indianapolis, IN 46249**

13. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION	14. ACCOUNTING AND APPROPRIATION DATA
[ ] 10 U.S.C. 2304(c) (2) [ ] 41 U.S.C. 253(c) ( )	**See Section G**

15A. ITEM NO.	15B. SUPPLIES/SERVICES	15C. QUANTITY	15D. UNIT	15E. UNIT PRICE	15F. AMOUNT
	See Section B				
				15G. TOTAL AMOUNT OF CONTRACT ▷	**$253,843,146.00 EST**

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(X)	SEC.	DESCRIPTION	PAGE(S)	(X)	SEC.	DESCRIPTION	PAGE(S)
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X	B	SUPPLIES OR SERVICES AND PRICES/COSTS	6			PART III – LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACH.	
X	C	DESCRIPTIONS/SPECS./WORK STATEMENTS	11	X	J	LIST OF ATTACHMENTS	47
X	D	PACKAGING AND MARKING	27			PART IV – REPRESENTATIONS AND INSTRUCTIONS	
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X	F	DELIVERIES OR PERFORMANCE	29				
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X	H	SPECIAL CONTRACT REQUIREMENTS	33		M	EVALUATION FACTORS FOR AWARD	

CONTRACTING OFFICER WILL COMPLETE ITEM 17 OR 18 AS APPLICABLE

17. [X] CONTRACTOR'S NEGOTIATED AGREEMENT *(Contractor is required to sign this document and return 1 copies to issuing office.)* Contractor agrees to furnish and deliver all items or perform all the services set forth or otherwise identified above and on any continuation sheets for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the following documents: (a) this award/contract, (b) the solicitation, if any, and (c) such provisions, representations, certifications, and specifications, as are attached or incorporated by reference herein. *(Attachments are listed herein.)*

18. [ ] AWARD *(Contractor is not required to sign this document.)* Your offer on Solicitation Number SP0600-08-R-0803, including the additions or changes made by you which additions or changes are set forth in full above, is hereby accepted as to the items listed above and on any continuation sheets. This award consummates the contract which consists of the following documents: (a) the Government's solicitation and your offer, and (b) this award/contract. No further contractual document is necessary.

19A. NAME AND TITLE OF SIGNER *(Type or print)*	20A. NAME OF CONTRACTING OFFICER
James Bruce, General Manager	**BRIAN J. KOESSEL**

19B. NAME OF CONTRACTOR	19C. DATE SIGNED	20B. UNITED STATES OF AMERICA	20C. DATE SIGNED
BY *(Signature of person authorized to sign)*	29-SEP 2011	BY *(Signature of Contracting Officer)*	9/30/11

AUTHORIZED FOR LOCAL REPRODUCTION
PREVIOUS EDITION IS USABLE

STANDARD FORM 26 (REV. 12/2002)
Prescribed By GSA - FAR (48 CFR) 53.214(a)

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PREAMBLE

Hardin County Water District No. 1 (HCWD1/Contractor) shall assume ownership, operations, and maintenance of the potable water utility system (utility system) at Fort Knox, KY (the Installation). The Contractor shall furnish all necessary labor, management, supervision, permits, equipment, supplies, materials, transportation, and any other incidental services required for the complete ownership, operation, maintenance, repair, upgrade, and improvement of the potable water utility system. These utility services shall be provided in accordance with all terms, conditions, and special contract requirements, specifications, attachments, and drawings contained in this contract or incorporated by reference.

The following terms and conditions of the Preamble shall apply regardless of inconsistent terms and conditions in any other document.

1. This contract is contingent upon mutual agreement between the U.S. Army and the Contractor on the terms and conditions of an Easement providing access to Fort Knox and the Bill of Sale conveying the potable water utility system to HCWD1 (the Easement and the Bill of Sale will be combined into one document). Upon award, the parties agree to work promptly with the cognizant office of the U.S. Army Corps of Engineers to negotiate and finalize the Easement / Bill of Sale. Once executed, the Easement / Bill of Sale shall be provided as Reference JR8.

2. Invoices under this contract shall be submitted separately and not be combined with invoices for any other goods or services provided by HCWD1.

3. Payment for the services provided hereunder including assessment of late-payment charges shall be in accordance with FAR 52.232-25 (Prompt Payment).

4. In accordance with FAR 15.204-1, HCWD1's Final Proposal Revision, Volume III, Section K, *Representations, Certifications, and Other Statement of Offerors*, dated June 23, 2011 is incorporated by reference into this contract.

5. The contract award shall be conditioned upon the Kentucky Public Service Commission's (KPSC) review and approval of this utility services contract. Upon the receipt of a bilaterally executed copy of the contract, the Contractor shall expeditiously prepare a filing with the KPSC for such review and approval. The Government shall cooperate by providing such reasonable documentation as may be necessary to support the regulatory approval process, provided that HCWD1 provides appropriate guidance on the need for and content of such documentation. Should the KPSC impose any substantive conditions on its regulatory approval that are unacceptable to either the Government or HCWD1, the parties shall negotiate in good faith to modify the contract to alleviate any objectionable provisions.

6. HCWD1's regulated tariff rate will recover only its direct costs invested in owning and operating the Fort Knox potable water utility system, plus G&A costs. In accordance with regulations set by the KPSC, HCWD1 is required to maintain separate funds for its expenditures, for rate-making and to avoid un-allowed subsidies between customer accounts, as required by GASB34 accounting standards. HCWD1 shall routinely compare the accumulation of those costs plus its G&A overhead rate against revenues received from the Fort Knox monthly utility service charge. If HCWD1 collects excess funds on its rate charges, the excess funds will remain within the separate account for future use on the Fort Knox potable water utility system only. When total revenue requirements are higher than current rates, HCWD1 will request a rate adjustment. HCWD1 will notify the Government of any anticipated rate adjustments in conjunction with the submittal of its Annual System Deficiency Corrections and Renewals and Replacements Plan.

Section B

Supplies or Services and Prices/Costs

B.1 Clauses and Provisions

Clauses and provisions from the Federal Acquisition Regulation (FAR) and its supplements are incorporated in this document by reference and in full text. Those incorporated by reference have the same force and effect as if they were given in full text.

B.2 Utility Service Charges

The Contract Line Item Numbers (CLINs) discussed below represent the potable water utility system included in this contract for privatization. The total monthly charge due to the Contractor is the sum of the Monthly Service Charge and any applicable surcharges or credits that are in effect during that month. The surcharges that will be in effect, with duration of surcharge in parentheses, are: Transition Surcharge (1 month), Initial System Deficiency Corrections Surcharge (60 months), and Purchase Price Recovery Surcharge (120 months). The credit that will be in effect is the Credit as Payment of Purchase Price (120 months).

B.2.1 Type of Contract

This is a Regulated Tariff Rate utility services contract. The process for rate adjustments will be in accordance with FAR 52.241-7, *Change in Rates or Terms and Conditions of Service for Regulated Services*.

B.2.2 Applicable Tariff

The applicable tariff for this contract is HCWD1's Rate Schedule FKW (Exhibit JE7). The Rate Schedule FKW is an exclusive tariff sheet for potable water utility services at Fort Knox. The charges for utility services regulated by the KPSC must be established through a public process and be approved by the KPSC.

Rate Schedule FKW includes a Monthly Service Charge (MSC), an Initial System Deficiency Correction (ISDC) Surcharge, a Transition Surcharge, Purchase Price Recovery Surcharge, and a Credit as Payment of Purchase Price.

B.2.2.1 CLINs 0001 – 0050: Monthly Utility Service Charge

The Monthly Utility Service Charge includes the MSC, the Purchase Price Recovery Surcharge, and the Credit as Payment of Purchase Price. The MSC covers operations and maintenance (O&M) and renewals and replacements (R&R) of the potable water utility system.

The Contractor will purchase the potable water utility system for $8,903,000.00; payable to the Government over a 10-year period (120 months) at an annual interest rate of 3.0% through a monthly credit of $85,968.00 to the MSC. The Purchase Price Recovery Surcharge is added to the MSC and will also be recovered over 120 months at a monthly charge of $85,968.00.

Invoicing for the Monthly Utility Service Charge shall be done in accordance with Section G.3, and will commence 30 days after the contract start date. Price changes for CLINs 0001 – 0050 will be determined in accordance with Section B.2.1, *Type of Contract*, and Section G.4, *Utility Service Charge Adjustment*.

B.2.2.2 CLIN 0051: Transition Surcharge

The transition period will commence on the contract award date and will be in effect for a period of four (4) months in accordance with Section C.13, *Transition Plan*, and Exhibit JE5. The Transition Surcharge of $592,518.00 is firm-fixed price and is payable upon conveyance of the utility system. If, due to Government delay, the transition period must be extended, then an additional surcharge of $1,694.00 per month will be assessed to this CLIN.

B.2.2.3 CLINs 0052 – 0056: Initial System Deficiency Corrections Surcharge

The ISDC Surcharge of $473,831.00 is a fixed uniform monthly charge, which will begin following transition and remain in effect for sixty (60) months. The ISDC surcharge covers the cost of completing the ISDCs identified in Section B.5, *Initial System Deficiency Corrections Charges – Schedule 2*. The sixty month surcharge period corresponds to the period in which those ISDC projects are to be completed by the Contractor.

B.3 Schedule

Utility Service Payment by the Government

CLIN	Description	Qty	Unit	Unit Price	Total Price
0001 0001AA	Monthly Utility Service Charge – Year 1 Months 1-12 of 600 ACRN: TBD Period of Performance: Contract Start Date + 12 mos	12	mo	$246,172.00	$2,954,064.00

See Schedule 1 for Breakout of Monthly Utility Service Charge

The Contracting Officer reserves CLINs 0002 - 0050 for future year Monthly Utility Service Charges.

CLIN	Description	Qty	Unit	Unit Price	Total Price
0051	Transition Surcharge ACRN: AA Period of Performance: Contract Award Date + 4 mos	1	LO	$592,518.00	$592,518.00
0052 0052AA	ISDC Surcharge – Year 1 Months 1-12 of 60 ACRN: TBD Period of Performance: Contract Start Date + 12 mos	12	mo	$473,831.00	$5,685,972.00
0053 0053AA	ISDC Surcharge – Year 2 Months 13-24 of 60 ACRN: TBD Period of Performance: Contract Start Date + 12 mos	12	mo	$473,831.00	$5,685,972.00
0054 0054AA	ISDC Surcharge – Year 3 Months 25-36 of 60 ACRN: TBD Period of Performance: Contract Start Date + 12 mos	12	mo	$473,831.00	$5,685,972.00

0055	ISDC Surcharge – Year 4				
0055AA	Months 37-48 of 60	12	mo	$473,831.00	$5,685,972.00
	ACRN: TBD				
	Period of Performance: Contract Start Date + 12 mos				
0056	ISDC Surcharge – Year 5				
0056AA	Months 49-60 of 60	12	mo	$473,831.00	$5,685,972.00
	ACRN: TBD				
	Period of Performance: Contract Start Date + 12 mos				

B.4 Monthly Utility Service Charge – Schedule 1

Schedule 1 illustrates the Monthly Utility Service Charge for the potable water utility system, as described in Section B.2.2.1 of this contract.

Contract Year	Monthly Service Charge	Purchase Price Recovery Surcharge	Credit as Payment of Purchase Price	Monthly Utility Service Charge	Annual Utility Service Charge
1	$246,172.00	$85,968.00	($85,968.00)	$246,172.00	$2,954,064.00
2	$246,172.00	$85,968.00	($85,968.00)	$246,172.00	$2,954,064.00
3	$251,528.00	$85,968.00	($85,968.00)	$251,528.00	$3,018,336.00
4	$255,936.00	$85,968.00	($85,968.00)	$255,936.00	$3,071,232.00
5	$260,422.00	$85,968.00	($85,968.00)	$260,422.00	$3,125,064.00
6	$258,340.00	$85,968.00	($85,968.00)	$258,340.00	$3,100,080.00
7	$262,867.00	$85,968.00	($85,968.00)	$262,867.00	$3,154,404.00
8	$267,475.00	$85,968.00	($85,968.00)	$267,475.00	$3,209,700.00
9	$272,163.00	$85,968.00	($85,968.00)	$272,163.00	$3,265,956.00
10	$276,933.00	$85,968.00	($85,968.00)	$276,933.00	$3,323,196.00
11	$281,786.00			$281,786.00	$3,381,432.00
12	$286,725.00			$286,725.00	$3,440,700.00
13	$291,751.00			$291,751.00	$3,501,012.00
14	$296,864.00			$296,864.00	$3,562,368.00
15	$302,067.00			$302,067.00	$3,624,804.00
16	$307,361.00			$307,361.00	$3,688,332.00
17	$312,748.00			$312,748.00	$3,752,976.00
18	$318,230.00			$318,230.00	$3,818,760.00
19	$323,807.00			$323,807.00	$3,885,684.00
20	$329,483.00			$329,483.00	$3,953,796.00
21	$335,258.00			$335,258.00	$4,023,096.00
22	$341,134.00			$341,134.00	$4,093,608.00
23	$347,113.00			$347,113.00	$4,165,356.00
24	$353,196.00			$353,196.00	$4,238,352.00
25	$359,387.00			$359,387.00	$4,312,644.00
26	$365,686.00			$365,686.00	$4,388,232.00

Contract Year	Monthly Service Charge	Purchase Price Recovery Surcharge	Credit as Payment of Purchase Price	Monthly Utility Service Charge	Annual Utility Service Charge
27	$372,095.00			$372,095.00	$4,465,140.00
28	$378,616.00			$378,616.00	$4,543,392.00
29	$385,252.00			$385,252.00	$4,623,024.00
30	$392,005.00			$392,005.00	$4,704,060.00
31	$398,875.00			$398,875.00	$4,786,500.00
32	$405,866.00			$405,866.00	$4,870,392.00
33	$412,980.00			$412,980.00	$4,955,760.00
34	$420,218.00			$420,218.00	$5,042,616.00
35	$427,583.00			$427,583.00	$5,130,996.00
36	$435,077.00			$435,077.00	$5,220,924.00
37	$442,703.00			$442,703.00	$5,312,436.00
38	$450,462.00			$450,462.00	$5,405,544.00
39	$458,357.00			$458,357.00	$5,500,284.00
40	$466,390.00			$466,390.00	$5,596,680.00
41	$474,565.00			$474,565.00	$5,694,780.00
42	$482,882.00			$482,882.00	$5,794,584.00
43	$491,346.00			$491,346.00	$5,896,152.00
44	$499,957.00			$499,957.00	$5,999,484.00
45	$508,720.00			$508,720.00	$6,104,640.00
46	$517,636.00			$517,636.00	$6,211,632.00
47	$526,709.00			$526,709.00	$6,320,508.00
48	$535,940.00			$535,940.00	$6,431,280.00
49	$545,334.00			$545,334.00	$6,544,008.00
50	$554,892.00			$554,892.00	$6,658,704.00

B.5 Initial System Deficiency Corrections Charges – Schedule 2

Schedule 2 illustrates the Initial System Deficiency Corrections for the potable water utility system, as described in Section B.2.2.3 of this contract.

Project No.	Project Name	Project Completion (Contract Year)	Project Cost
ISDC#1	System Survey/ Assessment and Re-Map the Utility System	1	$121,610
ISDC#2	Leak Detection Survey	1	$49,530
ISDC#3	Hydraulic Model	1	$22,050
ISDC#4	Master Flow Meters at the WTP	1	$24,909
ISDC#5	20-inch Raw Valves	1	$89,319
ISDC#6	New Raw Water Main from the Muldraugh WTP to the 16-inch Raw Water Line Between Otter Creek PS and Central WTP	1	$1,946,203

Project No.	Project Name	Project Completion (Contract Year)	Project Cost
ISDC#7	Otter Creek Pump Station	1	$117,449
ISDC#8	Muldraugh HLPS	1	$108,234
ISDC#9	Central WTP	1	$64,202
ISDC#10	Central WTP Clear Well	1	$1,825,443
ISDC#11	Fire Hydrants	4	$1,957,620
ISDC#12	THIS ITEM PURPOSEFULLY LEFT BLANK	-----	-----
ISDC#13	Water Storage Tank No. 5	1	$439,499
ISDC#14	Automatic Transfer Switches	2	$248,658
ISDC#15	Pipe between Otter Creek PS and Central WTP	2	$1,773,822
ISDC#16	Water Storage Tank No. 6	2	$395,981
ISDC#17	Water Storage Tank No. 8	2	$395,981
ISDC#18	Water Storage Tank No. 7	3	$199,980
ISDC#19	SCADA System	3	$335,784
ISDC#20	Distribution System Pipe and Valves	3	$1,113,332
ISDC#21	Distribution System Pipe and Valves	3	$3,034,103
ISDC#22	Distribution System Pipe and Valves	3	$188,402
ISDC#23	Distribution System Pipe and Valves	4	$6,618,777
ISDC#24	Water Tank No. 1	3	$24,398
ISDC#25	Water Tank No. 2	3	$24,398
ISDC#26	Water Tank No. 4	3	$45,636
ISDC#27	West Point Well Field	1	$63,891
ISDC#28	Van Voorhis Pump Station	1	$8,776
ISDC#29	Decommission Muldraugh WTP	5	$496,146
ISDC#30	Muldraugh WTP Operation Year 1	1	$999,495
ISDC#31	Muldraugh WTP Operation Year 2	2	$997,297
ISDC#32	Muldraugh WTP Operation Year 3	3	$997,297
ISDC#33	Muldraugh WTP Operation Year 4	4	$997,297
ISDC#34	Muldraugh WTP Operation Year 5	5	$997,297

End of Section B

Section C

Description/Specifications/Work Statement

C.1 Order of Precedence

In accordance with FAR 52.215-8, any inconsistency in this contract shall be resolved by giving precedence in the following order: (a) The Schedule (excluding the specifications) and any Preamble; (b) Representations and other instructions; (c) Contract clauses; (d) Other documents, exhibits, and attachments; and (e) The specifications.

Additionally, the terms and conditions of Sections A through K, including the Section J Attachments, shall take precedence over any inconsistent provisions contained within portions of the Contractor's proposal incorporated in or made Exhibits to the Contract. Exceptions not specifically identified by the Contractor in its proposal in accordance with the requirements of Section L of the solicitation and expressly accepted by the Contracting Officer in writing shall not be deemed to be part of the Contract and shall not be binding on the Government.

C.2 Scope and Purpose

C.2.1 General

The Government is conveying the utility systems identified in this contract. Subsequent to the conveyance of the utility systems, the Government will acquire the potable water utility services from the Contractor as the new owner of the system. The conveyance of the utility system and the acquisition of utility services are both subject to the terms and conditions of this contract.

C.2.2 Privatization Guidance

The conveyance of the utility system is authorized by, and conducted under, 10 U.S.C. § 2688. The conveyance of the utility system is not an acquisition and therefore is not subject to the Federal Acquisition Regulation (FAR) and its supplements. The acquisition of utility services is an acquisition and will be governed by the FAR and its supplements.

C.2.3 Program Goal

The desired goal of the conveyance is to transfer all rights, title, and interest of the United States in and to the potable water utility system on Fort Knox, KY. The conveyance is documented by the Bill of Sale. The utility system being sold includes equipment, fixtures, structures, and other improvements utilized in connection with the utility system, which will be more specifically described in the Bill of Sale. The divestiture does not include the real property upon, under, or around the utility system. The utility system being sold is as identified in the Bill of Sale and does not include any other property.

C.2.4 Utility Service Providers

Services provided shall comply with all applicable Federal, state, and local laws and regulations, as they may be amended from time to time, including those requirements relating to health, safety, and the environment. The Contractor shall modify its service practice as necessary to accomplish such compliance.

If a change in the service requirement necessitated by compliance with later imposed/modified laws and regulations constitutes reasonable cause for an adjustment to the service charge, the charge will be adjusted in accordance with FAR 52.241-7 *Changes in Rates or Terms and Conditions of Service for Regulated Services*.

C.2.5 Utility System

Attachment JA1, *Potable Water Utility System*, is provided as an attachment to this contract, and is herein referred to as a "utility-specific attachment." The utility-specific attachment provides details specific to the Fort Knox potable water utility system and utility service requirements.

C.3 Requirement

C.3.1 Utility Service Requirement

Subject to the terms and conditions in this contract, the Contractor shall furnish all facilities, labor, materials, tools, and equipment necessary to provide potable water utility service.

The Contractor shall manage, control, and perform operations, maintenance, repairs, replacements, expansions, and incidentals on its utility system so as to provide reliable and dependable utility service to each Government or tenant connection within the service area (see Section C.4, *Service Area*) 24 hours each and every day. The Contractor shall be responsible for providing capital investments and all other resources required to own, maintain, and operate its utility system in a safe and reliable condition, and to meet all the requirements listed herein.

The Contractor shall obtain and maintain current any and all licenses, permits, or certifications necessary to own, maintain, and operate its potable water utility system. Access to the potable water utility system will be as specified in Section C.6, *Access to the Utility System*.

C.3.2 Performance Standards

Unless otherwise provided for in this contract, the Contractor shall provide utility service in accordance with industry-standard construction, operations, maintenance, management, environmental, safety, and other relevant standards, that apply to similarly situated utility service providers serving customers whose service characteristics are comparable to the service characteristics of the Installation.

The Contractor shall comply with all applicable Federal, State, and local laws/regulations and Installation specific requirements, as defined in Attachment JA1, in performing its duties under the contract. The Contractor has identified and incorporated standards and specifications in its Operations and Maintenance/Quality Management Plan, provided as Exhibit JE3 to this contract.

C.3.3 Sub-Metering

The Contractor shall be responsible for reading, maintaining, and calibrating all sub-meters on the privatized utility system. The Government will use sub-meters for internal installation billing purposes and for commodity management and energy conservation purposes.

Meter reading reports shall be submitted to the recipient identified in Attachment JA1.

All costs for providing, installing, reading, reporting, and maintaining the meters shall be the responsibility of the Contractor. Newly installed meters shall be in accordance with Installation metering requirements identified in Attachment JA1.

C.3.3.1 Future Sub-Meters

The Contractor shall provide, install, read, maintain, and calibrate sub-meters requested by the Government for any purpose throughout the contract period. Installation of and responsibility for future sub-meters (not on the system at the time of sale or identified for installation as part of the service contract) may constitute reasonable cause for a service charge adjustment in accordance with FAR 52.241-7, *Changes in Rates or Terms and Conditions of Service for Regulated Services*.

C.3.3.2 Sub-Meter Calibration

The frequency and accuracy of sub-meter calibration shall be in accordance with the manufacturer's recommendations and applicable regulations that govern meter calibration.

C.3.4 Energy and Water Efficiencies and Conservation

The Contractor shall strive to provide energy- and water-efficient systems. The Government has an established program for conducting and implementing energy- and water-saving and conservation projects to reduce utility usage and costs. Some of these have resulted in the Government entering into long-term financing arrangements with non-government entities. The utility-specific Attachment JA1 identifies any such energy- and water-savings projects that are currently in place for the potable water utility system.

The Contractor agrees to take no action that will negatively impact these projects without prior approval of the Contracting Officer. Additionally, the Government reserves the ability to enter into any future energy- and water-savings projects with the goal of reducing Government costs. The Contractor will facilitate the implementation of any such future energy and water savings projects. Projects implemented by the Government that will require changes in the privatized system shall be coordinated between the parties prior to implementation.

The Contractor is encouraged to propose SDCs/Upgrades to the Government that will increase the overall efficiency of the utility system. Efficiency SDCs/Upgrades shall be proposed to the Government in accordance with Section C.11, SDCs/*Upgrades/Connections and Renewals and Replacements*. The Government may consider cost-savings sharing and incentives either through service charge adjustments or lump-sum payments.

C.3.5 Energy/Water Commodity Supply

Water commodity supply is not included in this contract, even if water production facilities are included as part of the system to be conveyed. The Government retains the right to procure or supply water that will be transported on the system covered by this contract from any source, including the Contractor, if the Contractor proposes to supply it.

The Government will remain the customer of record and retain ownership of all commodities transported and distributed through the Contractor-owned systems unless otherwise provided in the contract.

C.4 Service Area

The service area is defined as all areas within the Fort Knox boundaries and any other facilities and property boundaries under the control of the Installation as defined in Attachment JA1. Within the service area and upon the Government's request, the Contractor shall provide utility service to all existing and new customers. At any time, by written order, the Contracting Officer may designate any location within the service area where utility service under this contract shall commence or be discontinued. Any service charge adjustment as a result of these actions will be in accordance with FAR 52.241-7, *Changes in Rates or Terms and Conditions of Service for Regulated Services*.

C.4.1 Use of Distribution Systems to Serve Areas Out-side the Installation Service Area

The Contractor may use the utility infrastructure on the Installation to serve or benefit areas or customers outside the service area(s) only with concurrence of the Government, which may be withheld for any reason. Compensation to the Government will be negotiated. In no way shall service to off-installation customers degrade or hinder reliable service, or create unhealthy, unsafe or unacceptable outages to the Government's facilities.

C.4.2 Joint Use

C.4.2.1 Government Use

The Government may have property and equipment installed on or attached to poles, conduits, pipes, duct banks, towers, buildings, and other portions of the utility systems to be transferred. The Government reserves the right to continue to use the property to be transferred for this purpose, to enter on the transferred property to maintain, repair, operate, upgrade, and replace its property and equipment, and to install new government equipment. Any upgrade or replacement of such installed or attached property shall be made only after

coordinating with the Contractor. Any upgrade or replacement of such installed or attached property shall comply with all applicable safety regulations.

The Government will not pay attachment fees. However, costs of any make-ready work related to safety requirements may be recovered under the contract. All attachments will be coordinated with the Contractor prior to the attachment.

C.4.2.2 Commercial Use

C.4.2.2.1 The Contractor shall enter into joint use agreements with the Installation's telephone company, cable television company and other service providers in accordance with applicable law and regulation.

C.4.2.2.2 Certain system components may have third party equipment attached pursuant to a lease or other contractual arrangement between the third party and the Installation. The Contractor will take ownership of these components subject to such lease(s), with any revenue continuing to accrue to the Installation until the lease(s) expire or are otherwise terminated at the discretion of the Installation. Any new lease(s) or other arrangements between the Contractor and any third party to permit attachment of third party equipment to system components must be approved by the Installation and may be subject to revenue sharing, all of which must be negotiated with the Installation under separate agreement. The Government will not pay for attachment fees. All attachments will be coordinated with the Contractor prior to the attachment.

C.5 Utility System Ownership, Personnel, and Security

C.5.1 Utility System Ownership

C.5.1.1 Transfer of Title

A general description of the utility system assets to be transferred is included in Attachment JA1. Prior to the transfer of title, such facilities shall continue to be owned by the Government. Transfer of title shall be accomplished by Bill of Sale. The Bill of Sale shall provide the complete list of all assets to be sold.

The parties shall prepare and execute such additional documents as may be necessary to implement the ownership transfer.

C.5.1.2 Tools, Vehicles, and Equipment

Unless listed in the final Bill of Sale, government-owned tools, vehicles, and equipment used for system operations and maintenance that are not a physical part of the utility system will remain the property of the Government.

C.5.1.3 Placement of Utility System

The Contractor shall comply with requests from the Installation regarding the placement of new or renewal utility systems, unless to do so would cause the Contractor to violate any applicable law or regulation or would be inconsistent with sound utility operational practices. Requests for placement, which differ from normal utility practice, may be reimbursable under FAR 52.241-7, *Changes in Rates or Terms and Conditions of Service for Regulated Services*.

C.5.1.4 Contractor Facilities

The Contractor, at its expense, shall acquire, furnish, install, and operate and maintain all facilities required to provide the utility service hereunder. The Contractor shall have title to all facilities it builds and equipment it installs under this contract, except as otherwise specifically provided. If available and at the Government's sole discretion, the Contractor may be permitted to either build or lease office space, maintenance shops, materials storage/staging areas or other facilities on the installation.

The Contractor will be responsible for acquiring all utilities, janitorial services, building maintenance, and ground maintenance for these facilities. The Government may, if its capabilities permit, consent to provide certain of these services to the Contractor on a reimbursable basis.

New construction or remodeling existing facilities shall comply with the Installation's architectural standards and be fully coordinated with the Installation prior to beginning construction.

C.5.1.5 Record Drawings

The Contractor shall maintain record drawings for all existing and new facilities installed by the Contractor within the service area. Upon reasonable request and with reasonable notice, the Government may use and copy such drawings. The Contractor shall provide available drawings to the Government in the form of CAD-CAM disks using the latest release software compatible with Government systems at no cost to the Government. The Contractor will also provide information to allow for updates to the Installation Geographical Information System (GIS). The Contractor shall identify changes to and update utility system maps in both hard copy (full size) and electronic media formats to insure delineation of all Contractor facilities within one year of contract award and annually thereafter as necessary.

C.5.1.6 Disposition of Removed or Salvaged Materials

The removal and disposition of facilities and materials that are not used and useful for the purpose of providing utility service shall be the responsibility of the Contractor. The Contractor shall notify the Contracting Officer when removing hazardous substances in accordance with Section H.9, *Hazardous Substances* and the Site Specifications outlined in Attachment JA1. Abandoned plant items not identified on existing maps but found during operations shall be documented on the drawings. In order to prevent hazardous conditions, the Contractor shall be responsible for ensuring that no interconnections exist between abandoned and utilized facilities.

C.5.1.7 Liens and Mortgages

The Contractor shall not engage in any financing or other transaction creating any mortgage upon any government property, place or suffer to be placed upon government property any lien or other encumbrance, or suffer any levy or attachment to be made on the Contractor's interest in any easement or right of access to government property. For the purposes of the clause, property shall include but not be limited to fee, lease, license, personal property or any authorized government use or interest in property.

C.5.2 Personnel

For purposes of this paragraph, the term "personnel" or "employee(s)" refer to any person performing work related to this contract, including but not limited to, the Contractor's employees, agents, representatives, or subcontractors. The Contractor shall not permit any personnel to work under this contract if such person is identified to the Contractor as a potential threat to the health, safety, security, general well being, or operational mission of the Installation or population. All personnel will comply with installation security, health and safety conditions.

The Contractor will allow the Installation to review on a continuing basis a listing of all personnel engaged in providing utility service to the Installation. The listing will provide sufficient information on all personnel to allow precise Government identification of each individual.

C.5.2.1 Speaking, Reading, and Understanding English

Where reading, understanding, and discussing environmental, health, and safety warnings are an integral part of an employee's duties, that employee shall be able to understand, read, write, and speak the English language fluently. All personnel that interface with customers shall be able to speak and understand the English language fluently.

C.5.2.2 Personnel Appearance and Identification

The Contractor's personnel shall present a neat appearance and be readily recognized as Contractor personnel. If required by the Installation, the Contractor shall ensure each employee obtains from Security Forces an identification card that shall include at a minimum the employee's name, photograph, and Contractor's name. Each employee shall follow established Installation procedures for displaying the identification card while within the boundaries of the Installation.

C.5.2.3 Employee Certification

The Contractor shall ensure that employees meet all applicable federal, state, local, and installation certification, licensing, and medical requirements to perform all assigned tasks and functions as defined in this contract.

C.5.2.4 Installation's Rules Apply to Contractor

Rules, regulations, direction, and requirements issued by the Installation, or other command authorities, under their responsibility for good order, administration, and security, including Site Specifications as outlined in Attachment JA1, apply to all personnel who enter the Installation or who travel by Government transportation.

C.5.2.5 National Agency Check

The Contractor shall provide sufficient information to obtain complete and favorable National Agency Check (NAC) investigations for its personnel for unescorted entrance into restricted areas on the Installation. Normal access to the Installation shall be in accordance with Section C.6, *Access to the Utility System*. The Contractor shall justify to the Installation Security Forces requests for NAC on Contractor personnel requiring unescorted entry into restricted areas. Final approval for unescorted entry into restricted areas rests with the Installation Commander.

C.5.2.6 Controlled Access Areas

The Contractor shall apply for personnel security clearances required for performance after the contract is awarded. Personnel requiring access to secured areas or restricted areas under the control of the Installation shall comply with applicable regulations. The Government reserves the right to terminate the entry of any employee upon disclosure of information that indicates the individual's continued entry to the Installation is not in the best interests of national security. Additionally, violation of, or deviation from, the established security procedures by the Contractor's personnel may result in the confiscation of identification media and the denial of future entry to the Installation.

C.5.2.7 Conflict of Interest

The Contractor shall not knowingly employ any person who is a U.S. Government employee if employing that person would create a conflict of interest. Additionally, the Contractor shall not knowingly employ any person who is an employee of the Government, either military or civilian, unless such person seeks and receives written approval according to DOD 5500.7-R, Joint Ethics Regulations (JER).

C.5.2.8 Employment of Military Personnel

The Contractor is cautioned that off-duty active military personnel hired under this contract may be subject to permanent change of station, changing duty hours, or deployment. Military reservists and National Guard members may be subject to recall to active duty. The abrupt absence of these personnel could adversely affect the Contractor's ability to perform. However, their absence at any time shall not constitute an excuse for nonperformance under this contract.

C.5.2.9 Employment of Quality Assurance Representative Personnel

The Contractor is prohibited from employing Quality Assurance Representatives (QAR) whom the Contractor knows or should know are responsible for monitoring any contracts/subcontracts awarded to the Contractor.

C.5.3 Contractor Vehicles

All Contractor vehicles shall be readily identifiable. Identification shall include displaying Contractor name in a clear and unobstructed location on the vehicle.

C.5.4 Contractor Radios

Prior to operating communications devices, including but not limited to two-way, portable, or land mobile devices, on the Installation, the Contractor shall obtain approval of the Installation Communication Group by

requesting an available clear frequency. The Contractor shall follow all Installation procedures for operating radios on Fort Knox in accordance with DFARS 252.235-7003, *Frequency Authorization.*

C.5.5 Contractor Advertising

The Contractor shall not place or display (nor permit a third party to place or display) advertising of any kind on government property or on the Contractor's property located on the Installation. Reasonable markings on the Contractor's property, including vehicles, for the purpose of identifying it as the Contractor's property are permitted.

C.6 Access to the Utility System

C.6.1 General

The Contractor shall have reasonable access to the Installation (Premises) to accomplish its duties and responsibilities under the Contract. Such access is subject to the general supervision and control of the Installation's Commander and his duly authorized representatives. In accepting the rights, privileges, and obligations established hereunder, the Contractor recognizes that the Installation serves the national defense and that the Government will not permit the operation, construction, installation, repair, and maintenance of a utility system and the provision of utility services to interfere with the Installation's military mission.

Fort Knox is an operating military installation that is closed to the public and is subject to the provisions of the Internal Security Act of 1950, 50 U.S.C. § 797, and of 18 U.S.C. § 1382. Access to the Installation is subject to the control of its Installation Commander and is governed by such regulations and orders as have been lawfully promulgated or approved by the Secretary of Defense or by any designated military commander. Any access granted to the Contractor, its officers, employees, Contractors of any tier, agents, and invitees is subject to such regulations and orders. Access is subject to all regulations and orders currently promulgated or which may be promulgated by lawful authority as well as all other conditions contained herein. Such regulations and orders may, by way of example and not by way of limitation, include restrictions on who may enter, how many may enter at any one time, when they may enter, and what areas of the Installation they may visit, as well as requirements for background investigations, including those for security clearances, of those entering. The Contractor is responsible for the actions of its officers, employees, Contractors of any tier, agents, and invitees while on the Installation and acting under this contract.

C.6.2 Easement

Access to the Installation and the utility system shall be in accordance with the Easement (Reference JR8). If a utility is denied access to the system, due to circumstances beyond its control or negligence, its obligations and liabilities under this Agreement will be suspended if such a deficient condition would not have occurred but for its inability to gain access to the Installation and was not the result of previous deficiencies in performance.

C.7 Response to Service Interruptions/Contingencies and Catastrophes

The Contractor shall employ sound utility practices to ensure continuous, dependable, and reliable utility service and to minimize the scope and length of any service disruption. Installation specific response time requirements for Fort Knox are identified in Attachment JA1. The Contractor's Service Interruption/Contingency and Catastrophic Loss Plan is provided as Exhibit JE2 to this contract.

The Contractor shall maintain and update the Service Interruption/Contingency and Catastrophic Loss Plan as necessary and adhere to its requirements throughout the contract term. It shall not be materially altered without the Government's prior consent. However, the Contractor need not seek the Government's consent prior to immaterial alterations in such procedures.

In the event the Installation has an Emergency Restoration Plan that prioritizes service restoration, the Contractor shall adhere to the priority list established by the plan.

C.8 Repair Response Procedures

The Contractor shall identify to the Government and implement clearly defined procedures by which Installation personnel can submit service requests to the Contractor. The Contractor also shall clearly identify any difference in service request procedures that apply to routine, urgent, and emergency matters. The Government will be responsible for disseminating such procedures within the Installation. The Contractor shall provide a local or toll-free telephone number by which it can be contacted 24 hours a day, 7 days a week, for service requests. This number will connect the Government to a local dispatcher or equivalent supervisor capable of estimating Contractor repair crew arrival time. All calls shall be centrally placed by designated Government representatives. The Government will assign "emergency," "urgent," or "routine" designations when contacting the Contractor with a service call in accordance with the defined procedures.

The Contractor shall maintain records of all service request calls, documenting the time of the call, time of service response, cause of request, and action taken (including time and date completed). Such records shall be retained for 2 years, and may be reviewed by the Contracting Officer upon reasonable notice.

If the request affects building operations, the Contractor shall coordinate all work with the person responsible for the building or facility. The Government will provide the Contractor with a list of Government representatives and the buildings or facilities for which they are responsible. Emergency service requests submitted to the Contractor, or emergencies identified by the Contractor, shall be reported immediately to the designated Government representative.

C.8.1 Notification Procedures

The Contractor shall have in place mechanisms, means, or procedures by which Installation personnel can submit service requests to the Contractor. If there is an order of precedence of phone numbers for Government personnel to call, the Contractor shall determine and clearly define that precedence. The Contractor also shall clearly identify any difference in service request procedures that apply to routine, urgent, and emergency matters.

The Government will be responsible for disseminating such procedures within the Installation. In addition, the Contractor shall provide to the Contracting Officer the name of the local Project Manager or other responsible person and an alternate with after-hours contacts' telephone numbers.

C.8.2 Emergency Service Requests

An emergency condition is one that is detrimental to the mission of the base, significantly impacts operational effectiveness, or compromises the safety, health, and life of personnel. Such requests shall include, but are not necessarily limited to, electrical outages, downed power lines, water outages, broken water mains, natural gas outages, natural gas leaks, or wastewater main overflows. Specific service requirements are identified in Attachment JA1.3.24.

C.8.3 Urgent Service Requests

An urgent condition is not an emergency but significantly hinders performance of Installation activities and requires elimination of potential fire, health, and safety hazards (for example, environmental controls, non-emergency utility leaks, special requests and events, plumbing problems, downgraded emergency responses, etc.). Specific service requirements are identified in Attachment JA1.3.24.

C.8.4 Routine Service Requests

A routine service request is one that does not pose an immediate threat to public health, safety, or property, or to a mission or operation conducted at the Installation. Such requests may include, but are not necessarily

limited to requests for new or relocated service connections. Specific service requirements are identified in Attachment JA1.3.24.

C.9 Coordination of Work

C.9.1 Routine Work

Routine work, such as the scheduled repair, replacement, or removal of system components that require service interruption, shall be coordinated with the Contracting Officer's Representative at least 2 weeks prior to commencing work to ensure minimal impact to the mission and operations. The Contractor and Government shall each provide a single point of contact for coordination.

Notification shall include date, time of outage, a list of buildings that will be affected and the estimated time until the service will be restored. The Contractor shall also notify building occupants in advance of outages and post street signboards.

The Installation reserves the right to require the Contractor to postpone work requiring service interruption if such interruption might adversely affect the Installation's missions and operations. If an interruption is postponed, the parties shall coordinate a mutually acceptable alternate time for the scheduled service interruption. Scheduled utility outages may be required after normal working hours to lessen the inconvenience to Installation mission critical functions.

C.9.2 Routine, Urgent, and Emergency Service Requests

Any routine, urgent, or emergency service request by Government personnel shall be reported to the Contractor's service request line or point of contact. Emergency service requests to the Contractor or emergencies identified by the Contractor shall be identified immediately to the Contracting Officer's Representative.

C.9.2.1.Scheduled Utility Service Interruptions

The Installation reserves the right to reschedule Contractor work requiring service interruption at any time if such interruption might materially adversely affect the Installation's missions and operations. If an interruption is rescheduled, the parties shall coordinate a mutually acceptable alternative time for the scheduled service interruption. Only designated Government service representatives may request utility service interruption. The Contractor will refer any other service interruption requests to designated Government representatives.

C.9.3 Construction and Restoration of Site

The Contractor will ensure that proper temporary facilities and controls are in place during any construction and other work it performs that could affect installation activities. All work must include temporary facilities and control measures to facilitate the flow of vehicular, emergency, and pedestrian traffic to include the following: high-intensity reflectorized signs, barricades, temporary sidewalks, fencing, and traffic cones. Once work is complete, the Contractor will restore the area to an equal or better condition. Site restoration requires proper waste cleanup, removal, and disposal; replacement of cracked pavement and sidewalks; proper repair and sealing of utility cuts both on improved and unimproved land and roadways; replacement of loam or topsoil; top dressing by hand; lawn bed preparation; hydro air seeding, mulch, fertilizer and shrub replacement.

C.9.3.1.Excavation Permits

The Contractor shall obtain a written excavation permit from the Contracting Officer or Contracting Officer designated representative before commencing any digging or excavation on the Installation. The excavation permit will contain requirements normally applied to similar excavation work on the Installation. The Contracting Officer or designated representative will notify the Contractor as to reasonable time periods for applying for an excavation permit.

C.9.3.2. Underground Utility Location

At the request of the Installation, the Contractor shall be responsible for locating underground utility system components in support of the Installation's excavation permit process. Requests for line location shall be responded to within three (3) working days of the request at no additional cost to the Government.

C.9.4 Working Hours

Normal working hours shall be Monday-Friday (0730-1600). All routine work shall be accomplished during normal working hours. The Government must approve deviations from these working hours.

C.9.5 Coordination Meetings

The Contractor shall be available for meetings as reasonably required by the Contracting Officer.

C.9.6 Exercises and Crisis Situations Requiring Utility Support

The Contractor shall respond to Installation emergency and crisis situations and exercises that require utility support. The Contractor shall respond to these events with qualified personnel and equipment as soon as possible after notification. Participation may be in a simulated capacity equal to other participants. In no case will response be longer than those requirements listed in Section C.8.2, *Emergency Service Requests*. The Contractor shall advise and assist the on-scene commander until the event is terminated. Extra work effort under these circumstances may entitle the Contractor to equitable adjustment in accordance with FAR 52.241-7, *Changes in Rates or Terms and Conditions of Service for Regulated Services.*

C.9.7 Emergency Operation

The Government reserves the right to perform or supplement performance of contract functions with Government designated personnel during periods of disaster and emergency that affects the Installation and prevents the Contractor from fulfilling its obligations under the contract. The Government shall coordinate with the Contractor and obtain authorization before supplementing the Contractor's performance in these circumstances. Such authorization shall not be unreasonably withheld.

C.9.8 Non Performance and Abandonment

The Government reserves the right to perform or supplement performance of contract functions with Government designated personnel if the Contractor consistently fails to perform its obligations under the contract, has been notified in writing of failure to perform its obligations, and has not cured the performance failures within a reasonable time. The Contractor shall make its facilities available for this purpose at no cost to the Government for as long as the circumstance requiring Government operation persists.

C.9.9 Plant Control

After obtaining the prior permission of the Contracting Officer's Representative, the Contractor may trim or remove plants and trees that pose a potential hazard to its utility system. In those areas where the plants or trees contribute to historic or aesthetic values and trimming or removing them would be destructive of those values, the Contractor may be prohibited from trimming or removing them. In all instances, plants or trees listed as threatened or endangered under applicable federal, state, interstate, or local law will not be harmed by the activities of the Contractor.

C.10 Environmental Compliance

The Contractor shall comply with all applicable environmental laws and regulations including Installation specific requirements.

C.10.1 Permit Compliance

Once ownership of the utility system is transferred, the Contractor shall be the party of record for all environmental permits related to operating the system. Thereafter, the Contractor shall be responsible for obtaining any new or revised permits needed to operate and maintain the utility system. The Government shall remain the party of record and retain responsibility for any applicable permits prior to the transfer of ownership, as defined by Section C.13, *Transition Plan*, and for those permits that are not transferable.

C.10.2 Spill Contingencies

The Contractor shall adopt the procedures of the Installation Spill Contingency Plan or shall submit to the Contracting Officer for review and acceptance a Contractor developed Spill Contingency Plan. A Contractor-developed plan shall be prepared in accordance with the National Response Team's Integrated Contingency Plan Guidance (http://www.epa.gov/emergencies/guidance.htm#oneplan).

C.10.3 Work in Environmentally Sensitive Areas

The Contractor shall comply with the Installation procedures and standards for work in and around environmentally sensitive or contaminated property. Prior to accessing any environmentally sensitive areas, the Contractor shall coordinate with the designated Government Representative.

C.10.4 Environmental Impact Assessments

Modification of the utility system on Fort Knox may require an environmental impact assessment in accordance with environmental impact analysis process applicable to the Installation. The Contractor shall be responsible for preparing all documents necessary for conducting this assessment in coordination with the Government.

C.10.5 Hazardous Material and Waste Minimization

Hazardous materials used in utility system operation and maintenance shall be handled in accordance with applicable laws and regulations. Appropriate Material Safety Data Sheets (MSDS) shall accompany all hazardous materials used on the Installation. The Contractor shall submit copies of MSDS to the COR, and retain a copy of each MSDS on-site. The Contractor shall maintain a viable hazardous waste minimization program that includes making every effort to identify non-hazardous or less hazardous materials than those currently in use and recycling versus disposing of consumable wastes.

C.10.6 Environmental Response

The Contractor shall be responsible for accomplishing at no cost to the Government any environmental response required as a result of the Contractor's activities. The Contractor may be required to perform, but shall not be responsible for the cost of, remediation for pre-existing environmental conditions. Unexploded ordnance shall be considered a pre-existing environmental condition.

C.10.7 Asbestos and Lead-based Paint

The Contractor will not make any improvements or engage in any construction on government property which contain asbestos-containing material (ACM), without prior approval of the Contracting Officer; any such improvements or construction shall be done in compliance with all applicable Federal, state, interstate, and local laws and regulations governing ACM. The Contractor is responsible for monitoring the condition of its property containing ACM on any portion of government property for deterioration or damage. The Contractor is responsible, at its expense, for remediation of any ACM contained on or in its property which is disturbed or damaged by the Contractor or is deteriorated and of any ACM on government property which is disturbed or damaged by the Contractor during the term of the contract.

The Contractor will test any painted surface to be affected by any of its operation, construction, installation, repair, or maintenance activities to determine if the paint is lead-based and will handle that surface in compliance with all applicable laws and regulations and at the Contractor's expense.

C.10.8 Environmental Restoration Program

If the Installation has not been listed on the National Priorities List (NPL) under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, at the time of contract award, but is listed subsequent to the award of this contract, the Government will provide the Contractor with a copy of any Federal Facility Agreement (FFA) that is entered into between the Government and the U.S. Environmental Protection Agency (USEPA), along with any amendments to the FFA when they become effective.

If the Installation has been listed on the NPL at the time of the award of this Contract but no FFA has been entered into, the Government will provide the Contractor with a copy of any FFA subsequently entered into along with any amendments to the FFA when they become effective.

If the Installation has been listed on the NPL at the time of award of this Contract and an FFA has been entered into, the Contractor acknowledges that the Government has provided it with a copy of the FFA, with current amendments. The Government will provide the Contractor with a copy of any subsequent amendments thereto.

The Contractor agrees that should any conflict arise between the terms of such agreement as it presently exists, or may be amended or entered into, and the provisions of this Contract, the provisions of the FFA will take precedence.

C.11 SDCs/Upgrades/Connections and Renewals and Replacements

C.11.1 Due Diligence Adjustment

The Contractor shall be responsible for all required SDC/Upgrades and renewals and replacements to maintain and operate the utility system in a safe, reliable condition, and to meet the requirements of this contract.

The Contract is based on the inventory listed in Attachment JA1. If during the Joint Inventory that takes place during the Transition Period between contract award and contract start date, the Contractor identifies additional inventory not listed in Attachment JA1, the Contractor may submit a request for an equitable adjustment to the Contracting Officer. If the Contractor determines that the inventory listed in Attachment JA1 is overstated, the Contractor shall report the extent of the overstatement to the Contracting Officer, who will determine an equitable adjustment as appropriate.

C.11.2 SDCs/Upgrades/Connections and Renewals and Replacements

C.11.2.1 Initial System Deficiency Corrections

Initial System Deficiency Corrections (ISDCs) are those necessary to reach the standards typically maintained by the Contractor on its utility systems, so that subsequent renewals and replacements will permit the long-term safe and reliable operation of the utility system. All ISDCs are listed in Exhibit JE4. All ISDCs shall be complete within 5 years of the contract start date. The Government reserves the right to buy down a previously amortized ISDC at no penalty to the Government.

C.11.2.2 Future System Deficiency Corrections/Upgrades/Connection Charges

Future System Deficiency Corrections (SDCs)/Upgrades/Connection Charges are investments in the utility system resulting from changes in service requirements, laws, or regulations. Future SDCs/Upgrades/Connection Charges may also include the implementation of new technologies.

C.11.2.3 Renewals and Replacements

Renewals and replacements are investments in the utility system to renew or replace system components that fail or reach the end of their useful life. Renewals and replacements identified in Exhibit JE4, *Initial System Deficiency Corrections and Initial Renewals and Replacements Plan*, will be paid in accordance with Section B.3, *Schedule*.

C.11.2.4 Annual System Deficiency Corrections/Upgrades and Renewals and Replacements Plan

The Contractor shall prepare and submit an Annual SDC/Upgrades and Renewals and Replacements Plan to identify SDC/Upgrades and major renewals and replacements the Contractor intends to accomplish. The Annual SDC/Upgrades and Renewals and Replacement Plan shall contain a proposed SDC/Upgrade list for each of the next 5 years. The plan shall be structured as follows:

- Year 1 shall include detailed SDC/Upgrade information including site plans, cost estimates, SDC/Upgrade schedules, and an analysis of the impact of construction on Installation operations and the environment, and shall address safety requirements.

- Years 2-5 shall include SDC/Upgrade lists with SDC/Upgrade descriptions, order-of-magnitude estimates, and proposed site plans.

Unless the parties agree in writing to an alternate date, the first Annual SDC/Upgrades and Renewals and Replacements Plan shall be submitted no later than **January 31** of the first full fiscal year following contract award. Thereafter, the plan shall be submitted no later than **January 31** of each year. The Plan shall be submitted to the Government representatives designated in Section G.

C.11.2.5 SDCs/Upgrades

The Contractor may propose SDC/Upgrades in the Annual SDC/Upgrade and Renewal and Replacement Plan (Future SDC/Upgrades). The Government reserves the right to determine at its discretion whether it will pay for any portion of proposed SDC/Upgrades. Future SDC/Upgrades required to comply with requirements and standards imposed by law that have changed during the contract term will be paid subject to the availability of funds. Approved SDC/Upgrades and improvements identified in the SDC/Upgrades and Renewals and Replacements Plan will be paid, in accordance with G.3, *Utility Service Charge Adjustment*, and B.3, *Schedule*, when accomplished. The Government reserves the right to pay for any SDC/Upgrade as a lump-sum payment rather than by amortizing the SDC/Upgrade costs.

C.11.2.6 Requirements and Standards

The SDC/Upgrades and R&R Plan shall include an assessment of any new or revised standards and clearly address planned system improvements or operational changes needed to comply with such standards.

C.11.2.7 Anticipated Connections and Disconnections

The SDC/Upgrades and R&R Plan shall include a list of anticipated new service connections, including a preliminary design and estimated installation costs. The Government will provide a list of new service requirements and anticipated disconnections.

C.11.3 Connections and Disconnections

The Contractor shall be responsible for adding any additional service points and/or deleting any service points that are no longer required. The Contractor shall coordinate this work with the Contracting Officer's Representative.

If a connection or disconnection constitutes reasonable cause for a change in service charge, the rate will be re-negotiated in accordance with FAR 52.241-7, *Changes in Rates or Terms and Conditions of Service for Regulated Services.*

C.11.3.1 Temporary Connections

The Contractor shall extend temporary service to the Government or Contractors performing work on the Installation when requested by the Government.

The Government will identify the party responsible for reimbursing the Contractor for temporary connections or utility usage. The Contractor shall provide the following information regarding any temporary service connections:

1. Name of the temporary customer
2. Cost
3. Date of Installation
4. Expected duration of the connection
5. Description of the connection, including route and type of material
6. POC, Title and Phone Number

C.11.3.2 Permanent Connections

(a) *Charge.* In consideration of the Contractor furnishing and installing at its expense any new connecting facilities requested by the Government, the Government may pay the Contractor a mutually agreed upon connection charge. Any payment will be in a form agreed to by the parties and as permitted by applicable law. When the Government requests new connecting facilities, including work necessary to increase the capacity of existing facilities, the Contractor shall submit a detailed proposal identifying the work necessary to provide the required utility services, any proposed connection charge, and the proposed change in the monthly utility service fee that will go into effect upon completion and placement into service of the new connecting facilities.

Payment for connection charges may be made as a line item under this contract or directly by the requesting party, however, regardless of payment method, the terms and conditions of this contract shall control. As a condition precedent to final payment, the Contractor shall execute a release of any claims against the Government arising under or by the virtue of such installation. Proposed changes to the monthly utility service fee(s) must be approved in advance by the Contracting Officer, regardless of the payment vehicle utilized for the connection charge.

(b) *Ownership, operation, maintenance and repair of new facilities to be provided.* The facilities to be supplied by the Contractor under this clause, notwithstanding the payment by the Government of a connection charge, shall be and remain the property of the Contractor and shall, at all times during the life of this contract or any renewals thereof, be operated, maintained, and repaired by the Contractor at its expense. All taxes and other charges in connection therewith, together with all liability arising out of the construction, operations, maintenance, or repair of such facilities, shall be the obligation of the Contractor.

(c) *Credits.*

(1) Where the Government is part of the Contractor's general rate base and the Contractor subsequently

includes the cost of the connecting facilities in its general rate base, the Contractor agrees to allow the Government, on each monthly bill for service furnished under this contract to the service location, a credit in the form of a percentage of the amount of each such bill as rendered until the accumulation of credits shall equal the amount of such connection charge. The amount of the credit percentage shall be negotiated, but shall not be less than that provided for under the terms of any tariff filed by the Contractor or otherwise provided by the Contractor to any commercial customer, provided that the Contractor may at any time allow a credit up to 100 percent of the amount of each such bill.

(2) In the event the Contractor serves any customer other than the Government (regardless of whether the Government is being served simultaneously, intermittently, or not at all) by means of these facilities, the Contractor shall promptly notify the Government in writing. Unless otherwise agreed by the parties in writing at that time, the Contractor shall promptly credit the Government, up to 100 percent of each monthly bill, until there is refunded the amount that reflects the Government's connection costs for that portion of the facilities used in serving others.

(d) *Terminations.* Payment for and disposition of wholly or partially completed facilities upon termination of the contract shall be in accordance with the Government Repurchase Option clause of the Contract.

(FAR 52.241-9)

C.11.3.3 Third Party Construction

(a) Where the Government contracts with a third party to construct new infrastructure that is intended to connect to the Contractor's system, the following terms and conditions shall apply:

(1) The Contractor will provide the Government and the third party contractor with specifications (the "Specifications") applicable under the terms of this contract for its system components and for interconnections.

(2) The Government will require the third party contractor to renovate or construct any infrastructure that will connect to the Contractor's existing systems in accordance with the Specifications.

(3) The Government will coordinate with the Contractor to ensure the existing system can accommodate any additional load requirements necessitated by the renovation/construction. Should the Contractor determine that the existing systems require upgrades to support the additional load requirements, a price for the upgrade will be negotiated in accordance with FAR 52.241-7, *Changes in Rates or Terms and Conditions of Service for Regulated Services.*

(b) At the Government's option, the Contractor will take ownership of system components renovated or constructed by the third party contractor to the Specifications. Any adjustment to service requirements and the contract price as a result of these actions will be in accordance with FAR 52.241-7, *Changes in Rates or Terms and Conditions of Service for Regulated Services.*

(c) The Contractor shall have the right to reasonably inspect the third party contractor's construction of system components for which the Contractor will take ownership. Inspections are among the utility services included in the monthly utility service charge.

(d) If third party constructed system components are not built to the Specifications, the Contractor shall identify such components and the basis for the discrepancy to the Government with specificity. The Government may direct the Contractor to perform any work required to bring the system into compliance with the Specifications, in which case the Contractor will be compensated in accordance with FAR 52.241-7, *Changes in Rates or Terms and Conditions of Service for Regulated Services.*

(e) In the event the parties are unable to agree on an equitable price adjustment for any of the above paragraphs, the matter shall be resolved under the provisions of this contract.

C.12 Operations and Maintenance/Quality Management

The Contractor has established and shall maintain an Operations and Maintenance/Quality Management Plan (Exhibit JE3). The Plan shall ensure the provision of reliable, cost-effective, and compliant service over the term of the contract. The Contractor shall maintain and update the Plan as necessary and adhere to its requirements throughout the contract term. It shall not be materially altered without the Government's consent.

C.13 Transition Plan

The Contractor's Operational Transition Plan, to be executed during the transition period, is provided as Exhibit JE5 to this contract. The Plan shall not be materially altered without the Government's consent. The transition period will begin at contract award and last four (4) months.

This transition period is intended to provide the Contractor time to perform additional due diligence functions and stand up operations in support of the contract. The Contractor will be paid for transition costs in accordance with Section B.3, *Schedule*. Transition costs are defined as all costs expended during the transition period that are necessary and reasonable to assume ownership and responsibility for the system.

C.14 Historical, Architectural, and Landscaping Requirements

Cultural resources on Federal property are protected and managed by the Archaeological Resources Protection Act of 1979 and other applicable laws. The Contractor shall exercise care so as not to disturb or damage artifacts or fossils (should any be uncovered) during the excavation operations. Should the Contractor discover evidence of possible scientific, prehistoric, historic or archaeological finds within the work limit lines or adjacent to the work area, the Contractor shall immediately cease work at that location and notify the Contracting Officer. The Contractor shall provide the Contracting Officer with complete information as to the specific location and nature of the findings. Where appropriate by reason of discovery, the Contracting Officer may order delays in time of performance or changes in the work or both. If such delays or changes are ordered, an equitable adjustment will be made in accordance with the applicable clauses of the contract.

End of Section C

Section D

Packaging and Marking

None

End of Section D

Section E

Inspection and Acceptance

None

End of Section E

Section F

Deliveries or Performance

F.1 Contract Term

The Contractor agrees to furnish, and the Government agrees to purchase, potable water utility services, in accordance with the terms and conditions of this contract, for a period of fifty (50) years commencing with the contract start date. If the Government terminates the contract, whether for convenience or default, the appropriate FAR termination clauses will apply.

F.2 Commencement of Service

The Contractor shall complete all transitions and be prepared to provide utility services on the contract start date. The contract start date is defined as the expiration of the transition period and the initiation of the monthly utility service. The period of performance begins at the contract start date.

Phase I	Phase II	Phase III
Contract Award Date	Transition Period (Pre-performance)	Contract Start Date
Fixed date in time on which the utility service contract is executed.	Transition period of 4 months begins upon execution of contract award.	Transition Period ends and the Performance of Utility Services begins.

F.3 Clauses Incorporated by Reference

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text.

The following FAR Clauses are incorporated by reference:

FAR Paragraph	Clause Title	IAW	Date
52.242-15	Stop Work Order	42.1305(b)(1)	Aug 1989
52.242-17	Government Delay of Work	42.1305(c)	Apr 1984

End of Section F

Section G

Contract Administration Data

G.1 Contracting Officer

The Contracting Officer is responsible for the issuance of the contract and for all actions leading up to and including award of the contract.

No oral or written statements of any person(s) other than the Contracting Officer shall modify or otherwise affect the terms, conditions, scope of work, or drawings of the contract. All modifications to the contract must be in writing by the Contracting Officer.

All contract administration shall be effected by the Contracting Officer. Communications pertaining to contract administration matters will be addressed by the Contracting Officer listed below:

Brian J. Koessel
Defense Logistics Agency Energy
8725 John J. Kingman Rd, Suite 3937
Fort Belvoir, VA 22060-6222
Phone: 703-767-1595
E-mail: brian.koessel@dla.mil

G.2 DFARS 252.201-7000: Contracting Officer's Representative

Contracting Officer's Representative means an individual designated in accordance with subsection 201.602-2 of the Department of Defense FAR Supplement and authorized in writing by the Contracting Officer to perform specific technical or administrative functions.

If the Contracting Officer designates a Contracting Officer's Representative (COR), the Contractor will receive a copy of the written designation. It will specify the extent of the COR's authority to act on behalf of the Contracting Officer. The COR is not authorized to make any commitments or changes that will affect price, quality, quantity, delivery, or any other term or condition of the contract. The COR for this contract is:

Taina M. Rivera
Defense Logistics Agency Energy
8725 John J. Kingman Rd, Suite 3937
Fort Belvoir, VA 22060-6222
Phone: 703-767-8130
E-mail: taina.rivera@dla.mil

G.3 Submission and Payment of Invoices

The Government will pay the Contractor for utility service through a monthly service charge. Subject to the provisions set forth in Section B, utility services will be billed on a monthly basis.

The Contractor shall submit invoices electronically via the internet using the Wide Area Work Flow (WAWF) system in accordance with DFARS clause, 252.232-7003, Electronic Submission of Payment Requests and Receiving Reports. The WAWF system is located at the following internet website: https://wawf.eb.mil. Failure to submit invoices in WAWF will be considered failure to submit a proper invoice and may result in delay of payment.

The Contractor shall prepare and submit electronic invoices to the Installation for payment by the 25th of each month for the previous month's billing period. Invoices shall be sent to the recipient and address identified in the then current version of Contract Section G.2, *Contracting Officer's Representative*, with a copy provided to the Contracting Officer identified in Section G.1.

G.4 Utility Service Charge Adjustment

At the request of either party to this contract, and with reasonable cause, the Utility Service Charge may be renegotiated in accordance with FAR 52.241-7: *Changes in Rates or Terms and Conditions of Service for Regulated Services.* However, any such request by the Contractor for an increase in the monthly utility service charge shall be submitted to the Contracting Officer no later than **January 31**, and in conjunction with the submittal of the Annual System Deficiency Corrections and Renewals and Replacements Plan.

For future SDCs/Upgrades/Connections resulting from changed service requirements, at the request of either party to this contract, and with reasonable cause, the Utility Service Charge may be renegotiated, at any time, in accordance with FAR 52.241-7, *Changes in Rates or Terms and Conditions of Service for Regulated Services*.

Any changes to charges, terms, or conditions as a result of negotiations shall be made part of this contract by the issuance of a bilateral contract modification. The failure of the parties to agree upon any change after a reasonable period of time shall be a dispute under the Disputes clause of this contract.

G.5 Accounting Procedures

The Contractor shall maintain records of all costs and payments associated with the provision of utility service(s) to the Installation using the National Association of Regulatory Utility Commissioners (NARUC) Uniform System of Accounts (USOA), Federal Energy Regulatory (FERC) USOA, the Rural Utility Service (RUS) USOA, or the American Water Works Association (AWWA) USOA, or an alternative USOA acceptable to the Government. The USOA may be supplemented by the Contractor's standard accounting procedures and generally recognized accounting practices and principles, as long as such supplemental procedures and practices are consistent with the NARUC (or an accepted alternative) USOA. The standard utilized must be consistent with the written and established practices for measuring, assigning, and allocating costs.

G.5.1 Price Adjustment for Noncompliance with Accounting Procedures

The Government shall be entitled to a price adjustment if it finds that the contract price was increased during any price redetermination actions as a result of the use of noncompliant or inconsistent accounting practices established and accepted by the Government on the part of the contractor. The amount of the adjustment shall be the difference between the contract price that was negotiated and the price that would have been negotiated had the business unit used compliant and established accounting practices that were in accordance with FERC, NARUC, RUS, or AWWA and were consistent with the contractor's written and established practices. In such cases, the Government shall be entitled to a credit or cash recovery (at the Government's option) for the amount of the increased price plus interest. The interest rate shall be computed from the date the payment by the Government until the date of repayment by the contractor. The interest rate shall be the rate specified at 26 U.S.C. 6621(a)(2).

G.6 Accounting and Appropriation Data

ACRN AA is hereby established in the amount of $592,518.00. Funds are provided under the Direct Fund Cite MIPR10095246. A funding breakdown of ACRN AA is provided below:

AA 02120112011 2020000 A22TT 131079QMIS 253F 0010095246 0030001382 021001 $592,518.00

Funding Breakdown:		
Funding for ACRN AA:	On CLIN 0051	$592,518.00
Total Funding:		$592,518.00
Total Funding for ACRN AA:		$592,518.00
Remaining Funds for ACRN AA:		$0.00

End of Section G

Section H

Special Contract Provisions

H.1 Mobilization and Other Contingencies

In the event of troop mobilization or other contingencies, the Contractor will be expected to promptly take whatever measures are needed to meet any new demands placed upon it, to include extended work hours and expansion of the contract work force.

Extra work effort under these circumstances may entitle the Contractor to an equitable adjustment under the Changes Clause FAR 52.243-1, *Changes – Fixed-Price,* Alternate I.

H.2 Insurance Requirements

H.2.1 Insurance Certificate

Contractor shall deliver or cause to be delivered upon execution of this contract (and thereafter not less than thirty (30) days prior to the expiration date of each policy furnished pursuant to this contract) to the Government a certificate of insurance evidencing the insurance required by this contract.

H.2.2 Types of Insurance

During the entire period this contract shall be in effect, the Contractor and its subcontractors at any tier shall carry and maintain the following:

H.2.2.1 General Liability

Commercial general liability insurance with a minimum combined single limit of $1,000,000 per occurrence and $2,000,000 in the aggregate for all premises and operations, including products/completed operations. The policy shall include coverage for bodily injury, including death, and property damage arising out of the acts or omissions by or on behalf of the Contractor by any invitee or any other person or organization, or involving any owned, non-owned, or hired automotive equipment in connection with the Contractor's activities. The policy shall also include broad form property damage and shall cover independent contractors. The policy shall include coverage for hazards referred to as XCU (explosion, collapse, and underground).

H.2.2.2 Automobile Liability

Comprehensive automobile liability insurance with a combined single limit of $1,000,000 per occurrence for bodily injury and property damage. Coverage is to include owned, hired, and non-owned vehicles.

H.2.2.3 Workers' Compensation and Employer's liability

If and to the extent required by law, workers' compensation and employer's liability insurance. Workers compensation coverage is to be provided in compliance with applicable laws, and employer's liability limits shall be at least $500,000.

H.2.2.4 Umbrella/Excess Liability Coverage

Umbrella or Excess Liability coverage in an amount of $1,000,000 per occurrence and $1,000,000 in the aggregate. Coverage is to be in excess of commercial general liability, automobile liability, and employer liability.

H.2.3 General

All policies of insurance which this contract requires the Contractor to carry and maintain or cause to be carried or maintained pursuant to this contract shall be with insurance companies who have an A- Best VIII or higher rating. All such policies of insurance shall list the government as additional insured, except for workers compensation. Each such policy shall provide that any losses shall be payable notwithstanding any act or failure to act or negligence of Contractor or Government or any other person; provide that no cancellation, reduction in amount, or material change in coverage thereof shall be effective until at least sixty (60) days after receipt by Government of written notice thereof; provide that the insurer shall have no right of subrogation against the Government; and be reasonably satisfactory to the Government in all other respects. In no circumstances will the Contractor be entitled to assign to any third party rights of action which the Contractor may have against the Government. The foregoing notwithstanding, any cancellation of insurance coverage based on nonpayment of the premium shall be effective upon ten (10) days' written notice to the Government. The Contractor understands and agrees that cancellation of any insurance coverage required to be carried and maintained by the Contractor under this contract will constitute a failure to comply with the terms of this contract.

H.2.4 Self-insurance

The requirements to maintain insurance under Section H.2, *Insurance Requirements*, may be met by the use of self-insurance only under the following conditions and with the express prior written approval of the contracting officer:

H.2.4.1 Submittals

If the Contractor desires to self-insure, the Contractor shall submit to the Contracting Officer, in writing, a request to self-insure. The Contractor shall, when submitting any documents under this provision, apprise the Contracting Officer of any such documents that constitute confidential or proprietary business records, and mark those records accordingly. To support the determination of the Contracting Officer regarding the request, said officer may request some or all of the following information, to the extent the contractor maintains such information, on the contractors proposed self-insurance program—

(1) A complete description of the program, including any resolution of the board of directors authorizing and adopting coverage, including types of risks, limits of coverage, assignments of safety and loss control, and legal service responsibilities;
(2) If available, the corporate insurance manual;
(3) The terms regarding insurance coverage for any Government property;
(4) The contractor's latest financial statements;
(5) Loss history and premiums history;
(6) The means by which the self-insurance will be funded;
(7) Claims administration policy, practices, and procedures;
(8) The method of projecting losses; and
(9) A disclosure of all captive insurance company and reinsurance agreements, including methods of computing cost.

H.2.4.2 Programs of Self Insurance

Programs of self-insurance covering Contractor’s insurable risks, including the deductible portion of purchased insurance, may be approved by the Contracting Officer when examination of a program indicates that its application is in the Government’s interest; such determination is within the sole discretion of the Government. The Government will not approve a program of self-insurance for workers’ compensation in a jurisdiction where workers’ compensation does not completely cover the employer’s liability to employees, unless the Contractor—

(1) Maintains an approved program of self-insurance for any employer’s liability not so covered; or

(2) Shows that the combined cost to the Government of self-insurance for workers' compensation and commercial insurance for employer's liability will not exceed the cost of covering both kinds of risk by commercial insurance.

H.2.4.3 Approval

Once the Contracting Officer has approved a program, the Contractor must submit to that official for approval any major proposed changes to the program. Any program approval may be withdrawn if the contracting officer finds that either—

(1) Any part of a program does not comply with the requirements of this part and/or the criteria at FAR 31.205-19; or
(2) Conditions or situations existing at the time of approval that were a basis for original approval of the program have changed to the extent that a program change is necessary.

H.2.4.4 Qualifications

To qualify for self-insurance, the contractor must demonstrate to the Government an ability to sustain the potential losses involved. In making the determination, the Contracting Officer shall consider the following factors:

(1) The soundness of contractor's financial condition, including available lines of credit.
(2) The geographic dispersion of assets, so that the potential of a single loss depleting all the assets is unlikely.
(3) The history of previous losses, including frequency of occurrence and the financial impact of each loss.
(4) The type and magnitude of risk, such as minor coverage for the deductible portion of purchased insurance or major coverage for hazardous risks.
(5) The contractor's compliance with Federal and State laws and regulations.

H.3 Availability of Funds

Nothing in this contract shall be construed to obligate funds in advance of appropriations.

H.4 Liability

The Contractor shall indemnify and hold the Government harmless against any and all judgments, expenses, liabilities, claims, and charges of whatever kind or nature that may arise as a result of the activities of the Contractor, whether tortious, contractual, or other, except to the extent such claim or charge is cognizable under the Federal Tort Claims Act, or, in regard to indemnification, to the extent the Contractor is prohibited from doing so by Federal or State law.

H.5 Catastrophic Loss

The Contractor shall propose how it plans to protect itself from a catastrophic loss, including but not limited to vehicular damage, vandalism, and Acts of God or a Public Enemy that significantly affect the utility system(s). The Contractor will be expected to bring the system back into service expeditiously following any such catastrophic loss or event and shall identify in its proposal how it plans to accomplish this. In its plan, the Contractor shall identify any intent to rely on the Federal Emergency Management Agency (FEMA) or other Governmental relief agencies for financial assistance in recovering from any catastrophic loss and must identify to what extent, if any, the Contractor would expect reimbursement under the Contract. If the Contractor has catastrophic insurance, the Contractor shall provide a copy of the coverage to the Contracting Officer.

H.6 Notification of Infrastructure/Service Contract Transfer

The Contractor shall provide 120 day written notice prior to any resale, transfer, or encumbrance of the system or any components thereof. Regardless of the disposition of the Contractor's property, the utility services contract can only be transferred to another entity with the Government's consent (see 41 U.S.C. §15 and FAR 42.1204).

H.7 Government Repurchase Option

1. The Government may, at its sole option, repurchase the privatized system at the end of the contract term or in the event the contract is terminated for the convenience of the Government or for default.

2. The Government shall exercise its repurchase option by providing written notice to the Contractor.

3. As consideration for the repurchase, the Government shall pay the Contractor the amount of the Contractor's Unrecovered Investments in the System as defined in Paragraph 8 below. The repurchase shall become effective and the System[s] shall become the property of the Government 120 days after the Government issues notice of its intent to exercise its repurchase option or on such later date as the Government may designate. Following the transfer of the System to the Government, the Contractor shall present an invoice for the repurchase price.

4. In the event of a repurchase, the system shall be transferred to the Government free of all liens and encumbrances. The Contractor and the Government shall cooperate in preparing and executing all documents required to accomplish the transfer. All information in all media (electronic, paper and otherwise) including, without limitation, books, manuals, operating procedures, specifications, databases and maps necessary or useful for operating the System shall be transferred to the Government with the System. In addition, copies of all Contractor operations and maintenance records shall be transferred to the Government with the System.

5. To the extent the Contractor receives payments for Unrecovered Investments in accordance with this clause, the Contractor shall not be entitled to equivalent payments for Unrecovered Investments under any termination, cancellation or similar provision of the Contract.

6. In the event of termination for default, the Government may offset against payments made as consideration for repurchase under this Section any damages, including excess re-procurement costs, it suffers as a consequence of the Contractor's default. The Government shall have no obligation to tender the repurchase price until the quantum of such damages is defined.

7. The Contractor shall maintain an up to date account of the current System repurchase price throughout the contract term based upon a methodology established by the Contractor and approved by the Government prior to contract award. Upon request, the Contractor shall make the account available to the Government with appropriate supporting documentation.

8. Definitions

A. For purposes of this Section, "Privatized System" or "System" means all fixtures and equipment used or useful for operating the utility system[s].

B. For purposes of this Section, "Unrecovered Investments" means

1. The purchase price for the utility system[s] defined in Section B of the contract but only to the extent the Contractor has paid all or a portion of the purchase price to the Government without offsetting recovery;

2. Improvements or additions to the system located on Government property and approved by the Government that are:

a) identified in the Contractor's Initial System Deficiency Corrections and Renewal and Replacement Plan and subsequent Plans provided annually throughout the contract term ; or
b) the result of requests for connections or connecting facilities.

However, the Contractor will only be compensated to the extent such investments have not been recovered by the Contractor in the form of payments made by or on behalf of the Government on account of such investments.

H.8 Foreign Object Damage Prevention Program

The Contractor shall comply with the Installation's foreign object damage prevention program whenever it engages in activities on or around flightlines, airfields, or runways.

H.9 Hazardous Substances

The Contractor, at its expense, must comply with all applicable laws on occupational safety and health, the handling and storage of hazardous materials, and the proper handling and disposal of hazardous wastes and hazardous substances generated by its activities. Responsibility for the costs of proper handling and disposal of hazardous wastes and hazardous substances is governed by applicable law. The terms hazardous materials, hazardous wastes, and hazardous substances, are defined in the Federal Water Pollution Control Act, the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, the Solid Waste Disposal Act, the Clean Air Act, the Toxic Substances Control Act, and their implementing regulations, as they may be amended from time to time.

Any unexploded ordnance discovered on government property by the Contractor is the responsibility of the Government and will not be disturbed by the Contractor but, upon discovery, shall be immediately reported to Installation Security and the Contracting Officer's Representative.

H.10 Contribution in Aid of Construction (CIAC) Tax Liability

The parties hereby recognize that a purchase by the Contractor of a Government utility system at less than fair market value may be treated as a CIAC and therefore taxable income to the Contractor. As a result, the Contractor may incur an associated income tax liability. It is the responsibility of the Contractor to ensure that all transactions undertaken under the contract are in compliance with the United States Internal Revenue Service notices, guidelines, rules, and regulations governing the CIAC tax, and particularly the notices, guidelines, rules, and regulations governing how to determine fair market value, so that there is no CIAC tax liability to the Government. The Government will have no liability for nor will it pay any CIAC tax for which the Contractor is liable, or may become liable because of the Contractor's performance under this contract.

H.11 Differing Site Conditions

FAR 52.236-2 -- Differing Site Conditions (Apr 1984)

(a) The Contractor shall promptly, and before the conditions are disturbed, give a written notice to the Contracting Officer of –

(1) Subsurface or latent physical conditions at the site which differ materially from those indicated in this contract; or

(2) Unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in the contract.

(b) The Contracting Officer shall investigate the site conditions promptly after receiving the notice. If the conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performing any part of the work under this contract, whether or not changed as a result of the conditions, an equitable adjustment shall be made under this clause and the contract modified in writing accordingly.

(c) No request by the Contractor for an equitable adjustment to the contract under this clause shall be allowed, unless the Contractor has given the written notice required; provided, that the time prescribed in paragraph (a) of this clause for giving written notice may be extended by the Contracting Officer.

(d) No request by the Contractor for an equitable adjustment to the contract for differing site conditions shall be allowed if made after final payment under this contract.

(End of Clause)

End of Section H

Section I

Contract Clauses

In the event of any inconsistencies between non-mandatory FAR and DFARS clauses incorporated by reference herein or elsewhere and any clauses set forth in full text in this Contract, the full text clauses shall control.

I.1 FAR 52.252-2 Clauses Incorporated by Reference (Feb 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at these addresses: http://farsite.hill.af.mil (All Clauses) and https://www.acquisition.gov/far/ (FAR Clauses ONLY).

(End of Clause)

I.2 FAR Clauses

The following FAR clauses are incorporated by reference:

FAR Paragraph	Clause Title	IAW	Date
52.202-1	Definitions	FAR 2.201	Jul 2004
52.203-3	Gratuities	FAR 3.202	Apr 1984
52.203-5	Covenant Against Contingent Fees	FAR 3.404	Apr 1984
52.203-6	Restrictions on Subcontractor Sales to the Government	FAR 3.503-2	Sep 2006
52.203-7	Anti-Kickback Procedures	FAR 3.502-3	Oct 2010
52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity	FAR 3.104-9(a)	Jan 1997
52.203-10	Price or Fee Adjustment for Illegal or Improper Activity	FAR 3.104-9(b)	Jan 1997
52.203-12	Limitation on Payments to Influence Certain Federal Transactions	FAR 3.808(b)	Oct 2010
52.203-13	Contractor Code of Business Ethics and Conduct	FAR 3.1004(a)	Apr 2010
52.204-4	Printed or Copied Double-Sided on Postconsumer Fiber Content Paper	FAR 4.303	May 2011
52.204-7	Central Contractor Registration	FAR 4.1105	Apr 2008
52.207-3	Right of First Refusal of Employment	FAR 7.305(c)	May 2006
52.209-6	Protecting the Government's Interest when Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment	FAR 9.409	Dec 2010
52.215-2	Audit and Records - Negotiation	FAR 15.209(b)	Oct 2010
52.215-8	Order of Precedence – Uniform Contract Format (See Section C.1 of the contract)	FAR 15.209(h)	Oct 1997

FAR Paragraph	Clause Title	IAW	Date
52.215-11	Price Reduction for Defective Certified Cost or Pricing Data—Modifications	FAR 15.408(c)	Aug 2011
52.215-13	Subcontractor Certified Cost or Pricing Data—Modifications	FAR 15.408(e)	Oct 2010
52.215-21	Requirements for Certified Cost or Pricing Data and Data Other Than Certified Cost or Pricing Data – Modifications	FAR 15.408(m)	Oct 2010
52.219-4	Notice of Price Evaluation for HUBZone Small Business Concerns	FAR 19.1309(b)	Jan 2011
52.219-8	Utilization of Small Business Concerns	FAR 19.708(a)	Jan 2011
52.219-9	Small Business Subcontracting Plan w/ Alt II below	FAR 19.708(b)	Jan 2011
52.219-9	Alternate II	FAR 19.708(b)(1)(ii)	Oct 2001
52.219-16	Liquidated Damages—Subcontracting Plan	FAR 19.708(b)(2)	Jan 1999
52.219-25	Small Disadvantaged Business Participation Program – Disadvantaged Status and Reporting	FAR 19.1204(b)	Dec 2010
52.219-28	Post-Award Small Business Program Representation	FAR 19.309(d)	Apr 2009
52.222-1	Notice to the Government of Labor Disputes	FAR 22.103-5(a)	Feb 1997
52.222-3	Convict Labor	FAR 22.202	Jun 2003
52.222-4	Contract Work Hours and Safety Standards Act - Overtime Compensation	FAR 22.305	Jul 2005
52.222-21	Prohibition of Segregated Facilities	FAR 22.810(a)(1)	Feb 1999
52.222-26	Equal Opportunity	FAR 22.810(e)	Mar 2007
52.222-35	Equal Opportunity for Veterans	FAR 22.1310(a)(1)	Sep 2010
52.222-36	Affirmative Action for Workers with Disabilities	FAR 22.1408(a)	Oct 2010
52.222-37	Employment Reports on Veterans	FAR 22.1310(b)	Sep 2010
52.222-40	Notification of Employee Rights Under the National Labor Relations Act	FAR 22.1605	Dec 2010
52.222-50	Combating Trafficking in Persons	FAR 22.1705(a)	Feb 2009
52.222-54	Employment Eligibility Verification	FAR 22.1803	Jan 2009
52.223-5	Pollution Prevention and Right-to-Know Information	FAR 23.1005	May 2011
52.223-6	Drug-Free Workplace	FAR 23.505	May 2001
52.223-12	Refrigeration Equipment And Air Conditioners	FAR 23.804(b)	May 1995
52.228-5	Insurance-Work on a Government Installation	FAR 28.310	Jan 1997
52.229-3	Federal, State, and Local Taxes	FAR 29.401-3	Apr 2003

FAR Paragraph	Clause Title	IAW	Date
52.232-1	Payments	FAR 32.111(a)(1)	Apr 1984
52.232-8	Discounts for Prompt Payment	FAR 32.111(b)(1)	Feb 2002
52.232-11	Extras	FAR 32.111(c)(2)	Apr 1984
52.232-17	Interest	FAR 32.617(a) & (b)	Oct 2010
52.232-18	Availability of Funds	FAR 32.705-1(a)	Apr 1984
52.232-23	Assignment of Claims ALT 1	FAR 32.806(a)(1)	Jan 1986 Apr 1984
52.232-25	Prompt Payment	FAR 32.908(c)	Oct 2008
52.232-33	Payment by Electronic Funds Transfer --Central Contractor Registration	FAR 32.1110(a)(1)	Oct 2003
52.233-1	Disputes ALT 1	FAR 33.215	Jul 2002 Dec 1991
52.233-3	Protest after Award	FAR 33.106(b)	Aug 1996
52.233-4	Applicable Law for Breach of Contract Claim	FAR 33.215(b)	Oct 2004
52.237-2	Protection of Government Buildings, Equipment, and Vegetation	FAR 37.110(b)	Apr 1984
52.237-3	Continuity of Services	FAR 37.110(c)	Jan 1991
52.242-1	Notice of Intent to Disallow Costs	FAR 42.802	Apr 1984
52.242-13	Bankruptcy	FAR 42.903	Jul 1995
52.243-1	Changes – Fixed-Price ALT I	FAR 43.205(a)(1)	Aug 1987 Apr 1984
52.244-6	Subcontracts for Commercial Items	FAR 44.403	Dec 2010
52.249-2	Termination for Convenience of the Government (Fixed-Price)	FAR 49.502(b)(1)(i)	May 2004
52.249-8	Default (Fixed-Price Supply and Service)	FAR 49.504(a)(1)	Apr 1984
52.252-6	Authorized Deviations in Clauses	FAR 52.107(f)	Apr 1984

I.2.1 Disputes

The requirements of the Disputes clause at FAR 52.233-1 are supplemented to provide that in regard to the interpretation of retail rates, rate schedules and items directly related to rates and rate schedules provided under this contract, the parties agree to accept as authoritative the interpretation of any statewide public utility regulatory authority with jurisdiction over the Contractor. The Government shall not be bound to accept as authoritative interpretations that conflict with Federal law or regulation or that are found by any administrative or judicial forum to: 1) result in discrimination against the Installation; 2) have resulted from abuse of discretion; or 3) have directly or indirectly resulted from any failure on the part of the regulatory authority or its members to comply with applicable laws and regulations.

I.3 DFARS Clauses Incorporated by Reference

The use in this contract of any Defense Federal Acquisition Regulation Supplement (48 CFR Chapter 2) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

The following DFARS clauses are incorporated by reference:

DFARS Paragraph	Clause Title	IAW	Date
252.203-7001	Prohibition on Persons Convicted of Fraud or Other Defense-Contract-Related Felonies	DFARS 203.570-3	Dec 2008
252.203-7002	Requirement to Inform Employees of Whistleblower Rights	DFARS 203.970	Jan 2009
252.203-7003	Agency Office of the Inspector General	DFARS 203.1004(a)	Sep 2010
252.204-7000	Disclosure of Information	DFARS 204.404-70(a)	Dec 1991
252.204-7003	Control of Government Personnel Work Product	DFARS 204.404-70(b)	Apr 1992
252.205-7000	Provision of Information to Cooperative Agreement Holders	DFARS 205.470	Dec 1991
252.209-7004	Subcontracting with Firms that Are Owned or Controlled by the Government of a Terrorist Country	DFARS 209.409	Dec 2006
252.215-7000	Pricing Adjustments	DFARS 215.408(1)	Dec 1991
252.219-7003	Small Business Subcontracting Plan (DoD Contracts)	DFARS 219.708(b)(1)(A)	Oct 2010
252.223-7004	Drug-Free Work Force	DFARS 223.570-2	Sep 1988
252.223-7006	Prohibition on Storage and Disposal of Toxic and Hazardous Materials	DFARS 223.7103(a)	Apr 1993
252.225-7031	Secondary Arab Boycott of Israel	DFARS 225.7605	Jun 2005
252.226-7001	Utilization of Indian Organizations, Indian-Owned Economic Enterprises, and Native Hawaiian Small Business Concerns	DFARS 226.104	Sep 2004
252.231-7000	Supplemental Cost Principles	DFARS 231.100-70	Dec 1991
252.232-7003	Electronic Submission of Payment Requests and Receiving Reports	DFARS 232.7004	Mar 2008
252.232-7010	Levies on Contract Payments	DFARS 232.7102	Dec 2006
252.235-7003	Frequency Authorization	DFARS 235.072(b)	Dec 1991
252.236-7005	Airfield Safety Precautions	DFARS 236.570(b)(3)	Dec 1991
252.243-7001	Pricing of Contract Modifications	DFARS 243.205-70	Dec 1991
252.243-7002	Requests for Equitable Adjustment	DFARS 243.205-71	Mar 1998
252.247-7023	Transportation of Supplies by Sea	DFARS 247.574(b)(1)	May 2002

I.4 Utility Services Clauses Incorporated by Reference

The following Utility Services FAR and DFARS clauses are incorporated herein by reference:

Paragraph	Clause Title	IAW	Date
52.241-2	Order of Precedence – Utilities	FAR 41.501(c)(1)	Feb 1995
52.241-4	Change in Class of Service	FAR 41.501(c)(3)	Feb 1995
52.241-5	Contractor's Facilities	FAR 41.501(c)(4)	Feb 1995
52.241-11	Multiple Service Locations	FAR 41.501(d)(5)	Feb 1995
252.241-7001	Government Access	DFARS 241.501-70(b)	Dec 1991

I.5 Other Clauses

I.5.1 FAR 52.204-10: Reporting Executive Compensation and First-Tier Subcontract Awards (Jul 2010)

(a) *Definitions.* As used in this clause:

"Executive" means officers, managing partners, or any other employees in management positions.

"First-tier subcontract" means a subcontract awarded directly by a Contractor to furnish supplies or services (including construction) for performance of a prime contract, but excludes supplier agreements with vendors, such as long-term arrangements for materials or supplies that would normally be applied to a Contractor's general and administrative expenses or indirect cost.

"Total compensation" means the cash and noncash dollar value earned by the executive during the Contractor's preceding fiscal year and includes the following (for more information see 17 CFR 229.402(c)(2)):

(1) Salary and bonus.

(2) Awards of stock, stock options, and stock appreciation rights. Use the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Statement of Financial Accounting Standards No. 123 (Revised 2004) (FAS 123R), Shared Based Payments.

(3) Earnings for services under non-equity incentive plans. This does not include group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of executives, and are available generally to all salaried employees.

(4) Change in pension value. This is the change in present value of defined benefit and actuarial pension plans.

(5) Above-market earnings on deferred compensation which is not tax-qualified.

(6) Other compensation, if the aggregate value of all such other compensation (*e.g.*, severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property) for the executive exceeds $10,000.

(b) Section 2(d) of the Federal Funding Accountability and Transparency Act of 2006 (Pub. L. No. 109-282), as amended by section 6202 of the Government Funding Transparency Act of 2008 (Pub. L. 110-252), requires the Contractor to report information on subcontract awards. The law requires all reported information be made public, therefore, the Contractor is responsible for notifying its subcontractors that the required information will be made public.

(c)(1) Unless otherwise directed by the contracting officer, by the end of the month following the month of award of a first-tier subcontract with a value of $25,000 or more, (and any modifications to these subcontracts that change previously reported data), the Contractor shall report the following information at http://www.fsrs.gov for each first-tier subcontract. (The Contractor shall follow the instruction s at http://www.fsrs.gov to report the data.)

(i) Unique identifier (DUNS Number) for the subcontractor receiving the award and for the subcontractor's parent company, if the subcontractor has a parent company.

(ii) Name of the subcontractor.

(iii) Amount of the subcontract award.

(iv) Date of the subcontract award.

(v) A description of the products or services (including construction) being provided under the subcontract, including the overall purpose and expected outcomes or results of the subcontract.

(vi) Subcontract number (the subcontract number assigned by the Contractor).

(vii) Subcontractor's physical address including street address, city, state, and country. Also include the nine-digit zip code and congressional district.

(viii) Subcontractor's primary performance location including street address, city, state, and country. Also include the nine-digit zip code and congressional district.

(ix) The prime contract number, and order number if applicable.

(x) Awarding agency name and code.

(xi) Funding agency name and code.

(xii) Government contracting office code.

(xiii) Treasury account symbol (TAS) as reported in FPDS.

(xiv) The applicable North American Industry Classification System code (NAICS).

(2) By the end of the month following the month of a contract award, and annually thereafter, the Contractor shall report the names and total compensation of each of the five most highly compensated executives for the Contractor's preceding completed fiscal year at http://www.ccr.gov , if—

(i) In the Contractor's preceding fiscal year, the Contractor received—

(A) 80 percent or more of its annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements; and

(B) $25,000,000 or more in annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements; and

(ii) The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of

1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at http://www.sec.gov/answers/execomp.htm .)

(3) Unless otherwise directed by the contracting officer, by the end of the month following the month of a first-tier subcontract with a value of $25,000 or more, and annually thereafter, the Contractor shall report the names and total compensation of each of the five most highly compensated executives for each first-tier subcontractor for the subcontractor's preceding completed fiscal year at http://www.fsrs.gov , if—

(i) In the subcontractor's preceding fiscal year, the subcontractor received—

(A) 80 percent or more of its annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements; and

(B) $25,000,000 or more in annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements; and

(ii) The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at http://www.sec.gov/answers/execomp.htm .)

(d)(1) If the Contractor in the previous tax year had gross income, from all sources, under $300,000, the Contractor is exempt from the requirement to report subcontractor awards.

(2) If a subcontractor in the previous tax year had gross income from all sources under $300,000, the Contractor does not need to report awards to that subcontractor.

(e) Phase-in of reporting of subcontracts of $25,000 or more.

(1) Until September 30, 2010, any newly awarded subcontract must be reported if the prime contract award amount was $20,000,000 or more.

(2) From October 1, 2010, until February 28, 2011, any newly awarded subcontract must be reported if the prime contract award amount was $550,000 or more.

(3) Starting March 1, 2011, any newly awarded subcontract must be reported if the prime contract award amount was $25,000 or more.

(End of Clause)

I.5.2 FAR 52.209-9: Updates of Publicly Available Information Regarding Responsibility Matters (Jan 2011)

(a)(1) The Contractor shall update the information in the Federal Awardee Performance and Integrity Information System (FAPIIS) on a semi-annual basis, throughout the life of the contract, by posting the required information in the Central Contractor Registration database at http://www.ccr.gov.

(2) At the first semi-annual update on or after April 15, 2011, the Contractor shall post again any required information that the Contractor posted prior to April 15, 2011.

(b)(1) The Contractor will receive notification when the Government posts new information to the Contractor's record.

(2) The Contractor will have an opportunity to post comments regarding information that has been posted by the Government. The comments will be retained as long as the associated information is retained, *i.e.,* for a total period of 6 years. Contractor comments will remain a part of the record unless the Contractor revises them.

(3)(i) Public requests for system information posted prior to April 15, 2011, will be handled under Freedom of Information Act procedures, including, where appropriate, procedures promulgated under E.O. 12600.

(ii) As required by section 3010 of Public Law 111-212, all information posted in FAPIIS on or after April 15, 2011, except past performance reviews, will be publicly available.

(End of Clause)

I.5.3 FAR 52.241-7: Change in Rates or Terms and Conditions of Service for Regulated Services (Feb 1995)

(a) This clause applies to the extent services furnished under this contract are subject to regulation by a regulatory body. The Contractor agrees to give **the Contracting Officer in Section G.1** written notice of

(1) the filing of an application for change in rates or terms and conditions of service concurrently with the filing of the application and

(2) any changes pending with the regulatory body as of the date of contract award. Such notice shall fully describe the proposed change. If, during the term of this contract, the regulatory body having jurisdiction approves any changes, the Contractor shall forward to the Contracting Officer a copy of such changes within 15 days after the effective date thereof. The Contractor agrees to continue furnishing service under this contract in accordance with the amended tariff, and the Government agrees to pay for such service at the higher or lower rates as of the date when such rates are made effective.

(b) The Contractor agrees that throughout the life of this contract the applicable published and unpublished rate schedule(s) shall not be in excess of the lowest cost published and unpublished rate schedule(s) available to any other customers of the same class under similar conditions of use and service.

(c) In the event that the regulatory body promulgates any regulation concerning matters other than rates which affects this contract, the Contractor shall immediately provide a copy to the Contracting Officer. The Government shall not be bound to accept any new regulation inconsistent with Federal laws or regulations.

(d) Any changes to rates or terms and conditions of service shall be made a part of this contract by the issuance of a contract modification unless otherwise specified in the contract. The effective date of the change shall be the effective date by the regulatory body. Any factors not governed by the regulatory body will have an effective date as agreed to by the parties.

(End of Clause)

End of Section I

Section J

List of Attachments, Exhibits, and Reference Documents

Attachments	Title
JA1	Potable Water Utility System
Exhibits	**Title**
JE2	Service Interruption/Contingency and Catastrophic Loss Plan
JE3	Operations and Maintenance/Quality Management Plan
JE4	Initial System Deficiency Corrections and Initial Renewals and Replacements Plan
JE5	Operational Transition Plan
JE6	Subcontracting Plan
JE7	Rate Schedule FKW – Water Service within Fort Knox, Kentucky
Reference Documents	**Title**
JR8	Easement / Bill of Sale

End of Section J

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT	1. CONTRACT ID CODE	PAGE 1 OF 3

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
P00001	See Block 16C		

6. ISSUED BY CODE	SP0600	7. ADMINISTERED BY CODE *(If other than Item 6)*
DEFENSE LOGISTICS AGENCY ENERGY 8725 JOHN J. KINGMAN ROAD, SUITE 3937 FORT BELVOIR, VA 22060-6222 Buyer/Symbol: Taina M. Rivera/DLA Energy-EF PHONE: (703) 767-8130 E-MAIL: Taina.Rivera@dla.mil P.P. 8.2		

8. NAME AND ADDRESS OF CONTRACTOR *(NO., street, city ,county, State, and ZIP Code)*		9a. AMENDMENT OF SOLICITATION NO.
Hardin County Water District No. 1 1400 Rogersville Road Radcliff, KY 40160-9343 DUNS: 130402811 CAGE CODE: 316V9	X	9b. DATED *(SEE ITEM 11)* 10a. MODIFICATION OF CONTRACT NO. SP0600-11-C-8271 10b. DATED *(SEE ITEM 13)* September 30, 2011

11. **THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

[ ] The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers [ ] is extended, [ ] is not extended

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning ____ copies of the amendment;(b) By acknowledging receipt of this amendment on each copy of the offer submitted; or(c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. **FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER.** If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. **ACCOUNTING AND APPROPRIATION DATA** *(If required)*
Not Applicable

13. **THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
X	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation date, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: FAR 43.103(a)
	D. OTHER *(Specify type of modification and authority)*

E. **IMPORTANT:** Contractor [X] is not, [ ] is required to sign this document and return 1 copies to the issuing office.

14. **DESCRIPTION OF AMENDMENT/MODIFICATION** *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

Fort Knox, Kentucky – Utility Privatization Contract
Potable Water Utility System

See Additional Pages for Further Details.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remain unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME OF CONTRACTING OFFICER *(Type or print)*	
		BRIAN J. KOESSEL	
15B. NAME OF CONTRACTOR/OFFEROR *(Signature of person authorized to sign)*	15C.DATE SIGNED	16B. UNITED STATES OF AMERICA *(Signature of Contracting Officer)*	16C.DATE SIGNED 9/30/11

A. The purpose of this modification is to revise CLIN 0052 to provide funding for the first four (4) months of the ISDC Surcharge for Year 1 in the amount of $1,895,324.00, for the period from February 1, 2012 to May 31, 2012. Section B.3 is hereby revised as a result of these changes to include the applicable appropriation data in Section G. Accordingly, the contract is modified as follows:

B. Section B – Supplies or Services and Prices/Costs – As a result of the changes described in Paragraph A, the following line items are incorporated into Section B.3 as follows:

B.3 Schedule

Utility Service Payment by the Government

CLIN 0052 is hereby revised as follows:

FROM:

CLIN	Description	Qty	Unit	Unit Price	Total Price
0052	ISDC Surcharge – Year 1				
0052AA	Months 1-12 of 60	12	mo	$473,831.00	$5,685,972.00
	ACRN: TBD				
	Period of Performance: Contract Start Date + 12 mos				

TO:

CLIN	Description	Qty	Unit	Unit Price	Total Price
0052	ISDC Surcharge – Year 1				
0052AA	Months 1-4 of 60	4	mo	$473,831.00	$1,895,324.00
	ACRN: AB				
	Period of Performance: February 1, 2012 – May 31, 2012				
0052AB	Months 5-12 of 60				
	ACRN: TBD	8	Mo	$473,831.00	$3,790,648.00
	Period of Performance: June 1, 2012 – January 31, 2013				

C. **G.6 Accounting and Appropriation Data**

ACRN AB is hereby established in the amount of $1,895,324.00. Funds are provided under the Direct Cite MIPR Number 10098889 as follows:

Line of Accounting:

AB 02120112011 2020000 A22TT 131056QMIS 2334 0010098889 0020001382 021001 $1,895,324.00

Funding Breakdown:		
Funding for ACRN AB:	On SubCLIN 0052AA	$1,895,324.00
Total Funding:		$1,895,324.00
Total Funding for ACRN AB:		$1,895,324.00
Remaining Funds for ACRN AB:		$0.00

D. The total amount obligated on the contract is increased by $1,895,324.00 from $592,518.00 to $2,487,842.00.

E. The total value of the contract remains unchanged at $253,843,146.00.

F. All other Terms and Conditions shall remain unchanged and in full force and effect.

End of Modification

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT	1. CONTRACT ID CODE	PAGE 1 OF 3

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
P00002	See Block 16C		

6. ISSUED BY CODE	SP0600	7. ADMINISTERED BY CODE *(If other than Item 6)*
DEFENSE LOGISTICS AGENCY ENERGY 8725 JOHN J. KINGMAN ROAD, SUITE 3937 FORT BELVOIR, VA 22060-6222 Buyer/Symbol: Taina M. Rivera/DLA Energy-EF PHONE: (703) 767-8130 E-MAIL: Taina.Rivera@dla.mil P.P. 8.2		

8. NAME AND ADDRESS OF CONTRACTOR *(NO., street, city ,county, State, and ZIP Code)*		9a. AMENDMENT OF SOLICITATION NO.
Hardin County Water District No. 1 1400 Rogersville Road Radcliff, KY 40160-9343 DUNS: 130402811 CAGE CODE: 316V9	X	9b. DATED *(SEE ITEM 11)* 10a. MODIFICATION OF CONTRACT NO. SP0600-11-C-8271 10b. DATED *(SEE ITEM 13)* September 30, 2011

11. **THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

[ ] The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers [ ] is extended, [ ] is not extended

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning ____ copies of the amendment;(b) By acknowledging receipt of this amendment on each copy of the offer submitted; or(c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. **FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER.** If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. **ACCOUNTING AND APPROPRIATION DATA** *(If required)*
Not Applicable

13. **THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
X	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation date, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: FAR 43.103(a)
	D. OTHER *(Specify type of modification and authority)*

E. **IMPORTANT:** Contractor [X] is not, [ ] is required to sign this document and return 1 copies to the issuing office.

14. **DESCRIPTION OF AMENDMENT/MODIFICATION** *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

Fort Knox, Kentucky – Utility Privatization Contract
Potable Water Utility System

See Additional Pages for Further Details.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remain unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME OF CONTRACTING OFFICER *(Type or print)* BRIAN J. KOESSEL	
15B. NAME OF CONTRACTOR/OFFEROR *(Signature of person authorized to sign)*	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA *(Signature of Contracting Officer)*	16C. DATE SIGNED 9/30/11

A. The purpose of this modification is to revise CLIN 0052 to return the funding previously obligated in Modification P00001. The funding for CLIN 0052 is decreased in the amount of $1,895,324.00 from $1,895,324.00 to $0.00. Section B.3 is hereby revised as a result of these changes to include the applicable appropriation data in Section G. Accordingly, the contract is modified as follows:

B. Section B – Supplies or Services and Prices/Costs – As a result of the changes described in Paragraph A, the following line items are incorporated into Section B.3 as follows:

B.3 Schedule

Utility Service Payment by the Government

CLIN 0052 is hereby revised as follows:

FROM:

CLIN	Description	Qty	Unit	Unit Price	Total Price
0052	ISDC Surcharge – Year 1				
0052AA	Months 1-4 of 60	4	mo	$473,831.00	$1,895,324.00
	ACRN: AB				
	Period of Performance: February 1, 2012 – May 31, 2012				
0052AB	Months 5-12 of 60				
	ACRN: TBD	8	Mo	$473,831.00	$3,790,648.00
	Period of Performance: June 1, 2012 – January 31, 2013				

TO:

CLIN	Description	Qty	Unit	Unit Price	Total Price
0052	ISDC Surcharge – Year 1				
0052AA	Months 1-12 of 60	12	mo	$473,831.00	$5,685,972.00
	ACRN: TBD				
	Period of Performance: February 1, 2012 – January 31, 2013				

C. **G.6 Accounting and Appropriation Data**

ACRN AB, previously established in Modification P00001, is hereby deleted in its entirety. Funds are decreased in the amount of $1,895,324.00 from $1,895,324.00 to $0.00.

Line of Accounting:

AB 02120112011 2020000 A22TT 131056QMIS 2334 0010098889 0020001382 021001 $0.00

Document Reference Number: MIPR10098889

Funding Breakdown:		
Funding for ACRN AB:	On SubCLIN 0052AA	$0.00
Total Funding in Mod P00001:		$1,895,324.00
Total Funding Decreased in this Mod:		**$1,895,324.00**
Total Funding for ACRN AB:		$0.00
Remaining Funds for ACRN AB:		$0.00

D. The total amount obligated on the contract is decreased by $1,895,324.00 from $2,487,842.00 to $592,518.00.

E. The total value of the contract remains unchanged at $253,843,146.00.

F. All other Terms and Conditions shall remain unchanged and in full force and effect.

End of Modification

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT	1. CONTRACT ID CODE	PAGE 1 OF 11

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
0003	13 May 2011	SP0600-08-1258	

6. ISSUED BY CODE	SP0600	7. ADMINISTERED BY CODE (If other than Item 6)
DEFENSE LOGISTICS AGENCY ENERGY 8725 JOHN J. KINGMAN ROAD, SUITE 3830 FT. BELVOIR, VA 22060-6222 BUYER/SYMBOL: Taina M. Rivera/DLA Energy-EF PHONE: (703) 767-8130 E-MAIL: Taina.Rivera@dla.mil		

8. NAME AND ADDRESS OF CONTRACTOR (NO., street, city ,county, State, and ZIP Code)		9a. AMENDMENT OF SOLICITATION NO.
	X	SP0600-08-R-0803
		9b. DATED (SEE ITEM 11) 1 July 2008
		10a. MODIFICATION OF CONTRACT/ORDER NO.
		10b. DATED (SEE ITEM 13)

11. **THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

[X] The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers [ ] is extended, [X] is not extended. Offerors must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning __1__ copy of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. **FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER.** If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. **ACCOUNTING AND APPROPRIATION DATA** *(If required)*
Not Applicable.

13. **THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation date, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: FAR 43.01
	OTHER *(Specify type of modification and authority)*

E. **IMPORTANT:** Contractor [ ] is not, [X] is required to sign this document and return _1_ copies to the issuing office.

14. **DESCRIPTION OF AMENDMENT/MODIFICATION** *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

Utility Privatization of the Potable Water Utility System Infrastructure at Fort Knox, KY

See Additional Pages for Further Details.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME OF CONTRACTING OFFICER (Type or print) **BRIAN J. KOESSEL**	
15B. NAME OF CONTRACTOR/OFFEROR *(Signature of person authorized to sign)*	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA *(Signature of Contracting Officer)*	16C. DATE SIGNED

The purpose of this amendment is to revise and update clauses in the RFP, specifically in Section I, *Contract Clauses*, Section J, *List of Attachments*, Section K, *Representations, Certifications, and other Statements of Offerors*, and Section L, *Instructions, Conditions, and Notices to Offerors*. Changes and additions to these Clauses are presented below and shown in **blue** font; deletions are shown in ~~**red strikethrough**~~ font.

A. RFP Section I.2, *FAR Clauses*, is deleted in its entirety and replaced with the following:

I.2 FAR Clauses

The following FAR clauses are incorporated by reference:

FAR Paragraph	Clause Title	IAW	Date
52.202-1	Definitions	FAR 2.201	Jul 2004
52.203-3	Gratuities	FAR 3.202	Apr 1984
52.203-5	Covenant Against Contingent Fees	FAR 3.404	Apr 1984
52.203-6	Restrictions on Subcontractor Sales to the Government	FAR 3.503-2	Sep 2006
52.203-7	Anti-Kickback Procedures	FAR 3.502-3	**Oct 2010**
52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity	FAR 3.104-9(a)	Jan 1997
52.203-10	Price or Fee Adjustment for Illegal or Improper Activity	FAR 3.104-9(b)	Jan 1997
52.203-12	Limitation on Payments to Influence Certain Federal Transactions	FAR 3.808(b)	**Oct 2010**
52.203-13	**Contractor Code of Business Ethics and Conduct**	**FAR 3.1004(a)**	**Apr 2010**
52.204-4	Printing or Copied Double-Sided on Recycled Paper	FAR 4.303	Aug 2000
52.204-5	**Women-Owned Business Other Than Small Business**	**FAR 4.607(b)**	**May 1999**
52.204-7	Central Contractor Registration	FAR 4.1104	Apr 2008
52.204-10	**Reporting Executive Compensation and First-Tier Subcontract Awards**	**FAR 4.1403(a)**	**Jul 2010**
52.207-3	Right of First Refusal of Employment	FAR 7.305(c)	May 2006
52.209-6	Protecting the Government's Interest when Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment	**FAR 9.409**	**Dec 2010**
52.215-2	Audit and Records - Negotiations	FAR 15.209(b)	**Oct 2010**
52.215-8	Order of Precedence – Uniform Contract Format (See Section C.1 of contract)	FAR 15.209(h)	Oct 1997

FAR Paragraph	Clause Title	IAW	Date
52.215-11	Price Reduction for Defective **Certified** Cost or Pricing Data—Modifications	FAR 15.408(c)	**Oct 2010**
52.215-13	Subcontractor **Certified** Cost or Pricing Data—Modifications	FAR 15.408(e)	**Oct 2010**
52.215-21	Requirements for **Certified** Cost or Pricing Data **and Data** Other Than **Certified** Cost or Pricing **Data**—Modifications	FAR 15.408(m)	**Oct 2010**
52.219-4	Notice of Price Evaluation for HUBZone Small Business Concerns	FAR 19.130**9**(b)	**Jan 2011**
52.219-8	Utilization of Small Business Concerns	FAR 19.708(a)	**Jan 2011**
52.219-9	Small Business Subcontracting Plan w/ Alt II below	FAR 19.708(b)	**Jan 2011**
52.219-9	Alternate II	FAR 19.708(b)(1)**(ii)**	Oct 2001
52.219-16	Liquidated Damages—Subcontracting Plan	FAR 19.708(b)(2)	Jan 1999
52.219-25	Small Disadvantaged Business Participation Program – Disadvantaged Status and Reporting	FAR 19.1204(b)	**Dec 2010**
52.219-28	Post-Award Small Business **Program** Representation	FAR 19.30**9**(d)	Apr 2009
52.222-1	Notice to the Government of Labor Disputes	FAR 22.103-5(a)	Feb 1997
52.222-3	Convict Labor	FAR 22.202	Jun 2003
52.222-4	Contract Work Hours and Safety Standards Act - Overtime Compensation	FAR 22.305	Jul 2005
52.222-21	Prohibition of Segregated Facilities	FAR 22.810(a)(1)	Feb 1999
52.222-26	Equal Opportunity	FAR 22.810(e)	Mar 2007
52.222-35	Equal Opportunity for ~~**Special Disabled**~~Veterans~~**, Veterans of the Vietnam Era, and Other Eligible Veterans**~~	FAR 22.1310(a)(1)	**Sep 2010**
52.222-36	Affirmative Action for Workers with Disabilities	FAR 22.1408(a)	**Oct 2010**
52.222-37	Employment Reports on ~~**Special Disabled**~~Veterans~~**, Veterans of the Vietnam Era, and Other Eligible Veterans**~~	FAR 22.1310(b)	**Sep 2010**
~~**52.222-39**~~	~~**Notification of Employee Rights Concerning Payment of Union Dues or Fees**~~	~~**FAR 22.1605**~~	~~**Dec 2004**~~
52.222-40	**Notification of Employee Rights Under the National Labor Relations Act**	**FAR 22.1605**	**Dec 2010**
52.222-50	Combating Trafficking in Persons	FAR 22.1705(a)	Feb 2009
52.222-54	Employment Eligibility Verification	FAR 22.1803	Jan 2009
52.223-5	Pollution Prevention and Right-to-Know Information	FAR 23.1005	Aug 2003
52.223-6	Drug-Free Workplace	FAR 23.505	May 2001
52.223-12	Refrigeration Equipment And Air Conditioners	FAR 23.804(b)	May 1995

FAR Paragraph	Clause Title	IAW	Date
52.223-13	Certification of Toxic Chemical Release Reporting	FAR 23.906(a)	Aug 2003
52.223-14	Toxic Chemical Release Reporting	FAR 23.906(b)	Aug 2003
52.228-5	Insurance-Work on a Government Installation	FAR 28.310	Jan 1997
52.229-3	Federal, State, and Local Taxes	FAR 29.401-3	Apr 2003
52.232-1	Payments	FAR 32.111(a)(1)	Apr 1984
52.232-8	Discounts for Prompt Payment	FAR 32.111(b)(1)	Feb 2002
52.232-11	Extras	FAR 32.111(c)(2)	Apr 1984
52.232-17	Interest	**FAR 32.611(a) & (b)**	**Oct 2010**
52.232-18	Availability of Funds	FAR 32.705-1(a)	Apr 1984
52.232-23	Assignment of Claims ALT 1	FAR 32.806(a)(1)	Jan 1986 Apr 1984
52.232-25	Prompt Payment	FAR 32.908(c)	Oct 2008
52.232-33	Payment by Electronic Funds Transfer --Central Contractor Registration	FAR 32.1110(a)(1)	Oct 2003
52.233-1	Disputes ALT 1	FAR 33.215	Jul 2002 Dec 1991
52.233-3	Protest after Award	FAR 33.106(b)	Aug 1996
52.233-4	Applicable Law for Breach of Contract Claim	FAR 33.215(b)	Oct 2004
52.237-2	Protection of Government Buildings, Equipment, and Vegetation	FAR 37.110(b)	Apr 1984
52.237-3	Continuity of Services	FAR 37.110(c)	Jan 1991
52.242-1	Notice of Intent to Disallow Costs	FAR 42.802	Apr 1984
52.242-13	Bankruptcy	FAR 42.903	Jul 1995
52.243-1	Changes – Fixed-Price ALT I	FAR 43.205(a)(1)	Aug 1987 Apr 1984
52.244-6	Subcontracts for Commercial Items	FAR 44.403	**Dec 2010**
52.249-2	Termination for Convenience of the Government (Fixed Price)	FAR 49.502(b)(1)(i)	May 2004
52.249-8	Default (Fixed Price Supply and Service)	FAR 49.504(a)(1)	Apr 1984
52.252-6	Authorized Deviations in Clauses	FAR 52.107(f)	Apr 1984

B. RFP Section I.3, *DFARS Clauses Incorporated by Reference*, is deleted in its entirety and replaced with the following:

I.3 DFARS Clauses Incorporated by Reference

The use in this solicitation or contract of any Defense Federal Acquisition Regulation Supplement (48 CFR Chapter 2) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

The following DFARS clauses are incorporated by reference:

DFARS Paragraph	Clause Title	IAW	Date
252.203-7001	Prohibition on Persons Convicted of Fraud or Other Defense-Contract-Related Felonies	DFARS 203.570-3~~5~~	**Dec 2008**
252.203-7002	Requirement to Inform Employees of Whistleblower Rights	DFARS 203.970	Jan 2009
252.204-7000	Disclosure of Information	DFARS 204.404-70(a)	Dec 1991
252.204-7003	Control of Government Personnel Work Product	DFARS 204.404-70(b)	Apr 1992
252.205-7000	Provision of Information to Cooperative Agreement Holders	DFARS 205.470	Dec 1991
252.209-7004	Subcontracting with Firms that Are Owned or Controlled by the Government of a Terrorist Country	DFARS 209.409	Dec 2006
252.215-7000	Pricing Adjustments	DFARS 215.408(1)	Dec 1991
252.219-7003	Small Business Subcontracting Plan (DoD Contracts)	DFARS 219.708(b)(1)(A)	**Oct 2010**
252.223-7004	Drug-Free Work Force	DFARS 223.570-2	Sep 1988
252.223-7006	Prohibition on Storage and Disposal of Toxic and Hazardous Materials	DFARS 223.7103(a)	Apr 1993
252.225-7031	Secondary Arab Boycott of Israel	DFARS 225.7605	Jun 2005
252.226-7001	Utilization of Indian Organizations, Indian-Owned Economic Enterprises, and Native Hawaiian Small Business Concerns	DFARS 226.104	Sep 2004
252.231-7000	Supplemental Cost Principles	DFARS 231.100-70	Dec 1991
252.232-7003	Electronic Submission of Payment Requests and Receiving Reports	DFARS 232.7004	Mar 2008
252.232-7010	Levies on Contract Payments	DFARS 232.7102	Dec 2006
252.235-7003	Frequency Authorization	DFARS 235.07**2**(b)	Dec 1991
252.236-7005	Airfield Safety Precautions	DFARS 236.570(b)(3)	Dec 1991
252.243-7001	Pricing of Contract Modifications	DFARS 243.205-70	Dec 1991
252.243-7002	Requests for Equitable Adjustment	DFARS 243.205-71	Mar 1998
252.247-7023	Transportation of Supplies by Sea	DFARS 247.574(b)(1)	May 2002

C. RFP Section I.5, *Non-Regulated Utility Clauses Incorporated by Reference*, is deleted in its entirety and replaced with the following:

I.5 Non-Regulated Utility Clauses Incorporated by Reference

The following FAR clauses are incorporated by reference if award is made to an entity that is non-regulated, non-Governmental:

Paragraph	Clause Title	IAW	Date
52.222-41	Service Contract Act of 1965~~, as amended~~	FAR 22.1006(a)	Nov 2007
52.222-44	Fair Labor Standards Act and Service Contract Act – Price Adjustment	FAR 22.1006(c)(2)	Sep 2009
52.230-2	Cost Accounting Standards	FAR 30.201-4(a)	**Oct 2010**
52.230-3	Disclosure and Consistency of Cost Accounting Practices	FAR 30.201-4(b)(1)	Oct 2008
52.230-6	Administration of Cost Accounting Standards	FAR 30.201-4(d)(1)	**Jun 2010**

D. RFP Section I.6, *Other Clauses*, is revised to insert FAR Clause 52.209-9, *Updates of Publicly Available Information Regarding Responsibility Matters*, as follows:

I.6.4 FAR Clause 52.209-9: Updates of Publicly Available Information Regarding Responsibility Matters (Jan 2011)

(a)(1) The Contractor shall update the information in the Federal Awardee Performance and Integrity Information System (FAPIIS) on a semi-annual basis, throughout the life of the contract, by posting the required information in the Central Contractor Registration database at http://www.ccr.gov.

(2) At the first semi-annual update on or after April 15, 2011, the Contractor shall post again any required information that the Contractor posted prior to April 15, 2011.

(b)(1) The Contractor will receive notification when the Government posts new information to the Contractor's record.

(2) The Contractor will have an opportunity to post comments regarding information that has been posted by the Government. The comments will be retained as long as the associated information is retained, *i.e.*, for a total period of 6 years. Contractor comments will remain a part of the record unless the Contractor revises them.

(3)(i) Public requests for system information posted prior to April 15, 2011, will be handled under Freedom of Information Act procedures, including, where appropriate, procedures promulgated under E.O. 12600.

(ii) As required by section 3010 of Public Law 111-212, all information posted in FAPIIS on or after April 15, 2011, except past performance reviews, will be publicly available.

(End of clause)

E. RFP Section J, Attachment J1, *Fort Knox Potable Water Utility System*, is deleted in its entirety and replaced with the following:

Attachment J1 -
Water - Fort Knox - M

F. RFP Section J, Attachment J41, *Subcontracting Plan*, is deleted in its entirety and replaced with the following:

Attachment J41 -
Subcontracting Plan -

G. RFP Section J, Attachment J42, *Sample Bill of Sale*, and Attachment J43, *Sample Easement*, are deleted in their entirety and replaced with the following:

Attachment J43 - UP
Model Easement - Jul

H. RFP Section J, Attachment J44, *Wage Determination*, is deleted in its entirety and replaced with the following:

Attachment J44 -
Wage Determination

I. RFP Section K, *Representations, Certifications, and other Statements of Offerors*, is deleted in its entirety and replaced with the following:

Offerors shall complete electronic annual representations and certifications at http://orca.bpn.gov in conjunction with required registration in the Central Contractor Registration (CCR) database.

52.204-8 ANNUAL REPRESENTATIONS AND CERTIFICATIONS (Jan 2011)

(a)(1) The North American Industry Classification System (NAICS) code for this acquisition is **221310 (Water Supply and Irrigation Systems)**.
(2) The small business size standard is **$7.0 million**.
(3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.

(b)(1) If the clause at 52.204-7, Central Contractor Registration, is included in this solicitation, paragraph (**d**) of this provision applies.

(2) If the clause at 52.204-7 is not included in this solicitation, and the offeror is currently registered in CCR, and has completed the ORCA electronically, the offeror may choose to use paragraph (**d**) of this provision instead of completing the corresponding individual representations and certifications in the solicitation. The offeror shall indicate which option applies by checking one of the following boxes:
[ ] (i) Paragraph (d) applies.
[ ] (ii) Paragraph (d) does not apply and the offeror has completed the individual representations and certifications in the solicitation.

(c)(1) The following representations or certifications in ORCA are applicable to this solicitation as indicated:

(i) 52.203-2, Certificate of Independent Price Determination. This provision applies to solicitations when a firm-fixed-price contract or fixed-price contract with economic price adjustment is contemplated, unless—

(A) The acquisition is to be made under the simplified acquisition procedures in Part 13;

(B) The solicitation is a request for technical proposals under two-step sealed bidding procedures; or

(C) The solicitation is for utility services for which rates are set by law or regulation.

(ii) 52.203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions. This provision applies to solicitations expected to exceed **$150,000.**

(iii) 52.204-3, Taxpayer Identification. This provision applies to solicitations that do not include the clause at 52.204-7, Central Contractor Registration.

(iv) 52.204-5, Women-Owned Business (Other Than Small Business). This provision applies to solicitations that—

(A) Are not set aside for small business concerns;

(B) Exceed the simplified acquisition threshold; and

(C) Are for contracts that will be performed in the United States or its outlying areas.

(v) 52.209-5, Certification Regarding Responsibility Matters. This provision applies to solicitations where the contract value is expected to exceed the simplified acquisition threshold.

(vi) 52.214-14, Place of Performance—Sealed Bidding. This provision applies to invitations for bids except those in which the place of performance is specified by the Government.

(vii) 52.215-6, Place of Performance. This provision applies to solicitations unless the place of performance is specified by the Government.

(viii) 52.219-1, Small Business Program Representations (Basic & Alternate I). This provision applies to solicitations when the contract will be performed in the United States or its outlying areas.

(A) The basic provision applies when the solicitations are issued by other than DoD, NASA, and the Coast Guard.

(B) The provision with its Alternate I applies to solicitations issued by DoD, NASA, or the Coast Guard.

(ix) 52.219-2, Equal Low Bids. This provision applies to solicitations when contracting by sealed bidding and the contract will be performed in the United States or its outlying areas.

(x) 52.222-22, Previous Contracts and Compliance Reports. This provision applies to solicitations that include the clause at 52.222-26, Equal Opportunity.

(xi) 52.222-25, Affirmative Action Compliance. This provision applies to solicitations, other than those for construction, when the solicitation includes the clause at 52.222-26, Equal Opportunity.

(xii) 52.222-38, Compliance with Veterans' Employment Reporting Requirements. This provision applies to solicitations when it is anticipated the contract award will exceed the simplified acquisition threshold and the contract is not for acquisition of commercial items.

(xiii) 52.223-1, Biobased Product Certification. This provision applies to solicitations that require the delivery or specify the use of USDA–designated items; or include the clause at 52.223-2, Affirmative Procurement of Biobased Products Under Service and Construction Contracts.

(xiv) 52.223-4, Recovered Material Certification. This provision applies to solicitations that are for, or specify the use of, EPA–designated items.

(xv) 52.225-2, Buy American Act Certificate. This provision applies to solicitations containing the clause at 52.225-1.

(xvi) 52.225-4, Buy American Act—Free Trade Agreements—Israeli Trade Act Certificate. (Basic, Alternate I, and Alternate II) This provision applies to solicitations containing the clause at 52.225-3.

(A) If the acquisition value is less than $25,000, the basic provision applies.

(B) If the acquisition value is $25,000 or more but is less than $50,000, the provision with its Alternate I applies.

(C) If the acquisition value is $50,000 or more but is less than $67,826, the provision with its Alternate II applies.

(xvii) 52.225-6, Trade Agreements Certificate. This provision applies to solicitations containing the clause at 52.225-5.

(xviii) 52.225-20, Prohibition on Conducting Restricted Business Operations in Sudan - Certification. **This provision applies to all solicitations.**

(xix) 52.225-25, Prohibition on Engaging in Sanctioned Activities Relating to Iran—Certification. This provision applies to all solicitations.

(xx) 52.226-2, Historically Black College or University and Minority Institution Representation. This provision applies to—

(A) Solicitations for research, studies, supplies, or services of the type normally acquired from higher educational institutions; and

(B) For DoD, NASA, and Coast Guard acquisitions, solicitations that contain the clause at 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns.

(2) The following certifications are applicable as indicated by the Contracting Officer:

[*Contracting Officer check as appropriate.*]

_X_ (i) 52.219-22, Small Disadvantaged Business Status.

X (A) Basic.

__ (B) Alternate I.

__ (ii) 52.222-18, Certification Regarding Knowledge of Child Labor for Listed End Products.

__ (iii) 52.222-48, Exemption from Application of the Service Contract Act to Contracts for Maintenance, Calibration, or Repair of Certain Equipment Certification.

__ (iv) 52.222-52, Exemption from Application of the Service Contract Act to Contracts for Certain Services–Certification.

__ (v) 52.223-9, with its Alternate I, Estimate of Percentage of Recovered Material Content for EPA–Designated Products (Alternate I only).

__ (vi) 52.223-13, Certification of Toxic Chemical Release Reporting.

__ (vii) 52.227-6, Royalty Information.

__ (A) Basic.

__(B) Alternate I.

__ (viii) 52.227-15, Representation of Limited Rights Data and Restricted Computer Software.

(d) The offeror has completed the annual representations and certifications electronically via the Online Representations and Certifications Application (ORCA) website at http://orca.bpn.gov. After reviewing the ORCA database information, the offeror verifies by submission of the offer that the representations and certifications currently posted electronically that apply to this solicitation as indicated in paragraph (c) of this provision have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201); except for the changes identified below [*offeror to insert changes, identifying change by clause number, title, date*]. These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

FAR Clause	Title	Date	Change

Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on ORCA.

(End of provision)

J. RFP Section L.6.2.1, *Waiver of Applicability of Cost Accounting Standards and Deviations from Specific Parts of Federal Acquisition Regulation (FAR) Part 31*, is deleted in its entirety and replaced with the following:

L.6.2.1.1 Cost Accounting Standards (CAS) Waiver

Offerors otherwise subject to CAS (See FAR Part 30 and FAR 52.230-1), who seek to have the utilities privatization CAS waiver allowed by the Cost Accounting Standards Board[1] applied to any resultant contract must submit the following information in writing as part of the proposal:

1. Certification that the business segment offering will not, at the time of award, be performing on any other contract that is subject to Cost Accounting Standards;
2. Disclosure of the Offeror's established accounting practices for allocating costs to contracts for which CAS has been waived; and
3. Certification that offeror will consistently use the disclosed practices to prepare current and future pricing.

Additionally, all the following provisions must be met for the CAS Waiver to be applied:

1. The contract type must be Firm-Fixed Price (FFP), Fixed-Price with Economic Price Adjustment (FPEPA), or Fixed-Price with Prospective Price Redetermination (FPPPR).
2. Cost or Pricing Data as defined in the FAR was not obtained during the award process.
3. Accounting practices used must be disclosed and comply with those laid out in Clause G.4.2.
4. Contractor agrees that adjustments to contract pricing can be made by the Government if accounting practices disclosed are not used (see Clause G.4, *Price Adjustment For Noncompliance with Accounting Procedure*).
5. Any resulting contract includes FAR Clause 52.215-2.

[1] A copy of the UP CAS Waiver can be found at http://www.desc.dla.mil/DCM/DCMPage.asp?pageid=601.

6. For FPPPR contracts, statutorily unallowable costs and costs typically not allowed by cognizant State regulatory bodies (as applicable) are not used for price redetermination.

L.6.2.1.2 FAR Part 31 Deviation

Offerors seeking a waiver from any otherwise applicable FAR Part 31 provisions, as permitted by the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics (OUSD-AT&L) Class Deviation 2011-O0006 dated March 31, 2011[2], must provide the following information and the following criteria must be met:

1. FAR 31.205-20 Interest and Other Financial Costs.
   a. A description as to why allowing costs otherwise disallowed by the cost principle will significantly reduce the costs to the Government under any resulting contract or price adjustment.
   b. Interest costs must be directly related financial costs incurred to obtain loans or borrow capital from third-party financial institutions and are reasonable.
2. FAR 31.205-41 Taxes
   a. For Federal Income Tax directly related to a Contribution in Aid of Construction (CIAC) Tax, an offer should be constructed in a manner to ensure no such tax liability is incurred. However, if, prior to award, a CIAC liability is identified, the offer shall notify the Contracting Officer and provide a written description as to why the liability exists, the amount of the liability, and why an offer cannot be structured to eliminate the tax.
   b. The allowable portion of any CIAC obligation would be limited to the portion of the actual CIAC tax attributable to the difference between:
      i. The fair market value determinations of the Government using a generally accepted valuation methodology, and
      ii. The fair market value determination of the Internal Revenue Service in assessing the tax.
   c. Please refer to Section H, *Contribution in Aid of Construction (CIAC) Tax Liability*, for CIAC obligations arising after contract award.
3. General Deviation from FAR Part 31
   a. The following criteria must be met in order for a waiver to be granted:
      i. Offeror must request a waiver from FAR Part 31, or a specific part of FAR Part 31, and provide a rationale as to why it is in the best interest of the Government to do so.
      ii. The contract contemplated must be FFP, FPEPA, or FPPPR and include FAR Clause 52.215-2.
      iii. The offer must be either exempt from CAS or have CAS requirements waived for the contract.
      iv. The initial fixed-price, fixed-price with economic price adjustment or fixed-price with price redeterminations must:
         1. Meet the limitations for any deviation granted from FAR 31.205-20, Interest and other financial costs;
         2. Meet the limitations specified for any deviation granted from FAR 31.205-41 Taxes;
         3. Exclude costs listed in 10 U.S.C. § 2324(e); and
         4. If a regulated entity, exclude costs typically consider to be unallowable by the cognizant State regulatory body.

K. All other Terms and Conditions shall remain unchanged and in full force and effect.

End of Amendment

[2] A copy of the Class Deviation can be found at http://www.desc.dla.mil/DCM/DCMPage.asp?pageid=601.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT	1. CONTRACT ID CODE K	Page 1 of 2

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
P00004	18 January 2012	N/A	

6. ISSUED BY	CODE SP0600	7. ADMINISTERED BY *(If other than Item 6)* CODE
DLA ENERGY – ENERGY ENTERPRISE 8725 JOHN J. KINGMAN ROAD, SUITE 4950 FORT BELVOIR, VA 22060-6222 Buyer/Symbol: Bryan Sveum/DLA Energy-EA PHONE: (703) 767-9518 E-MAIL: bryan.sveum@dla.mil		

8. NAME AND ADDRESS OF CONTRACTOR *(NO., street city, county, State ,and ZIP Code)*		9a. AMENDMENT OF SOLICITATION NO.
Hardin County Water District No. 1 1400 Rogersville Road Radcliff, KY 40160-9343 Phone: (270) 351-3222 ext. 208 Fax: (270) 352-3055 POC : Jim Bruce, General Manager DUNS # 130402811 CAGE #316V9		9b. DATED *(SEE ITEM 11)*
	X	10a. MODIFICATION OF CONTRACT/ORDER NO. **SP0600-11-C-8271**
		10b. DATED *(SEE ITEM 13)* 30 September 2011

11. **THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

[ ]The above numbered solicitation is amended as set forth in Item 14.
The hour and date specified for receipt of Offers [ ] is extended, [ ] is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copy of the amendment;(b) By acknowledging receipt of this amendment on each copy of the offer submitted; or(c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers.
FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. **ACCOUNTING AND APPROPRIATION DATA** *(If required)*0

13. **THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
X	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation date, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER *(Specify type of modification and authority)*

E. **IMPORTANT:** Contractor [X] is not, [ ] is required to sign this document and return _____ copies to the issuing office.

14. **DESCRIPTION OF AMENDMENT/MODIFICATION** *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

Fort Knox, Kentucky – Utility Privatization Contract
Potable Water Utility System

See Additional Pages for Further Details.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME OF CONTRACTING OFFICER **James Johnson**	
15B. NAME OF CONTRACTOR/OFFEROR BY _____ *(Signature of person authorized to sign)*	15C.DATE SIGNED	16B. UNITED STATES OF AMERICA BY _____ *(Signature of Contracting Officer)*	16C.DATE SIGNED 18 January 2012

NSN 7540-01-152-8070
PREVIOUS EDITION UNUSABLE

STANDARD FORM 30 (REV.10-83)
Prescribed by GSA
FAR (48 CFR) 52.243

A. The purpose of this modification is to correct the DFAS Payment Office.

FROM:	TO:
HQ0105	HQ0490
DEFENSE FINANCE ACCOUNTING SERVICE	DEFENSE FINANCE ACCOUNTING SERVICE
DFAS INDIANAPOLIS CENTER	DFAS-INDY VP GFEBS
899 E. 56TH STREET	8899 E 56TH STREET
INDIANAPOLIS, IN 46249	INDIANAPOLIS IN 46249-3800

B. All other terms and conditions of the subject contract remain unchanged and in full force and effect.

END OF MODIFICATION

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT	1. CONTRACT ID CODE K	Page 1 of 2

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
P00005	31 January 2012	N/A	

6. ISSUED BY	CODE SP0600	7. ADMINISTERED BY *(If other than Item 6)*	CODE
DLA ENERGY – ENERGY ENTERPRISE 8725 JOHN J. KINGMAN ROAD, SUITE 4950 FORT BELVOIR, VA 22060-6222 Buyer/Symbol: Kenneth Richardson/DLA Energy-EA PHONE: (703) 767-9559 E-MAIL: kenneth.richardson@dla.mil			

8. NAME AND ADDRESS OF CONTRACTOR *(NO., street city, county, State ,and ZIP Code)*		9a. AMENDMENT OF SOLICITATION NO.
Hardin County Water District No. 1 1400 Rogersville Road Radcliff, KY 40160-9343 Phone: (270) 351-3222 ext. 208 Fax: (270) 352-3055 POC : Jim Bruce, General Manager DUNS # 130402811 CAGE #316V9		9b. DATED *(SEE ITEM 11)* 10a. MODIFICATION OF CONTRACT/ORDER NO. **SP0600-11-C-8271** X 10b. DATED *(SEE ITEM 13)* 30 September 2011

11. **THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

[ ]The above numbered solicitation is amended as set forth in Item 14.
The hour and date specified for receipt of Offers [ ] is extended, [ ] is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copy of the amendment;(b) By acknowledging receipt of this amendment on each copy of the offer submitted; or(c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. **FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER.** If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. **ACCOUNTING AND APPROPRIATION DATA** *(If required)*0

13. **THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation date, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: FAR 52.243-1
	D. OTHER *(Specify type of modification and authority)*

E. **IMPORTANT:** Contractor [ ] is not, [X] is required to sign this document and return 1 copies to the issuing office.

14. **DESCRIPTION OF AMENDMENT/MODIFICATION** *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

Fort Knox, Kentucky – Utility Privatization Contract
Potable Water Utility System

See Additional Pages for Further Details.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME OF CONTRACTING OFFICER	
JAMES BRUCE, GENERAL MANAGER		Lisa S. Goins-Berntsen	
15B. NAME OF CONTRACTOR/OFFEROR	15C.DATE SIGNED	16B. UNITED STATES OF AMERICA	16C.DATE SIGNED
BY _____ *(Signature of person authorized to sign)*	31-JAN-2012	BY _____ *(Signature of Contracting Officer)*	31 January 2012

NSN 7540-01-152-8070
PREVIOUS EDITION UNUSABLE

STANDARD FORM 30 (REV.10-83)
Prescribed by GSA
FAR (48 CFR) 52.243

A. The purpose of this modification is to attach the Bill of Sale for the Water Utility System, dated January 31, 2012, as Reference Document JR8, *Bill of Sale*.

B. The Easement is not completed at this time and will be incorporated at a later date. The Contractor and its agents, employees, contractors, and subcontractors shall have reasonable access to the Installation to accomplish its duties and responsibilities under the Contract identified in block 10a. The U.S. Army Garrison, Fort Knox, pursuant to Army Regulation 405-80 paragraph 2-13 b. (2) granted a Revocable License to Hardin County Water District #1. This License authorizes ingress and egress to Fort Knox, Kentucky for the purposes of, installing, operating and maintaining utility systems out side Hardin County Water District #1 utility easement; such as water meters, water lines and other utility work required to comply with their contract. The License is granted for the period of 1 February 2012 through 31 July 2012.

C. The Contracting Officer cited under Section G, Contract Administration Data, is hereby changed:

From:	To:
JAMES JOHNSON 8725 John J. Kingman Road Suite 3725 Fort Belvoir, VA 22060 DSN: 427-9554 (703) 767-9554 E-mail: james.1.johnson@dla.mil	LISA GOINS-BERNTSEN 8725 John J. Kingman Road Suite 3725 Fort Belvoir, VA 22060 DSN: 427-7543 (703) 767-7543 E-mail: lisa.goinsberntsen@dla.mil

D. The total amount obligated on the contract remains unchanged at $592,518.00.

E. The total value of the contract remains unchanged at $253,843,146.00.

F. All other Terms and Conditions shall remain unchanged and in full force and effect.

End of Modification

UTILITY SYSTEM BILL OF SALE

FOR WATER UTILITY SYSTEM
FOR
FORT KNOX MILITARY INSTALLATION,
HARDIN COUNTY, KENTUCKY

This BILL OF SALE made and entered into this 31st day of January, 2012, by and between the UNITED STATES OF AMERICA, hereinafter the "Government", acting by and through the Secretary of the Army, c/o Commander and District Engineer, United States Army Corps of Engineers, Louisville District, ATTN: CELRL-RE, P.O. Box 59, Louisville, Kentucky 40201-0059, hereinafter referred to as the "Seller", under and pursuant to 10 USC 2688 and in accordance with Contract No. SP0600-11-C-8271, which is attached hereto as Exhibit A, and HARDIN COUNTY WATER DISTRICT NO. 1, hereinafter the "Purchaser", 1400 Rogersville Road, Radcliff, Kentucky 40160-9343.

The Government, for good and valuable consideration as set out in Exhibit A, the receipt and sufficiency of which is hereby acknowledged, does hereby sell, transfer, set over and deliver to the Purchaser, its successors and assigns, all right, title, and interest of the Government in and to the water utility system, hereinafter the "System", owned by the Government, as and where such System presently exists on Fort Knox, Hardin County, Kentucky, comprised of all equipment, fixtures, structures, and other improvements, including access as provided for in the Right-of-Entry and subsequent Easement with this Bill of Sale, wholly excluding, however, any real property underlying, overlying, or surrounding such equipment, fixtures, structures, and other improvements. Such System is more specifically described in Exhibit B, attached hereto and made a part hereof.

The Government specifically disclaims and excludes any implied warranties of condition, of fitness for a particular purpose, of merchantability, or of any other kind under the laws of the United States and of the state in which the system is located. The System is sold "as is, where is." This Bill of Sale does not grant any right of access, right-of-way, or easement of any kind whatsoever over, across, or to the real property underlying, overlying, or surrounding the System. Any right of access to the System is contained, if at all, in a document separate from this Bill of Sale.

IN WITNESS WHEREOF, I have hereunto set my hand this 31st day of January, 2012, by authority of the Secretary of the Army.

UNITED STATES OF AMERICA
Acting by and through the Secretary of the Army

Veronica A. Hiriams, Chief Real Estate Division
Louisville District
U.S. Army Corps of Engineers

STATE OF KENTUCKY)
)SS
COUNTY OF JEFFERSON)

The foregoing Bill of Sale was acknowledged before me this 31st day of January, 2012, by Veronica A. Hiriams, Chief, Real Estate Division, Louisville District, U.S. Army Corps of Engineers, Louisville, Kentucky, acting by and through the Secretary of the Army for the United States of America.

My Commission Expires: 6-25-2014

Lisa M. Patrick
Notary Public, State at Large, Kentucky

APPROVAL AND ACCEPTANCE:

On this 31st day of JAN, 2012, Hardin County Water District No. 1 hereby approves and accepts this Bill of Sale and does hereby agree to all of the terms and conditions thereof.

HARDIN COUNTY WATER DISTRICT NO. 1

BY: JAMES BRUCE

TITLE: GENERAL MANAGER

STATE OF Kentucky)
) SS
COUNTY OF Hardin)

The foregoing Bill of Sale was acknowledged before me this 31st day of January, 2012 by Andrea Palmer as Executive Asst of HARDIN COUNTY WATER DISTRICT NO. 1.

ANDREA N. PALMER NOTARY PUBLIC ID NO. 452564 MY COMMISSION EXPIRES 10/12/2015 STATE AT LARGE, KY.

My Commission Expires: 10-12-2015

Notary Public, State at Large, Kentucky

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT	1. CONTRACT ID CODE K	Page 1 of 3

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
P00006	31 January 2012	N/A	

6. ISSUED BY	CODE	SP0600	7. ADMINISTERED BY *(If other than Item 6)*	CODE	

DLA ENERGY – ENERGY ENTERPRISE
8725 JOHN J. KINGMAN ROAD, SUITE 4950
FORT BELVOIR, VA 22060-6222
Buyer/Symbol: Kenneth Richardson/DLA Energy-EA
PHONE: (703) 767-9559 E-MAIL: kenneth.richardson@dla.mil

8. NAME AND ADDRESS OF CONTRACTOR *(NO., street city, county, State ,and ZIP Code)*		9a. AMENDMENT OF SOLICITATION NO.
Hardin County Water District No. 1 1400 Rogersville Road Radcliff, KY 40160-9343 Phone: (270) 351-3222 ext. 208 Fax: (270) 352-3055 POC : Jim Bruce, General Manager DUNS # 130402811 CAGE #316V9		9b. DATED *(SEE ITEM 11)*
	X	10a. MODIFICATION OF CONTRACT/ORDER NO. **SP0600-11-C-8271**
		10b. DATED *(SEE ITEM 13)* 30 September 2011

11. **THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

[ ]The above numbered solicitation is amended as set forth in Item 14.
The hour and date specified for receipt of Offers [ ] is extended, [ ] is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copy of the amendment;(b) By acknowledging receipt of this amendment on each copy of the offer submitted; or(c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. **FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER.** If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. **ACCOUNTING AND APPROPRIATION DATA** *(If required)*0

13. **THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
X	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation date, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 52.243-1
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: FAR 52.243-1
	D. OTHER *(Specify type of modification and authority)*

E. **IMPORTANT:** Contractor [X] is not, [ ] is required to sign this document and return _____ copies to the issuing office.

14. **DESCRIPTION OF AMENDMENT/MODIFICATION** *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

Fort Knox, Kentucky – Utility Privatization Contract
Potable Water Utility System

See Additional Pages for Further Details.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME OF CONTRACTING OFFICER **Lisa Goins-Berntsen**	
15B. NAME OF CONTRACTOR/OFFEROR BY _____ *(Signature of person authorized to sign)*	15C.DATE SIGNED	16B. UNITED STATES OF AMERICA BY _____ *(Signature of Contracting Officer)*	16C.DATE SIGNED 31 January 2012

NSN 7540-01-152-8070
PREVIOUS EDITION UNUSABLE

STANDARD FORM 30 (REV.10-83)
Prescribed by GSA
FAR (48 CFR) 52.243

A. The purpose of this modification is to provide 2 months of funding for SubCLIN 0001AA. Section B.3 is hereby revised as a result of these changes; and Section G.5 is revised to establish the applicable appropriation data.

B. Section B - Supplies or Services and Prices/Costs – As a result of the changes described in Paragraph A, the following line items are incorporated into Section B.3 as follows:

B.3 Schedule

Utility Service Payment by the Government

CLIN 0001 is hereby revised as follows:

FROM:

CLIN	Description	Qty	Unit	Unit Price	Total Price
0001	Monthly Utility Service Charge (Year 1)				
0001AA	Months 1-12 of 600 ACRN: TBD	12	Mo.	$246,172.00	$2,954,064.00

See Schedule 1 for Breakout of Monthly Utility Service Charge

TO:

CLIN	Description	Qty	Unit	Unit Price	Total Price
0001	Monthly Utility Service Charge (Year 1)				
0001AA	Month 1 and 2 of 600 ACRN: AB	2	Mo.	$246,172.00	$492,344.00
0001AB	Year 1 – Months 3-12 of 600 ACRN: TBD	10	Mo.	$246,172.00	$2,461,720.00

CLIN 0052 is hereby revised as follows:

FROM:

CLIN	Description	Qty	Unit	Unit Price	Total Price
0052	ISDC Surcharge – Year 1				
0052AA	Months 1-12 of 60 ACRN: TBD	12	Mo.	$473,831.00	$5,685,972.00

TO:

CLIN	Description	Qty	Unit	Unit Price	Total Price
0052	ISDC Surcharge – Year 1				
0052AA	Month 1 and 2 of 60 ACRN: AB	2	Mo.	$473,831.00	$947,662.00
0052AB	Year 1 – Months 3-12 of 60 ACRN: TBD	10	Mo.	$473,831.00	$4,738,310.00

C. Section G – Contract Administration Data - As a result of the changes described in Paragraph A, Section G.5 is revised as follows:

G.5 Accounting and Appropriation Data

ACRN AB is hereby established in the amount of $1,440,006.00. Funds are provided under the Direct Cite MIPR Number MIPR2D10132035 as follows:

Line of Accounting**:**
AB 02120122012 2020000 A2ABH 131079QDPW 2540 0010132035 1012.502 2ABH0086 021001 $1,440,006.00

D. The total amount obligated is increased by $1,440,006.00 from: $592,518.00 to: $2,032,524.00.

E. The total value of the contract remains unchanged at $253,843,146.00.

F. All other Terms and Conditions shall remain unchanged and in full force and effect.

End of Modification

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT	1. CONTRACT ID CODE K	Page 1 of 3

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
P00007	6 April 2012	N/A	

6. ISSUED BY	CODE	SP0600	7. ADMINISTERED BY *(If other than Item 6)*	CODE
DLA ENERGY – ENERGY ENTERPRISE 8725 JOHN J. KINGMAN ROAD, SUITE 4950 FORT BELVOIR, VA 22060-6222 Buyer/Symbol: Kenneth Richardson/DLA Energy-EA PHONE: (703) 767-9559 E-MAIL: kenneth.richardson@dla.mil				

8. NAME AND ADDRESS OF CONTRACTOR *(NO., street city, county, State ,and ZIP Code)*		9a. AMENDMENT OF SOLICITATION NO.
Hardin County Water District No. 1 1400 Rogersville Road Radcliff, KY 40160-9343 Phone: (270) 351-3222 ext. 208 Fax: (270) 352-3055 POC : Jim Bruce, General Manager DUNS # 130402811 CAGE #316V9		9b. DATED *(SEE ITEM 11)*
	X	10a. MODIFICATION OF CONTRACT/ORDER NO. **SP0600-11-C-8271**
		10b. DATED *(SEE ITEM 13)* 30 September 2011

11. **THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

[ ]The above numbered solicitation is amended as set forth in Item 14.
The hour and date specified for receipt of Offers [ ] is extended, [ ] is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copy of the amendment;(b) By acknowledging receipt of this amendment on each copy of the offer submitted; or(c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers.
FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. **ACCOUNTING AND APPROPRIATION DATA** *(If required)*0

13. **THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
X	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation date, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 52.243-1 Alt 1
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER *(Specify type of modification and authority)*

E. **IMPORTANT:** Contractor [ ] is not, [X] is required to sign this document and return 1 copies to the issuing office.

14. **DESCRIPTION OF AMENDMENT/MODIFICATION** *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

Fort Knox, Kentucky – Utility Privatization Contract
Potable Water Utility System

See Additional Pages for Further Details.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME OF CONTRACTING OFFICER **Lisa S. Goins-Berntsen**	
15B. NAME OF CONTRACTOR/OFFEROR BY _____ *(Signature of person authorized to sign)*	15C.DATE SIGNED	16B. UNITED STATES OF AMERICA BY _____ *(Signature of Contracting Officer)*	16C.DATE SIGNED 6 April 2012

NSN 7540-01-152-8070
PREVIOUS EDITION UNUSABLE

STANDARD FORM 30 (REV.10-83)
Prescribed by GSA
FAR (48 CFR) 52.243

A. The purpose of this modification is to provide 10 months of funding for SubCLIN 0001AB and SubCLIN 0052AB. Section B.3 is hereby revised as a result of these changes; and Section G.5 is revised to establish the applicable appropriation data.

B. Section B - Supplies or Services and Prices/Costs – As a result of the changes described in Paragraph A, the following line items are incorporated into Section B.3 as follows:

B.3 Schedule

Utility Service Payment by the Government

CLIN 0001 is hereby revised as follows:
FROM:

CLIN	Description	Qty	Unit	Unit Price	Total Price
0001	Monthly Utility Service Charge (Year 1)				
0001AA	Month 1 and 2 of 600 ACRN: AB	2	Mo.	$246,172.00	$492,344.00
0001AB	Year 1 – Months 3-12 of 600 ACRN: TBD	10	Mo.	$246,172.00	$2,461,720.00

TO:

CLIN	Description	Qty	Unit	Unit Price	Total Price
0001	Monthly Utility Service Charge (Year 1)				
0001AA	Month 1 and 2 of 600 ACRN: AB	2	Mo.	$246,172.00	$492,344.00
0001AB	Year 1 – Months 3-12 of 600 ACRN: AC	10	Mo.	$246,172.00	$2,461,720.00

CLIN 0052 is hereby revised as follows:
FROM:

CLIN	Description	Qty	Unit	Unit Price	Total Price
0052	ISDC Surcharge – Year 1				
0052AA	Month 1 and 2 of 60 ACRN: AB	2	Mo.	$473,831.00	$947,662.00
0052AB	Year 1 – Months 3-12 of 60 ACRN: TBD	10	Mo.	$473,831.00	$4,738,310.00

TO:

CLIN	Description	Qty	Unit	Unit Price	Total Price
0052	ISDC Surcharge – Year 1				
0052AA	Month 1 and 2 of 60 ACRN: AB	2	Mo.	$473,831.00	$947,662.00
0052AB	Year 1 – Months 3-12 of 60 ACRN: AC	10	Mo.	$473,831.00	$4,738,310.00

C. Section G – Contract Administration Data - As a result of the changes described in Paragraph A, Section G.5 is revised as follows:

G.5 Accounting and Appropriation Data

ACRN AC is hereby established in the amount of $7,200,030.00. Funds are provided under the Direct Cite MIPR Number MIPR2D10132035 as follows:

Line of Accounting**:**
AC 02120122012 2020000 A2ABH 131079QDPW 2540 0010132035 1012.502 2ABH0086 021001 $7,200,030.00

D. The total amount obligated is increased by $7,200,030.00 from: $2,032,524.00 to: $9,232,554.00.

E. The total value of the contract remains unchanged at $253,843,146.00.

F. All other Terms and Conditions shall remain unchanged and in full force and effect.

End of Modification

ATTACHMENT JA1

Fort Knox Potable Water Utility System

TABLE OF CONTENTS

LIST OF TABLES

JA1 Fort Knox Potable Water Utility System

JA1.1 Fort Knox Overview

The U.S. Army Garrison at Fort Knox is located roughly 36 miles southwest of Louisville and 14 miles northwest of Elizabethtown, Kentucky. The Army's main cantonment and range areas cover over 109,000 acres spread across Hardin, Bullitt and Nelson counties. The Federal government acquired the initial portion of the Installation in 1903 for the purpose of conducting Army maneuvers. Named for Major General Henry Knox, the first Secretary of War, Camp Knox was established in 1918 as an artillery training center to provide military training to personnel in response to the US involvement in World War I. Camp Knox was later designated Fort Knox in 1933.

In 1936 the U.S. Treasury Department began construction of the U.S. Bullion Depository and the Gold Vault opened in January 1937. During World War II, the U.S. Bullion Depository continued to operate at Fort Knox, receiving more and more shipments of the country's gold reserves. The Gold Vault was also used to store and to safeguard the English crown jewels and the Magna Carta, along with the gold reserves of several of the countries of occupied Europe. In December 1941, the Gold Vault also received the original documents of the Constitution, the Bill of Rights, and the Declaration of Independence for safekeeping. These historic documents left Fort Knox on Oct 1, 1944, and were returned to Washington DC for public display.

The Army created its first armored force at Fort Knox in 1940 and as a result the Installation is often referred to as "the Home of Armor". During World War II, four combat armored divisions were trained at Installation. Since first established in 1918, Fort Knox has played a key role in the development of military tactics, doctrine, and equipment, and has been an integral part of the training establishment for the active Army and Army Reserve.

Today, the Armor Center and School is the largest organization on Fort Knox and performs the mission of training all armor Soldiers and Marines. The Army Recruiting Command headquarters conducts the mission of bringing men and women into the U.S. Army. Additionally, the Eastern Region of the ROTC is headquartered at Fort Knox. The Army Accessions Command has personnel on post and will relocate the headquarters here as a result of the BRAC decisions of 2005. Units located on Fort Knox are considered "Partners in Excellence" and include active duty Army organizations, Army Reserve, National Guard and the U.S. Marine Corps.

According to current information published by Fort Knox (http://www.knox.army.mil/), the Installation supports a total population of over 23,000 Soldiers, family members and civilians.

JA1.1.1 Army Family Housing

Fort Knox recently privatized the Army Family Housing on Post to Knox Hills, a partnership between Fort Knox and Actus Lend Lease. This Residential Community Initiative (RCI) transfers ownership and maintenance responsibility of all of the housing units to a private contractor. Under this RCI agreement, Knox Hills will also remodel, renovate, demolish some structures and build new units in multiple phases over the initial years of the 50-year contract term. It should be pointed out that this RCI initiative does not involve the transfer of land nor does it include the transfer of

the existing potable water utility system components within the housing areas. The existing distribution system components in the housing areas which have not been renovated have been retained by the Government and are, therefore, included as part of this UP action. The ownership of the new potable water utility system components in the housing areas will be transferred from Knox Hills to Fort Knox for ownership, operation and maintenance and will also be part of the utility privatization action. It is important to note that the RCI process will result in some reconfiguration of the remaining housing areas with resultant changes in the utility systems serving those neighborhoods. The utility system owner should expect to be very much involved in these future changes.

JA1.2 Potable Water Utility System Description

JA1.2.1 Potable Water Utility System Fixed Equipment Inventory

Fort Knox's potable water utility system consists of all appurtenances physically connected to the system from the point in which the Government ownership currently starts to the point of demarcation defined by the real estate instruments. Generally, the point of demarcation will be the building footprint. The system may include, but is not limited to, the raw water wells, the surface water intake structures at the dams, the low lift pump station (LLPS), the water treatment plants (WTP), the clear wells, the high lift pump stations (HLPS), the booster pump station (BPS), the elevated water storage tanks and the distribution lines including raw water and finished water transmission lines and the service laterals. The following description and inventory is included to provide the Offeror with a general understanding of the size and configuration of the potable water utility system. The Offeror shall base the proposal on site inspections, information in the bidders' library, other pertinent information, and to a lesser degree the following description.

Ownership of the potable water system utility components including, but not limited to, the raw water wells, the surface water intake structures at the dams, the LLPS, the WTP facilities, the clear wells, the HLPSs, the BPS, the elevated water storage tanks and the distribution lines including raw water and finished water transmission lines and the service laterals will be transferred to the Utility Privatization (UP) Contractor. There are currently no plans to transfer any land ownership inside the main cantonment area. An easement will be provided for the land on which the potable water system structures are located (i.e., the pump stations, the water storage tanks, etc.). Fort Knox will retain all its water rights. All structures transferred must comply with the Installation's fire protection and security standards.

Specifically excluded from the potable water utility system privatization package:

- The Army-owned dams and impoundment structures at McCracken Spring and Otter Creek
- Raw water intake structures which are contained within the dams
- Golf course / landscaping irrigation systems
- Swimming pool facilities
- Wash rack facilities

The following description and inventory is included to provide the Offeror with a general understanding of the size and configuration of the potable water utility system. The description and inventory were developed based on the best available data.

The Offeror shall base its proposal on site inspections, information in the technical library, and other pertinent information, as well as the following description and inventory. If after award the Offeror identifies additional inventory not listed in Section JA1.2.1.4, the Offeror may submit to the Contracting Officer a request for an equitable adjustment. If the Offeror determines that the inventory listed in Section JA1.2.1.4 is overstated, the Offeror shall report the extent of the overstatement to the Contracting Officer, in accordance with Section C.11.1, *Due Diligence Adjustment*.

Generally, the Government uses the following useful lives in determining the value of the potable water utility system to be privatized:

Component	Useful Life
Raw water wells – structures	75 Years
Raw water wells – pumps / control systems	25 Years
WTP – Structures	75 years
WTP - Pumps / Control Systems	25 years
Pipe and services	50 years
Meters, main valves and hydrants	25 years
Water storage tanks	75 years
Pump Station – Structure	75 years
Pump Station - Pumps / Control Systems	25 years
SCADA and Cathodic Protection	25 years

JA1.2.1.1 System Description

Fort Knox's potable water utility system includes 13 groundwater wells, two raw water intake structures at the dams, a low-lift pumping station, 48,700 linear feet (LF) (9.2 miles) of raw water line, two WTP facilities, three clear wells, two high lift pump stations, one booster pump station, eight elevated storage tanks, the main cantonment area's potable water distribution system which includes roughly 810,329 LF (153.5 miles) of potable water distribution pipe and the range areas' potable water distribution systems which include roughly 48,397 LF (9.2 miles).

For the purposes of this document, Fort Knox's potable water system has been divided into the following four components: (1) raw water supply sources, (2) the WTP facilities, (3) the main cantonment area's water distribution and storage and (4) the range areas' water distribution systems. The schematic diagram of Fort Knox's potable water utility system is included in the Offeror's Technical Library.

Raw Water Supply Sources

The raw water is taken from four primary sources: the Otter Creek, the McCracken Spring, 13 Army-owned ground water wells and 3 leased ground water wells. The Otter Creek and McCracken Spring facilities, located southwest of the main cantonment area, are the primary

sources of water to the Central WTP. Raw water from the West Point well field located north of the main cantonment area along the Ohio River can also be pumped to the Muldraugh WTP via a 24-inch cast iron line or a 14-inch ductile iron line leased by the Army from Hardin County Water District No. 1 (HCWD No. 1) to the Central WTP. The Army's 13 ground water wells and the 3 leased wells are the primary sources of raw water to the Muldraugh WTP.

A small impoundment and concrete dam structure below the McCracken Spring provides surface water to the Otter Creek pumping station (PS), via a gravity feed 16-inch case iron line. A small impoundment and concrete dam structure on the Otter Creek also provides surface water to the Otter Creek pumping station (Facility No. 9213). The small impoundment and dam structures were constructed in the late 1930s and have been dredged periodically over the subsequent years. The Otter Creek PS pumps the surface water withdrawn from the McCracken Spring and the Otter Creek to the Central WTP. The pumping station includes an intake structure with mechanical screens, pump controls and telemetry, one 1,200 gpm (1.728 MGD) 150 HP, pump and two 2,100 gpm (3.024 MGD) pumps (one pump is 230 HP pump whereas the second pump is 250 HP), and a 550 kilowatt (kW) diesel emergency / standby generator. Originally constructed in 1936, the Otter Creek's mechanical screens, sluice gates, pump controls and telemetry and pumps have been replaced over the years. The 1,200 gpm and 2,100 gpm (230 HP) pumps were installed in 1983 and the other 2,100 gpm pump was installed in 2008.

Although the physical structure of the LLPS appears to be in relatively good condition given its age, the roof, doors and windows of the LLPS are in need of repair or replacement. The back side of the PS near the raw water intake on the Otter Creek is also in need of repair. The raw water lines from McCracken Spring to the Otter Creek PS and from the Otter Creek PS to the Central WTP are over 70 years old and may need to be considered for replacement in the next few years.

The Government's 13 ground water wells and the 3 ground water wells leased by Fort Knox from HCWD No.1 are located in the West Point well field, north of the main cantonment area along the Ohio River, on land either owned by or leased by the Army. The well field is a naturally formed alluvial aquifer bounded by the Ohio River, the Salt River and the inland hills. The raw water wells utilized either vertical turbine pumps on top of the wells or submersible pumps located with the well. 12 wells have pumps rated at 750 gpm (1.080 MGD), 125 HP and one of wells is rated at 500 gpm (0.720 MGD), 75 HP.

Table 1 summarizes the facility numbers, well numbers, locations, dates of original installation and upgrades, well depth, and the rated capacity of the wells in gallons per minute (gpm) and in MGD. The table also includes the relevant information for three raw water wells leased by Fort Knox from Hardin County Water District No. 1 in the West Point well field.

TABLE 1
Raw Water Wells
Potable Water Utility System, Fort Knox, Kentucky

Facility No.	Well	Location	Dates Installed/ Upgraded	Estimated Depth	Rated Capacity (gpm)	Rated Capacity (MGD)
8001	No. 1	West Point Well Field	1998	82 feet	750	1.080
8003	No. 2	West Point Well Field	2004	121 feet	750	1.080
8005	No. 3	West Point Well Field	2004	134 feet	750	1.080
8022	No. 5	West Point Well Field	2002	114 feet	750	1.080
8011	No. 6	West Point Well Field	2000	107 feet	500	0.720
8025	No. 7	West Point Well Field	1970	106 feet	750	1.080
8028	No. 8	West Point Well Field	1998	116 feet	750	1.080
8030	No. 9	West Point Well Field	1998	125 feet	750	1.080
8033	No. 10	West Point Well Field	1999	134 feet	750	1.080
8036	No. 11	West Point Well Field	2000	132 feet	750	1.080
8038	No. 12A	West Point Well Field	1985	113 feet	750	1.080
8001	No. 12B	West Point Well Field	2003	113 feet	750	1.080
8003	No. 13	West Point Well Field	1992	--	750	1.080
		Total Fort Knox Wells			**8,750**	**12.600**
Hardin County Water District No. 1 (Leased Wells)						
--	No. 4	West Point Well Field	--	--	1,000	1.440
--	No. 5	West Point Well Field	--	--	1,000	1.440
--	No. 6	West Point Well Field	--	--	1,000	1.440
		Total Leased Wells			**3,000**	**4.320**
		Total Wells			**11,750**	**16.920**

Although the wells are routinely cleaned and maintained by Fort Knox, many of the wells are producing raw water with elevated chloride levels. It is believed that the sources of the chloride into the aquifer are from abandoned natural gas and oil wells in the nearby area which were not properly sealed and capped. The raw water from the high chloride wells is brought down to acceptable levels by combining this production with the wells with lower chloride levels. The 24-inch raw water line from the West Point well field to the Muldraugh WTP is over 70 years old and may need to be considered for replacement in the next few years.

The Army has also notified HCWD No. 1 that, if privatization occurs, it intends to terminate the lease of the three wells and the 14-inch raw line upon conveyance of the utility system. Upon termination of the lease, the three wells and 14-inch line will revert back to HCWD No.1. As a result, these system components will not be included in the privatization action.

Water Treatment Facilities

As previously noted, Fort Knox has two WTP facilities: the Central WTP facility and the Muldraugh WTP facility. As the name indicates, the Central WTP is located in the central area of the main cantonment area. The Muldraugh WTP is located on the northwestern side of the Installation, near the town of Muldraugh, Kentucky.

The Central WTP facility (Facility No. 1205) was initially constructed in 1937, and has been partially upgraded numerous times over the years. The primary source of raw water to the 3.5 MGD Central WTP is the surface water from the Otter Creek and McCracken Spring facilities, located southwest of the main cantonment area. When surface water is not desirable for treatment, the ground water is pumped from the West Point well field to the main cantonment area on to the Central WTP via the leased 14-inch ductile iron line.

The Central WTP facility is a combination water softening and WTP facility. As detailed in the monthly operating reports, the facility continues to produce a good quality finished-water. Although the Central WTP has historically been staffed over 24 hours, the WTP facility is currently only operated roughly 6-12 hours per day. The Central WTP is currently operated to produce finished water with chlorine residual reading in the range of 1.8 to 2.9 TAP, pH reading in the range of 8.4 to 8.8 TAP, hardness reading in the range of 100 to 110 parts per million (ppm) and fluoride in the range of 1.0 to 1.2 ppm. Should the potable water utility system be privatized, the UP Contractor will be required to operate the Central WTP in a manner that the finished water meets these levels.

The plant was originally designed to treat surface water using lime and aluminum sulfate for pH adjustment, coagulation and sedimentation prior to filtration. Today, the treatment process includes aeration, flocculation, sedimentation, filtration and chlorination before the water is pumped into the distribution system. Both pre-chlorination and post-chlorination are used. The filter media (anthracite and sand) within the three mixed media filters was recently replaced in 2008. Reinforced concrete construction was used throughout the plant with liberal use of tile and marble for interior walls and flooring. The building is sound and is an excellent example of art-nouveau architecture.

The sludge from the treatment process at the Central WTP is trucked to sludge lagoons near the landfill on the Installation where the sludge is dried and disposed of in the landfill. If the Fort Knox system is privatized, the sludge from the Central WTP will be trucked off Post by the UP Contractor for complete disposal. The sludge lagoons located at the landfill are not included in this privatization action.

From the mixed media filters, the finished water flows into either the 2.0 million gallon (MG) clear well or the 500,000 gallon clear well located in the east side of the WTP facility. The finished water is then pumped to the distribution system via the HLPS located within the Central WTP facility. The HLPS includes pump controls and telemetry, one 4,850 gpm (6.984 MGD) 250 HP pump, one 1,000 gpm (1.440 MGD) 70 HP pump and one 1,400 gpm (2.016 MGD) 60 HP pump, and a 280 kilowatt (kW) dual fuel (natural gas / fuel oil) emergency / standby generator. The HLPS also houses a 5,400 gpm pump which is used to backwash the three mixed media filters in the Central WTP facility.

The mechanical systems and overflow weirs in one of the primary clarifiers at the Central WTP facility are currently being replaced. New hand rails around the top of the clarifiers and sedimentation basins are also being installed. Although the Central WTP facility is generally in good condition considering the age of the facility, the 2.0 MG clear well is in need of immediate repair or replacement. The exterior / above ground portion of the concrete tank is spalling in several areas, the structural integrity of the roof of the tank is in question and the clear well appears to leaking underground. The Installation is planning to study the potential repair /

replacement of the clear well. One alternative under consideration involves the removal / replacement of the roof at a lower elevation below grade and the lining of the interior of the tank.

The Muldraugh WTP facility (Facility No. 3009) was initially constructed in 1941, and has been partially upgraded numerous times over the years. The primary source of raw water to the 7.0 MGD Muldraugh WTP is the ground water pumped from the Army's 13 wells and the three leased wells in the West Point well field, located north along the Ohio River. The ground water from the wells is pumped roughly 3 miles to the Muldraugh WTP via a 24-inch case iron line.

The Muldraugh WTP facility is also a combination water softening and WTP. As detailed in the monthly operating reports, the facility continues to produce a good quality finished-water, in spite of the deteriorating equipment and facility. This is likely due to the fact that the Muldraugh WTP is generally operated at roughly 2.5 MGD, or 36 percent of the WTP's design capacity of 7.0 MGD. The Muldraugh WTP is operated and staffed 24 hours per day / 365 days per year. The Muldraugh WTP is also currently operated to produce finished water with chlorine residual reading in the range of 1.8 to 2.9 TAP, pH reading in the range of 8.4 to 8.8 TAP, hardness reading in the range of 100 to 110 ppm and fluoride in the range of 1.0 to 1.2 ppm. Should the potable water utility system be privatized and the Muldraugh WTP still be in operation, the UP Contractor will be required to operate the WTP facility in a manner that the finished water meets these levels.

The plant was originally designed to treat surface water using lime and aluminum sulfate for pH adjustment, coagulation and sedimentation prior to filtration. Today, the treatment process includes aeration, flocculation, sedimentation, filtration and chlorination before the water is pumped into the distribution system. Both pre-chlorination and post-chlorination are used in the treatment process. The Muldraugh WTP facility is a "semi-permanent" structure. The foundations, filters, settling basins, floors and the underground clear well are of reinforced concrete construction. The walls of the above ground structure are constructed of concrete brick construction.

After flowing into the 1.0 MG clear well located on the east side of the WTP facility, the finished water is pumped through a 24-inch case iron line that connects the WTP facility to the distribution system via the Muldraugh HLPS (Facility No. 3008). The HLPS is located within fenced area of the Muldraugh WTP facility. The HLPS includes pump controls and telemetry, one 3,500 gpm (5.040 MGD) 250 HP pump, one 4,850 gpm (6.984 MGD) 350 HP pump and one 2,200 gpm (3.168 MGD) 150 HP pump, and a 600 kW diesel emergency / standby generator. The HLPS also houses a 5,400 gpm pump used to backwash the seven filters.

There are two SCADA systems with monitoring and control equipment located at the Muldraugh WTP. Both of the systems are antiquated by today's industry standards and are approaching the end of their respective design life. Although the SCADA information on the wells, tank level, and pumps is transmitted to the Central WTP, the wells and high lift pumps can only be controlled remotely at the Muldraugh WTP facility.

The sludge from the treatment process in the Muldraugh WTP is pumped into one of four sludge lagoons located northeast of the WTP facility. Three of the sludge lagoons are filled to capacity and are no longer operational. The fourth sludge lagoon was recently cleaned and the solids were trucked to the Installation's landfill. The UP Contractor will not own, but will be responsible for the operation of the fourth sludge lagoon through the remaining operational life (not to exceed 5

years) of the Muldraugh WTP. When the Muldraugh WTP is taken out of operation, the Government will be responsible for the demolition / remediation of the four sludge lagoons.

Although the Muldraugh WTP facility is currently operating at an acceptable level, the WTP facility has not been maintained to the same level as that of the Central WTP facility. The filter controls and valves and the pump and controls are well beyond its respective design life. The pipe bolts, valves and other controls located in the filter pipe gallery are in poor condition. Many of the pipe connection bolts are corroded and need to be replaced; most of the valves appeared to be original and have failed or are starting to fail; and the outside of the pipe was corroded and in need of cleaning and painting. Most of the exterior doors, windows and the roofs of the WTP facility's structures are failing and in need of replacement. The filter media within the seven rapid sand filters was last replaced in 1997. The 24-inch finished water line from the Muldraugh WTP to the connection with the main cantonment distribution system is over 65 years old and may also need to be considered for replacement in the next few years.

Given the high levels of chlorides in the raw water coupled with the age and relatively poor condition of the Muldraugh WTP facility, the Army is currently looking at purchasing potable water from a local municipality to replace the potable water capacity at the Muldraugh WTP facility. As a result, the Army does not plan to expend any significant amount of funding at the Muldraugh WTP facility other than to demolish the WTP once the facility is permanently taken out of service. The UP Contractor will be required to own, operate and maintain the Muldraugh WTP until an alternate potable water source is provided within the next 5 years.

Main Cantonment's Potable Water Distribution and Storage System

The water distribution system transports the finished water from the two WTP facilities to the various facilities located throughout the Installation. The system provides domestic, industrial and fire protection throughout the Installation. The distribution system consists of pipes, valves, meters, fire hydrants, water storage tanks and the BPS. The distribution system piping which includes mains, service lines and fire lines with known sizes ranging from less than 6-inch to 24 inches in diameter. The distribution pipe includes polyvinyl chloride, cast iron, ductile iron, and asbestos concrete. Since the majority of the water distribution pipe was installed prior to 1950, the Installation plans to replace most of the distribution lines over the next 20 years.

Fort Knox's potable water utility system includes one BPS located in the Van Voorhis Housing area. Constructed in 1995, the Van Voorhis BPS (Facility No. 5898) includes three 175 gpm, 10 HP pumps and one diesel driven 2,000 gpm, 125 HP fire protection pump.

Eight elevated storage tanks are located throughout the system support Fort Knox's potable water distribution system. The combined capacity of the storage tanks is approximately 3.550 million gallons. The type, location, manufacturer, date of fabrication and the capacity of each tank are summarized in **Table 2**.

TABLE 2
Potable Water Storage Tanks
Potable Water Utility System, Fort Knox, Kentucky

Facility No.	Tank No.	Type	Location	Installed/ Upgrade	Capacity (gallons)
1190	WT001	Elevated	Education Center # 1, Dixie Street	1935/2004	250,000
1191	WT002	Elevated	Education Center # 2, Dixie Street	1937/2004	500,000
7100	WT003	Elevated	Near WWTP, Ninth Street	2010	500,000
2911	WT004	Elevated	Old Ironsides, Brave Rifles Ave.	1941/2002	500,000
5899	WT005	Elevated	Van Voorhis Housing.	1958/1994	300,000
2797	WT006	Elevated	Frazier-Wilson	1995	500,000
7561	WT007	Elevated	Fort Knox High School, Dixie Street	1997	500,000
4773	WT008	Elevated	Pritchard Housing	1997	500,000
				Total	**3,550,000**

Note: The tank upgrades included removal of lead paint, recoating of the tank interior, repainting of the exterior, replacement of anodes and rectifier, and replacement of altitude valve.

Tank Nos. 5, 6, 7, and 8 are in need of some immediate attention. Tank Nos. 5, 6, and 8 require complete renovation to include the coating of the interior of the tank, painting of the exterior of the tank and legs, the installation of new sacrificial anodes in the tanks, a new rectifier on the outside of the tanks, and a new altitude valve. The exterior of Tank No. 7 will be painted during the summer of 2011. Tank No. 7 will still require coating of the interior of the tank, painting of the legs, the installation of new sacrificial anodes, a new rectifier on the outside of the tank, and a new altitude valve.

Range Areas' Water Distribution Systems

There are three relatively small potable water distribution systems located in the Zussman Range, Yano Range and Basham's Corner areas, with routine environmental testing and reporting performed by the water providers.

The potable water distribution system serving the Zussman Range area, located near the Mount Eden, includes roughly 30,287 LF of PVC pipe constructed in 1997; 443 LF of PVC pipe constructed in 2002; and, 14,779 LF of polyethylene (PE) pipe installed in 2002. The potable water, supplied to this system, is purchased from the City of Louisville.

The potable water distribution system serving the Yano Range area includes roughly 2,500 LF of PVC pipe. The Yano Range distribution system was initially constructed in the 1950s and was renovated in mid-1990s with additional. The potable water, supplied to this system, is purchased from the Hardin County Water District No. 2 (HCWD No. 2).

The potable water distribution system serving the Basham's Corner area, located Highway 60 and Highway 1882, includes roughly 388 LF of PVC pipe constructed in 2004. The potable water, supplied to this system, is purchased from the Meade County Water District.

JA1.2.1.2 Points of Demarcation

Fort Knox's potable water utility system consists of all components from the supply points to the points where water is supplied to end-users. The point of demarcation for each end user is defined as the point or component on the distribution system where ownership changes from the utility owner to the building owner. In most cases the point of demarcation is the first upstream component (e.g., meter, valve, regulator, etc.) of the system located outside of the facility footprint. However, in situations where the facility water meter is located within the facility, the point of demarcation will be inside the facility and the Contractor will be required to coordinate his work within the facility. The technical library contains a list of facilities where the point of demarcation is located within the facility.

Table 3 identifies the type of service and general location of the point of demarcation with respect to each building served by the distribution system.

TABLE 3
Points of Demarcation
Potable Water Utility System, Fort Knox, Kentucky

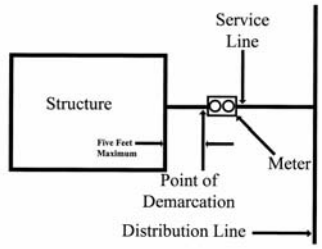
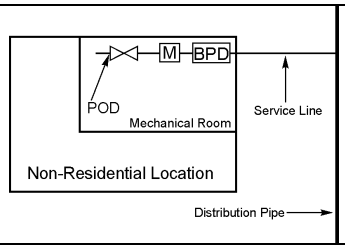
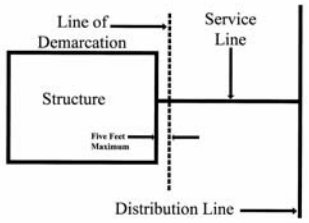
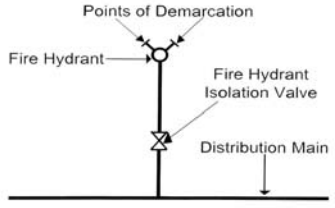
Point of Demarcation	Applicable Scenario	Sketch
The point of demarcation is downstream of the water meter, backflow device, or valve (closest apparatus to the exterior of the structure) within five feet of the face of the structure. If greater than five feet from the face of the structure, the demarcation point is five feet from the face of the structure.	Water meter, backflow device, or cutoff valve is located on the service line entering the structure within five feet of the exterior of the structure.	
Point of demarcation is the downstream side of the first water valve located downstream of the meter and / or of the main backflow prevention device.	Non-residential service line or dedicated fire line enters a mechanical room and a water meter and / or a main backflow prevention device is located in the mechanical room.	
The point of demarcation is five feet from the face of the structure where the service line enters the structure for either potable water or fire protection service.	No water meter, backflow device, or cutoff valve exists on the service line entering the structure.	
No point of demarcation exists; the utility service contractor will own all exterior fire suppression infrastructure, up to and including fire hydrants.	Exterior fire protection exists at the Installation.	

Table 4 identifies the unique points of demarcation.

TABLE 4
Unique Points of Demarcation
Potable Water Utility System, Fort Knox, Kentucky

Point of Demarcation	Applicable Scenario
Raw Water Intakes at the McCracken and Otter Creek Dams	The upstream side of the valve or sluice gate to the raw water intake structure.
Interconnects for the Purchase of Water for the Range Areas	The downstream side of the potable water supplier's meter.
Interconnects for Sale of Water to HCWD No. 1	1.) The downstream side of the valve on the 12-inch main connects to the Prichard Elevated Water Storage Tank (WT008). 2.) Near the intersection of Estrada and Bennett streets where the HCWD No. 1's 10-inch water main (connected to HCWD No. 1's booster pump station) taps Fort Knox's 12-inch water main.
Interconnects for Sale of Water to the City of Muldraugh	1.) The downstream side of the meter located at U.S. Highway 31W, on the north end of Fort Knox's 10-inch water main. 2.) The downstream side of the 12-inch valve connected to Fort Knox's 24-inch water main near Watts Street.
Golf course / landscaping irrigation systems	The downstream side of the meter or main service valve.

JA1.2.1.3 Condition Assessment

The water pipes at Fort Knox are reported to be generally in poor condition. Currently, there are some dead end lines that are flushed periodically to ensure water quality. The water valves are generally in average condition. There are an adequate number of fire hydrants located throughout the system. The hydrants are exercised over a three year period and are generally in good condition with adequate water pressure. There are service lines that do not have isolation valves on them.

JA1.2.1.4 Inventory

The property being sold in this action will be as described in **Table 5** of this utility specific attachment of the solicitation. The system will be sold in an "as is, where is" condition without any warranties, representations, or obligations on the part of the Government to make any alterations, repairs, or improvements. Any proposal that offers an alternative description of the property being sold may be deemed technically unacceptable.

Ancillary equipment attached to, and necessary for, operating the system, though not specifically mentioned herein, is considered part of the purchased utility.

When not specifically identified by system geographic information system (GIS) drawings and databases, the size and type of system components were estimated based on the size of the piping the component was connected to. Additionally, when the year of construction was not known, it was estimated based on the age of the piping or the age of the facility served.

TABLE 5
Fixed Inventory
Potable Water Utility System, Fort Knox, Kentucky

Component	Size	Quantity	Unit	Average Year of Construction
RAW WATER SOURCES				
McCracken Spring Intake				1937/1980
CI Line to Otter Creek PS	16-inch	2,500	Linear Feet	1937
Otter Creek PS (Facility No. 9213)	Structure	1,701	Square Feet	1936/1953
Intake / Mechanical Screen		1	Each	1953/1999
Pump controls & telemetry		1	Each	1995
Pump No. 4	1,200 gpm, 150 HP	1	Each	1983
Pump No. 9	2,100 gpm, 230 HP	1	Each	1983
Pump No. 10	2,100 gpm, 250 HP	1	Each	2008
Emergency Generator	350 kW	1	Each	1981
CI Line to Central WTP	16-inch	26,400	Linear Feet	1937
Central WTP (Facility No 1205)	3.5 MGD	1	Each	1937
Structure		6,799	SF	1937
Chemical Feed Systems				
Clarifier	3.5 MG	1	Each	1937/2008
Multi-media filters	1 MG	3	Each	1937/2008
Filter backwash tank	150,000 gallons	1	Each	1978
Clear well No. 1	0.5 MG	1	Each	1937
Clear well No. 2	2 MG	1	Each	1945
Central WTP High Lift				
Pump No. 1 & controls	4,850 gpm, 250 HP	1	Each	1970
Pump No. 2 & controls	1,000 gpm, 70 HP	1	Each	1984
Pump No. 3 & controls	1,400 gpm, 60 HP	1	Each	1984
Filter backwash pump & controls	5,400 gpm,	1	Each	1994
Emergency generator - dual fuel (natural gas / fuel oil)	280 kW	1	Each	2010
West Point Well Field				
Well No. 1, pump/controls	750 gpm, 125 HP	1	Each	1998
Well No. 2, pump/controls	750 gpm, 125 HP	1	Each	2004
Well No. 3, pump/controls	750 gpm, 125 HP	1	Each	2004
Well No. 5, pump/controls	750 gpm, 125 HP	1	Each	2002

Component	Size	Quantity	Unit	Average Year of Construction
Well No. 6, pump/controls	500 gpm, 75 HP	1	Each	2000
Well No. 7, pump/controls	750 gpm, 125 HP	1	Each	1985
Well No. 8, pump/controls	750 gpm, 125 HP	1	Each	1998
Well No. 9, pump/controls	750 gpm, 125 HP	1	Each	1998
Well No. 10, pump/controls	750 gpm, 125 HP	1	Each	1999
Well No. 11, pump/controls	750 gpm, 125 HP	1	Each	2000
Well No. 12A, pump/controls	750 gpm, 125 HP	1	Each	1985
Well No. 12B, pump/controls	750 gpm, 125 HP	1	Each	2003
Well No. 13, pump/controls	750 gpm, 125 HP	1	Each	1992
Well Field Header	16-inch	3,960	Linear Feet	1937
CI Line to Muldraugh WTP	24-inch	15,840	Linear Feet	1937
Muldraugh WTP (Facility No. 3009)	7.0 MGD	1	Each	1941
Structure		14,860	SF	1941
Chemical Feed Systems				
Clarifier No. 1	5.0 MG	1	Each	1978/1998
Clarifier No. 2	2.0 MG	1	Each	1998
Multi-media filters	1 MGD	7	Each	1941/1997
Filter backwash tank	150,000 gallon	1	Each	1978
Clear well	1.0 MG	1	Each	1989
Muldraugh High Lift (Fac. No. 3008)		**1,840**	**SF**	**1977**
Pump A & controls	3,500 gpm, 250 HP	1	Each	1984
Pump B & controls	4,850 gpm, 350 HP	1	Each	1970
Pump C & controls	2,200 gpm, 150 HP	1	Each	1984
Filter backwash pump & controls	5,400 gpm,	1	Each	2008
Emergency generator	600 kW	1	Each	1990
CI Line to Cantonment Area	24-inch	10,449	Linear Feet	1941
MAIN POST				
Distribution Pipe				
Cast Iron	Unknown	1,420	Linear Feet	1935
	.75”	1,155	Linear Feet	1935
	1”	4,463	Linear Feet	1935
	1.25”	4,207	Linear Feet	1935

Component	Size	Quantity	Unit	Average Year of Construction
	1.5”	12,470	Linear Feet	1935
	2”	28,836	Linear Feet	1935
	2.5”	4,785	Linear Feet	1935
	3”	9,504	Linear Feet	1935
	4”	13,331	Linear Feet	1935
	5”	410	Linear Feet	1935
	6”	216,645	Linear Feet	1935
	8”	162,301	Linear Feet	1935
	10”	46,690	Linear Feet	1935
	12”	30,122	Linear Feet	1935
	14”	16,393	Linear Feet	1935
	16”	3,920	Linear Feet	1935
	24”	10,560	Linear Feet	1935
Total Cast Iron		*567,212*	*Linear Feet*	
Ductile Iron	1”	180	Linear Feet	1958
	1.25”	7,076	Linear Feet	1958
	1.5”	4,293	Linear Feet	1958
	2”	11,436	Linear Feet	1958
	3”	1,115	Linear Feet	1958
	6”	25,835	Linear Feet	1958
	8”	18,035	Linear Feet	1958
	8”	4,118	Linear Feet	2007
	10”	4,677	Linear Feet	1958
	12”	897	Linear Feet	1958
	12”	9,183	Linear Feet	1994
	14”	192	Linear Feet	1958
Total Ductile Iron		*87,036*	*Linear Feet*	
Transite	1”	834	Linear Feet	1935
	1.5”	1,988	Linear Feet	1935
	2”	3,727	Linear Feet	1935
	3”	284	Linear Feet	1935
	6”	4,231	Linear Feet	1935
	8”	6,472	Linear Feet	1935
	10”	5,927	Linear Feet	1935
Total Transite		*23,463*	*Linear Feet*	
PVC	1.5”	16,608	Linear Feet	2005
	2”	10,698	Linear Feet	2008

Component	Size	Quantity	Unit	Average Year of Construction
	3”	473	Linear Feet	2007
	3”	603	Linear Feet	2008
	4”	24	Linear Feet	1997
	4”	334	Linear Feet	2005
	4”	443	Linear Feet	2007
	4”	6,368	Linear Feet	2008
	6”	9,224	Linear Feet	1994
	6”	7,640	Linear Feet	2003
	6”	2,912	Linear Feet	2005
	6”	6,372	Linear Feet	2007
	6”	5,033	Linear Feet	2008
	8”	10,211	Linear Feet	1994
	8”	14,522	Linear Feet	1997
	8”	18,915	Linear Feet	2005
	8”	2,223	Linear Feet	2007
	8”	4,644	Linear Feet	2008
	10”	1,555	Linear Feet	1994
	10”	106	Linear Feet	2005
	12”	1,996	Linear Feet	1994
Total PVC		*120,904*	*Linear Feet*	
Galvanized Steel	2.5”	1,264	Linear Feet	1995
Total Distribution Pipe		*799,879*	*Linear Feet*	
Valves	.75”	3	Each	1935
	1”	28	Each	1935
	1.25”	13	Each	1935
	1.25”	3	Each	1958
	1.5”	51	Each	1935
	1.5”	65	Each	2005
	2”	137	Each	1935
	2”	33	Each	1958
	2”	1	Each	2007
	2”	13	Each	2008
	2.5”	15	Each	1935
	3”	81	Each	1935
	3”	2	Each	2007
	4”	76	Each	1935

Component	Size	Quantity	Unit	Average Year of Construction
	4”	2	Each	1994
	4”	2	Each	2007
	4”	15	Each	2008
	5”	2	Each	1935
	6”	592	Each	1935
	6”	63	Each	1958
	6”	5	Each	2003
	6”	3	Each	2007
	6”	13	Each	2008
	8”	381	Each	1935
	8”	39	Each	1958
	8”	4	Each	1994
	8”	32	Each	1997
	8”	9	Each	2008
	10”	108	Each	1935
	10”	10	Each	1958
	10”	1	Each	2007
	12”	52	Each	1935
	12”	5	Each	1958
	12”	2	Each	1994
	14”	21	Each	1935
	16”	15	Each	1935
	20”	6	Each	1998
	24”	1	Each	1935
Fire Hydrants		722	Each	1935
		83	Each	1958
		14	Each	1997
		54	Each	2005
Meters		50	Each	Assume 1998
Pressure Reducing Station		1	Each	2003
SCADA		2	Each	1995
Well Control System		1	Each	1995
Van Voorhis BPS (Facility No. 5898)	Structure	NA	SF	1995
Pump No. 1 & pressure tank	175 gpm, 10 HP	1	Each	1995

Component	Size	Quantity	Unit	Average Year of Construction
Pump No. 2 & pressure tank	175 gpm, 10 HP	1	Each	1995
Pump No. 3 & pressure tank	175 gpm, 10 HP	1	Each	1995
Fire protection (diesel fueled)	2,000 gpm, 125 HP	1	Each	1995
Elevated Storage Tanks (Steel)				
Tank No. 1 & cathodic protection	250,000 gallons	1	Each	1935/2004
Tank No. 2 & cathodic protection	500,000 gallons	1	Each	1937/2004
Tank No. 3 & cathodic protection	500,000 gallons	1	Each	2010
Tank No. 4 & cathodic protection	500,000 gallons	1	Each	1941/2002
Tank No. 5 & cathodic protection	300,000 gallons	1	Each	1958/1994
Tank No. 6 & cathodic protection	500,000 gallons	1	Each	1995
Tank No. 7 & cathodic protection	500,000 gallons	1	Each	1997
Tank No. 8 & cathodic protection	500,000 gallons	1	Each	1997
ZUSSMAN RANGE (MT. EDEN)				
Distribution Pipe				
PVC	1”	110	Linear Feet	1997
	1”	383	Linear Feet	2002
	1.5”	60	Linear Feet	2002
	4”	30,177	Linear Feet	1997
Total PVC Pipe		*30,730*	*Linear Feet*	
PE	1”	1,111	Linear Feet	2002
	4”	13,668	Linear Feet	2002
Total PE Pipe		*14,779*	*Linear Feet*	
Valves	1”	4	Each	1997
	1”	2	Each	2002
	1.5”	1	Each	2002
	4”	2	Each	1997
	4”	13	Each	2002
YANO RANGE				
Distribution Pipe				
PVC	2”	2,500	Linear Feet	1990
Valves	2”	2	Each	1990
Pressure Reducing Valves		2	Each	1990

Component	Size	Quantity	Unit	Average Year of Construction
Flush Hydrant	2”	1	Each	1990
BASHAM’S CORNER				
Distribution Pipe				
PVC	1.25”	72	Linear Feet	2004
	2”	60	Linear Feet	2004
	6”	256	Linear Feet	2004
Total PVC Pipe		*388*	*Linear Feet*	
Valves	1.25”	3	Each	2004
	6”	2	Each	2004
Flush Hydrant	2”	1	Each	2004
Fire Hydrants		1	Each	2004
Meters		2	Each	2004
Backflow Preventers		2	Each	2004
Note: Service lateral lengths are included in the overall distribution pipe lengths. Service valve counts are included in the valve counts.				

JA1.2.2 Potable Water Utility System Non-Fixed Equipment and Specialized Tools

Table 6 lists other ancillary equipment (spare parts), and **Table 7** lists specialized vehicles and tools included in the purchase. Offerors shall field verify all equipment, vehicles, and tools prior to submitting a proposal. Offerors shall make their own determination of the adequacy of all equipment, vehicles, and tools.

TABLE 6
Spare Parts
Potable Water Utility System, Fort Knox, Kentucky

Quantity	Item	Make/Model	Description	Remarks
No spare parts are included with the Fort Knox Potable Water Utility System.				

TABLE 7
Specialized Vehicles and Tools
Potable Water Utility System, Fort Knox, Kentucky

Quantity	Item	Make/Model	Description	Remarks
No specialized vehicles or tools are included with the Fort Knox Potable Water Utility System.				

JA1.2.3 Potable Water Utility System Manuals, Drawings, and Records

Table 8 lists the manuals, drawings, and records that will be transferred with the system.

TABLE 8
Manuals, Drawings, and Records
Potable Water Utility System, Fort Knox, Kentucky

Quantity	Item	Description	Remarks
Fort Knox maintains a limited collection of technical manuals, SCADA operational manual, drawings, and records on the installed components of the Potable Water Utility System. This information will be transferred to the Contractor during the transition period. System maps will be available in the Offeror's Technical Library.			

JA1.3 Specific Service Requirements

The service requirements for the Fort Knox potable water system are as defined in Section C, *Description/Specifications/Work Statement*. The following requirements are specific to the Fort Knox utility system and are additive 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.

JA1.3.1 On-Site Contractor Facility

The Contractor may establish an on-site facility in order to meet response time requirements and participate in Government meetings as necessary. This location will be determined and provided by the Installation. Should the Contractor choose to construct a facility, the Contractor will immediately acquire and install a temporary facility followed by construction of a permanent, Installation Design Guide (IDG) compatible facility. This facility will be manned with an individual that is capable of representing the Contractor at Government meetings. The Contractor will be responsible for maintaining the grounds around the facility and those areas which are fenced in for Contractor use only.

In lieu of having an on-site facility, the Offeror must explain in their proposal how they will meet the Fort Knox response time requirements.

JA1.3.2 Temporary Contractor Facilities

Temporary facilities may be placed on post for construction projects. Approval from the Contracting Officer (KO) / Contracting Officer's Representative (COR) and appropriate staff personnel is required prior to the Contractor locating a construction trailer on post. The approval will be for a term commensurate with the construction period and will provide for termination of the approval upon completion of the work. Construction, use, duration of use, removal, and

clean-up associated with these temporary facilities will be negotiated with the Government on a project-specific basis.

JA1.3.3 Restricted Access Areas

The areas listed below generally require more intensive security procedures to access. The Contractor will be required to obtain separate badges to access these areas:

- The U.S. Department of Treasury's Gold Bullion Depository.
- AMMO Storage Area

The Contractor will be restricted in secure areas and during times when the post is secured due to threat or alert. The Government may limit or restrict the right of access granted for any reason considered to be necessary (e.g., national security, public safety).

JA1.3.4 Limited Access

Fort Knox is a closed post and access may be limited at times with controlled gate openings and closures. Gate operating times and procedures are published by the Provost Marshal's Office. Unscheduled gate closures by the Military Police may occur at any time, and personnel entering or exiting Fort Knox may experience a delay due to vehicle inspection, registrations, wearing of seat belts, etc. When an unforeseen closure of Fort Knox occurs during normal duty hours, the Contractor shall reschedule the work. The exact date and time will be coordinated with the COR. Emergency work shall continue regardless of closure of Fort Knox.

JA1.3.5 Vehicles

The Contractor and Contractor employees shall register vehicles with Fort Knox Provost Marshal within 5 working days from date of employment and renew registration annually thereafter. The registrant shall remove the registration decal from the registered vehicle upon termination of employment or sale of vehicle. Personnel operating vehicles on government property shall possess a valid Kentucky or other state driver's license. This registration procedure is established to facilitate access to the Installation. The Contractor shall not fuel and/or maintain personal or Contractor owned vehicles in Government-furnished facilities. However, the Contractor may use AAFES stations to fuel vehicles that remain on post at all times.

JA1.3.6 Coordination Requirements Prior to Performing Work

The Contractor will coordinate vehicle parking areas, work staging areas, vegetative disturbance, landscaping disturbance and customer notification with the Contracting Officer's Representative and appropriate staff personnel prior to performing this work.

JA1.3.7 Planning and Programming

In order to function as a partner with the Fort Knox DPW, the Contractor must be fully engaged in planning and programming activities for projects that may impact the utility system(s). Costs associated with planning / programming shall be included in the Contractor's O&M costs as part of normal operations. The following listing generally describes activities in which the UP contractor may be asked to assist the DPW:

- The Contractor will assist in the development of Requests for Action (RFAs) (See Section JA1.3.8). This may include providing detailed information to support scopes of work, budget estimates, etc. for any necessary changes to the utility system and/or services provided.
- The Contractor will be invited to and participate in meetings for projects impacting the utility system(s) such as, but not limited to, DD1391s development of Statement of Work (SOW) for Military Construction (MILCON) projects, planning charrette for MILCON projects, Real Property Master Planning Boards, Fort Knox and SOW Line Item Reviews. As required by the Government Project Manager, the Contractor will attend the pre-design meeting, design charrette, pre-construction meetings, site visits, partnering meetings, etc.
- The Installation anticipates that it will experience significant growth and expansion during the Contract period that will necessitate new and/or upgraded facilities. Therefore, as part of its regular utility services under the monthly utility service charge, the Contractor must maintain capability to prepare and provide in a timely manner complete designs for such facilities, including site maps, sketches, and / or drawings.
- The Contractor shall respond to requests from the Government for new/upgraded facilities and/or demolition of existing facilities. The Contractor will coordinate the design and construction of such facilities with the Government, A/E, and construction contractors.
- The Contractor shall identify future project requirements as well as system deficiencies. The Contractor will identify the specific utility requirement for each project and prepare designs and project cost proposals.
- The Contractor shall participate in strategic planning and propose long-term initiatives.
- The Contractor shall provide supporting information to assist the Government in developing budget estimates for unfunded projects.
- The Contractor shall respond to customer questions.

JA1.3.8 Request for Action (RFA) Process

The following language GENERALLY describes the process for an RFA and may not be all inclusive. It is provided for informational purposes only, and the Government is not binding itself to follow these steps. Nonetheless, the current process is as follows: (*Abbreviations: PM – DPW Project Manager; KO – Contracting Officer; COR - Contracting Officer's Representative; UP – Utility Privatization Contractor.*)

STEP 1: The PM prepares Work Orders and provides to the COR. The COR then forwards to the KO and the KO contacts the UP contractor regarding the potential project.

STEP 2: The PM develops independent government estimates (IGE) and provides to COR and KO.

STEP 3: The UP Contractor identifies specific utility system requirements for the project, develops a scope of work, detailed cost estimate, sketch, period of performance, and project schedule. The UP Contractor should also identify any applicable increase/decrease to the O&M/R&R

STEP 4: The KO, COR, and PM review the UP contractor's proposal.

STEP 5: UP Contractor, KO, COR, and PM discuss and agree on price and schedule.

STEP 6: The PM provides the COR with funds and work order.

STEP 7: Funds are provided to the KO.

STEP 8: KO issues modification.

STEP 9: The PM and/or general contractor coordinates with the UP Contractor regarding schedule.

STEP 10: The UP contractor completes Quality Assurance/Quality Control (QA/QC) and Inspections.

STEP 11: The UP contractor invoices for the project.

STEP 12: Modify the UP contract to include O&M and R&R for the added assets.

JA1.3.9 Mapping Requirements

Maps shall be prepared according to the following specifications:

a. A single map of the entire site shall be prepared indicating the existing site conditions and required demolitions.

b. A single map indicating proposed utilities and other constructions to include the footprint of structures, paving (including curbing), sidewalks, and other relevant planimetric features.

c. The map will be registered to the Kentucky State Plane Coordinate System – North American Datum of 1983 (NAD83), Geodetic Reference System of 1980 (GRS80) Ellipsoid,. U.S. Survey Feet.

d. Due north on the map will be as viewed from the bottom of the map. Rotation and translation of coordinate systems will not be allowed nor will orientation to Magnetic North. The Magnetic North orientation view may be rotated for plotting purposes but the orientation of the map must be geographically correct when selecting ‘top view’.

e. The map will contain a labeled coordinate grid with spacing appropriate to the map extents. For instance, a map scale of 1”=30’ will have coordinates labeled at 100’ intervals north/south and east/west.

f. All utilities on the map will be clearly labeled as to size and material.

JA1.3.10 Updated Utility Maps

The Contractor is required to submit to the Installation updates to utility maps within 30 days after completion of any changes and updated utility maps annually with the Capital Plan or upon request of the Government. The Contractor is responsible for coordinating with and updating the Installation’s GIS. GIS information must be in acceptable DoD format and compatible with existing Fort Knox GIS System.

JA1.3.11 Disposition of Removed or Salvaged Materials

Disposition of facilities and material removed from a system shall be the responsibility of the Contractor. If the cost structure is dependent upon in-place value, the salvage value of equipment removed from service prior to the end of its useful life shall be deducted from the in-place value of the system.

JA1.3.12 Component Replacement

Infrastructure unutilized after construction can be abandoned in place, provided the abandoned infrastructure poses no immediate or future health, safety, operational, or environmental risks in compliance with industry standards. However, unsightly abandoned infrastructure may be required to be removed and disposed of properly as may be practical or common practice, such as gas metering when units have been converted to total electric. Generally, above-ground infrastructure may require demolition and removal. Abandoned infrastructure must be clearly marked on the utility maps.

JA1.3.13 Excavation Marking Process

JA1.3.13.1 Contractor-Provided Markings

Contractor shall subscribe to the regional process (one-call dispatch center) for notification and marking of underground utilities. The Contractor shall endeavor to mark all utilities in the time windows defined by this process. In some cases, where non-metallic lines do not have tracer wires, it may take longer to locate the lines. In these cases, the Contractor will make necessary notifications about a possible delay in the marking process. Contractor shall be responsible for all repairs, costs, and damages due to excavations by others for which he did not properly mark his utilities as part of the utility marking process.

JA1.3.13.2 Notification Prior to Digging

The UP Contractor shall notify the regional Before You Dig (BUD) dispatch center of his digging requirement. The UP Contractor shall be responsible for all repairs, costs, and damages due to his excavations, including excavations extending beyond areas that have been permitted for excavation.

JA1.3.14 System Survey and Assessment / Utility Record Drawings

The Contractor shall initiate a comprehensive survey of the system to identify components not shown on record drawings and identify errors on existing record drawings. Production and maintenance of record drawings shall be in accordance with Section C.5.1.5, *Record Drawings*, and all work shall conform to the latest release of the software the Government is using compatible with the latest versions of Spatial Data Standards. The Contractor will provide geo-referenced data in a format that can be readily used in GIS (geographic information system) (widely used by DoD and external agencies). All maps and associated data must comply with the latest version of Spatial Data Standards for Facilities, Infrastructure and Environment (SDSFIE) available from the CADD/GIS Technology Center at http://tsc.wes.army.mil/products/TSSDS-TSFMS/tssds/html. The project must be completed no later than one year after the contract start date. Effort will include a comprehensive record search, will also require physical survey work, and may include some excavation to ascertain line location, type, and condition.

The Contractor will also develop and maintain an accurate computerized model of the utility system. The model should reflect major system components and attributes. It is envisioned that this model will be used for briefing, planning activities, contingency applications, long-range plans, analyzing system faults, and addition or deletion of new flow. The Installation is familiar with and would prefer that the UP Contractor utilize the Kentucky Pipe Model 2006. (See the Technical Library for the current model being used.)

JA1.3.15 Installation Design Guide

The Contractor will follow the Fort Knox Installation Design Guide (IDG) and the respective environmental guide specifications for all work. The Contractor shall provide updates to the IDG with his applicable construction standards and specifications within 45 days after the contract start date.

JA1.3.16 Supervisory Control and Data Acquisition System

The Contractor shall install and maintain a new Supervisory Control and Data Acquisition (SCADA) system to fully integrate system tank level signals, pump controls, and monitor and remotely read the advanced metering device once they are installed per the Army's Metering Program (AMP) (See Section JA1.5 for AMP discussion). As a minimum, the system will enable the controller to regulate tank levels, monitor system pressure, and monitor various critical water quality parameters.

JA1.3.17 Fire Control and Safety

In all cases, the Contractor shall abide by Fort Knox fire protection requirements. Should the Contractor choose to construct an on-site facility to locate office space, warehouse, etc., the Contractor shall permit Fire Department personnel access to their facility to perform fire inspections and emergency response. 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.

Changes to O&M processes and procedures will be coordinated with DPW and the Fire Department.

JA1.3.18 Fire Flow

The Contractor shall perform flow testing and marking of fire hydrants IAW National Fire Protection Association standards/recommended practices. The Contractor will perform the services during the late spring each year and coordinate the services with Fire/Emergency Services of Fort Knox. The annual inspection shall be documented on a written report and a copy sent to Fire Prevention Section. The Contractor shall update numbers and locations of hydrants on the Installation's water distribution maps.

Exception on marking the fire hydrants – the numbers shall be ½" in height, placed on the back side of the bonnet, black in color. The rim of the bonnet will have reflective paint of the capacity of the fire hydrants using the color code in NFPA 291.

The Contractor shall own, operate, maintain, and test the Post water system IAW Kentucky Department of Environmental Protection, Frankfort Division of Water (Division of Water)

standards. The Contractor shall provide the Contracting Officer, COR, and DPW with copies of any and all testing information and reports submitted to the Division of Water.

The Contractor shall coordinate any changes to the potable water utility system that may affect fire flow capabilities with the DPW and the Fort Knox Fire Department.

JA1.3.19 Environmental Issues

The Contractor shall follow all environmental rules and regulations IAW with Section C.10, *Environmental Compliance*.

Trees in which the Indiana Brown Bat reside cannot be cut during the summer months. The Contractor shall notify EMD prior to cutting trees.

JA1.3.20 Required Regulatory Reports

The Contractor shall be responsible for any reporting required by local, State and Federal regulatory bodies. The Contractor shall provide the COR with information as directed that may be necessary and in the timeframe requested to support reports required by the Department of the Army and other appropriate agencies.

JA1.3.21 Official Inspections

The Contractor shall immediately inform the COR, Post Safety Office or Environmental Management Division (EMD), Directorate of Public Works, Fort Knox through the KO or COR when the United States Environmental Protection Agency (EPA), the Kentucky Department of Environmental Protection, Frankfort Division of Water, the County Department of Health, the MEDDAC, the Public Service Commission, or OSHA, following notification of any scheduled or unscheduled inspector visits to the Installation for an official inspection.

JA1.3.22 First Response Investigation

Restoration of utility service is extremely important to DoD installations and expectations are generally covered well throughout this RFP. However, occasions do arise where it may not be immediately apparent who the responsible repair agency is. This frequently occurs where an apparent fault (e.g., line break, leak, etc.) is located near a point of demarcation. In these situations, someone may have to excavate to the actual fault to determine the precise location of the fault and who the appropriate repair agency is. The Contractor must plan to perform this type of "first response investigation". This may involve pumping water and excavation. In these situations, the Contractor should proceed toward fixing the problem until such time it is determined that repair responsibility is with someone else.

JA1.3.23 Response to Service Requests

The Contractor shall respond only to the service requests (service calls). The Contractor shall have a telephone manned 24 hours/day, 365 days/year that the customers may call to report utility system problems. There shall be only one phone number, active during duty hours and non-duty hours, for the Government to call to report system problems. For all response times, the Contractor shall respond within the allotted time, take necessary corrective actions, order necessary materials, and schedule additional repairs. The Contractor shall develop procedures for notification of utility outage to necessary personnel during the transition period.

JA1.3.24 Utility Outage

Because of the critical nature of many Fort Knox mission requirements, response to utility emergencies in and around the Cantonment area must be immediate. The Contractor will respond with a knowledgeable individual to emergency utility problems within 30 minutes of notification during duty hours (0700-1700, Monday – Friday) and within 1 hour during non-duty hours. Additionally, repair crews must be on scene within one hour during duty hours and within two hours during non-duty hours. In the Zussman Range, Yano Range and Basham's Corner areas, response times shall be 1½ hours during normal duty hours and 2 hours during non-duty hours. Work shall be continued until the problem is corrected. The above response times do not apply to conditions where inclement weather (tornadoes, ice/snow storms, major lightning storms, floods) prevents normal operation. It is recognized that extraordinary conditions will cause the response times to vary proportionally to the number and expanse of system outages, and the priority of service restoration.

The type of service request, priority and minimum response time for various service requests are furnished below.

EMERGENCY:

Emergency - Life or Death – Respond Immediately

"Life or Death" emergencies will typically be handled by Fort Knox Emergency Response agencies, like the Military Police or Fire Department. These agencies or DPW will contact the Contractor. The Contractor shall respond immediately.

Priority 1 - Emergency - Not Life or Death - Respond Same Day IAW previous paragraph

Priority 1 requests arise due to situations that, if left uncorrected, will cause significant damage to a facility, or compromise security or safety, or negatively affect productivity for an entire operation or group. The Contractor shall respond to Priority 1 request as appropriate and reduce the severity of the situation within 1 hour. The Contractor shall complete the service orders within 24 hours unless there is a delay from the Government or the Contractor cannot procure the material.

URGENT:

Priority 2 – "Health & Welfare" – Respond within 3 Working Days

Priority 2 requests arise due to situations that, if left uncorrected will measurably reduce productivity, cause discomfort or inconvenience to the customer, waste resources, or create the need for additional minor repairs. The Contractor shall respond to Priority 2 request within three working days. The Contractor shall complete the service orders within 7 business days unless there is a delay from the Government or the Contractor cannot procure the material.

ROUTINE:

Priority 3 – "Productivity Inhibitor" – Respond within 5 days

Priority 3 requests arise due to situations that, if left uncorrected, will cause measurable discomfort or inconvenience to the customer, waste resources or create the need for additional minor repairs, is esthetically unpleasant or inconvenient. The Contractor shall respond to Priority 3 request within five working days. The Contractor shall complete the service orders within 10 business days unless there is a delay from the Government or the Contractor cannot procure the material.

JA1.3.25 Emergency Operations

The Contractor shall have an emergency plan in place for such occurrences. If the damage from a storm or disaster is widespread and affects the Contractor's other customers (off the Fort Knox installation), Fort Knox's DPW personnel must be informed of the Installation's restoration priority. The Contractor shall notify Fort Knox's DPW personnel of each situation/priority as soon as possible. The Contractor will provide an emergency operations plan, updated on an annual basis. The Contractor shall develop and document an emergency operations plan that addresses all aspects of the contractor's response to emergency conditions including but not limited to system failures due to acts of God, breakdown, or demand spikes. The Government requires first priority response for service restoration to mission critical facilities during national emergencies, deployments, and alerts. The priority response will take into consideration the Contractor's other critical civilian priorities (life-safety priorities such as hospitals). In no case will equipment and/or personnel normally used in the support of Fort Knox's utility system be pulled to serve the Contractor's external customers if utility service to Fort Knox is experiencing an outage that requires their service. Some personnel assigned to Fort Knox may be pulled to assist in the restoration of service to customers external to Fort Knox if the Fort Knox's system is not experiencing an outage. A minimal staff shall remain in service to Fort Knox at all times. The priority of restoration is:

1. Medical Facilities
2. Command and Control Facilities
3. Schools
4. Food Services and Shopping
5. Barracks and Housing

JA1.3.26 Temporary Service

Temporary service will be coordinated with Fort Knox's DPW and the affected customer(s) if temporary service is required. The Contractor must make all possible preparation and coordination prior to actual outage. It is the responsibility of the Contractor to limit the length of an outage to minimum requirements.

JA1.3.27 Planned Outages

The Contractor must coordinate any planned outages for construction or maintenance with the DPW and affected customers. For outages requiring 4 or more hours of interruption to service, work should be planned during off hours, such as, in the evening or weekends or holidays depending on the customers affected. In rare cases, the Contractor may be required to provide temporary or emergency services for the length of the planned outage.

JA1.3.28 Cost of Supporting Utilities

The Contractor may consume reasonable quantities of supporting utilities at no charge. However, Contractor shall fully cooperate with the Government with respect to energy / water conservation measures as described in Section C.3.4, *Energy and Water Efficiencies and Conservation*. The UP Contractor's usage may be separately metered to provide the Army with the capability to monitor the contractor's use of these services and to ensure that the UP contractor is practicing

energy conservation measures as prescribed by the Army through their Army Energy and Water Campaign Plan (AEWCP).

JA1.3.29 Water Storage Tanks

JA1.3.29.1 Equipment Mounted on Water Storage Tanks

The Contractor shall allow the Government access to operate and maintain any communication equipment, obstruction lights, emergency warning equipment, public address equipment, and other Government equipment on water storage tanks being privatized at no additional cost to the Government. The Contractor shall develop a procedure for granting the Government access. This procedure shall be submitted to the Contracting Officer for approval.

Further, the installation considers cellular telephone antennas to be mission essential. Therefore, as noted in Section C.4.2.2.2, the Contractor will take ownership of the water storage tanks subject to any cellular telephone antenna leases. In addition to retaining the right to locate existing antennas on water storage tanks and to continue to accrue revenue from existing contracts/leases, the installation will retain the right to locate additional antennas on privatized water storage tanks and to retain all revenue from future contracts/leases.

JA1.3.29.2 Application of Logos on Water Storage Tanks

The Government reserves the right to approve the design of all logos applied to any water storage tanks. The Contractor shall submit all logos to the Contracting Officer for approval prior to application on the water storage tanks. Additional logos and/or lighting requested by the Government will be funded by the Government.

JA1.3.30 Cultural Resources

Transfer of ownership of certain historic properties necessitates Government compliance with federal laws and regulations to meet historic preservation requirements. The final transfer documents will include an easement or covenant that includes adequate and legally enforceable restrictions or conditions to ensure long-term preservation of historic properties to meet these preservation requirements. As a result of this easement or covenant, the Contractor will likely be required to preserve and maintain transferred historic properties in accordance with Secretary of the Interior's Standards for the Treatment of Historic Properties (36 CFR 68).

The Contractor shall not remove or disturb any historical, archaeological, architectural or other cultural artifacts, relics, remains, or objects of antiquity.

Activities involving ground disturbance, construction, demolition, landscape modification, or alteration of the exterior or interior of a historic building has the potential to adversely affect cultural resources. Historic districts, buildings, landscape features, or archaeological sites considered eligible for the National Register of Historic Places that may be identified in the future shall be subject to the terms of this section. With regard to the historic building / facilities to be transferred as part of the utility privatization action, please see the Offeror's Technical Library.

The Contractor will coordinate projects that may affect cultural resources listed on the Installation Cultural Resources Management Plan as reviewed with the Contracting Officer's Representative (COR). The COR will coordinate with the Fort Knox Cultural Resources Program to determine if consultation with the Department of Environmental Protection is required per 36 CFR 800. For

non-emergency work, the COR will respond to the Contractor within 10 working days. Initial SHPO review requires 30 days and additional consultation may be required to avoid, minimize or mitigate any adverse effect. The Contractor shall not start work until notified by the COR.

In emergency situations, the Contractor is not required to consult with Fort Knox in advance of actions to repair the utility distribution system. The Contractor will notify Fort Knox, who will notify the Department of Environmental Protection, following execution of all emergency measures affecting historic properties. The emergency exception contained in this paragraph will only apply to undertakings initiated within 10 days of the emergency. For emergency work, the Contractor may take steps to safeguard life and property, and restore service, but shall minimize impact to the site.

In the event archaeological materials are inadvertently encountered during construction or excavation activities, the activity must stop and the Contractor shall immediately notify the COR.

Costs for mitigation of damage to cultural resources (restoration, repair, or replacement) due to the Contractor's failure to comply with historical and cultural preservation laws, regulations, or programs, that relate or may arise under performance of this contract may be deducted or offset by the Government from any monies due the Contractor, and with respect to the nature and severity of the damage. The Contractor will take any corrective or remedial actions as directed by the Contracting Officer.

JA1.3.31 Standards and Regulations

The Contractor will provide the Installation with three hard copies and one electronic copy of the Contractor's standards and regulations within 45 days after contract start date.

JA1.3.32 Network Access Requirements

- Information Assurance (IA): Contractor personnel requiring access to U.S. Government Information Systems to fulfill their duties shall possess the required favorable security investigation, security clearance, formal access approval, and "need-to-know" prior to being granted access to any Government computer or computer network.

- Information Technology (IT)-I Level of Security Access is required for contractor personnel in IA positions working with infrastructure devices, IDSs, routers, System Administration or Network Administration, with privileged-level access to control, manage, or configure IA tools or devices, individual information systems, networks, and enclaves. At a minimum, such contractor personnel shall require a favorably completed NAC, initiation of SSBI, completion of Forms SF85P, SF86, and Supplemental Questionnaire.

- IT-II Level of Security Access is required for contractor personnel in IA positions required to work with operating systems administration of common applications or enclaves, or back-up operators with limited privileged level access to control, manage, or configure information systems or devices. At a minimum, such contractor personnel shall require a favorable review of local personnel, base / military, medical, and other security records as appropriate, initiation of a NACLC, and completion of Forms SF85P or SF86 and Supplemental Questionnaire.

- IT-III Level of Security Access is required for Contractor personnel in positions as normal users, power user on individual systems for configuration with non-privileged level of access to information systems and devices. At a minimum, such contractor personnel shall require a favorable review of local personnel, base / military, medical, and other security records as appropriate, initiation of a NAC, and completion of Form SF85P and the Supplemental Questionnaire.
- Contractor personnel shall not be granted access to any Government computer systems or networks until proof of compliance to the IA clearance requirements.
- Once Contractor personnel have complied with the IA requirements as reflected above, they will be granted the appropriate IT level of security access.
- Contractor personnel shall personally pick-up and sign for Government network user identification and password at the Information Assurance Office.
- Contractor employee(s) shall be solely responsible for the safeguarding of user passwords and shall immediately report any suspected compromise or loss of the password to the Information Assurance Office.
- The Contractor is responsible for notifying the Contract Officer Representative (COR) and also the Information Assurance Office of any changes to their status or their personnel status.

JA1.4 Current Service Arrangement

Fort Knox collects and treats the raw surface water and ground water and distributes the finished water throughout the Installation. **Table 9** summarizes the annual volume of raw water treated and/or used by Fort Knox over the last three calendar years.

TABLE 9
Annual Volume of Raw Water Treated or Used
Potable Water Utility System, Fort Knox, Kentucky

Location	CY2005 (MG)	CY2006 (MG)	CY2007 (MG)	3-Year Average
Muldraugh WTP	842.364	950.172	903.378	898.638
Central WTP	245.598	140.950	145.844	177.464
Total	1,087.962	1,091.122	1,049.222	1,076.102

Table 10 summarizes the peak day volumes of raw water treated and/or used by Fort Knox over the last three calendar years.

TABLE 10
Peak Day Volumes of Raw Water Treated or Used
Potable Water Utility System, Fort Knox, Kentucky

Location	CY2005 (MGD)	CY2006 (MGD)	CY2007 (MGD)	3-Year Average
Muldraugh WTP	3.580	4.400	4.060	4.013
Central WTP	2.473	2.741	1.453	2.222

In addition to the potable water supplied by the Muldraugh and Central WTPs, Fort Knox also purchases potable water from the City of Louisville for the Zussman Range, from the Meade County Water District for Basham's Corner area, and from HCWD No. 2 for Yano Range.

Fort Knox also sells potable water to the City of Muldraugh and the HCWD No. 1. All potable water or raw water sales agreements will be negotiated, reviewed and approved by Fort Knox and the Department of Army, and coordinated with the UP Contractor.

JA1.5 Secondary Metering

Between the raw water supply points and the end-user points of demarcation, the Contractor shall own, operate and maintain the existing meters at locations throughout the Installation, as directed by the Contracting Officer in keeping with the guidance in Section C.3.3, *Sub-Metering*.

The Army intends to pay for the installation of new meters under the Army's Metering Program (AMP). The Contractor shall closely work with the Army and the Army's Contactors to facilitate the installation of advanced metering equipment on the existing meters, the installation of new meters with advanced metering capability and the integration of the advanced metering capability consistent with the AMP. (For additional information on the AMP, please see the information included in the Offeror's technical library.) It is the Army's intent to transfer the new meters to the UP Contractor under the utility privatization contract. Subject to the change provisions of the contract, an equitable adjustment will be negotiated between the KO and the UP Contractor for the ownership, operation and maintenance for the new meters.

JA1.5.1 Existing Meters

Table 11 list the existing meters (at the time of contract award) that will be transferred to the Contractor and for which the Contractor shall provide meter readings IAW Section C.3.3, *Sub-Metering*, and JA1.6, *Monthly Submittals*.

TABLE 11
Existing Secondary Meters
Potable Water Utility System, Fort Knox, Kentucky

Meter No.	Tenant Organization	Group No.	Building Served / Description
1000259	81st RSC	2271	Building No. 5901 - Vehicle Maintenance Shop GS
1000405	Anderson Guest House	918	Building No. 7961 - Anderson Guest House
1000009	Armed Forces Bank	552	Building No. 1507 - Armed Forces Branch Bank

Meter No.	Tenant Organization	Group No.	Building Served / Description
421880	City of Muldraugh (20J D9SC)	587	Muldraugh North Meter
1200583	City of Muldraugh (20J D9SC)	587	--
17979192	City of Muldraugh (20J D9SC)	587	Muldraugh South Meter
19799193	City of Muldraugh (20J D9SC)	587	South Meter Low
3955284	Commissary	507	Building No. 121 - Commissary B
6236457	Commissary	507	Building No. 121 - Commissary A
2559422	Credit Union	557	Building No. 133 - Fort Knox Credit Union Branch
6245695	DRMO	511	Building No. 2962 – DRMO
1000002	Fort Knox Exchange	253	Building No. 51 - PX Maintenance Warehouse
1017999	Fort Knox Exchange	253	Building No. 52 - PX Warehouse Storage
1184647	Fort Knox Exchange	253	Building No. 2012 - PX Burger King
6678679	Fort Knox Exchange	253	Building No. 1608 - AAFES Car Wash
1000016	Gold Vault	515	Gold Vault
1000019	Hardin Co Water Dist #1	256	Wilson Avenue Booster
1545329	Hardin Co Water Dist #2	256	Carpenter Test Road
1000441	Hardin Co Water Dist #3	256	Prichard Pump Station
1000008	Knox Post Base Line Data	1297	Building No. 1377 - Armed Forces Bank – Main
1000102	Knox Post Base Line Data	1297	Building No. 853 - Little Meter
1000108	Knox Post Base Line Data	1297	Building No. 853 - Big Meter
1000267	Knox Post Base Line Data	1297	Building No. 1492 - Kuma Dining
7823023	Knox Post Base Line Data	1297	Building No. 28 - Medical Warehouse
1000061	Lindsey Golf Course	3612	Building No. 4024 - Golf Course Club House
4055089	Lindsey Golf Course	3612	Building No. 4127 - Lindsey Green
1000155	MEDDAC Facilities	1338	Building No. 2724 - Small Meter
1000156	MEDDAC Facilities	1338	Building No. 2724 – Big Meter
2081713	MEDDAC Facilities	1338	Building No. 860
5408309	MEDDAC Facilities	1338	Building No. 851 – Clinic
5586008	MEDDAC Facilities	1338	Building No. 851 – Kitchen
7823053	MEDDAC Facilities	1338	Building No. 5949 – Troop Medical
7824306	MEDDAC Facilities	1338	Building No. 1003
7824307	MEDDAC Facilities	1338	Building No. 1022 - Optical Bal.
7824308	MEDDAC Facilities	1338	Building No. 6289
7824309	MEDDAC Facilities	1338	Building No. 865 - Inside Meter
7824310	MEDDAC Facilities	1338	Building No. 6585
7824311	MEDDAC Facilities	1338	Building No. 1489
7824312	MEDDAC Facilities	1338	Building No. 6586 - Reception Medical
7824313	MEDDAC Facilities	1338	Building No. 1068 - Vet Facility
7824314	MEDDAC Facilities	1338	Building No. 1006
7862457	MEDDAC Facilities	1338	Building No. 7711 - Vet Facility
9536354	NAF/MWR	303	Building No. 6597 - Wickham Guest

Meter No.	Tenant Organization	Group No.	Building Served / Description
1000257	Navy Seals Special Boat GP	1196	Hudson Street Trailer #1
1000258	Navy Seals Special Boat GP	1196	Hudson Street Trailer #2
1080180	Nolin RECC	1732	Building No. 614 - Nolin Recreation
872139	Sewer Plant	1623	Building No. 7207 - Sewer Plant
9918264	SO Contracting	4260	Queen Street Lot 101
1000000	US Army Reserves	1520	Building No. 2327 - US Army Reserve
5471368	Youth Challenge	695	Building No. 2377 - A Enlisted Barracks - 35,760 SF

JA1.6 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:

1. **Invoice** (IAW Section G.3, *Submission and Payment of Invoices*). The Contractor shall submit payment requests electronically via the internet using the Wide Area Workflow (WAWF) system. The WAWF system is located at the following internet website: https://wawf.eb.mil. Failure to submit invoices in WAWF may result in delay of payment. For further WAWF assistance, contact Customer Support @ 866-618-5988 (toll-free) or 801-605-7095. NOTE: Go to http://wawftraining.com for self-paced training, to learn how to electronically apply for user ID and password, and how to electronically submit and take action on documents in WAWF.

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

   Name: *TBD*
   _____
   Address: Directorate of Public Works
   Fort Knox, KY _____
   Phone number: 502-___-____
   E-mail: _____

3. **Meter Reading Report**. The monthly meter reading report shall show the current and previous month's 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 10th of each month for the previous month. Meter reading reports shall be submitted to:

   Name: *TBD*
   _____
   Address: Directorate of Public Works
   Fort Knox, KY _____
   Phone number: 502-___-____
   E-mail: _____

4. **Monthly Operating Report**. Copies of the monthly operating reports, the bacteriological analysis reports and the water main reports submitted to the State of Kentucky shall be submitted to:

   Name: *TBD*
   _____
   Address: Directorate of Public Works
   Fort Knox, KY _____
   Phone number: 502-___-____
   E-mail: _____

5. **Monthly Water Withdrawal Permit Report**. Copies of the monthly water withdrawal permit reports submitted to the State of Kentucky shall be submitted to:

   Name: *TBD*
   _____
   Address: Directorate of Public Works
   Fort Knox, KY _____
   Phone number: 502-___-____
   E-mail: _____

6. **Monthly Discharge Monitoring Reports**. Copies of the monthly discharge monitoring reports submitted to the State of Kentucky shall be submitted to:

   Name: *TBD*
   _____
   Address: Directorate of Public Works
   Fort Knox, KY _____
   Phone number: 502-___-____
   E-mail: _____

JA1.7 Energy Saving Projects

In keeping with Section C.3.4, *Energy and Water Efficiencies and Conservation*, any projects that should be implemented or continued would be listed here.

- Although there are no projects identified at this time, any future pump motor replacements shall be in compliance with Army Energy conservation policy.

JA1.8 Service Area

IAW Section C.4, *Service Area*, the service area is defined as all areas within the Fort Knox boundaries.

JA1.9 Off-Installation Sites

Fort Knox provides water services to the following off-Installation sites:

1) City of Muldraugh
2) Hardin County Water District No. 1

JA1.10 Turning Utility Services On and Off

The Contractor will turn on and turn off water services as requested by the Government at no additional cost. Requests of this type are routine calls that include, but are not limited to, allowing maintenance on equipment beyond the point of demarcation, new or upgrading a service, and demolition of an existing service. There will be a substantial number of this type of request for turn on / turn offs over the next several years associated with intense new construction activity.

JA1.11 Special Transition Requirements

IAW Section C.13, *Transition Plan*, there are no known required specific transition requirements at this time.

JA1.12 Government Recognized System Deficiencies

Table 12 provides a list of Government recognized deficiencies, the Government's approach to remedy the deficiency, and the time frame in which the deficiency should be remedied. The deficiencies listed may be physical deficiencies, functional deficiencies, or operational in nature. If the utility system is sold, the Government will not accomplish a remedy for the recognized deficiencies listed. In some cases, these requirements have not been quantified, nor are there project numbers assigned. They are provided to generally acquaint the Contractor with system needs, from the Government's perspective, that should be addressed over the next few years. The Contractor should propose his approach (which must be IAW industry standards) to correct the recognized deficiencies, which may or may not be similar to the Government's approach.

TABLE 12
Government Recognized System Deficiencies
Potable Water Utility System, Fort Knox, Kentucky

System Component	Recognized Deficiencies and the Government's Approach to Remedy	Year to be Completed
System Survey / Assessment and Re–Map the Utility Systems	Conduct a system survey / assessment and re-map the potable water distribution system with GIS coordinates. This project also includes the development of an accurate computerized model of the system.	Within 1st year of the contract start date
Leak Detection Survey	Conduct a leak detection survey of the entire potable water system lines including the raw water lines and the potable water distribution lines within the main cantonment area and the range areas.	Within 1st year of the contract start date
Hydraulic Model	Develop a hydraulic model of the entire potable water utility system. This model will be invaluable during the design and replacement of the existing potable water distribution system.	Within 1st year of the contract start date

System Component	Recognized Deficiencies and the Government's Approach to Remedy	Year to be Completed
Master Flow Meters at the WTPs	The finished water master meter at the Muldraugh WTP pump house needs to be replaced, The meter is well beyond its design life. The finished master water meters at the Muldraugh and Central WTPs need to be calibrated.	Within 1st year of the contract start date
20-inch Valves	Replace the 20-inch valves on 24-inch CI Line from the West Point well fields to the Muldraugh WTP. The valves are the original valves and are not operable.	Within 1st year of the contract start date
New Raw Water from the Muldraugh WTP to 16-inch Raw Water Line Between Otter Creek PS & Central WTP	Install a new 16-inch raw water line (roughly 15,840 LF) from the Muldraugh WTP to the raw line connecting the Otter Creek PS to the Central WTP. This line is critical since the raw water from the West Point well field is utilized when the raw water from McCracken Spring and Otter Creek is not suitable to treat at the Central WTP. Fort Knox has indicated that its lease of the three wells and the 14-inch line from HCWD No. 1 will terminate once Fort Knox's potable water utility system is privatized.	Within 1st year of the contract start date
Otter Creek PS	Repair the creek side of the Otter Creek PS where the bank of the creek has be severely eroded. Install new windows and doors and replace the roof.	Within 1st year of the contract start date
Muldraugh HLPS	Install new windows and doors, paint the exterior face of the concrete block facade and replace the roof.	Within 1st year of the contract start date
Central WTP	Replace the roof of the Central WTP.	Within 1st year of the contract start date
Central WTP Clear Well	Replace the roof and coat the interior of the 2.0 MG clear well located at the Central WTP. The size of the clear well may be reduced to accommodate the lowering the roof below grade to protect the concrete surfaces.	Within 1st year of the contract start date
Muldraugh WTP	This ISDC project cost estimates should include all costs, by year for Years 1-5 that the Offeror would incur to own, operate and maintain the Muldraugh WTP until an alternate potable water source is obtained. It is possible that the potable water purchase contract could be executed at any time during the initial 5 years of the contract. In this event, the Offeror's cost estimate would be pro-rated over the actual months of operation prior to the execution of the purchase water contract. The subsequent ISDC projects associated with the operation and maintenance of the Muldraugh Plant (if any remained) would be cancelled.	Years 1-5 from contract start date
Fire Hydrants	Replace roughly 600 fire hydrants identified by the Fort Knox Fire Department.	Within 4 years of the contract start date

System Component	Recognized Deficiencies and the Government's Approach to Remedy	Year to be Completed
Water Storage Tank No. 5	Tank No. 5 requires complete renovation to include the coating of the interior of the tank, the painting of the exterior of the tank and legs, and the installation of new sacrificial anodes in the tanks, a new rectifier on the outside of the tanks and a new altitude valve.	Within 1st year of the contract start date
Automatic Transfer Switches	Install automatic transfer switches at the Otter Creek PS, the Central WTP facility and the Muldraugh HLPS. Tie the switches into the new SCADA system.	Within 2nd year of the contract start date
Line Between Otter Creek PS & Central WTP	Replace roughly 14,437 LF of 16-inch cast iron raw water line between the Otter Creek WTP and the Central WTP facility,	Within 2nd year of the contract start date
Water Storage Tank No. 6	Tank No. 6 requires complete renovation to include the coating of the interior of the tank, the painting of the exterior of the tank and legs, and the installation of new sacrificial anodes in the tanks, a new rectifier on the outside of the tanks and a new altitude valve.	Within 2nd year of the contract start date
Water Storage Tank No. 8	Tank No. 8 requires complete renovation to include the coating of the interior of the tank, the painting of the exterior of the tank and legs, and the installation of new sacrificial anodes in the tanks, a new rectifier on the outside of the tanks and a new altitude valve.	Within 2nd year of the contract start date
Water Storage Tank No. 7	Tank No. 7 requires extensive renovation to include the coating of the interior of the tank, the painting of the legs, and the installation of new sacrificial anodes in the tanks, a new rectifier on the outside of the tanks and a new altitude valve.	Within 3rd year of the contract start date
SCADA System	Install a comprehensive SCADA system to assist the UP Contractor in monitoring and controlling the utility water system components, i.e. raw water wells, pumps, etc. The UP Contractor should coordinate the design and installation of the SCADA system with the Government to ensure that the new meters can also be integrated to the extent possible with the SCADA system.	Within 3rd year of the contract start date

System Component	Recognized Deficiencies and the Government's Approach to Remedy	Year to be Completed
Distribution Pipe & Valves	Replace transite pipe in the North Dietz Housing area of the following approximate amounts: • 834 LF of 1-inch • 1,988 LF of 1.5-inch • 3,726 of 2-inch • 284 LF of 3-inch • 4,231 LF of 6-inch • 6,472 LF of 8-inch • 5,927 LF of 10-inch	Within 3rd year of the contract start date
Distribution Pipe & Valves	Replace ductile iron pipe in the Van Voorhis Housing area of the following approximate amounts: • 180 LF of 1-inch • 7,076 LF of 1.25-inch • 4,293 LF of 1.5-inch • 11,436 LF of 2-inch • 1,115 LF of 3-inch • 25,835 LF of 6-inch • 18,034 LF of 8-inch • 4,677 LF of 10-inch • 897 LF of 12-inch • 192 LF of 14-inch	Within 3rd year of the contract start date
Distribution Pipe & Valves	Replace roughly 4,237 LF of 8-inch pipe which surrounds the site of the new Human Resource Center	Within 3rd year of the contract start date
Distribution Pipe & Valves	Replace the following approximate amounts of pipe under Phase I of the distribution pipe replacement program: • 994 LF of 1-inch • 29 LF of 1.25-inch • 759 LF of 1.5-inch • 3,720 LF of 2-inch • 483 LF of 2.5-inch • 4,280 LF of 3-inch • 3,754 LF of 4-inch • 61,582 LF of 6-inch • 38,255 LF of 8-inch • 17,066 LF of 10-inch • 4,153 LF of 12-inch • 1,665 LF of 14-inch	Within 4th year of the contract start date

Service Interruption / Contingency Plan

Hardin County Water District No.1 (HCWD1) has prepared this Subfactor in a manner that provides a comprehensive approach to continuity of service. Our approach addresses both the short-term responses to individual service disruptions that may occur and the long-term provision for service continuity.

The service interruption and contingency plan contains the following elements:

- Procedures and Provisions for Reacting to All Service Interruptions
- Resources to be Utilized in the Implementation of the Procedures Described in the Plan
- Detailed Contingency Plan
- Estimated Response Times
- Procedures for Handling Service Calls
- Re-establishment of Temporary Service
- Reestablishment of Permanent Service
- Emergency Restoration Plan
- Installation of Specific Requirements
- Possible Causes for Service Interruptions and Response Plans
- Catastrophic Loss Plan

JE2.1 Procedures and Provisions for Reacting to All Service Interruptions

It is our objective and commitment to provide dependable, continuous, and reliable water service to Fort Knox 24/7. HCWD1 will be ready to respond to emergency situations upon notification through our call center. The initial contact person to be notified is the Distribution Supervisor who will be responsible for contacting and dispatching appropriate maintenance personnel.

HCWD1 will operate the facilities to accepted Federal, State, and industry standards, including those published by the American Water Works Association (AWWA), the National Electric Code (NEC), National Electric Safety Code (NESC), American Society of Civil Engineers (ASCE), and the National Fire Protection Association (NFPA). These referenced documents will be maintained in our on-Post office and will be available to appropriate staff. Selected standards and codes we use and consider in developing upgrades are listed in Exhibit JE2-1.

Standard Operating Procedures (SOPs) will be tailored to Fort Knox and address all aspects of service interruption. These SOPs outline specific procedures for each type of interruption, as well as contingency plans for restoration of services. These SOPs will be maintained on-Post and readily available to all personnel and will be reviewed and updated on a regular basis. All staff will be trained regularly in the procedures outlined in the SOPs so that in the event of a service interruption, restoration of services will be completed in a minimal amount of time. SOPs developed for the facility will also incorporate emergency operating considerations (See Sections JE2.3 and JE2.4 for additional discussion).

EXHIBIT JE2-1
Typical Codes and Standards for Operating Utilities

DIPRA Handbook
Water Distribution Operator's Handbook
Water Supply Operations—Volume 3
OSHA
Kentucky OSH
Kentucky Plumbing Code
Kentucky Electric Code/Life Safety Code
Americans with Disabilities Act (ADA)
Federal Codes and Regulations including CFR 141 and 143
EM 385-1.1 USACE Safety and Health Requirements Manual
Industry Standards for Water Facilities
AWWA Recommended Practices
AWWA C502-94 *AWWA C500-983*
AWWA C700-95
NESC Codes
KDOW Title 401 KAR Chapter 8 Water Regulations
U.S. Public Health Service Standards
Army and Fort Knox Regulations
National Fire Protection Association Codes and Standards
Military Handbooks including Mil-HDBK-1008C

Examples of the SOPs to be tailored for Fort Knox and incorporated into our operations and

maintenance (O&M) Plan/Quality Management Plan include:

- *General Procedures.* These procedures typically include: service conditions tracking procedures; facility notification for scheduled or emergency outages; service interruption procedures; customer concern/complaint handling; and various inspection procedures.
- *Water Treatment and Distribution.* These procedures typically include: managing water failures; operation of electrical systems; alarm testing; state sampling requirements and procedures; operation of pumps, chemical feeders, etc.; procedures for line breaks; disinfection procedures; tank isolation procedures; managing failures of various systems; monitoring procedures; etc.

For this contract, HCWD1 will have a designated telephone number that will be used for incoming service requests. The appropriate project personnel will be notified of the service request and an estimated arrival time of the crew will be provided to the Government based upon the type of service call assignment.

The following procedures are in place to support any type of services provided at Fort Knox.

- Provisions. For all system upgrades and major construction projects, HCWD1 staff and subcontractors will provide temporary services of out-of-service components to maintain service to Fort Knox customers during these construction projects.
- Standby Power. Standby generation will be provided for all pump stations by either mobile or installed units in order to provide power when needed during extended service disruptions.
- Scheduled Service Outages. HCWD1 will coordinate with the Government and other contractors to facilitate service outages and underground utility locates when needed. HCWD1 will coordinate scheduled outages with Fort Knox's Department of Public Works (DPW). We will provide the date and time of outage, a list of buildings affected, and the estimated duration. Additionally, we will be responsible for notifying all affected building managers of the outage. No scheduled outages will be performed without notification to affected building managers. Likewise, we will work with the Post to reschedule routine outages if they adversely impact mission operations. We will track outages until work is complete and provide the appropriate notifications that services have been restored.
- Excavations. HCWD1 will comply with the Fort Knox excavation permit process. In emergency situations where excavations are required for repairs, HCWD1 will immediately notify the Contracting Officer's Technical Representative (COTR) and follow Post protocol.

Long-term plans for service continuity are addressed in the following ways:

- Capital Upgrade and Renewal and Replacement Plans. Subfactor 3 addresses our approach to initial system upgrade and replacement, in addition to our overall approach to long-term renewal and replacements for the water treatment and distribution systems. These plans provide for addressing the current deterioration of the systems that make the utilities susceptible to service disruptions. Our plan targets the most critical components in the systems where breakdowns typically occur first, and ensures these items are in optimal condition to reduce the potential for service disruptions. Our plan also includes the tracking of system failures and performance against our service standards. Whenever system modifications are planned, all practical efforts will be made to minimize downtime and restore service as soon as possible. Temporary services can also be installed to continue service during major modifications.
- Maintenance Management. Diligently performing preventive and predictive maintenance on system components significantly decreases the number of unplanned emergency failures. All preventive maintenance (PM) activities will be tracked through HCWD1's Computerized Maintenance Management System (CMMS), as described in Subfactor 2 of this proposal. Our CMMS program includes the following policies:

- Valves and hydrants will be exercised every 2 years.
- To avoid failures, diesel generators will be tested monthly and maintained in accordance with manufacturer recommendations.
- Selected critical equipment will receive vibration monitoring.
- Periodic current checks will be performed to track and trend equipment condition and wear.

JE2.2 Resources to be Utilized in the Implementation of the Procedures Described in the Plan

JE2.2.1 Management Organization

HCWD1's General Manager, Mr. Jim Bruce, will be the primary contact for business and ownership issues. Mr. Preston Pendley, Project Manager, will provide project oversight, coordination and planning and will serve as primary contact to the government regarding daily operations. Mr. Brett Pyles, Operations Manager, will provide support to the Project Manager and attend planning meetings and other meetings as needed. Mr. Richard Stranahan, Distribution Operations Supervisor, will be responsible for the day to day operation of the distribution system. HCWD1 proposes to employ a team of HCWD1, the Louisville Water Company (LWC), and CH2M HILL for the operations, maintenance, and engineering support for O&M of the water treatment and distribution facilities.

Our mission is to provide honorable stewardship over Fort Knox's facilities. Exhibit JE2.1-2 describes the specialized roles of HCWD1's team.

Administrative and Financial Staffing

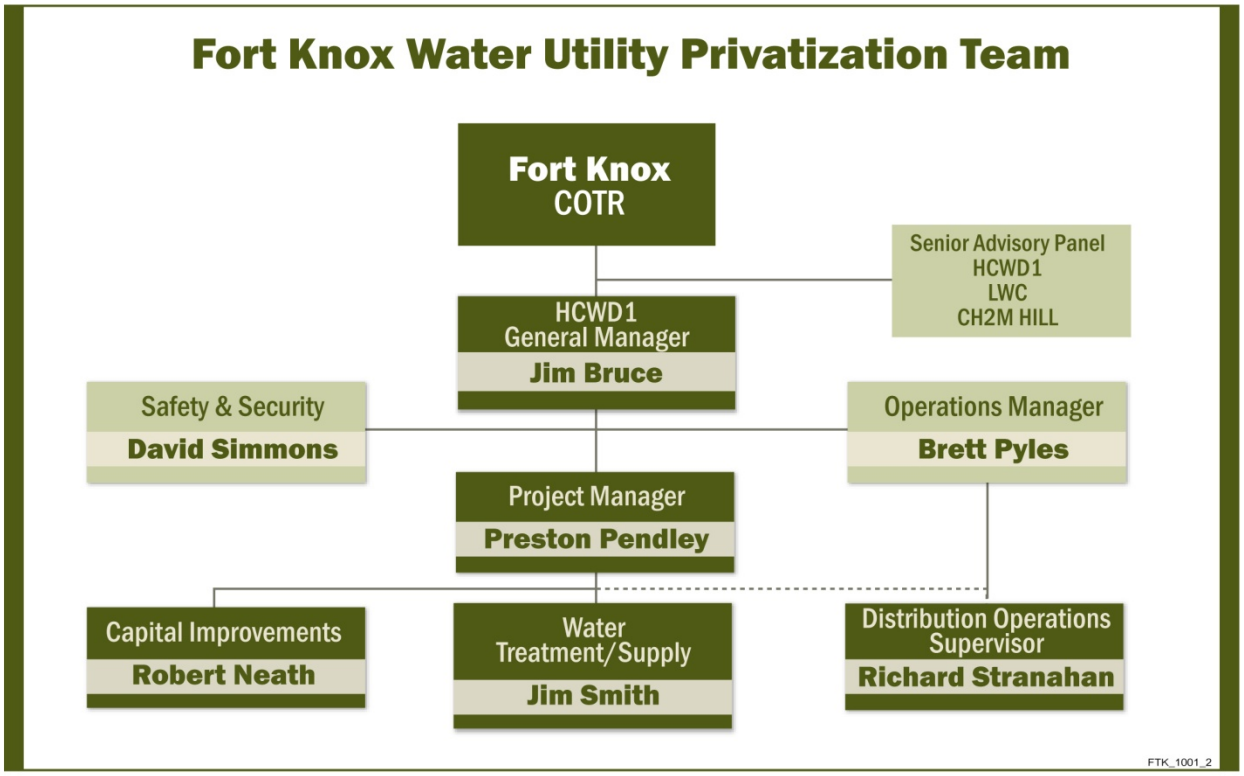
Management and administration of the contract will be accomplished by HCWD1's staff. As previously mentioned, General Manager Jim Bruce will be the direct contact for the Department of the Army for all business aspects of the contract. Mr. Bruce will devote as much time as needed for administration of the contract. Mr. Bruce will direct HCWD1's staff to accomplish key administrative functions, such as the coordination and administration of subcontracts with LWC, and CH2M HILL; procurement of subcontracts for the system upgrades and capital improvements; billing and accounts receivable to the Department of the Army; cost accounting functions; and general administration of the contract for the Department of the Army.

Mr. Bruce will be directly supported by the Project Manager, Preston Pendley, who will provide support for the water distribution and water treatment systems, procurement, and contract administration tasks. Supporting Mr. Bruce and Mr. Pendley will be the HCWD1 team; this team encompasses the HCWD1 management team, including the HCWD1 team currently managing and operating the Fort Knox wastewater systems. In addition, HCWD1 has partnered with the LWC and it 450 employees, and the 25,000 engineers and scientists at CH2M HILL. HCWD1's entire team is committed to devoting appropriate human resources to ensure prompt resolution of service interruptions.

Exhibit JE2-2
Summary of the Specialized Team Members

Team Member	Relationship	Role	Key Personnel
HCWD1	Owner	Own, finance, and manage the utility systems	Jim Bruce, General Manager
HCWD1	Dept. of Owner	Manage, oversee, and administer contracts for Fort Knox Water System and attend meetings with KO, COR, and other base personnel as needed	Preston Pendley, Project Manager
HCWD1	Dept. of Owner	Provide daily support to project manager, LWC contact, capital construction projects, and meetings with KO, COR, and other base personnel as needed	Brett Pyles, Operations Manager
HCWD1	Dept. of Owner	Operate and manage the utility systems (potable water distribution)	Richard Stranahan, Distribution Operations Supervisor
LWC	Subcontract to HCWD1	Operate and maintain the Water Treatment Plants	Jim Smith, Water Treatment Project Manager
CH2M HILL	Subcontract to HCWD1	Capital Improvement Plan Program Management	Robert Neath, Engineering Mgr

Exhibit JE2-3
Project Organization



HCWD1 has assembled a leadership team of industry leaders to ensure that this key aspect of our partnership with Fort Knox is executed at the highest level. Each of these key personnel is dedicated to the delivery of our Service Interruption/Contingency and Catastrophic Loss Plan, outlined above. Our plan ensures service availability 24/7, and in the event of service interruption service restoration activities are carried out safely, promptly and efficiently.

JE2.3 Detailed Contingency Plan

A general flowchart of our response plan to service calls is presented in Exhibit JE2-3. All incoming calls from installation personnel will be made to the 24-Hour Call Center/Dispatcher. The caller should identify themselves as a Fort Knox tenant, which facility requires the service, and the nature of the call. The Work Order is initiated and entered into the CMMS (Exhibit JE2-4).

The Distribution Supervisor is notified that a Fort Knox Work Order Request has come in, and an on-site representative will be notified immediately after the call is received to further assess the nature of the call. Normal, routine calls will be directly dispatched to the appropriate maintenance crew. Emergency calls and after hours calls are forwarded to the on-call supervisor for prioritization, assignment, and response.

All service requests will be documented, and the time of the call, time of the service response, cause of the request, and action taken (including the time and date completed) will be recorded by HCWD1. These records are maintained in the CMMS and will be made available to the Contracting Officer upon request.

Exhibit JE2-3
Service Call and Emergency Call Response Plan

Service Call and Emergency Call Response Plan

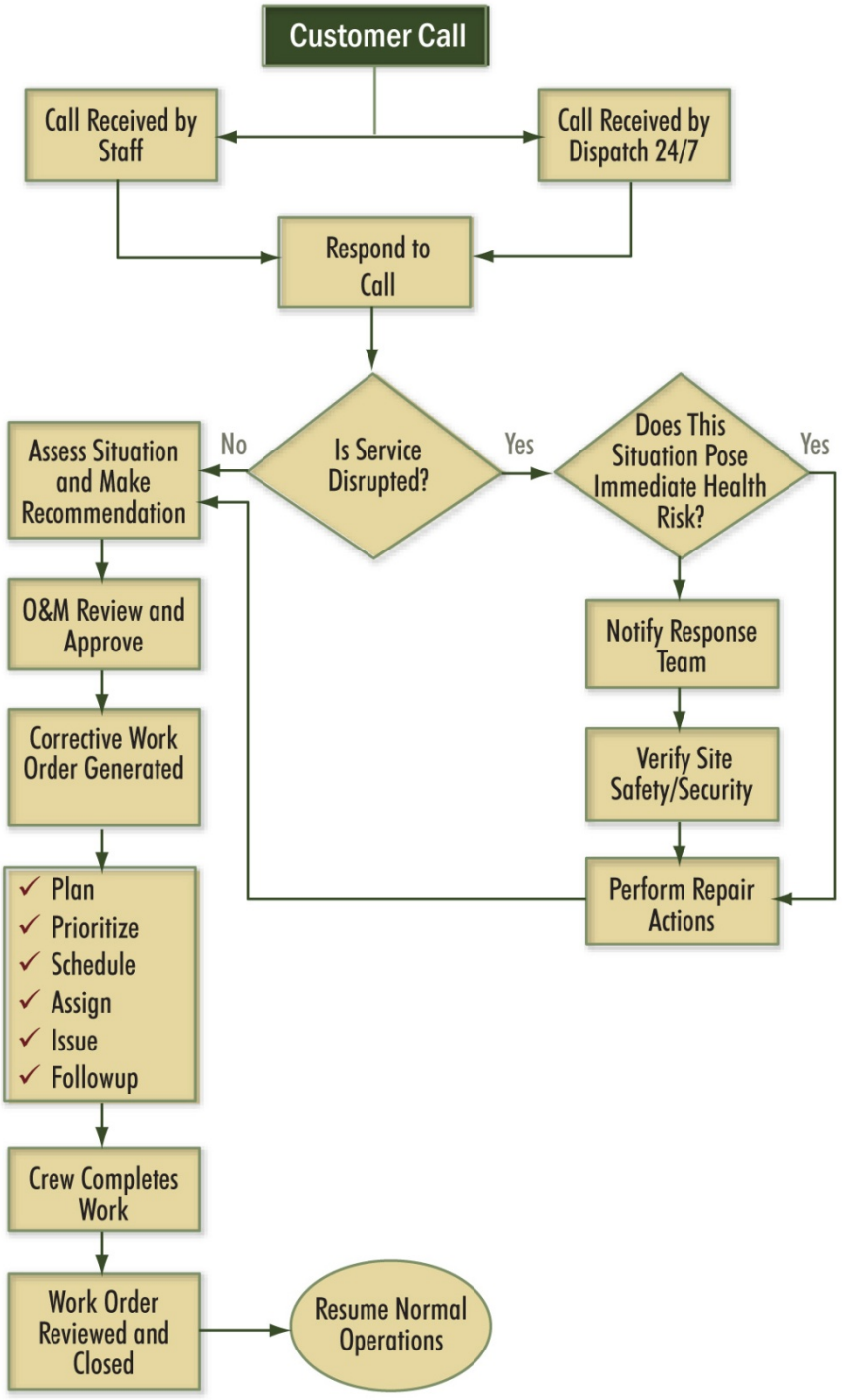
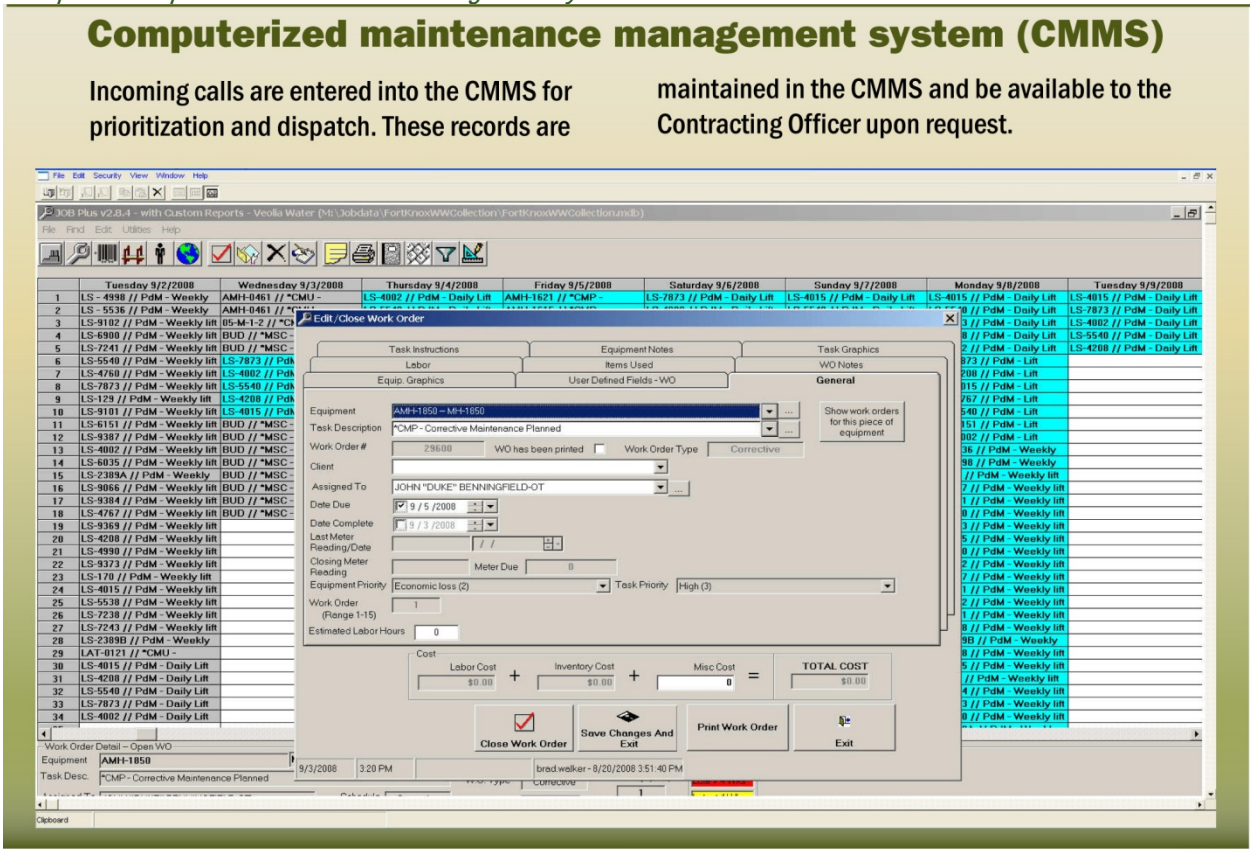


Exhibit JE2-4

Example of Computerized Maintenance Management System



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JE2.3.1 Procedures for Submitting Services Requests

We understand that the Government will designate the requests as 'emergency,' 'urgent,' or 'routine' during the service request.

The preferred method of submitting a service request would be through the 24-hour telephone number. In the event the telephone lines are down, service requests can be made via cell phone to the Distribution Supervisor. The appropriate project personnel will be notified of the service request and an estimated arrival time of the crew will be provided to the Government. Response time is based upon the type of service call assignment.

JE2.3.2 Coordination of Activities

After contract award, HCWD1 will review existing plans at Fort Knox and develop final operating procedures for water service coordination at the Post.

We recommend that these procedures be developed jointly with the departments and activities involved. For example, routine meetings with the master planners and engineers will ensure timely provision of water services to new facilities and coordination of pending and active construction/rehabilitation projects.

Person-to-person interactions between DPW and HCWD1 will be on appropriate levels. For example, the Project Manager will maintain close working relationships with COTR and DPW management to coordinate larger projects. He will be available to resolve any concern. We will maintain and encourage open communications with the DPW staff and civilian workforce.

The general customer base at Fort Knox will be informed about relevant issues, such as outages and road closures and news with special newsletters and

notifications, posters in public areas, and through signs on Post. In addition, HCWD1 will coordinate with the DPW, the Command Group, and COTR as follows:

- Administrative Issues: HCWD1 will coordinate with the administrative section of DPW through the COTR on issues related to master planning and military construction that would impact utility expansion requirements. The installation master planning section initiates military construction projects several years in advance, and the planning for these projects must of necessity be included in utility planning efforts. The focal point for such construction is the administrative offices of the DPWs and through periodic meetings, planning will be proactive rather than reactive. These meetings will also serve as the forum for discussions of O&M, Capital Improvements Program, and customer satisfaction reviews.
- Repair and replacement projects that are recommended by HCWD1 will be discussed with the Contracting Officer (CO) or COTR. We will coordinate the upgrades and renewal and replacement plan during these meetings, as well as changes in staffing and other requirements. HCWD1 staff will ensure that major projects for repair, replacement and installation of facilities, equipment, and infrastructure are on the agenda. Meetings will cover planned engineering projects, projects under design and construction, and specific long-range water requirements. The intent of such meetings will be to resolve any potentially overlapping or interfering conditions or conflicts.
- Operations and Maintenance Projects: Communications with the DPW will be both formal and informal. HCWD1 will meet with the DPW staff to discuss schedules and upcoming major and minor work prior to initiation of the work. We will also provide notice to the DPW on any planned work scheduled so it can be coordinated with residents or occupants of the areas affected. The General Manager will conduct regular visits to Fort Knox to ensure that the Army is satisfied with the work being performed and that the project has all of the resources needed to meet Army expectations. It is the intent of HCWD1 to ensure all work is fully communicated and coordinated with the DPW staff at Fort Knox.

Communications will occur on a daily basis. Our project personnel will become familiar with their counterparts in the DPW to maximize coordination and expedite response situations. We will support DPW for any required exterior utility services, and coordinate whole or partial system outages with DPW, the Fire Department, and potentially affected facilities. We will also coordinate digging permits, disaster recovery efforts, meetings, and work schedules during our meetings with DPW. HCWD1 also recommends regular meetings with DPW and other utility owners to ensure thorough coordination with key players on Fort Knox involved in potentially conflicting work.

JE2.4 Estimated Response Times

As stated in Section C.8, *Repair Response Notification Procedures*, of the contract, we understand the Government will assign 'emergency,' 'urgent,' or 'routine' designations when contacting HCWD1 with a service call. Once a service call is received, on-site personnel will be notified via a work order and will be categorized as Emergency, Urgent, or Routine as identified by the Government during response notification. These personnel will be authorized to acquire the necessary equipment, material, and personnel to respond to the situation. Our response will include personnel and equipment to assess and begin repairs within the specified time. Response times for various types of service calls (whether during or after normal duty hours) are highlighted in Exhibit JE2-5.

Exhibit JE2-5

Response Times for Each Type of Service Call Meets Requirements Specified in Attachment JA1.3.24 of the contract

Type of Service Call	Response Time	Completion Time
Emergency Service	Respond within 30 minutes during normal duty hours Repair crews on scene within 1 hour during duty hours Respond within 1 hour during non-duty hours Repair crews on scene within 2 hours during non-duty hours Zussman Range, Yano Range and Basham's Corner within 1.5 hours during normal duty hours, and 2 hours during non-duty hours	Remedied or downgraded within 24 hours of receiving request*
Urgent Service	Within 3-working days of request	Within 7 business days of receiving request*
Routine Service	Within 5 working days of request	Within 10 working days of receiving request*

*Unless there is a delay from the Government or HCWD1 cannot procure necessary materials.

Routine service interruptions or service requests are scheduled to perform routine maintenance of the distribution system or to add or delete connections, either at the request of the customer or at the initiation of the utility. The following situations would typically be declared routine and would be responded to on a timely basis:

- Requests by the customer for installation of new or redundant services
- Requests by the customer for utility service interruptions to a building so that work could be performed in the building
- Requests by the utility to shut off utility service to a building or facility so that an operation or maintenance task could be performed such as replacing system components or performing repair and replacement activities
- Utility locates within 48 hours

Routine work, such as the scheduled repair, replacement, or removal of system components that require service interruption, will be coordinated with the COTR to ensure minimal impact to the mission and operations. Notification will include date, time of outage, a list of buildings that will be affected, and the estimated time until the service will be restored. We understand that Fort Knox reserves the right to require HCWD1 to postpone work requiring service interruption if such interruption might adversely affect the Posts' missions and operations. If an interruption is postponed, the parties will coordinate a mutually acceptable alternate time for the scheduled service interruption. Scheduled utility outages may be required after normal working hours to lessen the inconvenience to Post mission critical functions. We will be able to provide an initial response to these routine service requests within 5 calendar days of request and non-emergency work will be accomplished within 10 days (unless there is a delay from the Government or HCWD1 cannot procure necessary materials).

Urgent service requests are made in situations that are not an emergency, but when the situation significantly hinders performance of Fort Knox activities and requires elimination of hazards that may present health and safety concerns. These services can include but are not limited to, downgraded emergency responses, special events schedule, and reduced service at mission critical facilities or housing. We will have the on-site resources and employees to respond to urgent outages within 3 working days, and the work will be completed within 7 days (unless there is a delay from the Government or HCWD1 cannot procure necessary materials). If circumstances beyond HCWD1's control limit the completion of work, temporary services or other temporary measures will be constructed to maintain service to the customers. The following are examples of situations that would typically be declared urgent situations:

- A water main or water service line leak that does not threaten to flood buildings or does not pose a safety risk
- Accidents caused by equipment striking buildings that house valve pit equipment or striking fire hydrants
- Code violation that poses a safety hazard

Emergency service is a situation that is detrimental to the mission of the Post, significantly impacts operational effectiveness, or presents an immediate threat to the life, health, and safety of Post personnel. Examples include a major water main break, or loss of operation of key plant equipment that causes an interruption of water treatment or pumping facility operations. These situations can be caused by:

- Acts of God, which might include things like high wind- or ice-induced power outages
- Natural disasters include events, such as earthquakes, fires, or high wind storms
- Human error, including accidental damage to distribution or pumping equipment including control panels, valves, or other system components
- Equipment failure, including failure of key distribution or equipment or components
- Employee strikes or work slowdowns, sabotage of key components of the water system, or failure to respond to requested service of customers
- Water main or service line leaks that would threaten to flood buildings or pose a safety risk
- Terrorist activity, which might include destruction of water system facilities, contamination of the water supply or denying utility worker access to critical facilities

HCWD1 will notify Fort Knox's COTR and DPW personnel of each situation/priority as soon as possible. HCWD1 will provide an Emergency Restoration Plan, maintain it on-Post, and update it on a regular basis.

When an emergency service situation occurs, the first responder and/or standby personnel will be contacted immediately by radio and/or cell phone or pager for after-hours responses. If necessary, that worker will be augmented by additional "call-ins" of the other HCWD1 team utility workers. The first on-site utility employee will secure the emergency site, assess the situation, and make an immediate call to the Project Manager for additional resources as required. At Fort Knox, the initial contact person contacted by the dispatcher will be the Distribution Supervisor who will be responsible for assembling the appropriate maintenance personnel. Constant communication between the Distribution Supervisor and the Project Manager will assure resources are available when and where needed. Response to emergencies will be within 30 minutes during duty hours (0730 – 1630, Monday – Friday) and within 1 hour during non-duty hours. Emergency response to the Zussman Range, Yano Range and the Basham's Corner areas will be within 1.5 hours during duty hours and within 2 hours during non-duty hours. Emergency service orders will be completed by HCWD1 within 24 hours (unless there is a delay from the Government or HCWD1 cannot procure necessary materials).

JE2.5 Procedures for Handling Service Calls

An overview of our procedures for handling the various types of service calls is provided in Exhibit JE2-3. A detailed list of contact names and numbers for Fort Knox, regulatory agencies, HCWD1 support, and local vendors and subcontractors will be developed and maintained for use, if needed, during an emergency service situation. Further discussions of emergency operations are provided in Section 1.8. All HCWD1 requests for scheduled outages will be coordinated with Fort Knox's DPW and the facility manager/user at least 10 working days prior to the scheduled outages. HCWD1 will make every reasonable effort to minimize the number of facilities affected and the duration of the outage.

All service request calls will be documented, and the individual who called (to ensure they are authorized), location of the problem, time of the call, time of the service response, cause of the request, and action taken (including the time and date completed) will be recorded by HCWD1. These records are maintained

in the CMMS for at least 2 years and will be made available to the CO/COTR upon request.

If the request affects building operations, HCWD1 will coordinate the work with the person responsible for the building or facility. All emergency service requests, or emergencies identified by HCWD1, will immediately be reported to the COTR. Upon award, HCWD1 will develop the procedure of Government notification after hours.

Any of the service requests listed above could be characterized as Emergency, Urgent, or Routine (as assigned by the designated Government representative). Exhibit JE2-5 summarizes the response times for each type of call. If it is an Emergency, we will respond within 30 minutes and be on-site with repair crews within 1 hour during normal duty hours. We will respond within 1 hour and be on site with repair crews within 2 hours during non-duty hours. Urgent requests will be responded to within 3 working days, and Urgent service orders within 7 days (unless there is a delay from the Government or HCWD1 cannot procure necessary materials).

If it is a Routine call, the response will vary as described in Exhibit JE2-5, but generally, the initial response will be within 5 business days, and Routine service orders will be completed within 10 business days (unless there is a delay from the Government or HCWD1 cannot procure necessary materials). Routine service requests typically include new service connections, disconnection or reconnection of services, scheduled outages, requests for technical information, requests for location of underground lines, control of digging and digging permits, or service valve repairs.

The first responder will initially contact the customer to verify the severity of the situation. First responders will assess the required manpower and equipment required, notify additional personnel, and make the area safe by isolating or containing the outage.

The work order is issued, work will be assigned to appropriate personnel, and upon completion, the customer will be notified and the work order will be closed.

If the first responder and the customer determine that service is disrupted or immediate repairs are required, an assessment of health risks will be made. For example, if an accident occurs, Post emergency response teams will be notified to remedy this situation. Following the correction of the emergency situation, repairs can be initiated to correct the service problem.

First responder personnel will always be trained and certified, as appropriate, and will report to the site in his/her duty truck complete with required tools, maps, and equipment to isolate the situation and begin to conduct repairs. The first responder will also have full access to HCWD1 resources on-site, including emergency generators, spare parts, lighting, and rescue gear. Additional maintenance personnel and subcontractors, as needed, will be called in to assist in the work.

Upon completion of the repairs, the safety of the situation will be determined and any additional requirements identified. Safety deficiencies will be considered emergencies and resolved as such. Barring any safety issues, the customer will be notified of the completion of the work and the corrective work order will be closed.

At the start of the next business day, the Project Manager will review the daily response log for follow-up and determination of the customer's satisfaction with our response.

All restoration of service issues will be coordinated with DPW. Service calls will be recorded for repairs, outages, and restoration of service in the CMMS. We will record the time of call, time of service restoration, cause of the outage, and service performed, as well as the time expended to address and restore the service item. Monthly information will be provided to DPW.

JE2.6 Reestablishment of Temporary Service

During an emergency service call, repair crews will be on site within 30 minutes during normal duty hours and within 1 hour during non-duty hours and will work continuously until temporary service is restored.

Depending upon the type of service disruption, HCWD1 will assess the situation and communicate the action plan and estimated time that temporary services will be restored to the affected facility manager. In all cases, temporary services will be restored within 24 hours (unless there is a delay from the Government or HCWD1 cannot procure necessary materials).

For all system upgrades and extended-time repairs, HCWD1 staff and subcontractors will provide temporary service for of out-of-service components to maintain service to Fort Knox customers during these repairs and construction projects. Upon reestablishment of temporary services, the safety of the situation will be determined and any additional requirements identified. Safety issues will be considered emergencies and will be resolved immediately.

Standby generators will be provided by mobile units (if not installed) in order to provide power when needed during service disruptions.

HCWD1 will identify the critical systems required to operate through emergencies. A plan will be developed to address all essential water functions through redundant systems. Our plan, described in this factor, will be modified as needed as the contract progresses and Post information is incorporated into our plans.

JE2.7 Reestablishment of Permanent Service

Once temporary service has been restored, HCWD1 will then begin working to restore permanent services. Permanent services will be restored within 7 business days (unless there is a delay from the Government or HCWD1 cannot procure necessary materials). An assessment of equipment and materials needed for permanent repairs will be completed. This assessment will include those materials to complete restoration as well.

For all work conducted, a pre-job hazard briefing will be held with employees before beginning the work. All safety guidelines and concerns will be discussed at this time.

A work plan will be developed and reviewed with staff as to the most effective manner to facilitate repairs and restore permanent service. If needed, the plan will outline subcontractor services required to complete the task.

If an interruption of service is anticipated, Fort Knox contacts, the facility manager, and any parties that may be affected will be contacted. HCWD1 will make every effort to minimize the number of facilities affected and the duration of the outage.

Upon completion of the reestablishment of permanent services, crews will begin restoration work. Site restoration will include any of the following that apply: cleanup of the area, removal, disposal, and replacement of any cracked pavement or sidewalks, repair of roadways, replacement of loam or topsoil, top dressing by hand, lawn bed preparation, lawn seeding, mulch, fertilizer, and shrub replacement.

JE2.8 Emergency Restoration Plan

HCWD1 has an Emergency Restoration Plan (ERP) in the event of a widespread utility outage. Upon award, HCWD1's ERP will be supplemented to specifically address the site specific issues of Fort Knox. The plan will include response requirements for both minor and major emergencies, natural disasters, manmade hazards, and other emergencies. HCWD1's approach will be augmented by LWC and CH2M HILL's experience in developing and implementing similar plans for water facilities. The plan will integrate design and operational considerations specific to the Department of the Army's facilities. The ERP will be structured to classify the emergency into a specific category, requiring specific responses, dependent upon the severity of the event, and its potential for affecting critical base operations. The Table of Contents for the ERP is provided in Exhibit JE2-6 to provide an overview of what information is presented.

EXHIBIT JE2-6

HCWD1's ERP will be a constant living document that will incorporate and compliment federal, state, and local community needs in the event of emergencies and/or disasters

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This comprehensive ERP will mitigate and incorporate reliability and communication features to minimize the occurrence of emergencies where possible, and to enhance safety, response, and communications when emergencies occur. Because it is impossible to predict the exact nature of every possible emergency, our program provides a comprehensive communication, training, and resource-based plan to manage the broadest range of possible emergencies. HCWD1 stands ready to support Fort Knox in any emergency, crisis situations, and/or related exercises that require HCWD1's support. Upon notification, an HCWD1 designated representative will act as liaison and will respond to these events and provide the appropriate staff to the on-scene coordinator until the event is terminated.

JE2.8.1 Critical Systems and Types of Emergencies

During the first 120 days of the contract, HCWD1 will identify the critical systems required to operate through emergencies. A plan will be developed to address all essential water functions through emergency power supply and redundant systems. Based on state and national standards, HCWD1 will refine our ERP annex in preparing for and responding to a wide range of possible experiences, such as:

- Accidents and personnel emergencies
- Raw water quality contamination
- Chemical spills and leaks
- Equipment and process failure
- Power failure
- Fires
- Flooding, hurricanes, and severe weather
- Tornadoes
- Earthquakes
- Strikes
- Terrorist threats and civil unrest

JE2.8.2 Emergency Response Equipment

HCWD1 will keep a complete emergency equipment inventory, with an updated listing that includes all equipment, materials, and chemicals available. Equipment includes: confined space equipment, such as self-contained breathing apparatus, gas detectors, and ventilators; chemical leak response equipment; heavy equipment (backhoes, loaders, dump trucks, etc.); and pumps, tools, hand tools, and personal protective equipment. Using this inventory, emergency equipment and supplies will be purchased and stockpiled within HCWD1 to enable staff to be prepared for emergencies. A copy of this inventory will be kept in an appendix of the ERP.

JE2.8.3 Emergency Response Personnel

The ERP will contain an Emergency Response Organizational Chart showing the number of staff available and their specific disciplines of performance under emergency conditions. This list will include emergency contact numbers, as well as specific duties to be performed in the event of an emergency.

JE2.8.4 Emergency Response Actions

Our ERP will contain general and, where possible, specific actions from discovery to containment to be performed in the event of the various types of emergencies. The plan will contain details on reporting procedures, first responders and their

priorities, and response times and actions to protect personnel, property, and to ensure the continuation of service.

JE2.8.5 Emergency Response Training

Members of the HCWD1 team are already trained to address the emergencies in this area and have worked with the local Emergency Management Agency (EMA) in emergency responses. Team safety experts and a designated onsite safety coordinator provide training for the HCWD1 staff including first aid, cardiopulmonary resuscitation, vehicle safety, lifting, electrical lockout/tagout, confined space entry, excavation and trenching (competent person), and responses to emergency conditions. All HCWD1 subcontractors are responsible for meeting or exceeding OSHA compliance standards.

Vendors and public safety personnel will also provide training in areas of their specific expertise. The Safety/Security Officer will monitor safety performance. An Annual Safety Review will be conducted and corrective actions initiated when warranted. SOPs developed for the facility will also incorporate safety considerations.

JE2.8.6 Coordination with Agencies and Adjacent Utilities

A detailed list of agencies and contact names and numbers will be developed and maintained in the ERP. All onsite personnel will be provided a wallet-sized version for their immediate reference, and the onsite safety team will post the listing at key facility locations.

In order to ensure the most effective and prompt response to emergency situations involving the facility staff, it is important to coordinate emergency notification and response activities at the facility, in planning and in implementation, with other agencies and parties involved. Key coordinating agencies include client representatives and Fort Knox's Public Safety (fire, military police, and emergency management services agencies). The Emergency Communications section of the ERP will be developed in concert with these parties.

Operating staff on Post will report any emergency situation, such as fire, accident, criminal act, or threatening act or condition by dialing 911 or reporting directly to the Fire Department or military police. In cases of water service emergencies, we will initiate corrective action and notify the COTR. We will record time and date, person notified, and scope of accident or repair. HCWD1 will provide the government two copies of the notification record and maintain a copy for a minimum of 2 years. We will provide keys to the DPW to allow for emergency access to all secured facilities included under this contract.

JE2.8.7 Disaster Recovery/Service Restoration

As part of HCWD1's ERP, the Disaster Recovery/Service Restoration Plan will identify the priority of restoration of service on Post following emergency issues. As previously stated, all emergency calls will be addressed immediately, 24 hours per day. In-house personnel will assess and prioritize all service calls. If a call is prioritized as a major emergency that cannot be addressed with HCWD1's crew, an outside contractor will be used. HCWD1 has an established list of available contractors who respond to emergencies immediately and work hand-in-hand with the HCWD1 crews. Crews and equipment can typically be at the gate within 30 minutes.

In any recovery efforts, HCWD1 can call upon the resources of their subcontractor, LWC, which will be a subcontractor to HCWD1 for water treatment. With staff of over 450 employees who are located in the Louisville area, LWC is able to devote the necessary resources to assist in the utility system recovery from emergency conditions. In addition, LWC maintains contingency contracts with local contractors to provide assistance, in the event of a plant or distribution emergency.

The recovery/restoration priorities for the water systems address health and safety priorities, as well as mission-critical facilities during national emergencies, deployments, and alerts and in accordance with the Force Protection Plan. They are as follows:

1. Hospitals/medical facilities
2. Critical Command Facilities
3. Major Command Headquarters
4. Family housing and barracks areas
5. Motor pools and other facilities

JE2.9 Installation-Specific Requirements

No additional installation-specific requirements are included in this proposal. However, HCWD1 will work closely with Fort Knox to ensure that all work is conducted in accordance with installation requirements.

JE2.10 Possible Causes for Service Interruptions and Response Plans

HCWD1's approach to respond to potential service interruptions is shown in Exhibit JE2-7.

Exhibit JE2-7
HCWD1's Approach to Potential Service Interruptions

Cause of Service Interruption (Examples)	How HCWD1 Will Respond
Natural disasters (Earthquake, high winds, etc.) o Acts of God, which might include things like high wind-induced power outages, to the wastewater collection system, heat, or water distribution equipment or a fire. o Natural disasters include events, such as earthquakes or floods. Both of these scenarios have the potential to cause severe damage to the buried utility service lines, lift stations, buildings and delivery of electricity, etc. o These outages will typically be caused by ice and snow loading, causing mechanical failure of overhead conductors. Wind damage to overhead conductors, or conductor "slap" causing fuses to blow. Lightning strikes, causing fuse, transformer, or conductor damages, can occur to either overhead or underground systems.	✓ Coordinate restoration priorities with Fort Knox. ✓ Mobilize all available local staff per the ERP. ✓ Assess damage to the facilities and associated components. ✓ Engage additional external staff and resources as deemed necessary (e.g., engineering staff to assess structural damage, potable water tanks, etc.). ✓ Notify relevant state and federal permitting agencies of the status and condition of facilities. ✓ Project Health & Safety Manager mobilizes to site to conduct site safety assessment. ✓ Communicate situation overview, assessment, and recommendations for restoration of services with Fort Knox. ✓ Provide temporary services until final assessment and permanent service is restored. ✓ Begin restoration of facilities and all affected components. ✓ Provide other (non-utility) emergency response support to Fort Knox as requested and able.
Human Error o Inadvertently close valves that would lead to a water main freezing during winter months because the water was not allowed to circulate in a looped system o Failure to properly maintain or service the valves, or improperly connecting bypass pumps to the power supply, or improperly operating the fire hydrant operating nuts causing damage to the valve are all possible events o Improper switching or synchronizing generating equipment	✓ Once error identified, Project Manager notifies COTR and begins procedures to correct deficiency. ✓ Mitigate the emergency before it causes additional problems or damages throughout the water distribution system. ✓ If error results in permit violation, proper state notification will be provided. ✓ If processes are affected, immediate action will be taken to bring said process under control within operating specifications. ✓ Investigate cause and effect to evaluate employee causing error. ✓ Define if further training is needed, is employee routinely causing problems, etc. ✓ Conduct remedial training and lessons learned. ✓ Provide correspondence to COTR and State (where applicable) ✓ Overcome these events by redundancy in the system and having well trained and certified system operators.

Exhibit JE2-7

HCWD1's Approach to Potential Service Interruptions

Cause of Service Interruption (Examples)	How HCWD1 Will Respond
Equipment Failure (bearings go out, motor burns out, pump failure, etc) o No heat at valve pits or meter vaults or other key utility buildings o Unavailability of fuel (pumping) from fueling stations for vehicles or equipment o Frozen water lines o Flooding of water pits where seals have deteriorated and result in surface water flooding the pits o Fuel, condensate, or feedwater pumps failure o Fans or compressor failures	✓ Set up work order and review history of equipment. ✓ Once failure identified, go to inventory of critical spare parts and repair defective equipment. ✓ If failed equipment is not in inventory, procure through national contracts and/or basic ordering agreements. ✓ Repair or replace equipment as soon as possible. ✓ Investigate cause of failure (environment, maintenance deficiency, age, etc.). ✓ Maintain proper lubrication and inspections for all associated equipment. ✓ If failure appears to be recurring, modify frequency of PM to mitigate failure occurrence. ✓ Properly insulate water mains and service lines with sprayed on urethane and designed as circulating loops that use water movement to prevent freezing action. ✓ Constant monitoring of distribution system water temperature, low flow areas can be enhanced by activation of fire hydrants to speed flows when water temperatures drop to unacceptably low temperatures. ✓ Controlled fire hydrant flushing can markedly improve service even during the winter months and it improves water quality to the customer because it refreshes water that may have gone "stale" from not moving or circulating. ✓ Have thawing equipment available to thaw mains and services. ✓ Implement predictive maintenance on critical equipment.
Fire	✓ Mobilize all available local staff per the ERP. ✓ Assess damage to the facilities and associated components. ✓ Engage additional external staff and resources as deemed necessary (e.g., engineering staff to assess structural damage, potable water tanks, etc.) ✓ Project Health & Safety Manager mobilizes to site to conduct site safety assessment. ✓ Communicate situation overview, assessment, and recommendations for restoration of services with Fort Knox. ✓ Provide temporary services until final assessment and permanent service is restored. ✓ Begin restoration of facilities and all affected components.
Employee Strikes o Operators fail to report for work based upon a bargaining agreement dispute o Intentional sabotage of key utility components by striking employees	✓ During transition, additional security and supervision will ensure that no processes or equipment can be sabotaged or tampered with. ✓ Project Manager will notify COTR and immediately call internal labor relations representative to begin discussions. ✓ Support personnel from nearby HCWD1-affiliated companies will bring in key positions to sustain service to Fort Knox. ✓ Proceed with discussions to resolve issues.

Exhibit JE2-7
HCWD1's Approach to Potential Service Interruptions

Cause of Service Interruption (Examples)	How HCWD1 Will Respond
Terrorism	✓ Provide site employees with specific training in preparing for and responding to terrorists activities involving public and private utilities. ✓ Perform periodic utility vulnerability threat assessments. ✓ Notify Government official and COTR of situation. ✓ Mobilize all available local staff per the ERP. ✓ Assess damage to the facilities and associated components. ✓ Engage additional external staff and resources as deemed necessary (e.g., engineering staff to assess structural damage, potable water tanks, etc.) ✓ Notify all state and federal permitting agencies of the status and condition of treatment facilities. ✓ Project Health & Safety Manager mobilizes to site to conduct site safety assessment. ✓ Communicate situation overview, assessment, and recommendations for restoration of services with Fort Knox. ✓ Provide temporary services until final assessment and permanent service is restored. ✓ Begin restoration of facilities and all affected components. ✓ Provide any assistance as needed by Fort Knox.

Details follow on how the various types of responses (emergency, urgent, and routine) will be managed to restore water service to Fort Knox in the event of a service interruption.

Step 1: Establish a central organization/location

- Assess the severity of the damage to the water distribution system and tailor the response to include the following steps as necessary.
- Establish an Emergency Response Center where all organization and coordination takes place. This would be an on-site, temporary emergency location at the HCWD1 operations center if the building is structurally sound. Responses to emergencies are expected to be fluid and the operators will, of necessity, be required to react to the situation rather than follow rigid guidelines. The on-site water distribution operators will be expected to request additional resources early in the emergency response time line and those resources would be secured from area businesses immediately after being requested. The Project Manager will be in constant communications with HCWD1 operators during emergency activities.

Step 2: Work crews and manning

- As soon as initial damage assessment and control are complete, the Project Manager will split available personnel into two shifts and send one half home with a recall time. For the duration of the emergency, each shift will work 12 hours on and 12 hours off until the emergency is over. The on-duty crew will be split into as many crews as can be fielded along with temporary workers, and will be dispatched to begin repair work at the direction of the person in charge.
- HCWD1 will supplement labor at the Post with labor from a pre-designated list of HCWD1 and LWC personnel, and subcontractors working under the direction of the Project Manager.

Step 3: Damage assessment and priority of restoration

- As soon as a workforce is gathered, they will take immediate steps to mitigate the damage. The utility operators will ensure actions are taken to protect key facilities and prevent additional damage to facilities or to the water distribution system, and to ensure that key facilities, such as medical, child

care, fire protection, and mission essential facilities, are being served on a priority basis. Inherent in the initial response is the utility worker's follow-up requirements outlined below:

- Identify portions of the water distribution system where breaks have occurred. This can be done using visual inspection of water main routes, reports from customers, or from inspection of meter readings at various locations in Fort Knox's water distribution system.
- Activate emergency power for water pumps needed to establish bypass operations when necessary using on-site standby generators or truck mounted generators. Emergency power will only be activated after the system has been assessed to ensure activation of the generator power will not cause additional damages to the infrastructure or equipment.
- Take action to enclose and heat damaged facilities, as necessary, using stockpiled emergency supplies listed earlier in this proposal. Temporary heating sources are available from local rental businesses in the Fort Knox area. There are few facilities that would require supplemental heat; therefore, it is not practical to maintain large portable heaters on hand.

Step 4: Priority for restoration of water service to Fort Knox

- Restore the water distribution system mains/piping network.
- Restore water distribution meter pits and valve buildings.

Step 5: Restoration of water service to buildings and facilities

- Restoration will be accomplished according to the Fort Knox ERP. Priority will be established by the Post commander and the COTR.
- It will be the responsibility of HCWD1 employees to determine if the utility system is sufficiently stable to restore connections to individual buildings or facilities. If the building is not structurally intact or stable enough for work to be performed, HCWD1 on-site personnel will coordinate with the Post representative and the COTR to develop an acceptable temporary service to serve the customers and the Post. In no case will the utility personnel be required to work in unsafe buildings; however, the utility representative is obligated to find an acceptable solution to providing water service to the residents of Fort Knox.
- Once all components of the water system have been restored to usable condition, the system will be thoroughly cleaned of any silt or other debris and put back into service. Water quality will be tested to ensure safety to consumers.

These steps would be slightly modified, as follows, in a smaller-scale outage.

Step 1: Notification of Emergency Service Request. Authorized Government representative will notify the Call Center of the emergency condition.

Step 2: Duty Operator/or Operations Manager will notify maintenance crews and/or first responder.

Step 3: Crews will respond within the required response times.

Step 4: Government personnel will be notified when the condition has been assessed and when estimated restoration times have been determined.

Step 5: After downgrading to Urgent or complete restoration, Government personnel will be notified.

Emergencies as the Result of Human Error

Emergencies related to human error are considered differently and the response is more rapid than deliberate acts of sabotage because the employee is immediately aware of their error. In cases where an employee clearly makes a mistake, the response is normally identified very quickly and the operator has the ability to mitigate the emergency before it causes additional problems or damages throughout the water distribution system.

The most likely accidental damage would be caused to mechanical equipment, valves, control panels, or structural equipment of the distribution system. An inexperienced operator could damage equipment or

components and cause water service disruption within the service lines or to segments of the distribution system. It would also be possible for an inexperienced operator to inadvertently close valves that would lead to a water main freezing during winter months because the water was not allowed to circulate in a looped system.

Operators may also damage key components of the water treatment/distribution system through inadvertent and unintentional acts. Most likely equipment to be damaged through a mistake is water distribution valves or control panels. Failure to properly maintain or service the valves, or improperly connecting bypass pumps to the power supply, or improperly operating the fire hydrant operating nuts causing damage to the valve are all possible events. These events can be overcome by redundancy in the water distribution system and having well-trained and state-certified water distribution system operators. It is our intent to employ only state-certificated operators to operate the water distribution system.

The likelihood of damage by an operator to the distribution system piping components is considered extremely remote. These facilities and structures are difficult to damage through inadvertent acts; thus, concern would be more appropriately placed with the more sensitive and easily damaged components.

HCWD1 employees will be trained in the O&M of the water treatment/distribution system, as well as in the health and safety issues in and around the system. The water system will be maintained in a responsible manner so that equipment failures will be kept to a minimum. All HCWD1 employees and the closely affiliated companies are subject to pre-hire and random drug and alcohol testing. We operate in a zero tolerance industry and employees are expected to maintain very high standards of conduct. We take the extraordinary steps of ensuring employees are highly skilled and that they do not participate in personally destructive behavior that would extend to the workplace.

Accidental Destruction

Immediately notify the customer and the COTR of the situation. If the destruction is isolated to one component, then the component will be replaced. If the destruction covers a wider segment of the water utility, the on-site operator will prioritize his/her efforts to complete repairs, and if additional assistance is needed, he/she will immediately contact the Project Manager for additional resources. Those resources may be from external HCWD1, LWC, or contracted businesses in the local area. The urgency of repairs and the degree of expertise required for repairs will determine the resources that are applied. In many cases, there is adequate inventory of supplies and materials to support immediate needs of HCWD1. One of the many advantages of standardizing equipment and materials within a joint venture is the immediate availability of repair parts. It will be our intent to standardize as many water treatment/distribution system components as possible. Standardization of inventory also favors cost containment for operations. Inventory is expensive, and a reduction of just 10 percent in inventory lines is directly reflected as a cost savings under a regulated proposal.

Specific components include standardization of pipe, control panels, water meters, fire hydrants, and valves.

Emergencies as a Result of Equipment Failure

There are relatively few pieces of equipment in the water distribution system that are prone to failure. The most likely event is a failure of an isolation valve or the failure of a water meter. Proactively addressing valve maintenance to include proper lubrication, exercising valves and isolation equipment, servicing pressure reducing devices, routinely checking water meter readings, and proper maintenance of electronic controls all contribute to enhanced reliability. Our team has a long history of providing aggressive equipment maintenance to prevent equipment failures and that same philosophy will be implemented at Fort Knox.

The most likely event to occur at Fort Knox (based upon information provided in the utilities privatization documentation and the site visit) is the likelihood of treatment or pumping equipment failure. HCWD1 will

implement an aggressive predictive and preventative maintenance program. This program has proven to reduce unplanned equipment failure, reduce operating cost, and extend the lifespan of equipment. During transition, HCWD1 will review all facilities and identify "critical spares." These are defined as system components that are necessary for safety and environmental compliance, or are required to maintain continuous service. This will serve as the catalyst for maintaining spare equipment on-site or at the HCWD1/LWC offices.

JE2.11 Catastrophic Loss Plan

HCWD1's Catastrophic Loss Plan (CLP) has the following elements:

- Vulnerability/Threat Assessment
- Planning
- Emergency Restoration Plan
- Lessons Learned/Plan Updates

JE2.11.1 Vulnerability/Threat Assessment

Prevention of catastrophic loss is the key goal of our plan. This begins with the identification of critical operations, products, and services. Then a hazard assessment must be completed for each of the critical areas. The assessment reviews potential hazards (i.e., fire, flood, weather related, and acts of terrorism). Then each of the elements are assessed based on the likelihood of occurrence and the impact to critical service. A ranking system uses both of these review elements to prioritize response during a catastrophic event. Since an effective CLP must be "site-specific," HCWD1 will complete this site-specific assessment during the first 120 days of the contract.

A key element of protecting a utility from catastrophic loss is the vulnerability assessment. As required under the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (Bioterrorism Act) HCWD1 assumes that the required vulnerability assessment was completed by the 30 June 2004 deadline. This plan will be reviewed and incorporated into the SOPs, as appropriate.HCWD1 will maintain the appropriate levels and types of insurance for critical facilities to ensure that prompt resources are available to mitigate the loss, and replace or renew damaged assets.

JE2.11.2 Planning

The CLP must then be integrated with employees and other Fort Knox agencies. Employees and others play an essential role in the prevention of loss. Employees should ensure facilities are secure at all times, security systems are active and functioning correctly, and report unusual or non-regular activities in and around critical facilities. Communicating the plan to other Fort Knox agencies allows them to assist in surveillance activities.

JE2.11.3 Emergency Restoration Plan

Should a catastrophic event occur, restoring service and mitigating impact are key considerations. HCWD1's ERP is detailed in Section JE2.8. The ERP covers restoration of service from catastrophic events both man-made and naturally occurring. Should a widespread catastrophic event occur, HCWD1 will work with local, state, and federal agencies to integrate our CLP with restoration efforts of these agencies. This participation would include all aspects of disaster recovery, including application for grants and low-interest loans to restore facilities completely, should the damage exceed the insured amount, or not be a covered event.

JE2.11.4 Lessons Learned/Plan Updates

The CLP is a plan, and as such will be reviewed periodically to ensure it accurately reflects the hazards present during the course of the contract. Lessons learned are a key part of preventing reoccurrence of catastrophic failures. If a catastrophic event occurs, immediately after the emergency restoration is complete, a team will be convened to identify, collect, and disseminate lessons learned, both from the event, and the restoration phase. The plan will be updated to reflect the lessons learned.

Initial System Deficiency Corrections and Initial and Renewals and Replacements Plan

HCWD1 has developed an Initial System Deficiency Corrections (ISDC) and Renewals and Replacements (R&R) Plan that will result in a water system that (1) meets required standards; (2) protects the system from degradation; and (3) protects the Government from potential cost increases that might result from inadequate maintenance and consequent EPA fines. The approach used for identifying, characterizing, prioritizing, and programming these projects follows the HCWD1 proven methodology, which is based on the team's extensive knowledge of conditions unique to the Fort Knox area. The proposed system improvements resulting from application of the HCWD1 approach will yield dramatic benefits in system performance within the initial years of the contract and will provide long-term reliability and quality into the future. The ISDC and R&R Plan will enhance the reliability of the Army's water system and reduce unscheduled O&M needs. HCWD1 is confident that the continuing application of our proven methodology for future R&R will serve the Army well through the duration of this contract, providing a water distribution system that meets the Army's needs for quality, reliability, and cost-effectiveness.

A preliminary inventory and assessment of the water system condition was one of the components that formed the basis for the ISDC and R&R projects presented herein. Our preliminary inventory and condition assessment was developed based on the limited information provided in the J Attachment in the RFP and from observations during the July 2008 site visit. Although the documentation and site visits provided a solid general understanding of the overall capacity, age, condition, and appearance of some of the facilities, this information and the length of field observations were not sufficient to provide a detailed condition assessment of all system components, identify all deficiencies, or develop options for correcting all deficiencies. Assumptions have been noted with the Technical Proposal.

The Fort Knox Water System is comprised of raw water supplies, water treatment facilities, and distribution piping systems. Raw water is supplied from four sources, including Otter Creek, McCracken Spring, the West Point Well Field, and the HCWD1 Well Field. Raw water is treated at either the Central WTP or the Muldraugh WTP. Finished water is conveyed to customers in the main cantonment area and the range area through approximately 162.7 miles of pipe. The water system is technically defined as all components from the supply points to the points of demarcation as defined in Attachment JA1.2.1.2 of the contract.

The primary sources of raw water supply to the Central WTP come from Otter Creek and McCracken Spring. Small impoundment dams on the creek and the spring feed water to the Otter Creek (low lift) Pump Station, which in turn pumps the raw water to the Central WTP for treatment.

The primary sources of raw water supply to the Muldraugh WTP come from the 13 Government-owned wells located in the West Point Well Field and the 3 leased wells from HCWD1. The wells are located in an alluvium adjacent to the Ohio River. The well depths range from 82 to 134 feet below ground surface and typically produce 1.1 to 1.4 mgd.

The Central WTP is a 3.5 mgd facility located in the "central area" of the main cantonment. Treatment processes include flocculation, sedimentation, filtration, and chlorination. Finished water is stored in either a 2.0 million gallons (MG) or 0.5 MG clear well and is pumped into the distribution system from the Central WTP high lift pump station.

The Muldraugh WTP is a 7.0-mgd facility located on the northwest side of the Post near the town of Muldraugh, Kentucky. Treatment processes include aeration, flocculation, sedimentation, filtration, and chlorination. Finished water is stored in a 1.0 MG clear well, and pumped into the distribution system from the Muldraugh WTP high lift pump station.

The distribution system consists of pipes, valves, hydrants, meters, elevated storage tanks, and a booster pump station. Including both the main cantonment and range areas, the distribution system

consists of approximately 162.7 miles of pipe ranging in size from ¾ inch to 24 inches. Existing pipe materials include cast iron, transite, ductile iron, polyvinyl chloride (PVC), and polyethylene (PE). The system contains a reported 1,935 valves and 875 fire and flush hydrants. There are eight elevated steel storage tanks ranging in volume from 250,000 gallons to 500,000 gallons, with a total storage capacity of 3.55 MG to equalize system pressures and provide adequate flow for peak demands and fire flows. The distribution system also contains the Voorhis Booster Pump station, which is equipped with three pumps (rated 175 gpm each) and one fire protection pump (rated at 2000 gpm).

The ISDC and R&R Plan were developed by tailoring the existing HCWD1 project planning methodology to reflect key criteria for the Fort Knox facilities. The Plan identifies projects that will provide optimum timing for upgrading the water system. These projects will provide the best balance between reliability and length of service life.

The guidelines and requirements listed in RFP *Section L.4.3 Subfactor 3: Initial System Deficiency Corrections and Initial Renewals and Replacements Plan*, were used to develop the purpose, scope and costs of the ISDC and R&R Plan. The information is presented in the following subsections:

- ISDC and R&R. This section summarizes the ISDC and R&R projects that are designed to renovate existing water system facilities and pipelines that have already reached or exceeded their useful lives.
- Long-Term R&R Methodology. This section presents the conceptual methodology we used to schedule R&R for the duration of the contract. The proposed methodology provides an efficient level of service over the long term.

The proposed ISDC and R&R Plans will improve the operations and reliability of the water system at Fort Knox to bring these systems into compliance with the existing requirements. These initial projects are required to renew and replace system components that have failed or have reached the end of their useful lives. Our Plan was developed from the following information sources:

- Observations of the water facilities during the site visit in July 2008
- Review of the supporting documentation for the RFP and amendments to the RFP
- Review of responses to questions submitted by us and other contractors

Our intent is to allow for revisions to our Plan by using information developed from the system characterization studies that we will complete during the first years of contract operations. We will examine in detail both the condition and the capacity of the water distribution system by performing condition assessment, leak detection, mapping, and modeling studies. HCWD1 will also review any existing studies to confirm that efforts are not being duplicated. The results of these studies will enable us to develop, confirm, and prioritize a list of upgrades. The most appropriate improvements can then be designed and constructed.

The ISDC and R&R projects were priced based upon the information that was available to HCWD1 at the time of the proposal submittal. The price estimate is considered a Class 5 estimate that was prepared in accordance with the guidelines of the Association for the Advancement of Cost Engineering (AACE) International. The Class 5 estimates are prepared based on some limited information, where the preliminary engineering is from 0 percent to 2 percent complete.

Order of magnitude estimates are prepared for a number of purposes, including, but not limited to, detailed strategic planning, business development, project screening, alternative scheme analysis, confirmation of economic and or technical feasibility, and preliminary budget approval or approval to proceed to the next stage. Some examples of estimating methods we used include equipment or system process factors, scale-up factors, and parametric and modeling techniques. Our estimates were based primarily on historical data, MEANS, Richardson, and data from similar project estimates where practical, or on allowances when the actual scope was unknown.

All upgrades/replacements proposed by HCWD1 are based on one or more of the following specific and clearly defined drivers:

- Regulatory compliance, including drinking water quality standards and all applicable codes, including health and safety codes
- Performance and service requirements specified in the contract
- Operational efficiencies resulting in lower costs for Fort Knox
- Repair or replacement of aging or failing components for system dependability and reliability

Potential projects not driven by at least one of the above criteria are not considered beneficial and are therefore not proposed in HCWD1's work plan.

A partial list of the codes and standards typically considered in developing upgrades is provided below:

- OSHA
- ADA
- Federal Codes and Regulations including CFR 141 and 143
- EM 38 3-1.1 USACE Safety and Health Requirements Manual
- Standards for Water Facilities Industry
- AWWA Recommended Practices
- Federal EPA and KDOW Regulations
- U.S. Public Health Service Standards
- Army and Fort Knox Regulations
- NFPA Codes and Standards
- Great Lakes Upper Mississippi River Board of State Public Health & Environmental Managers Recommended Standards for Water Works

The ISDC and R&R Plans provided in this proposal address these codes to the extent that we are aware of the current condition of the facilities. All new facilities identified in the capital improvement plans will be designed and constructed to meet these applicable standards.

The HCWD1 Project Manager will provide an oversight and strategic planning role. The Project Manager will:

- Develop the Annual Plan and the Budget and Expenditure Report before submission to the Contracting Officer for approval.
- Oversee ISDC and CIP project design and construction activities.
- Make recommendations and review strategies for R&R.
- Coordinate and provide ISDC project management and oversight, or engage outside engineering services as needed.
- Conduct management and environmental compliance reviews based on performance metrics
- Review overall project performance and customer satisfaction
- Participate in regular meetings with Fort Knox leadership

JE4.1 Initial System Deficiency Correction Plan

The ISDC plan is summarized in Exhibit JE4-1 and discussed in detail in this section. The projects listed represent upgrades/replacements that the Government has recognized and that HCWD1 believes need to be completed soon after transfer of ownership, as indicated in the exhibit.

The immediate timing of these projects is required to allow HCWD1 to comply with regulatory and service requirements or to maximize operational cost savings. We understand the constraints (both legal and budgetary) within which Fort Knox must operate, so we do not expect that HCWD1 will be permitted to construct any projects before transfer of ownership. Therefore, these projects are expected to be implemented after transfer of ownership, unless they are implemented by Fort Knox before that time.

EXHIBIT JE4-1
Initial System Deficiency Corrections Summary

Project	Project Name	Contract Start Month	Contract Completion Month	Project Basis
	Water System			
ISDC#1	System Survey/Assessment and Re-Map the Utility System	2	7	Government Recognized Deficiency
ISDC#2	Leak Detection Survey	7	9	Government Recognized Deficiency
ISDC#3	Hydraulic Model	7	9	Government Recognized Deficiency
ISDC#4	Master Flow Meters at the WTPs	3	5	Government Recognized Deficiency
ISDC#5	20-inch Valves	4	5	Government Recognized Deficiency
ISDC#6	New Raw Water from the Muldraugh WTP to the 16-inch Raw Water Line Between Otter Creek PS and Central WTP	2	12	Government Recognized Deficiency
ISDC#7	Otter Creek PS	6	8	Government Recognized Deficiency
ISDC#8	Muldraugh HLPS	6	8	Government Recognized Deficiency
ISDC#9	Central WTP	6	8	Government Recognized Deficiency
ISDC#10	Central WTP Clear Well	7	12	Government Recognized Deficiency
ISDC#11	Fire Hydrants	37	48	Government Recognized Deficiency
ISDC#13	Water Storage Tank No. 5	8	12	Government Recognized Deficiency
ISDC#14	Automatic Transfer Switches	13	17	Government Recognized Deficiency
ISDC#15	Pipe between Otter Creek PS and Central WTP	13	23	Government Recognized Deficiency
ISDC#16	Water Storage Tank No. 6	13	18	Government Recognized Deficiency
ISDC#17	Water Storage Tank No. 8	20	24	Government Recognized Deficiency
ISDC#18	Water Storage Tank No. 7	25	29	Government Recognized Deficiency
ISDC#19	SCADA System	28	33	Government Recognized Deficiency
ISDC#20	Distribution System Pipe and Valves	25	36	Government Recognized Deficiency
ISDC#21	Distribution System Pipe and Valves	25	36	Government Recognized Deficiency
ISDC#22	Distribution System Pipes and Valves	25	28	Government Recognized Deficiency
ISDC#23	Distribution System Pipe and Valves	37	48	Government Recognized Deficiency

Improvements to Fort Knox's water systems are described in this section. The improvements range from performance of studies to construction of piping improvements.

ISDC#1 – System Survey/Assessment and Re-Map the Utility System. HCWD1 will complete a system survey/assessment and revised map of the potable water distribution system, complete with GIS coordinates. A comprehensive survey of the water distribution system will be conducted. The survey will use GPS to provide X,Y coordinates and approximate ground elevation at visible water system features in the system, including hydrants, valves, meters, and water storage tanks. Updated maps and hydrant coordinate database shall be provided to the CO for use by the fire department. Naming conventions used in the database will support linking with other physical attributes and condition attributes prepared for the water system GIS and hydraulic models. All maps and associated data will comply with the latest version of SDSFIE, and the data collected in the computerized model will be made available to the Government upon reasonable request and with reasonable notice. HCWD1 will maintain all maps and data collected for the Fort Knox system separately from HCWD1's existing GIS maps.

In order to establish what information already exists and what new information needs to be collected, a gap analysis will be performed on the current GIS database. Existing GIS files will be analyzed for content, and known CAD drawings will be converted into GIS and populated with attributes. The water system GIS database will be populated with the new inventory and field survey data. This task will incorporate new location and elevation data from the field survey with other data previously collected for

the water system. This task also includes the development of an accurate computerized model of the system. (See Appendix JE4-1 for Scope of Work)

The project is anticipated to be completed within the first year after the contract start date.

ISDC#2 – Leak Detection Survey. HCWD1 will conduct a leak detection survey of the entire potable water system lines within the main cantonment area and the range areas, as well as the raw water lines. (See Appendix JE4-1 for Scope of Work)

The project is anticipated to be completed within the first year after the contract start date.

ISDC#3 – Hydraulic Model. HCWD1 will develop a hydraulic model of the entire potable water utility system. This model will be used during the design and replacement of the existing potable water distribution system.

The water distribution system hydraulic model will be created with the inventory data and used to model the flows in the water distribution system. All electronic input files (inventory, system water demands, fire flows, etc.) will either be used from an existing water system hydraulic model (if one exists), or the files will be built based on water demand, inventory, and fire flow data. The model input files will be updated based upon the new inventory and GPS/GIS data for all main water pipes that are 6-inch diameter and larger.

A non-proprietary software-based water distribution system hydraulic model will be created with the inventory data and used to model the flows in the water distribution system. The system will be modeled for existing flow demands and for a design fire flow condition. Upon completion of the updates and verification of model results, the updated hydraulic model will be used to identify the location and size of improvements necessary to the water distribution system. These improvements will be sized to maintain the needed pressure and flow capacity for average day, maximum day, minimum hour plus tank replenishment, and fire flow conditions.

The model will be used to evaluate the system and identify the size and location of new infrastructure necessary for the water system. The model will be used to simulate the system's performance. We will then develop a system upgrade program to address the defects of each segment and to evaluate the cost of renewal and replacement of the pipelines. The results will be used to identify projects for the annually updated R&R Plan. (See Appendix JE4-1 for Scope of Work)

The project is anticipated to be completed within the first year after the contract start date.

ISDC#4 – Master Flow Meters at the WTPs. The finished water master meter at the Muldraugh WTP pump house is well beyond the useful design life and will be replaced with a new magnetic flow meter or similar meter. The finished master water meters at the Muldraugh and Central WTPs will also be calibrated to allow for more accurate measurement and totalization. This project includes replacement of 3 magnetic flow meters, each rated at approximately 7,500 gpm. The estimate includes labor, materials and equipment.

The project is anticipated to be completed within the first year after the contract start date.

ISDC#5 – 20-inch Valves. The original 20-inch valves on the 20-inch cast iron pipe from the West Point well fields to the Muldraugh WTP are the original valves and are not operable, so they will be replaced with 20-inch full body valves. (See Appendix JE4-1 for Scope of Work)

The project is anticipated to be completed within the first year after the contract start date.

ISDC#6 – New Raw Water from the Muldraugh WTP to the 16-inch Raw Water Line between Otter Creek PS and Central WTP. HCWD1 will design and construct a new 16-inch raw water line (approximately 15,840 LF) from the Muldraugh WTP to the raw line connecting the Otter Creek PS to the Central WTP. This line is critical since the raw water lines from the West Point well field are utilized when the raw water from McCracken Spring and Otter Creek is not suitable to treat at the Central WTP. Fort Knox has indicated that its lease of the three wells and the 14-inch line from HCWD1 will terminate once Fort Knox's potable water utility system is privatized. This

16-inch-diameter pipe will be constructed of Ductile Iron pipe. (See Appendix JE4-1 for Scope of Work)

The project is anticipated to be completed within the first year after the contract start date.

ISDC#7 – Otter Creek PS. To prevent further erosion and consequential damages, HCWD1 will repair the creek side of the Otter Creek PS where the bank of the creek has been severely eroded. We will also install new windows and doors and replace the roof. A pre-finished 24-gauge standing seam metal roof, with lightning protection, will be furnished and installed. The estimate includes demolition and disposal of the existing roof and labor, materials, and equipment to install the new roof. (See Appendix JE4-1 for Scope of Work)

The project is anticipated to be completed within the first year after the contract start date.

ISDC#8 – Muldraugh HLPS. HCWD1 will install new windows and doors, paint the exterior face of the concrete block façade, and replace the roof. (See Appendix JE4-1 for Scope of Work)

The project is anticipated to be completed within the first year after the contract start date.

ISDC#9 – Central WTP. HCWD1 will replace the roof of the Central WTP. The estimate includes an allowance for the testing and abatement of asbestos and lead-based paint materials. (See Appendix JE4-1 for Scope of Work)

The project is anticipated to be completed within the first year after the contract start date.

ISDC#10 – Central WTP Clear Well. HCWD1 will replace the existing roof with a Geo-dome roof. An interior liner system will be installed on the sidewalls and floor of the 2 MG clear well. The estimate includes demolition and disposal of the existing roof and labor, materials, and equipment to install the new roof and liner system. (See Appendix JE4-1 for Scope of Work)

The project is anticipated to be completed within the first year after the contract start date.

ISDC#11 – Fire Hydrants. To improve fire protection reliability, HCWD1 will replace roughly 600 fire hydrants identified by the Fort Knox Fire Department. In as much as is practical, the installation of the new hydrants will be completed to coincide with distribution system piping improvements projects. (See Appendix JE4-1 for Scope of Work)

The project is anticipated to be completed within the fourth year after the contract start date.

ISDC#13 – Water Storage Tank No. 5. HCWD1 will completely renovate Tank No. 5 to include the coating of the interior of the tank, the painting of the exterior of the tank and legs, and the installation of new sacrificial anodes in the tank, a new rectifier on the outside of the tank, and a new altitude valve. (See Appendix JE4-1 for Scope of Work)

The project is anticipated to be completed within the first year after the contract start date.

ISDC#14 – Automatic Transfer Switches. To improve electrical system reliability, HCWD1 will design and install automatic transfer switches at the Otter Creek PS, the Central WTP facility, and the Muldraugh HLPS. The operation and monitoring of the switches will be tied into the new Supervisory Control and Data Acquisition (SCADA) system. The SCADA signal will include status of switch (active or not active), run time since last active, and any other discrete alarm or status conditions available from the ATS control panel.

The automatic transfer switches are service-rated in standalone outdoor enclosures with draw-out normal and emergency switches for servicing one while the other remains in service. Two transformers will be 480V/1200A and one transformer will be 480V/1600A. The estimate includes labor, materials, and equipment to install the automatic transfer switches. (See Appendix JE4-1 for Scope of Work)

The project is anticipated to be completed within the second year after the contract start date.

ISDC#15 – Pipe between Otter Creek PS and Central WTP. HCWD1 will design and construct the replacement of approximately 14,437 LF of 16-inch cast iron raw water pipe between the Otter Creek WTP and the Central WTP. The 16-inch diameter

pipe will be replaced with Ductile Iron pipe. (See Appendix JE4-1 for Scope of Work)

The project is anticipated to be completed within the second year after the contract start date.

ISDC#16 – Water Storage Tank No. 6. HCWD1 will completely renovate Tank No. 6 to include the coating of the interior of the tank, the painting of the exterior of the tank and legs, and the installation of new sacrificial anodes in the tank, a new rectifier on the outside of the tank, and a new altitude valve. (See Appendix JE4-1 for Scope of Work)

The project is anticipated to be completed within the second year after the contract start date.

ISDC#17 – Water Storage Tank No. 8. HCWD1 will completely renovate Tank No. 8 to include the coating of the interior of the tank, the painting of the exterior of the tank and legs, and the installation of new sacrificial anodes in the tank, a new rectifier on the outside of the tank, and a new altitude valve. (See Appendix JE4-1 for Scope of Work)

The project is anticipated to be completed within the second year after the contract start date.

ISDC#18 – Water Storage Tank No. 7. HCWD1 will completely renovate Tank No. 7 to include the coating of the interior of the tank, the painting of the legs, and the installation of new sacrificial anodes in the tank, a new rectifier on the outside of the tank and a new altitude valve. (See Appendix JE4-1 for Scope of Work)

The project is anticipated to be completed within the third year after the contract start date.

ISDC#19 – SCADA System. HCWD1 will design and install a comprehensive SCADA system to assist in monitoring and controlling the utility water system components, including the raw water wells and pumps and other critical system features. The design and installation will be coordinated with the Post's Directorate of Information Management. The selection of the SCADA upgrade will also seek to allow integrated implementation of the new water meters. The SCADA system estimate includes labor, materials, telemetry equipment, computers, software and programming. (See Appendix JE4-1 for Scope of Work)

The project is anticipated to be completed within the third year after the contract start date.

ISDC#20 – Distribution System Pipe and Valves. HCWD1 will replace approximately 23,462 LF of transite pipe ranging from 1 inch to 10 inch. This pipe is located in the North Dietz Housing area. All pipes that are 10 inches and smaller in diameter will be replaced with PVC pipe. The transite pipe will be abandoned in place. The estimate includes all labor, materials, and equipment. (See Appendix JE4-1 for Scope of Work)

- 834 LF of 1-inch
- 1,988 LF of 1.5-inch
- 3,726 LF of 2-inch
- 284 LF of 3-inch
- 4,231 LF of 6-inch
- 6,472 LF of 8-inch
- 5,927 LF of 10-inch
- 93 valves total

The project is anticipated to be completed within the third year after the contract start date.

ISDC#21 – Distribution System Pipe and Valves. HCWD1 will replace approximately 73,735 LF of ductile iron pipe ranging from 1 inch to 14 inches. This pipe is located in the Van Voorhis Housing area. Pipe that is 10 inches and smaller in diameter will be replaced with PVC pipe. Pipe that is 12 inches and larger in diameter will be replaced with Ductile Iron pipe. The estimate includes all labor, materials, and equipment. (See Appendix JE4-1 for Scope of Work)

- 180 LF of 1-inch
- 7,076 LF of 1.25-inch
- 4,293 LF of 1.5-inch
- 11,436 LF of 2-inch
- 1,115 LF of 3-inch
- 25,835 LF of 6-inch
- 18,034 LF of 8-inch
- 4,677 LF of 10-inch
- 897 LF of 12-inch
- 192 LF of 14-inch
- 294 valves total

The project is anticipated to be completed within the third year after the contract start date.

ISDC#22 – Distribution System Pipes and Valves. HCWD1 will replace approximately 4,237 LF of 8-inch pipe and 17 valves at the site of the new Human Resource Center. This pipe will be replaced with PVC pipe. The estimate includes all labor, materials, and equipment. (See Appendix JE4-1 for Scope of Work)

The project is anticipated to be completed within the third year after the contract start date.

ISDC#23 - Distribution System Pipe and Valves. HCWD1 will replace approximately 136,740 LF of cast iron pipe ranging from 1-inch to 14-inch. Pipe that is 10 inches and smaller in diameter will be replaced with PVC pipe. Pipe that is 12 inches and larger in diameter will be replaced with Ductile Iron pipe. The estimate includes all labor, materials, and equipment. (See Appendix JE4-1 for Scope of Work)

- 994 LF of 1-inch
- 29 LF of 1.25-inch
- 759 LF of 1.5-inch
- 3,720 LF of 2-inch
- 483 LF of 2.5-inch
- 4,280 LF of 3-inch
- 3,754 LF of 4-inch
- 61,582 LF of 6-inch
- 38,255 LF of 8-inch
- 17,066 LF of 10-inch
- 4,153 LF of 12-inch
- 1,665 LF of 14-inch
- 545 valves total

The project is anticipated to be completed within the fourth year after the contract start date.

JE4.2 Offeror Recommended Additional Upgrades

In addition to the Government Recognized ISDC Upgrades, HCWD1 has also identified a few other system deficiencies that we recommend for improvement based on our site visits. Those additional upgrades and corresponding schedule for improvement are as follows:

Project	Project Name	Contract Completion Year	Project Basis
Water System			
ISDC#24	Water Storage Tank No. 1	3	Interior/Exterior spot cleaning, surface preparation
ISDC#25	Water Storage Tank No. 2	3	Interior/Exterior spot cleaning, surface preparation
ISDC#26	Water Storage Tank No. 4	3	Interior/Exterior spot cleaning, surface preparation. Install new 8" overflow pipe
ISDC#27	West Point Well Field	1	Rehabilitate Well Platforms
ISDC#28	Van Voorhis Pump Station	1	Rehabilitate Pump House
ISDC#29	Decommission Muldraugh WTP	5	Purchase Off-Post Water

ISDC#24 – Water Storage Tank No. 1. HCWD1 will perform a partial renovation of Tank No. 1 to include interior and exterior spot cleaning followed by surface preparation, priming, and finish coating. (See Appendix JE4-1 for Scope of Work)

The project is recommended to be completed during the third year after the contract start date.

ISDC#25 – Water Storage Tank No. 2. HCWD1 will perform a partial renovation of Tank No. 2 to include interior and exterior spot cleaning followed by surface preparation, priming, and finish coating. (See Appendix JE4-1 for Scope of Work)

The project is recommended to be completed during the third year after the contract start date.

ISDC#26 – Water Storage Tank No. 4. HCWD1 will perform a partial renovation Tank No. 4 to include interior and exterior spot cleaning followed by surface preparation, priming, and finish coating. In addition, HCWD1 will also install a new 8-inch-diameter

overflow pipe. (See Appendix JE4-1 for Scope of Work)

The project is recommended to be completed during the third year after the contract start date.

ISDC#27 – West Point Well Field. HCWD1 will perform a partial renovation of each of the 13 well platforms to include spot-blasting and application of top coat finish. The estimate includes labor, materials, equipment to spot apply prime epoxy mastic 4.0 – 6.0 mils dry film thickness (dft) and 3.0 – 4.0 mils (dft) UV compatible finish coating. (See Appendix JE4-1 for Scope of Work)

The project is recommended to be completed during the first year after the contract start date.

ISDC#28 – Van Voorhis Pump Station. HCWD1 will perform a partial renovation of the pump station to include spot-blasting and application of top coat finish. (See Appendix JE4-1 for Scope of Work)

The project is recommended to be completed during the first year after the contract start date.

ISDC#29 – Decommission Muldraugh WTP. The Army is planning to replace the potable water capacity at the Muldraugh WTP with purchased water from a local municipality within 5 years. HCWD1 will perform demolition of above-ground facilities to an elevation just below grade and decommission the operation of the facility. (See Appendix JE4-1 for Scope of Work)

The project is recommended to be completed during the fifth year after the contract start date.

In addition to the HCWD1 ISDC, HCWD1 has also priced an O&M building as an R&R in Year 1 of this proposal. The O&M building will provide the necessary space for staff to work and store tools, equipment, materials, records, and vehicles. Dedicated space for our water utility is essential to providing a safe, healthy, and efficient work environment to best serve Fort Knox.

JE4.3 Conceptual Plans for, Including Methods for Monitoring the Effectiveness of, Energy Efficiencies and Conservation

As evidenced by the in-place Conservation Plans and continuing improvement of Standards of Operation, HCWD1 has set the goal of developing "Benchmark" energy- and water-efficient systems. Procedures now in place for the Fort Knox water system will be strengthened and ultimately incorporated into the HCWD1 operations plan.

HCWD1 will work with the Government to facilitate any future energy- and/or water-savings projects determined to reduce the Government's costs, while still meeting their service requirements. Current HCWD1 water conservation programs encourage system efficiency within the service area and may be applied to the Government's facilities.

Water Conservation

Unaccounted-for-water (UAW) is defined as the difference between the total amount of water pumped into the water system from the treatment facilities and the amount of (metered) use by the customers of the water system expressed as a percentage of the total water pumped into the system. UAW generally includes system leakage, inaccurate meters, accounting errors, and unmetered use, such as fire fighting, line flushing, broken water mains, etc. A standard industry goal of 10 percent UAW in municipal systems the size of Fort Knox's is optimal.

The current UAW for Fort Knox is unknown because the system is largely not metered. To immediately address conservation objectives, HCWD1 will initiate the first defined meter installation projects during the transition period to improve measurement of water use and more clearly understand water losses. This effective approach to water conservation will incorporate the Fort Knox Service Area, enabling more accurate measurement of water use. This also assists maintenance personnel with identifying potential problem areas with unusual water use/loss before they develop into major losses.

HCWD1 will undertake the following steps to decrease water loss in the Fort Knox Service Area:

- Respond to customer requests about leaking pipes, hydrants, and other visible leaks in the water system. Maintenance is performed on components that are found faulty by the Leak Detection Crew.
- HCWD1 will incorporate the Fort Knox water distribution system information into our current maps (ArcView system), including all pipes. This will reduce time and money spent for leak detection and system maintenance.
- The water storage tanks will be monitored on the SCADA system. SCADA allows for all water level information to be monitored at a central location by HCWD1 system operators. If the tank level becomes too high and is detected early enough, water wastage is significantly reduced.
- HCWD1 has several programs in place pertaining to water loss and conservation. Although not all would apply to Fort Knox services, HCWD1 will work with Fort Knox to investigate what improvements could be made to conservation measures currently in place in the Fort Knox service area. Some of these might include:
  - Leak Detection and Meter Maintenance Programs
  - Plumbing Fixture Replacement
  - Plumbing Retrofit Programs
  - Residential Water Use
  - Landscaping Programs
  - Educational Programs (school and community)

Raw water supplies will also be measured in order to monitor losses during the treatment processes.

Energy Conservation

When UAW is minimized, pumping and treatment energy use is reduced. Greater diligence in finding and correcting distribution system failures that cause wasted water not only improves system performance, but also conserves energy. The approach noted above will facilitate this conservation. For the water system, HCWD1 will perform an assessment during initial site characterization studies to assess energy efficiency with regard to motors, heating, venting, and air conditioning (HVAC) and lighting. The energy supplier will be invited to participate in these reviews. Operational procedures will also be reviewed as compared with actual application. HCWD1 will develop a water production energy management plan and facility-specific energy management plans.

JE4.4 Description of the Contractor's Conceptual Methodology for Scheduling R&R for Contract Duration

Each year, HCWD1 will develop an Annual Capital Upgrades and R&R Plan (Annual Plan) that will serve as the mechanism for communicating scope, schedule, and estimated cost for known deficiencies. The path to the preparation of the first and subsequent Annual Plans is shown in Exhibit JE4-2. Note that the first Annual Plan will be predominantly developed based on the initial system characterization studies that will be performed to establish the baseline condition of the water system. Developing hands-on specific knowledge of system condition will result in "just-in-time" annual R&R to allow the water system to be maintained in a reliable and sustainable condition.

HCWD1 consistently practices a "just-in-time" approach to system renewal, such that the right amount of system investment is applied at the right time. This suggests that no more renewal investment is made in the systems than is required. HCWD1 does not intend to replace the entire water system in the early years of this project. However, it is common utility practice and to be expected that over 75 years, a majority of each system will be renewed due to age and condition.

Our current projected R&R schedule is shown in Exhibit JE4-3, and with costs in Table IV-2 in the supporting pricing sheets submitted with our Price Proposal. It is based on the inventory, estimated ages, and projected replacement years for system components, as included in Table IV-2, and these

inventory and projected replacement years were adjusted based on the site visits and extensiveness of the ISDC identified during the solicitation process. The R&R schedule is intended to be updated during system characterization studies conducted during the transition period in the initial year of the contract.

JE4.4.1 Identifying Deficiencies and Defining Scope of Upgrades and Replacements

A list of capital renewals and upgrades will be developed based on periodic studies, collection of routine O&M data, requests for new utility connections or disconnections, and knowledge of new regulatory requirements, and then correlated through our annual planning process. The current projected schedule for renewals and upgrades is shown in Exhibit JE4-3.

JE4.4.2 Annual Plan

After the completion of the system characterization study, transition period, and project definition studies that will initially bring the available data on the systems up to date, HCWD1 will consistently and frequently assess the condition and performance of the utility systems on an annual basis. We will conduct periodic studies on a regular basis and produce an Annual Plan with the results. This plan will be updated and submitted annually to Fort Knox as not only a work plan, but also a vehicle to facilitate partnering to meet our mutual goals, define our course for the coming years, and set a reasonable budget for reliable service and asset management. The plan will include ownership issues, O&M, upgrades, modifications, expansions, planned replacements, and overall changes from the previous year. We will break down costs and will describe the methodology to arrive at the proposed costs.

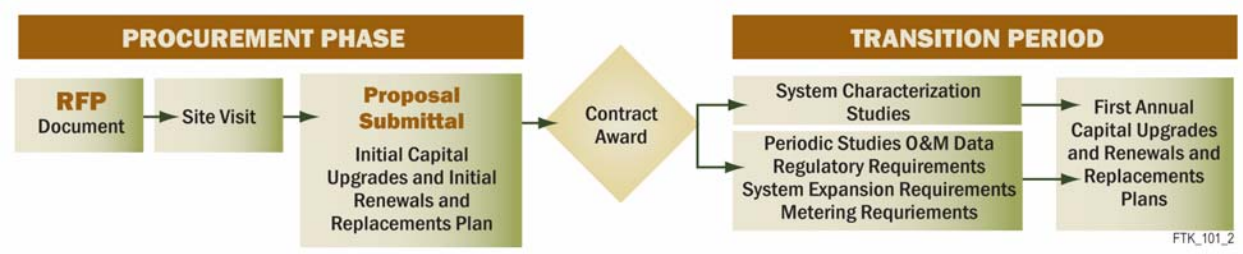


EXHIBIT JE4-2
Path to Initial Annual Plans

Exhibit JE4-3

Renewal and Replacement Schedule

This table generally follows the format included in RFP Schedule 2--Renewals and Replacements--50 YEAR SCHEDULE

Item and Size	Quant	Unit	First Expected Replacement Date	New Item	New Item Service Life	Rehab Year	Expected Subsequent Replacement Dates		
							Second R&R	Third R&R	Fourth R&R
RAW WATER SOURCES									
McCracken Spring Intake	1	Each	2014	Same as existing	75				
CI Line to Otter Creek PS - 16"	2,500	LF	2014	Ductile Iron Pipe	75				
Otter Creek PS (Facility No. 9213) - Structure	1,701	SF	2015	Same as existing	75				
Intake /Mechanical Screen	1	Each	2014	Same as existing	75				
Pump Controls	3	Each	Part of ISDC	Same as existing	25		0		
Pump No. 4 - 1,200 gpm, 150 HP	1	Each	2017	Same as existing	25		2042		
Pump No. 9 - 2,100 gpm, 230 HP	1	Each	2017	Same as existing	25		2042		
Pump No. 10 - 2,100 gpm, 250 HP	1	Each	2033	Same as existing	25		2058		
Emergency Generator - 350 KW	1	Each	2016	Same as existing	35		2051		
CI Line to Central WTP - 16-inch	11,963	LF	2017	Ductile Iron Pipe	50				
Central WTP (Facility No 1205) - 3.5 MGD									
Central WTP (Facility No. 1205) - Structure	6,799	SF	2012	Same as existing	75				
Chemical Feed Systems									
Clarifier - 3.5 MG	1	Each	2020	Same as existing	75				
Multi-Media Filters - 1 MG	3	Each	2020	Same as existing	75				
Filter Back Wash Tank - 150,000 gallons	1	Each	2053	Same as existing	75				
Clear Well No. 1 - 0.5 MG	1	Each	2020	Same as existing	75				
Clear Well No. 2 - 2 MG - 1945	1	Each	2020	Same as existing	75				
Central WTP High Lift									
Pump No. 1 & Controls - 4,850 gpm, 250 HP	1	Each	2013	Same as existing	25		2038		
Pump No. 2 & Controls - 1,000 gpm, 70 HP	1	Each	2013	Same as existing	25		2038		
Pump No. 3 & Controls - 1,400 gpm, 60 HP	1	Each	2013	Same as existing	25		2038		
Filter Back Wash Pump & Controls - 5,400 gpm	1	Each	2019	Same as existing	25		2044		
Emergency Generator - 280 KW	1	Each	2045	Same as existing	35				
West Point Well Field									
Well No. 1. Pump/Controls - 750 gpm, 125 HP	1	Each	2023	Same as existing	25		2048		
Well No. 2. Pump/Controls - 750 gpm, 125 HP	1	Each	2029	Same as existing	25		2054		
Well No. 3. Pump/Controls - 750 gpm, 125 HP	1	Each	2029	Same as existing	25		2054		
Well No. 5. Pump/Controls - 750 gpm, 125 HP	1	Each	2027	Same as existing	25		2052		
Well No. 6. Pump/Controls - 500 gpm, 75 HP	1	Each	2025	Same as existing	25		2050		
Well No. 7. Pump/Controls - 750 gpm, 125 HP	1	Each	2012	Same as existing	25		2037		
Well No. 8. Pump/Controls - 750 gpm, 125 HP	1	Each	2023	Same as existing	25		2048		
Well No. 9. Pump/Controls - 750 gpm, 125 HP	1	Each	2023	Same as existing	25		2048		
Well No. 10. Pump/Controls - 750 gpm, 125 HP	1	Each	2024	Same as existing	25		2049		
Well No. 11. Pump/Controls - 750 gpm, 125 HP	1	Each	2025	Same as existing	25		2050		

Exhibit JE4-3

Renewal and Replacement Schedule

This table generally follows the format included in RFP Schedule 2--Renewals and Replacements--50 YEAR SCHEDULE

Item and Size	Quant	Unit	First Expected Replacement Date	New Item	New Item Service Life	Rehab Year	Expected Subsequent Replacement Dates		
							Second R&R	Third R&R	Fourth R&R
Well No. 12A. Pump/Controls - 750 gpm, 125 HP	1	Each	2012	Same as existing	25		2037		
Well No. 12B. Pump/Controls - 750 gpm, 125 HP	1	Each	2028	Same as existing	25		2053		
Well No. 13. Pump/Controls - 750 gpm, 125 HP	1	Each	2017	Same as existing	25		2042		
Well Field Header - 16-inch	3,960	LF	2015	Ductile Iron Pipe	75				
CI Line to Muldraugh WTP - 24 inch	15,840	LF	2019	Ductile Iron Pipe	50				
Muldraugh WTP (Facility No. 3009) - 7.0 MGD	1	Each	Decommission		75				
Muldraugh WTP (Facility No. 3009) - Structure	14,860	SF	Decommission		75				
Chemical Feed Systems (value included in WTP cos	0	0	Decommission		25				
Clarifier No. 1 - 5.0 MG	1	Each	Decommission		75				
Clarifier No. 2 - 2.0 MG	1	Each	Decommission		75				
Multi-Media Filters - 1 MGD	7	Each	Decommission		75				
Filter Back Wash Tank - 150,000 gallons	1	Each	Decommission		75				
Clear Well - 1.0 MG	1	Each	2064	Same as existing	75				
Sludge Lagoons	4	Each	Decommission		0				
Muldraugh High Lift (Facility No. 3008) - Structure	1,840	SF	2052	Same as existing	75				
Pump A & Controls - 3,500 gpm, 250 HP	1	Each	2014	Same as existing	25		2039		
Pump B & Controls - 4,850 gpm, 350 HP	1	Each	2014	Same as existing	25		2039		
Pump C & Controls - 2,200 gpm, 150 HP	1	Each	2014	Same as existing	25		2039		
Filter Backwash Pump & Controls - 5,400 gpm	1	Each	Decommission		25				
Emergency Generator - 600 KW	1	Each	Decommission		35				
CI Line to Cantonment Area - 24 inch	10,449	LF	Decommission		50				
Valves: Note--Replacement of valves will occur with pipe replacement									
0.75"	3	Each		Included with pipe					
1"	28	Each		Included with pipe					
1.25"	13	Each		Included with pipe					
1.25"	3	Each		Included with pipe					
1.5"	51	Each		Included with pipe					
1.5"	65	Each		Included with pipe					
2"	137	Each		Included with pipe					
2"	33	Each		Included with pipe					
2"	1	Each		Included with pipe					
2"	13	Each		Included with pipe					
2.5"	15	Each		Included with pipe					

Exhibit JE4-3

Renewal and Replacement Schedule

This table generally follows the format included in RFP Schedule 2--Renewals and Replacements--50 YEAR SCHEDULE

Item and Size	Quant	Unit	First Expected Replacement Date	New Item	New Item Service Life	Rehab Year	Expected Subsequent Replacement Dates		
							Second R&R	Third R&R	Fourth R&R
3"	81	Each		Included with pipe					
3"	2	Each		Included with pipe					
4"	76	Each		Included with pipe					
4"	2	Each		Included with pipe					
4"	2	Each		Included with pipe					
4"	15	Each		Included with pipe					
5"	2	Each		Included with pipe					
6"	592	Each		Included with pipe					
6"	63	Each		Included with pipe					
6"	5	Each		Included with pipe					
6"	3	Each		Included with pipe					
6"	13	Each		Included with pipe					
8"	381	Each		Included with pipe					
8"	39	Each		Included with pipe					
8"	4	Each		Included with pipe					
8"	32	Each		Included with pipe					
8"	9	Each		Included with pipe					
10"	108	Each		Included with pipe					
10"	10	Each		Included with pipe					
10"	1	Each		Included with pipe					
12"	52	Each		Included with pipe					
12"	5	Each		Included with pipe					
12"	2	Each		Included with pipe					
14"	21	Each		Included with pipe					
16"	15	Each		Included with pipe					
20"	6	Each		Included with pipe					
24"	1	Each		Included with pipe					
Zussman Range (Mt.Eden) - Valves									
1"	4	Each		Included with pipe					
1"	2	Each		Included with pipe					
1.5"	1	Each		Included with pipe					
4"	2	Each		Included with pipe					
4"	13	Each		Included with pipe					
Yano Range - Valves									
2"	2	Each		Included with pipe					
Pressure Reducing Valves	2	Each		Included with pipe					

Exhibit JE4-3

Renewal and Replacement Schedule

This table generally follows the format included in RFP Schedule 2--Renewals and Replacements--50 YEAR SCHEDULE

Item and Size	Quant	Unit	First Expected Replacement Date	New Item	New Item Service Life	Rehab Year	Expected Subsequent Replacement Dates		
							Second R&R	Third R&R	Fourth R&R
Meters									
Meters	50	ea	2023	Same as existing	25		2048		
Basham's Corner - Meters									
Meters	2	ea	2029	Same as existing	25		2054		
Basham's Corner - Back Flow Preventers									
Basham's Corner - Back Flow Preventers	2	ea	2024	Same as existing	20		2044		
Pressure Reducing Station									
Pressure Reducing Station	1	ea	2028	Same as existing	25		2053		
SCADA									
SCADA (Pump Controls)	3	ea	In New Scada	Same as existing	--		--		
New SCADA System	1	ea	2037	Same as existing	25				
Automatic Transfer Switches									
Install switches at Otter creek PS, Central WTP and Mu	1	0	2036	Same as existing	25				
Well Control System									
Well Control System	1	ea	2020	Same as existing	25		2045		
Van Voorhis BPS (Facility No. 5898)									
Van Voorhis BPS - Structure	1,500	SF	2070	Same as existing	75				
Pump No. 1 & Pressure Tank - 175 gpm, 10 HP	1	ea	2020	Same as existing	25		2045		
Pump No. 2 & Pressure Tank - 175 gpm, 10 HP	1	ea	2020	Same as existing	25		2045		
Pump No. 3 & Pressure Tank - 175 gpm, 10 HP	1	ea	2020	Same as existing	25		2045		
Fire Protection (Diesel Fueled) - 2,000 gpm, 125 HP	1	ea	2025	Same as existing	30		2055		
Elevated Storage Tanks (Steel) Repairs									
Tank No. 1 & cathodic protection - 250,000 gallons	250,000	Gal	2029	Same as existing	75	2054			
Tank No. 2 & cathodic protection - 500,000 gallons	500,000	Gal	2029	Same as existing	75	2054			
Tank No. 3 & cathodic protection - 500,000 gallons	500,000	Gal	2084	Same as existing	75	2034			
Tank No. 4 & cathodic protection - 500,000 gallons	500,000	Gal	2027	Same as existing	75	2052			
Tank No. 5 & cathodic protection - 300,000 gallons	300,000	Gal	2035	Same as existing	75	2060			
Tank No. 6 & cathodic protection - 500,000 gallons	500,000	Gal	2070	Same as existing	75	2036			
Tank No. 7 & cathodic protection - 500,000 gallons	500,000	Gal	2072	Same as existing	75	2037			
Tank No. 8 & cathodic protection - 500,000 gallons	500,000	Gal	2072	Same as existing	75	2036			
DISTRIBUTION PIPE - CAST IRON (12" and Over Replaced with DIP)									
Unknown Diameter (assume 6")	1,420	LF	2014	PVC	50				
0.75" (NA - DIP starts at 4" Diameter)	1,155	LF	2014	PVC	50				

Exhibit JE4-3

Renewal and Replacement Schedule

This table generally follows the format included in RFP Schedule 2--Renewals and Replacements--50 YEAR SCHEDULE

Item and Size	Quant	Unit	First Expected Replacement Date	New Item	New Item Service Life	Rehab Year	Expected Subsequent Replacement Dates		
							Second R&R	Third R&R	Fourth R&R
1 " (NA - DIP starts at 4" Diameter)	4,463	LF	2014	PVC	50				
1.25" (NA - DIP starts at 4" Diameter)	4,207	LF	2014	PVC	50				
1.5" (NA - DIP starts at 4" Diameter)	12,470	LF	2014	PVC	50				
2" (NA - DIP starts at 4" Diameter)	28,836	LF	2014	PVC	50				
2.5" (NA - DIP starts at 4" Diameter)	4,785	LF	2014	PVC	50				
3" (NA - DIP starts at 4" Diameter)	9,504	LF	2014	PVC	50				
4"	13,331	LF	2014	PVC	50				
5" (NA Pipe diameters even numbers - use 6")	410	LF	2014	PVC	50				
6"	216,645	LF	2014	PVC	50				
8"	158,064	LF	2014	PVC	50				
8" - HR Center	4,237	LF	2013	PVC	50				
10"	46,690	LF	2014	PVC	50				
12"	30,122	LF	2014	Ductile Iron	50				
14"	16,393	LF	2014	Ductile Iron	50				
16"	3,920	LF	2014	Ductile Iron	50				
24"	10,560	LF	2014	Ductile Iron	50				
DISTRIBUTION PIPE - DUCTILE IRON									
1" (NA - DIP starts at 4" Diameter)	180	LF	2013	PVC	50				
1.25" (NA - DIP starts at 4" Diameter)	7,076	LF	2013	PVC	50				
1.5" (NA - DIP starts at 4" Diameter)	4,293	LF	2013	PVC	50				
2" (NA - DIP starts at 4" Diameter)	11,436	LF	2013	PVC	50				
3" (NA - DIP starts at 4" Diameter)	1,115	LF	2013	PVC	50				
6"	25,835	LF	2013	PVC	50				
8"	18,035	LF	2013	PVC	50				
8"	4,118	LF	2057	PVC	50				
10"	4,677	LF	2013	PVC	50				
12"	897	LF	2013	Ductile Iron	50				
12"	9,183	LF	2044	Ductile Iron	50				
14"	192	LF	2013	Ductile Iron	50				
DISTRIBUTION PIPE - TRANSITE (Replaced with C-900/PVC sch 80)									
1"	834	LF	2013	PVC	50				
1.5"	1,988	LF	2013	PVC	50				
2"	3,726	LF	2013	PVC	50				
3"	284	LF	2013	PVC	50				
6"	4,231	LF	2013	PVC	50				
8"	6,472	LF	2013	PVC	50				

Exhibit JE4-3

Renewal and Replacement Schedule

This table generally follows the format included in RFP Schedule 2--Renewals and Replacements--50 YEAR SCHEDULE

Item and Size	Quant	Unit	First Expected Replacement Date	New Item	New Item Service Life	Rehab Year	Expected Subsequent Replacement Dates		
							Second R&R	Third R&R	Fourth R&R
10"	5,927	LF	2013	PVC	50				
DISTRIBUTION PIPE - PVC (Replaced with C-900/PVC sch 80)									
1.5"	16,608	LF	2055	PVC	50				
2"	10,698	LF	2058	PVC	50				
3"	473	LF	2057	PVC	50				
3"	603	LF	2058	PVC	50				
4"	24	LF	2047	PVC	50				
4"	334	LF	2055	PVC	50				
4"	443	LF	2057	PVC	50				
4"	6,368	LF	2058	PVC	50				
6"	9,224	LF	2044	PVC	50				
6"	7,640	LF	2053	PVC	50				
6"	2,912	LF	2055	PVC	50				
6"	6,372	LF	2057	PVC	50				
6"	5,033	LF	2058	PVC	50				
8"	10,211	LF	2044	PVC	50				
8"	14,522	LF	2047	PVC	50				
8"	18,915	LF	2055	PVC	50				
8"	2,223	LF	2057	PVC	50				
8"	4,644	LF	2058	PVC	50				
10"	1,555	LF	2044	PVC	50				
10"	106	LF	2055	PVC	50				
12"	1,996	LF	2044	Ductile Iron	50				
Zussman Range (Mt.Eden) - Pipe Material - PVC									
1"	110	LF	2047	PVC	50				
1"	383	LF	2052	PVC	50				
1.5"	60	LF	2052	PVC	50				
4"	30,177	LF	2047	PVC	50				
Zussman Range (Mt.Eden) - Pipe Material - PE									
1"	1,111	LF	2052	PVC	50				
4"	13,668	LF	2052	PVC	50				
Yano Range - Pipe Material - PVC									
2"	2,500	LF	2040	PVC	50				
Basham's Corner - Pipe Material - PVC									

Exhibit JE4-3

Renewal and Replacement Schedule

This table generally follows the format included in RFP Schedule 2--Renewals and Replacements--50 YEAR SCHEDULE

Item and Size	Quant	Unit	First Expected Replacement Date	New Item	New Item Service Life	Rehab Year	Expected Subsequent Replacement Dates		
							Second R&R	Third R&R	Fourth R&R
1.25"	72	LF	2054	PVC	50				
2"	60	LF	2054	PVC	50				
6"	256	LF	2054	PVC	50				
FIRE HYDRANTS									
Fire Hydrants	600	Each	2015	Same as existing	25		2040		
Fire Hydrants	122	Each	2014	Same as existing	25		2039		
Fire Hydrants	83	Each	2014	Same as existing	25		2039		
Fire Hydrants	14	Each	2022	Same as existing	25		2047		
Fire Hydrants	1	Each	2015	Same as existing	25		2040		
Fire Hydrants	2	Each	2029	Same as existing	25		2054		
Fire Hydrants	54	Each	2030	Same as existing	25		2055		
Operation & Maintenance Building	1	ea	2012	Same as existing	75				
Vehicles/Equipment			2012	Same as existing	7		2019	2026	2033
Water Lab Equipment + Backhoe			2012	Same as existing	10		2022	2032	2042
Tools, and Furniture			2012	Same as existing	15		2027	2042	2057
Admin Equipment, Power Equipment			2012	Same as existing	5		2017	2022	2027

JE4.4.3 Periodic Studies

HCWD1 will conduct periodic system studies consistently and frequently to assess the condition and performance of the utility systems. For example, we will conduct water distribution system studies periodically to comply with the Safe Drinking Water Act and other regulations. We will update the study plan annually and propose additions, changes, or deletion of studies. The studies will define the system condition in terms of age and functional state, and verify the current adequacy of the system in terms of capacity, flow, dynamic characteristics, environmental compliance, and system failure protection. This involves updating mathematical models to define and characterize the current critical system parameters. The studies will also serve to identify requirements for system expansion/modifications including upgrades necessary to meet Fort Knox's current and future needs and any new regulatory compliance requirements.

Proposed studies and their frequency include the following:

- Hydraulic Modeling – Every 5 years
- Inventory and GIS Updates – Annually
- Mapping Updates – Annually
- Leak Detection Studies – Every 5 years
- Hydrant Flow Testing – Every 5 years

Hydraulic Modeling

A hydraulic model for the water system will be updated to identify capacity limitations and properly size system upgrades. System deterioration over time, system reconfiguration, extensions to the system, and the addition of new zones (system expansions) may also necessitate a hydraulic evaluation. The model input files will be updated based on new inventory and GPS/GIS data for main water pipes. The hydraulic evaluation will determine the adequacy of the existing water distribution to meet current and future needs. Based on the computer model, we will use network analyses to identify deficiencies in the systems and to develop the most cost-effective improvements.

GIS and Inventory Updates

After the completion of the site characterization phase, transition period, and project definition studies, the existing inventory will be brought up to date and new data due to equipment replacement, system rehabilitation, etc. will be added to the inventory at least annually throughout the life of the contract. Additional physical and condition attributes will be added to the inventory as required to meet the needs of the O&M crews.

The GIS database will be populated with new inventory and survey data collected during each year. The GIS will then be updated periodically during the year and submitted annually to show changes in the systems.

Mapping Updates

After the completion of the site characterization phase, transition period, and project definition studies, the existing maps will be brought up to date, and maps of the water system will be updated annually to reflect changes in the water system. New utility lines constructed during the year will be added to the maps. Lines not previously mapped will be added as encountered and located.

Leak Detection Studies

Leak detection studies are proposed to be performed every 5 years to determine water losses in the system due to unidentified leaks in pipes. High losses are generally associated with older water systems where leakage, no meters, or faulty meters are more commonplace than in new systems. Leak detection studies will identify leaks in the system and help make appropriate recommendations to reduce system leakage.

Hydrant Flow Testing

Flow testing will provide the necessary flow parameters for calibrating the periodic hydraulic model update. Every 5 years, a combination of flows will be measured in order to calibrate and update the hydraulic model so that the model is representative of what is in the system.

JE4.5 Procedures for Identifying, Financing, and Scheduling Long-Term Capital Removals and ISDC/Upgrades

Of primary importance when considering the urgency and timing of improvement are compliance, health and safety, and customer needs—followed closely by cost budgets. This section presents the methodology we used to schedule capital upgrades and R&R over the duration of the contract. Our overall asset management strategy is to provide a well-conceptualized, comprehensive, and flexible plan to provide modernization, technological improvement, and improved functionality, reliability, and appearance.

Each year, an Annual Plan will be developed. The first Annual Plan will rely upon information developed as part of the system characterization studies, as diagrammed in Exhibit JE4-4. Subsequent Annual Plans will be developed and delivered according to the process presented below.

The Contract Year 2 and subsequent Annual Plans will place an ongoing reliance on the performance of periodic studies and learned O&M data to develop and prioritize improvements meant to maintain regulatory compliance and meet system expansion requirements. The Annual Plan will also reflect on staffing and O&M procedures, upgrades, modifications, expansions, planned replacements, and overall changes from the previous year. It is intended to serve as a tool to facilitate communication between all parties, define our path for upcoming years, and set a reasonable budgeted cost for reliable service and asset management. The Annual Plan will provide cost budgets for recommended projects, including the basis of estimate. Each Annual Plan will be submitted for KO review and approval prior to implementation.

JE4.5.1 Pricing Review

HCWD1 will develop a basis of estimate for each project specific to its location and installation requirements. Subsequently, we will proceed with financing and implementation of approved projects in accordance with the Public Service Commission (PSC) regulated model.

JE4.5.2 Technical Review

HCWD1 proposes to establish overall technical direction associated with the Annual Plan by convening a Senior Advisory Panel. This advisory panel would consist of senior HCWD1 staff and senior representatives from LWC and CH2M HILL to review the Annual Plan documents and comment on the prioritization and schedule of capital improvements projects. These strategic planning "checkpoints" will ensure that the water system is being operated, maintained, and managed consistent with Government expectations.

JE4.6 Process for Responding to Government Requests for System Enhancements, Including Financing and Installation Arrangements

Most projects will be programmed and implemented as part of our annual planning process, which will take into consideration the R&R schedule, recommendations from completion of periodic studies, and coordination with Post Master Plans. In this fashion,

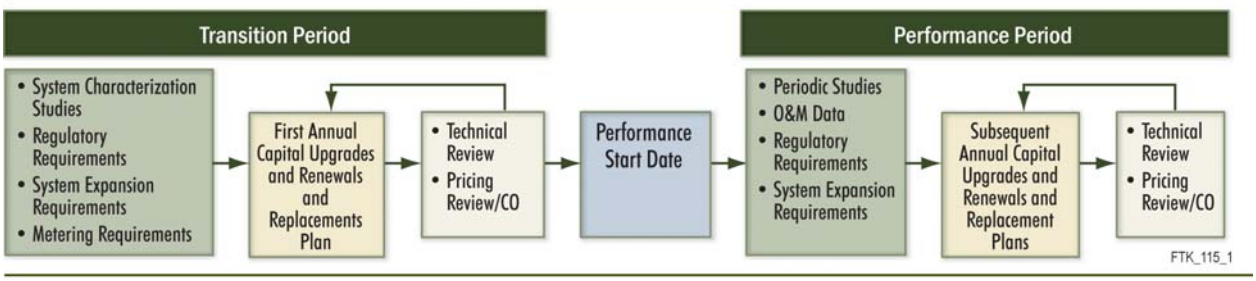


EXHIBIT JE4-4
Path to Performance Period Annual Plans

most of the Government-requested system enhancements can be integrated into improvements planning. For those projects that are not identified early on in the planning process, we will work with the Government to define the scope of the work and re-evaluate the entire project prioritization. Collectively, we can then determine if it is in the best interest of the Installation to either add a project to the list of projects that has already been programmed or to move a programmed project to a lower priority so that a new, more mission-critical project can be inserted. Either way, we will make system improvements to meet the immediate and ongoing needs of the Installation.

Similar to programmed projects, HCWD1 will develop each project's scope of work and the basis of cost estimate. We will proceed with financing and implementing the approved projects in accordance with the PSC regulated model.

Appendix JE4-1

Scope of Work for ISDC projects

Initial System Deficiency Corrections
Summary Table

ISDC No.		Labor and Materials	HCWD1 Supervison and Technical Support	Engineering/ Inspection	Total	Quote Source
1	System Survey/ Assessment and Re-Map the Utility System	$ 108,650	$ 10,865		$ 119,515	Vendor (SDI) quote
2	Leak Detection Survey	$ 44,252	$ 4,425		$ 48,677	LWC estimate
3	Hydraulic Model	$ 19,700	$ 1,970		$ 21,670	Vendor (HDR) quote
4	Master Flow Meters at the WTP	$ 24,480			$ 24,480	HCWD1 estimate
5	20-inch Raw Valves	$ 74,780		$ 13,000	$ 87,780	LWC estimate
6	New Raw Water Main from the Muldraugh WTP to the 16-inch Raw Water Line Between Otter Creek PS	$ 1,663,200		$ 249,480	$ 1,912,680	CH2M HILL estimate based on LWC and HCWD1 recent unit bid prices
7	Otter Creek Pump Station	$ 104,933	$ 10,493		$ 115,426	Vendor (Archway Roofing) quote and HCWD1 estimate
8	Muldraugh HLPS	$ 97,200	$ 9,720		$ 106,920	Vendor (Judy Construction) quote and HCWD1 estimate
9	Central WTP	$ 57,360	$ 5,736		$ 63,096	Vendor (Judy Construction) quote
10	Central WTP Clear Well	$ 1,560,000		$ 234,000	$ 1,794,000	Horizon estimate
11	Fire Hydrants	$ 1,749,000	$ 174,900		$ 1,923,900	LWC estimate
12				deleted by Government		
13	Water Storage Tank No. 5	$ 375,590		$ 56,339	$ 431,929	Horizon estimate
14	Automatic Transfer Switches	$ 212,500		$ 31,875	$ 244,375	HDR Estimate
15	Pipe between Otter Creek PS and Central WTP	$ 1,515,885		$ 227,383	$ 1,743,268	CH2M HILL estimate based on LWC and HCWD1 recent unit bid prices
16	Water Storage Tank No. 6	$ 338,400		$ 50,760	$ 389,160	Horizon estimate
17	Water Storage Tank No. 8	$ 338,400		$ 50,760	$ 389,160	Horizon estimate
18	Water Storage Tank No. 7	$ 170,900		$ 25,635	$ 196,535	Horizon estimate
19	SCADA System	$ 244,903	$ 85,097	$ -	$ 330,000	Sewell quote
20	Distribution System Pipe and Valves	$ 951,439		$ 142,716	$ 1,094,155	CH2M HILL estimate based on LWC and HCWD1 recent unit bid prices
21	Distribution System Pipe and Valves	$ 2,592,905		$ 388,936	$ 2,981,841	CH2M HILL estimate based on LWC and HCWD1 recent unit bid prices
22	Distribution System Pipe and Valves	$ 161,006		$ 24,151	$ 185,157	CH2M HILL estimate based on LWC and HCWD1 recent unit bid prices
23	Distribution System Pipe and Valves	$ 5,656,321		$ 848,448	$ 6,504,769	CH2M HILL estimate based on LWC and HCWD1 recent unit bid prices
24	Water Tank No. 1	$ 20,850		$ 3,128	$ 23,978	Horizon estimate
25	Water Tank No. 2	$ 20,850		$ 3,128	$ 23,978	Horizon estimate
26	Water Tank No. 4	$ 39,000		$ 5,850	$ 44,850	Horizon estimate
27	West Point Well Field	$ 54,600		$ 8,190	$ 62,790	Horizon estimate
28	Van Voohis Pump Station	$ 7,500		$ 1,125	$ 8,625	Horizon estimate
29	Decommmission Muldraugh WTP	$ 424,000		$ 63,600	$ 487,600	CH2M HILL and LWC estimate
30	Muldraugh WTP Operation Year 1	$ 982,279			$ 982,279	CH2M HILL and LWC estimate
31	Muldraugh WTP Operation Year 2	$ 980,119			$ 980,119	CH2M HILL and LWC estimate
32	Muldraugh WTP Operation Year 3	$ 980,119			$ 980,119	CH2M HILL and LWC estimate
33	Muldraugh WTP Operation Year 4	$ 980,119			$ 980,119	CH2M HILL and LWC estimate
34	Muldraugh WTP Operation Year 5	$ 980,119			$ 980,119	CH2M HILL and LWC estimate
Total		**$ 23,531,359**	**$ 303,207**	**$ 2,428,502**	**$ 26,263,068**	

ISDC 1

System Survey/Assessment and Re-Map the Utility System

Hardin Co. Water Dist. No. 1 / Ft. Knox Water Statement of Work

OBJECTIVE

Implement a fully functional Geographic Information System (GIS) of the Ft. Knox Water infrastructure. At this time all data collected, acquired and/or created will be incorporated into Hardin County Water District No. 1 (HCWD1) existing GIS, SDImaps. Full consideration will be given to the future migration to a full Enterprise GIS solution.

SCOPE OF WORK

1. Project development
    a. Determine what data is currently available on Ft. Knox and determine the current state of any existing data. The quality of this data will determine the amount of fieldwork that may be required; however, based upon the previous wastewater and stormwater project we anticipate receiving the same or similar quality data. This result would lead to a complete GPS collection of the water infrastructure.
    b. Participate in any required project meetings.

2. Develop Water dataset for Ft. Knox
    a. Provide Water dataset for use in SDImaps

3. Custom Development
    a. Existing aerial photos and topographic maps will be used and not included in this proposal.
    b. Creation of new Elevation dataset from existing Ft. Knox LIDAR data.
    c. Create Grid tool to meet *J1.9.3 – E*
    d. Update existing SDSFIE export utility to incorporate SDSFIE release 3.0 and allow for the exportation of all water features.

4. Data Collection and Attribution
    a. GPS Collection of all water features listed in Appendix A. The estimated number of features is 2898. The exact numbers may be adjusted if more accurate information is acquired. Attributes collected during GPS collection will be a minimum and limited to feature type, location, place details, and unique feature ID (if available).
    b. Post-Processing of all GPS data to sub-foot accuracy. Estimates are based upon the current information given above and may change if more accurate information becomes available.

c. Digitizing of all water mains. The locations of each will be based upon features collected by GPS and existing record drawings. These lines will be digitized by hand using the accompanying basemap set. It is estimated to be 171.9 miles of water main on post.
d. Digitizing of all service lines. The locations of each will be digitized by hand using the accompanying basemap set and digitized water mains. The service lines will be digitized 90° off the main and continue to the mark of demarcation as defined in J1.2.1.2 of the Potable Water Utility System Utilities Privatization – Fort Knox, Kentucky RFP. Estimates for service lines are unknown at this time; however, an estimate of 6,632 linear feet will be used. This is derived from the sum of all ¾" and 1" mains listed in Table 5 of section J1.2.1.4 of the Potable Water Utility System Utilities Privatization – Fort Knox, Kentucky RFP.
e. Coding attribute information that is gathered either in the field or from existing record drawings or other acquired information. Estimates are based upon the sum of GPS points collected in the field and the miles of main and service lines digitized.

5. Travel
   a. Current estimates are 8 weeks (40 days) for GPS collection of water infrastructure. Mileage is calculated based upon roundtrips from our Louisville Kentucky office to Ft. Knox, approximately 82 miles, plus the estimated main mileage doubled. The rates charged were acquired from the U.S. General Services Administration Per Diem for the Ft. Knox area. Current rates are 58.5 cents per mile.
   b. Per Diem and incidentals are based upon 2 people in the field for the entire collection time. The rates charged were acquired from the U.S. General Services Administration Per Diem for the Ft. Knox area. Current rates are $70 for lodging and $39 for meals and incidentals.

Appendix A

Infrastructure to be mapped

Feature	Cantonment Area	Range Areas	Totals
Backflow Prevention Valves	0	2	2
Low Lift Pumpstation	1	0	1
Booster Pumpstation	1	0	1
Pressure Reducing Valves	1	2	3
Raw Water Intakes	2	0	2
High Lift Pumpstation	2	0	2
Water Treatment Plant	2	0	2
Clear Wells	3	0	3
Storage Tanks	8	0	8
Ground Wells	13	0	13
Water Meters	50	2	52
Hydrants (Fire/Flush)	873	3	876
System Valves	1904	29	1933
	2860	**38**	**2898**

****** 162.7 miles of main in Cantonment area***

****** 9.2 miles of main in Range area***

Appendix B

Proposed Budget

Task Title	Price
Project Development – Includes all meetings and data inventory	$16,900.00
Ft. Knox Water Dataset	$ 750.00
Custom Development	$15,900.00
GPS Data Collection and Post Processing	$59,600.00
Digitization and Attribution	$15,500.00
	$108,650.00

Note: Based upon the estimated feature count of 2,898, the estimated price per feature for GPS collection and post processing is $20.56/feature.

ISDC 2

Leak Detection Survey

ISDC #2

Leak Detection Survey

Scope: Perform leak detection at every valve and every connection to discharge headers, transmission mains and distribution lines in the Ft Knox water system. The cost estimate assumes the system would be surveyed for leaks by a LWC Leak Survey Technician over a 3 month period. The estimates also includes charges for LWC vehicle and equipment usage.

Cost Estimate:

- Labor: 520 hours at $48/hr with 67% Overhead = $41,652
- Equipment & Vehicle charges @ $40/day= $2,600

Total = **$44,252**

ISDC 3

Hydraulic Model

HDR ONE COMPANY | *Many Solutions*

August 11, 2008

Mr. Daniel Clifford
Hardin County Water District No. 1
1400 Rogersville Road
Radcliff, KY 40160

RE: **Fort Knox Potable Water System Privatization**
Hydraulic Modeling Proposal

Dear Daniel,

We appreciate the opportunity to submit a proposal to develop and calibrate a hydraulic model of the Fort Knox Water System in accordance with RFP Section J1.3.14.

Please find attached our understanding of the water system, proposed scope and project approach for your review. We propose to perform the six (6) tasks as outlined in the attached scope for a lump sum fee of $19,700.

Schedule

HDR has the available modeling resources to complete all work within 90 calendar days from Notice-to-Proceed.

Resources

HDR resources available and ready to execute this project in a timely manner include Kevin Brian, Mike Agbodo, Eric Ivanovich, Brian Bradley and Kyle Guthrie.

If you have any questions or need additional information, please give me a call.

Sincerely,

Kevin J. Brian, PE
Project Manager

Copy: Brett Pyles/HCWD No. 1

HDR Engineering, Inc.

401 West Main Street
Suite 500
Louisville, KY 40202-2936

Phone: (502) 584-4118
Fax: (502) 589-3009
www.hdrinc.com

Water System Background

The Fort Knox water main system includes approximately 9.2 miles of raw water mains, 162.7 miles of distribution mains (containment and range areas), two high lift stations, one booster pump station, and eight elevated water storage tanks. The water mains range in size from 1" diameter to 24-inch diameter. The distribution system includes four (4) independent systems: Basham Corner supplied by MCWD; Cantonment Area; Yano Tank Range supplied by HCWD No. 2 and Zussman Urban site supplied by LWC.

Scope of Services/Project Approach

To gain a thorough understanding of this project the RFP was reviewed and discussions were conducted with District staff. The following paragraphs describe our proposed scope of services and project approach that will be employed by HDR Engineering (HDR) to develop and calibrate a computerized hydraulic model utilizing KY Pipe 2006, in accordance with RFP Section J1.3.14.

Item #1 – Conduct Kick-Off Meeting

Immediately after execution of the work order, the HDR Project Manager, Kevin Brian, will conduct a kick-off meeting with key modeling team members and Hardin County Water District No. 1 (District) management and operations staff to review project scope and schedule, establish lines of communication, obtain GIS data and facilities information, and discuss distribution system operations. Prior to this meeting, a detailed list of information (pump curves, tank and pump station as-builts, operations procedures, trend data, etc.) needed to complete the modeling activities will be will be sent to the District.

Item #2 – Develop Pipe Network

The modeling and system information and reports obtained at the kick-off meeting will be reviewed. The pipe network will be built from GIS data (geodatabase MDB format) of the water system provided by the District. The District will also provide a check on connectivity of pipes, valves and fire hydrants prior to providing the data. Hydraulic data of active control valves, pump stations, tanks, interconnects and other boundary facilities will be added to the model by HDR.

Item #3 – Develop and Allocate Water Demands

Consumption records are not available since Fort Knox does not have individual meters for businesses, facilities and residential areas. Average daily usage or base demands will be estimated and assigned manually to the model nodes based on zone production, hourly pumping data and residential unit counts (via polygons in the geodatabase) provided by the District. From this data HDR will estimate and allocate base demands throughout the system.

Nodes will be added at locations of large user demand. Global demand multipliers for will be incorporated to reflect non-revenue and unaccounted for water.

Once base demands have been allocated to the model the next step is to determine how demand varies according to location and time. Seasonal and diurnal variations can be expected for the Fort Knox water system. Variations in demand will be calculated and limited to operations data obtained from District staff, records and SCADA. SCADA information provided by the District includes flows, pressures, alarms, tank levels and equipment information, such as on/off status for pumps.

Item #4 – Perform Model Calibration

C-factors are friction coefficients that relate flow to head loss in each pipe element. C-factors are a very sensitive parameter in calculating flow and pressure for higher pipe velocities. HDR will identify locations throughout the distribution system to perform c-factor tests based on pipe sizes and materials and old and new pipes. The District will conduct field tests that involve measuring flow and headloss (pressure drop) between hydrants and recording boundary conditions at the time the test is performed. Information obtained from the field test will be utilized to adjust pipe c-factors and calibrate the model for a regular steady state condition.

Item #5 – Modeling Scenarios

Once the model has been developed and calibrated as described in Items #4 and #5 scenarios will be run for average day and maximum day conditions. A maximum day will be determined by a review of production/pumpage data over the last 12 months. A fire flow simulation will be performed to estimate how much water can be delivered at various hydrants throughout the distribution.

Item #6 – Technical Memorandum (TM)

HDR will prepare a TM to document the process for developing and calibrating the model. Results of modeling scenarios will be included as an appendix to the TM. A compact disc of the Pipe 2006 input and output files and a node map of the distribution system will be provided.

HDR ONE COMPANY | *Many Solutions*℠

February 11, 2011

Mr. Daniel Clifford
Hardin County Water District No. 1
1400 Rogersville Road
Radcliff, KY 40160

RE: **Fort Knox Potable Water System Privatization**
Hydraulic Modeling Proposal - Confirmation

Dear Daniel,

Please allow this letter to serve as confirmation that that HDR proposal dated August 11, 2008 is still valid.

Under available resources, we will be using Sasa Tomic for QC review. Mike Agbodo and Brian Bradley are no longer with HDR. HDR has the available resources to perform the work within 90 days of receiving the GIS information.

Please call if you have any questions. Thanks

Sincerely,

Kevin J. Brian, PE
Project Manager

HDR Engineering, Inc.

401 West Main Street
Suite 500
Louisville, KY 40202-2936

Phone: (502) 584-4118
Fax: (502) 589-3009
www.hdrinc.com

ISDC 5

20-inch Valves

20" Valve Replacement
Preliminary Cost and Time Estimate
02/11/11

PIPE INSTALLATION

Size (in)	Roadway	Location	Amount	Unit	Unit Price	Cost	Rate	Unit	Days
20	Along US 31-W	Roadside	**8**	lf	$ 100.00	**$ 800**	100	ft/day	**0.08**
20	In Easement	Dirt	**16**	lf	$ 75.00	**$ 1,200**	100	ft/day	**0.16**

OTHER PIPE WORK

Item	Location	Amount	Unit	Unit Price	Cost	Rate	Unit	Days
Tie-ins	Project	**6**	ea	$ 2,500.00	**$ 15,000**	1	ea/day	**6.00**
Pressure Testing, Water Samples	Project	**6**	days	$ 200.00	**$ 1,200**	1	days	**6.00**

PROJECT COST DATA

				Construction Crew	**$ 17,400**	3	
				Contingency	**$ 3,000**	15%	
				Construction Crew	**$ 20,000**	3	
Total Pipe Footage		**16**		Cost per Foot	**$ 1,250.00**		

Drafting	$ 1,000	8	ft/sht	Total Work Days		**12.16**
Engineering Design	$ 3,000	12	hrs/sht	Total Work Days per Week		5.00
Manage Construction	$ 2,000	24	hr/mon	Bad Weather Days per Week		0.50
Construction Inspector	$ 7,000	70	%	Holidays		1.00
Labor	**$ 13,000**			Total Non-Work Days		**8.00**
20-inch Ductile Iron Pipe	$ 480	$ 30.00	$/lf	Total Days		**20.16**
Fittings and Valves	$ 54,300			Contract Period (Days)		**30.00**
Materials	**$ 54,780**			Contract Period (Months)		**1.00**
Construction Crew	**$ 20,000**			Contractor Cost/Work Day	**$**	**1,645**
Total Project Cost	**$ 87,780**					
Total Cost per Foot	**$ 5,486.25**					

Prevailing Wage Rate	**No**	Construction Crew	**$ 20,000**	**22.8%**	
		Labor	**$ 13,000**	**14.8%**	
		Materials	**$ 54,780**	**62.4%**	
		Total	**$ 87,780**	**100%**	

ISDCs 6, 15, 20, 21, 22, 23, 24, 25

New Raw Water Lines and Distribution Mains

Scope of Work

The pipeline unit price was estimated as a weighted average price with 75% of the trenching in an area requiring sod restoration and 25% in an area requiring roadway asphalt restoration. Unit prices presumed that pipelines 4" diameter and above would be performed with open trench excavation. Minimum 3' cover. Medium hard excavation, partial layback, backfill compacted to 95%. Trench excavated minimum 3' width, allowing minimum 1' each side of pipe. Pipe laid atop 6"thick select fill bedding.

Ductile Iron pipe (DIP) is based on pressure class 350 with mechanical joints. Restrainer glands will be on all MJ fittings. Fittings will be double wrapped prior thrust block placement. Excavation in asphalt includes saw cutting, loading hauling and disposal of debris. Asphalt paving restoration to match existing, including wearing course and binder course on compacted sub-grade and stone base, includes stripping.

Valves and fittings are included in the distribution piping and raw water line unit prices. Gate valves will be installed having the same diameter as the distribution pipe.

ISDCs 6, 15, 20, 21, 22, 23
Raw Water and Distribution Pipe

ISDC	Pipe Dia (in)	Pipe Length (ft)	Number of valves*	Unit Cost ($/ft)	Construction Cost ($)	Engineering / Inspection ($)	Total Cost ($)
6- Raw Water Line	16	15,840		105	$ 1,663,200	$ 249,480	$ 1,912,680
15 - Raw Water Line	16	14,437		105	$ 1,515,885	$ 227,383	$ 1,743,268
20 - Transite Pipe	1	834		21	$ 17,514		
	1.5	1,988		22	$ 43,736		
	2	3,726		24	$ 89,424		
	3	284		25	$ 7,100		
	6	4,231		37	$ 156,547		
	8	6,472		38	$ 245,936		
	10	5,927		66	$ 391,182		
20 - Total Transite Pipe		23,462	93		$ 951,439	$ 142,716	$ 1,094,155
21 - DIP Pipe	1	180		21	$ 3,780		
	1.25	7,076		22	$ 155,672		
	1.5	4,293		23	$ 98,739		
	2	11,436		24	$ 274,464		
	3	1,115		25	$ 27,875		
	6	25,835		37	$ 955,895		
	8	18,034		38	$ 685,292		
	10	4,677		66	$ 308,682		
	12	897		74	$ 66,378		
	14	192		84	$ 16,128		
21 - Total DIP		73,735	294		$ 2,592,905	$ 388,936	$ 2,981,841
22 - CIP HR Center	8	4,237	17	38	$ 161,006	$ 24,151	$ 185,157
23 - CIP	1	994		21	$ 20,874		
	1.25	29		22	$ 638		
	1.5	759		23	$ 17,457		
	2	3,720		24	$ 89,280		
	2.5	483		25	$ 12,075		
	3	4,280		25	$ 107,000		
	4	3,754		27.5	$ 103,235		
	6	61,582		37	$ 2,278,534		
	8	38,255		38	$ 1,453,690		
	10	17,066		66	$ 1,126,356		
	12	4,153		74	$ 307,322		
	14	1,665		84	$ 139,860		
		136,740	545		$ 5,656,321	$ 848,448	$ 6,504,769

* based on 1 valve per 251 ft

ISDC 7

Otter Creek Pump Station

Item #7 - Otter Creek PS

Item	Est Cost	Comments
Repair creek side erosion	$34,000	Depending on severity of erosion, solution will vary
Replace windows	$26,500	Costs are generated from recent construction costs at the District's Pirtle Spring Water Plant renovation
Replace doors	$19,000	Costs are generated from recent construction costs at the District's Pirtle Spring Water Plant renovation
Roof replacement	$22,933	Costs are generated from vendor quote in 08/2008
Lightning Protection	$2,500	
TOTAL:	$104,933	

6404 Organ Creek Road Pendleton, KY 40055
Phone: 225-4446 Fax: 225-9995

Archway Roofing & Sheet Metal Systems, Inc.
Building Trust and Tradition One customer at a time

Fax

To:	Richard Stranahan	**From:**	Tim Skomsky
Fax:	(270) 352-3055	**Pages:**	1
Phone:		**Date:**	8/27/2008
Re:	Roof quotes	**CC:**	

☐ Urgent ☑ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

Comments:

Attention: Richard – here are the numbers. I will write up a formal proposal to outline what we are doing and fax it to you later.

Otter Creek Pump House: $22,933.00 (remove slate roof and haul away and install pre-finished 24-gauge standing seam metal roof)

ISDC 8

Muldraugh High Lift Pump Station

Item #8 – Muldraugh HL PS

Item	Est Cost	Comments
Replace Windows	$35,000	Costs are generated from recent construction costs at the District's Pirtle Spring Water Plant renovation
Replace Doors	$21,000	Costs are generated from recent construction costs at the District's Pirtle Spring Water Plant renovation
Replace Roof	$30,700	Costs are generated from vendor quote in 08/2008
Hazardous Materials	$10,000	Project allowance for asbestos and lead-based paint materials testing and abatement
TOTAL:	$96,700	

JUDY Construction Co.
GENERAL CONTRACTORS

P.O. BOX 457 CYNTHIANA, KENTUCKY 41031
Telephone (859) 234-6900 Fax (859) 234-3480
www.judyconstructionco.com

May 20, 2011

Hardin County Water District # 1
1400 Rogersville Road
Radcliff, KY 40160
Attn: Mr. Bret Pyles
Operations Manager

Ref: Muldraugh HLP Filtration Bldg
Roofing Replacement – Revised

Dear Mr. Pyles,

We are pleased to submit an estimated cost for the roof replacement at the Muldraugh Filtration Building. Our pricing is based upon the reduced copy of the November 19, 1935 drawing 6393-525 from the Office of the Quartermaster General noted as *Fort Knox – Kentucky Filtration Plant.*

Since the above is the only information available, we have had to make some assumptions. In our pricing we assume the following:

- Removal of the existing roofing materials to be done by industry standards (Not Corps of Engineers standard)
- Removal and disposal into standard dumpsters; no hazardous materials handling is included
- No asbestos or lead paint disposal is included
- Corps of Engineers' specifications and/or inspections not included
- Price good for 14 days only
- Price is based upon listed materials; if a different roof system or materials are desired, pricing may need to be adjusted
- Prevailing wage rates are not included

Scope of work:

1. Tear off the present roof down to the existing light weight insulation concrete deck and haul same from premises.
2. Nail 1 ply of PP28.
3. Install ½" wood fiber and fully adhered 045 EPDM.
4. Install composition SBS base flashing to the walls and curbs.
5. Install new roof drain leads.
6. Install new aluminum coping cap.
7. Re-work/replace the metal counterflashing where the lower roof butts the upper.

The lump sum price for the new roof is $30,700.00.

Please review and let us know if you have any questions.

Sincerely,

Judy Construction Company

Kista Thomas

Kista Thomas

Attachment

cc: File
Dale Wilson

KT/lj

ISDC 9

Central Water Treatment Plant

Item #9 – Central WTP

Item	Units	Unit Cost	Total	Comments
Roof Replacement	1	$43,800	$43,800	Quote from contractor
Hazardous Materials	1	$13,560	$13,560	Project allowance for asbestos and lead-based paint testing and abatement
TOTAL:			$57,360	

JUDY
Construction Co.
GENERAL CONTRACTORS

P.O. BOX 457 CYNTHIANA, KENTUCKY 41031
Telephone (859) 234-6900 Fax (859) 234-3480
www.judyconstructionco.com

May 20, 2011

Hardin County Water District # 1
1400 Rogersville Road
Radcliff, KY 40160
Attn: Mr. Bret Pyles
Operations Manager

Ref: Ft. Knox Filtration Plant
Roofing Replacement – Revised

Dear Mr. Pyles,

We are pleased to submit an estimated cost for the roof replacement at the Ft. Knox Filtration Building. Our pricing is based upon the reduced copy of the November 19, 1935 drawing 6393-525 from the Office of the Quartermaster General noted as *Fort Knox – Kentucky Filtration Plant.*

Since the above is the only information available, we have had to make some assumptions. In our pricing we assume the following:

- Removal of the existing roofing materials to be done by industry standards (Not Corps of Engineers standard)
- Removal and disposal into standard dumpsters; no hazardous materials handling is included
- No asbestos or lead paint disposal is included
- Corps of Engineers' specifications and/or inspections not included
- Price good for 30 days only
- Price is based upon listed materials; if a different roof system or materials are desired, pricing may need to be adjusted
- Prevailing wage rates are not included

Scope of work:

1. Tear off the present roof down to the existing light weight insulation concrete deck and haul same from premises.
2. Nail 1 ply of PP28.
3. Install ½" wood fiber and fully adhered 045 EPDM.
4. Install composition SBS base flashing to the walls and curbs.
5. Install new roof drain leads.
6. Install new aluminum coping cap.
7. Embed the gravel surface in a pouring of hot steep asphalt.
8. Re-work/replace the metal counterflashing where the lower roof butts the upper.

The lump sum price for the new roof is $43,800.00.

Please review and let us know if you have any questions.

Sincerely,

Judy Construction Company

Kista Thomas

Kista Thomas

Attachment

cc: File
Dale Wilson

KT/lj

ISDC 10

Central Water Treatment Plant Clearwell

P.O. Box 338
Campbellsburg, KY. 40075
Phone: 502.727.2828
E-Mail: mike@horizonqc.com

February 11, 2011
Brett Pyles
Hardin County Water District No.1
1400 Rogersville Road
Radcliff, KY 40160

RE: Central Water Treatment Plant – Clearwell No.2

Mr. Pyles,

Please find below the estimated costs to make the necessary repairs to the tanks at the Ft. Knox water system. Please note that these are estimates based on similar projects that my company has provided inspection services for. These estimates were originally generated in July of 2008 and were revised in February, 2011.

Please let me know if you have any questions.

Sincerely,

Mike Topp
Horizon QC

Central WTP – Clearwell No.2

Quan		Item	Unit Cost	Total
1	LS	Removal of existing roof	$125,000	$125,000
1	LS	Installation of Geo-dome Roof	$1,265,000	$1,265,000
1	LS	Installation of interior liner system on sidewalls and floor	$145,000	$145,000
1	LS	Replacement of existing vents	$25,000	$25,000
			Grand Total:	$1,560,000

ISDC 11

Fire Hydrants

Preliminary Fire Hydrant Cost Estimate

Date Estimate Prepared: 02/28/11
Purpose of Estimate: Preliminary
Estimate Prepared By: AFW

A. Replace Fire Hydrant Utilizing Existing Tee

Material Cost

Item	Quantity	Unit	Unit Price	Total
2" Polytape	2	ea	4.50	9.00
20" Polywrap : for 4", 6", & 8" pipe	30	lf	0.15	4.50
4' 6" long, Double Pumper Fire Hydrant	1	ea	740.00	740.00
6" Gate Valve MJ	1	ea	295.00	295.00
6" Gland, Gripper MJ & PVC	4	ea	19.50	78.00
6" Pipe, Ductile Iron	10	lf	10.50	105.00
7" Keytube Pipe (Plastic)	5	lf	1.90	9.50
All Concrete Block	8	ea	1.50	12.00
Valve Box & Lid	1	ea	31.50	31.50
Miscellaneous Items	1	job	50.00	50.00
			Material Sub-total	$1,335
			Sales Tax (6.0%)	$80
			Material Estimate	**$1,415**

Contract Labor

Item	Quantity	Unit	Unit Price	Total
Relocate Fire Hydrant	1	ls	1250.00	1,500.00
			Contract Labor Estimate	**$1,500**

COST SUMMARY		
	Material Estimate	$1,415
	Contract Labor Estimate	$1,500
	Project Estimate Total	**$2,915**

Quantity		$600
Total	**$**	**1,749,000**

Andrew F. Williams, P.E.
Project Engineer, Capital Planning & Hydraulics
Louisville Water Company
502.569.3600 x2219 Fax: 502.569.3691

ISDCs 13, 16, 17, 18, 24, 25, 26

Water Storage Tank Nos. 1, 2, 4, 5, 6, 8, 7

Summary of All FK Water Tank Work / Repairs
By: HCWD1 / Mike Topp

ISDC#	Tank No	Location	Size (kgals)	Year Built	Last Built/Upgrade	HCWD1 Proposed Work	Coating System	Complete By End Year	$ Labor	$ Insp	$Mtls	$CathProt	$Alt Valve	$Total
24	1	Educ Ctr 1	250	1935	2004	M, O, I	A, E, U	3	$12,938	$3,600	$4,313	$0	$0	$20,850
25	2	Educ Ctr 2	500	1937	2004	M, O, I	A, E, U	3	$12,938	$3,600	$4,313	$0	$0	$20,850
26	4	Brave Rfles	500	1941	2002	A, O, I	A, E, U	3	$25,875	$4,500	$8,625	$0	$0	$39,000
13	5	Van Voorhis	300	1958	1994	A,S,I,F,N,R,C	E, U	1	$237,190	$15,000	$80,000	$30,000	$13,400	$375,590
16	6	Frazier/Wilson	500	1995	1995	A,S,I,F,N,R,C	E,U	2	$210,000	$15,000	$70,000	$30,000	$13,400	$338,400
18	7	FKHS	500	1997	1997	M,I,N,R	E,U	3	$90,000	$7,500	$30,000	$30,000	$13,400	$170,900
17	8	Prichard	500	1997	1997	M,I,N,R,C	E,U	2	$210,000	$15,000	$70,000	$30,000	$13,400	$338,400

Col G Key;
M - Minor Rprs
O - Overcoat
S - Sanblast
I - Interior
A - major Rprs
F - Full re-coat
N - aNodes repl
R - Rectifier repl
P - Piping repl
C - Containment

Col H Key;
A - Acrylic
E - Epoxy
U - Urethane

ISDC 14

Automatic Transfer Switches

HDR ONE COMPANY | *Many Solutions*®

February 15, 2011

Mr. Brett Pyles
Operations Manager
Hardin County Water District No. 1
1400 Rogersville Road
Radcliff, Kentucky 40160

Re: Automatic Transfer Switch Costs

Dear Brett,

Pursuant to your email, I have generated the following cost estimates for furnishing and installing automatic transfer switches at three of your facilities. These costs use horsepower data presented in your email plus an assumed nominal amount of miscellaneous load. Each of these transfer switches are service-rated in stand alone outdoor enclosures with drawout normal and emergency switches for servicing one while the other remains in service.

Facility a
480V/1200A ATS: $25,000
Installation: $40,000
Start up: $2,500
Total: $67,500

Facility b
480V/1600A ATS: $30,000
Installation: $45,000
Start up: $2,500
Total: $77,500

Facility c
480V/1200A ATS: $25,000
Installation: $40,000
Start up: $2,500
Total: $67,500

Please let me know if you have any questions.

Sincerely,

Darryl Evans

Darryl W. Evans, P.E.

cc: Kevin Brian/HDR, P.E.

M:\Proposals\HCWD No. 1\Auto Transfer Switch Costs.doc

HDR Engineering, Inc.

401 West Main Street
Suite 500
Louisville, KY 40202-2936

Phone: (502) 584-4118
Fax: (502) 589-3009
www.hdrinc.com

ISDC 19

SCADA System

Item #19 – SCADA System

Item	Est Cost	Comments
Contractor	$244,903	Includes engineering, installation and material
District labor, G&A	$85,097	Includes District labor, G&A, oversight
Total:	$330,000	

Sewell Industrial Electronics, Inc.

"Quality at a fair price since 1975"

5851 Fern Valley Road Louisville, KY 40228

Phone: 502-968-3825 Fax: 502-968-1002

February 16, 2011

Curt Pickerell
Hardin County Water District #1
1400 Rogersville Road
Radcliff, KY 40160

Curt:

Please see the information below regarding Budgetary Pricing for Fort Knox Water Plant SCADA System.

ESTIMATE: PUMP STATIONS AND TANKS

	ea	unit	cost
Material	12	3,200	38,400
Fabrication	12	1400	16,800
ControlView32-5000 tag, Dev., Linx, 1-R.T.			7,820
ControlView32-5000 tag, Linx, 1-R.T.			4,715
RSLogix-500			1,200
Computers / Monitors????			5,000
Tank telemetry equipment	8	12,128.46	97,028
Pump station telemetry equipment	3	6,060	18,180
Water plant telemetry equipment	1		6,060

		Hrs	
Engineering	(incl. Dwgs)	88	
Programming		80	
HMI Screen programming		120	
Shop Test		30	
Install		24	
Startup		24	
T & V		16	
Training		24	
On-Site Assistance and Remote Support		80	
		486	49,700

Grand Total for Remote Sites as listed 244,903

Thank you for this opportunity,

Allan Sewell
Sewell Industrial Electronics, Inc.

ISDC 27

West Point Well Field

May 16, 2011

Mr. Brett Pyles
Hardin County Water District No.1
1400 Rogersville Road
Radcliff, KY 40160

RE: Ft.Knox Well Platforms

Mr. Pyles,

Please find below the estimated costs to make the necessary repairs to the well field platforms in the Ft. Knox well fields near West Point, KY. Please note that these are estimates based on similar projects that my company has provided coating inspection services for. These estimates were originally generated in July of 2008 and to the best of my knowledge, should still be accurate estimates.

Please let me know if you have any questions.

Sincerely,

Mike Topp
Horizon QC

- **Well Platforms (13)**

Repairs: Surface Preparation – SSPC SP 3 Power Tool Cleaning on all corrosion spots.
Spot prime epoxy mastic 4.0 – 6.0 mils dft.
Finish coating UV compatible coating 3.0–4.0 mils dft.

Cost: $4,200 x 13 = 54,600.00

ISDC 28

Van Voohis Pump Station

February 11, 2011

Mr. Brett Pyles
Hardin County Water District No.1
1400 Rogersville Road
Radcliff, KY 40160

RE: Van Voorhis Pump House

Mr. Pyles,

Please find below the estimated costs to make the necessary repairs to the Van Voorhis Pump House in the Ft. Knox water system. Please note that these are estimates based on similar projects that my company has provided coating inspection services for. These estimates were originally generated in July of 2008 and to the best of my knowledge, should still be accurate estimates.

Please let me know if you have any questions.

Sincerely,

Mike Topp
Horizon QC

- **VanVoorhis Pump House**

Repairs: Surface Preparation – SSPC SP 3 Power Tool Cleaning on all corrosion spots.
Spot prime epoxy mastic 4.0 – 6.0 mils dft.
Finish coating - compatible coating 3.0–4.0 mils dft.

Cost: $7,500.00

ISDC 29

Decommission Muldraugh Water Treatment Plant

ISDC 29
Decommission Muldraugh WTP

General Project Description

The client for this project is Fort Knox. The location of the project is in Muldraugh, KY. The project will include demolition of an existing treatment plant on the Fort Knox Military Reserve. Demolition will include two building which house equipment for the treatment facility, one garage, one clarifier tank, one sludge holding tank, two settling tanks, dirt to back fill the facility sites, and ground restoration of the existing facilities.

Scope of Work

The scope includes:

Item	Length (ft)	Width (ft)	Diameter (ft)	Volume (yd^3)	Unit Cost	Cost
Clarifier Tank			50	300	$60.00	$18,000
Sludge Holding Tank	40	40		200	$60.00	$12,000
Garage	60	30		300	$30.00	$9,000
Settling Tank	60	50		400	$60.00	$24,000
Building (Above Grade)	160	35		1400	$30.00	$42,000
Building (Basement)	160	35		700	$60.00	$42,000
Building (Above Grade)	80	40		800	$30.00	$24,000
Building (Basement)	80	40		400	$60.00	$24,000
Settling Tank	100	60		700	$60.00	$42,000
Fine Grade & Seed					$0.20	$5,000
Asbestos testing and abatement						$25,000
Lead Testing and Abatement						$30,000
Fill Material				3000	$25.00	$75,000
Total Hauling				5200	$10.00	$52,000

Subtotal	$424,000
Engineer/Admin/Inspection	$63,600
Total	$487,600

ISDCs 30, 31, 32, 33, 34

Muldraugh Water Treatment Plant Operation

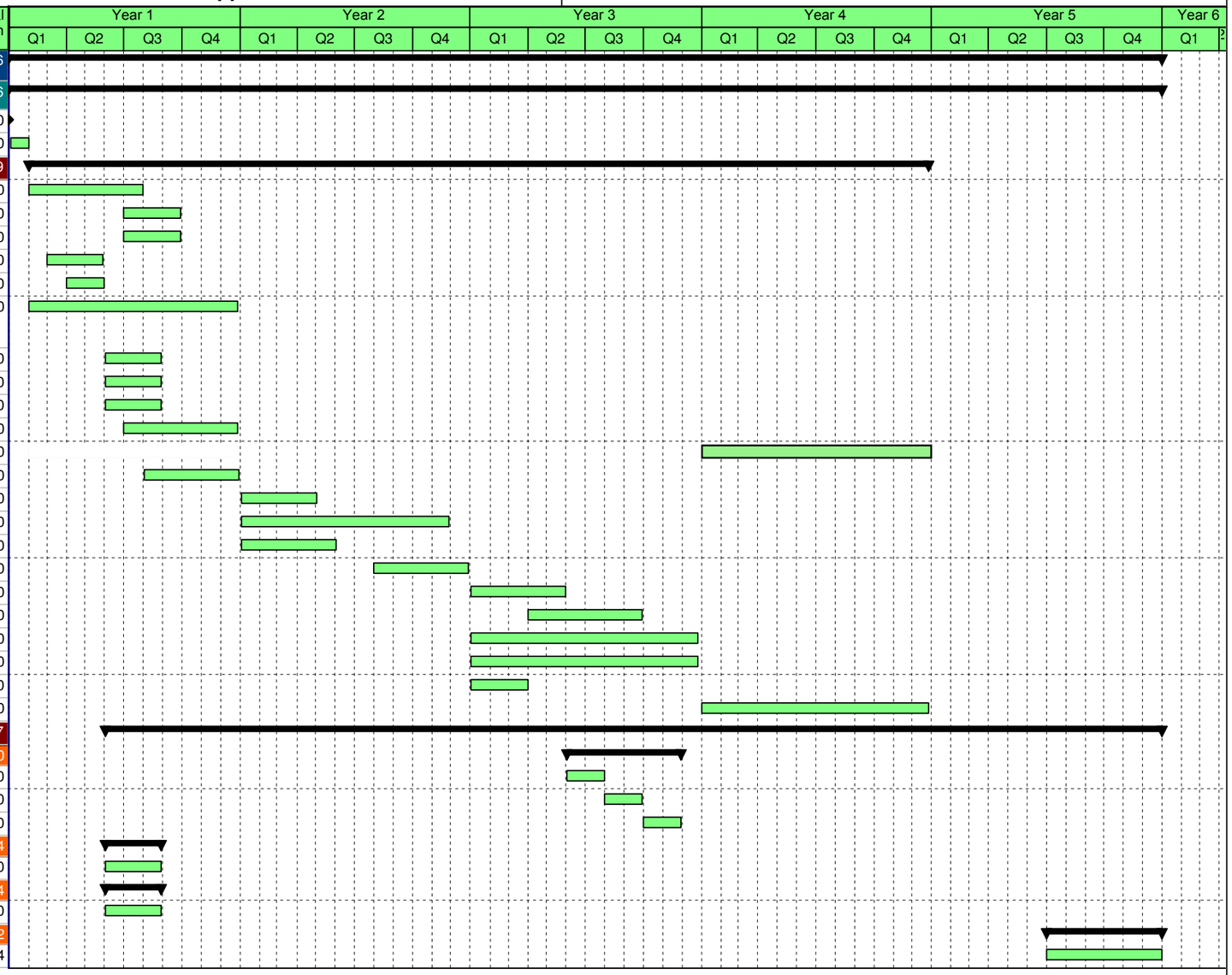
Years 1 - 5

Base - LABOR & EXPENSES - Water Treatment (Muldraugh Only) - Years 1 - 5				Year 1		Year 2-5	
				HRS	$	HRS	$
LABOR							
Labor Category	**# of Emps**	**U/M**	**Labor Rate**				
Water Treatment Operator	4	Hr	$ 47.63	8,736	416,138.92	8,736	416,138.92
Electrician/I&C	0.5	Hr	$ 46.54	1,092	50,821.35	1,092	50,821.35
Plant Mechanic	1	Hr	$ 46.54	2,184	101,642.70	2,184	101,642.70
TOTAL RAW LABOR (Raw + Fringe)	**5.5**			**12,012**	**568,602.98**	**12,012**	**568,602.98**
Fringe	**LWC Benefits Rate**		**68.5%**				
EXPENSES		**U/M**	**Unit Rate**	**QTY**	**$**	**QTY**	**$**
OPERATING EXPENSES							
Bulk Lime		Ton	$124.00	456	56,544.00	456	56,544.00
Carbon Dioxide		lb	$0.07	374,746	26,232.22	374,746	26,232.22
Alum		lb	$0.15	287,474	43,121.10	287,474	43,121.10
Fluoride		lb	$0.42	15,742	6,611.64	15,742	6,611.64
Chlorine		lb	$0.50	30,912	15,456.00	30,912	15,456.00
Telephone		Month	$25.00	12	300.00	12	300.00
Tools		Lot	$62.50	12	750.00	12	750.00
Lab Supplies		Month	$625.00	12	7,500.00	12	7,500.00
Fuel		Monthly	$76.45	12	917.40	12	917.40
Training and Tuition		Monthly	$232.15	12	2,785.80	12	2,785.80
Safety Supplies		Monthly	$135.41	12	1,624.92	12	1,624.92
Vehicle Repair and Maintenance		Monthly	$65.00	12	780.00	12	780.00
Repair Parts		Monthly	$3,208.33	12	38,500.00	12	38,500.00
CO2 Lease		Month	$37.50	12	450.00	12	450.00
Subtotal					**201,573.08**		**201,573.08**
OUTSIDE SERVICES / SUBCONTRACTS / PURCHASES							
Uniforms	5.5	Month	$220.00	12	$ 3,520.00	12	1,360.00
Contract Lab Services		Month	$4,737.75	12	$ 56,853.00	12	56,853.00
Cell Phones/Pagers		Month	$50.00	12	$ 600.00	12	600.00
Sludge Hauling Disposal		Tons	$35.00	4,318	$ 151,130.00	4,318	151,130.00
Subtotal					**212,103.00**		**209,943.00**
TOTAL EXPENSES					**413,676.08**		**411,516.08**
TOTAL LABOR AND EXPENSES					**982,279.06**		**980,119.06**

Appendix JE4-2
Current Projected Renewal and Replacement Schedule and Capital Improvement Plan

FORT KNOX Appendix JE4-2

ISDC #	Activity Name	Original Duration
Fort Knox - Appendix JE4-2		1306
		1306
	Contract Award - NTP	0
	Transition Period	30
SYSTEM COMPONENT/GOVERNMENT RECOGNIZED DEFICIENCY		1019
1	System Survey/Assessment and Re-Map the Utility Systems	180
2	Leak Detection Survey	90
3	Hydraulic Model	90
4	Master Flow Meters at the WTPs	90
5	20-inch Valves	60
6	New Raw Water from Muldraugh WTP to 16 in. Raw Water Line Between Otter Creek PS & Central WTP	330
7	Otter Creek PS	90
8	Muldraugh HLPS	90
9	Central WTP	90
10	Central WTP Clearwell	180
11	Fire Hydrants	330
13	Water Storage No. 5	150
14	Automatic Transfer Switches	120
15	Line Between Otter Creek PS & Central WTP	330
16	Water Storage Tank No. 6	150
17	Water Storage Tank No. 8	150
18	Water Storage Tank No. 7	150
19	SCADA System	180
20	Distribution Pipe & Valves - Transite	360
21	Distribution Pipe & Valves - DIP	360
22	Distribution Pipe & Valves - CIP HR Center	90
23	Distribution Pipe & Valves - CIP	360
SYSTEM COMPONENT- HCWD#1 RECOGNIZED DEFICIENCY		1197
Tank Rehabilitation		130
24	Tank No. WT001	60
25	Tank No. WT002	60
26	Tank No. WT004	60
West Point Well Platforms		64
27	Well Platforms - Rehab (13)	90
Van Voorhis Pump House		64
28	Pump House - Rehab	90
Decommission Muldraugh WTP		132
29	Decommission Muldraugh WTP	184



Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

Operational Transition Plan

The transition of the Fort Knox Water Systems from the Department of the Army to HCWD1 will take place over a 120-day period defined as the transition period. To achieve a smooth transition from Fort Knox's operations to HCWD1's, without risk of degrading the quality or reliability of the utility service, both parties must plan for the transition. This plan recommends the implementation of tasks prior to and during the transition period.

HCWD1 proposes a transition period beginning at contract award and not to exceed 120 days. The transition period will be phased to be as effective as possible. HCWD1 will relieve the Department of the Army from as many O&M responsibilities as early in the transition period as possible, while we conduct our remaining transition activities. At the end of the 120-day transition period, we will assume full ownership responsibility for the utility systems.

During the transition period, we will update our knowledge of the system and develop a foundation of utility system documents from current records. Effectively completing this activity is not only vital to the overall success of the privatization of the Water Utility Systems at Fort Knox, but ultimately to the effective and efficient O&M of the system by HCWD1. The tasks accomplished during the transition period will include:

- On-site Familiarization
- Human Resource Transition
- Administrative Transition
- Safety and Security Transition
- System Operations Transition
- System Maintenance Transition
- Ownership Transfer
- Perform Purchasing Requirements
- Prepare Work Plans for Initial Capital Upgrade Projects

By selecting the HCWD1 team, the Government gets an experienced, local supplier of water utility services with a working knowledge of Fort Knox and the issues related to startup and transition of government utility systems.

Immediately upon taking over operation and maintenance responsibilities, HCWD1 will assume all emergency calls 24/7. Inventories and transfers of equipment, tools, materials, and records are proposed to take place in the 120-day transition period. All personnel will be in place and trained prior to the end of the transition and transfer of O&M responsibilities. After that time, we will ensure the utility systems remain in continuous operation. Our proposed transition and startup schedule is shown on Exhibit JE5-1.

JE5.1 On-site Familiarization

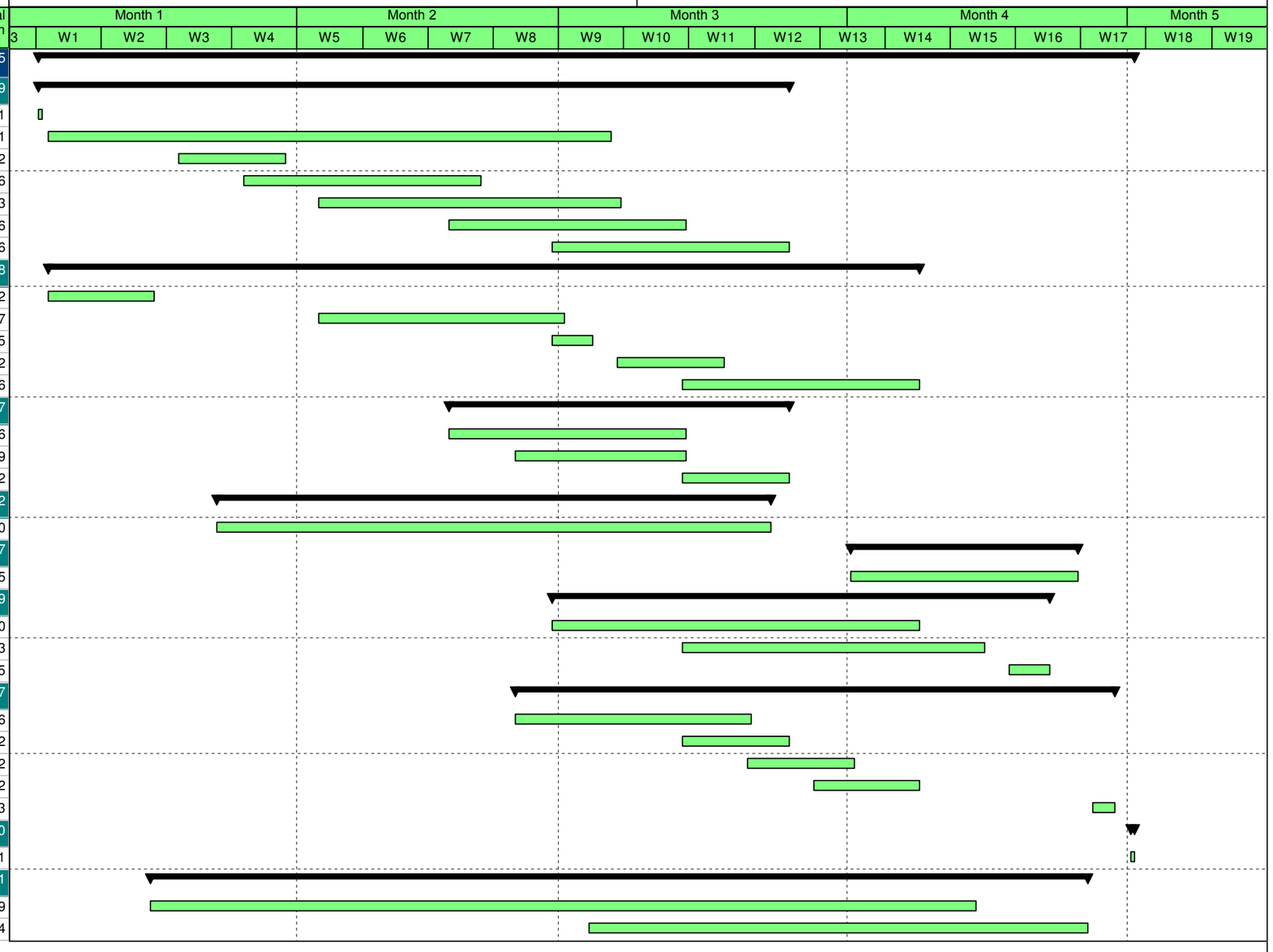
On-site familiarization would occur during the transition period. During this time, HCWD1 will update the knowledge base for long-term O&M of the water systems and develop a foundation of utility system planning documents based on that information. Effectively completing this activity is not only vital to the overall success of the privatization of the water systems at Fort Knox, but ultimately to the effective and efficient O&M of the systems by the Government or by HCWD1. HCWD1's objectives for on-site familiarization are to gather the information needed to develop a better understanding of the water utility systems at Fort Knox. The HCWD1 General Manager, Mr. Jim Bruce, will be assisted in mobilization efforts by a Startup Support Team consisting of the Operations Manager (Brett Pyles),

Exhibit I.4-1 Transition Schedule

FORT KNOX Transition Schedule

Solicitation No. SP0600-01-R-0119

Activity ID	Activity Name	Original Duration
Fort Knox Transition Schedule		85
On-Site Familiarization		59
2	First Meeting with Army	1
3	Legal Due Diligence	61
4	Contact Regulatory Agencies	12
5	Joint Inventory of facilities & fixed equipment	26
6	Joint Inventory of non-fixed	33
7	Inventory of manuals and records	26
8	Initial joint meter reading	26
HR Transition		68
10	Clearances, special access, badges	12
11	Evaluate Existing Employees for Employment	27
12	Initial meetings with all interested employees	5
13	Interviews	12
14	Conduct New Employee Training & Orientation	26
Administrative Transition		27
16	Install and startup accounting/financial system	26
17	Set up monthly billing	19
18	Set up monthly reporting (Service interruptions, meter reading, etc.)	12
Purchasing		42
20	Purchase Required Equipment and Material	60
Safety and Security		17
22	Safety Procedures and Briefing with Employees	25
Transition of System Operations		39
24	Revise/Create SOPs	40
25	Arrange for Transfer of All Files, Logs, Records	33
26	Final Joint Meter reading	5
Transition of System Maintenance		47
28	Implement Maintenance Management System	26
29	Develop Preventive Maintenance Tasks and Activities	12
30	Identify Equipment Repair and Replacement Requirements	12
31	Establish Inventory Control System	12
32	Assume Maintenance Responsibility	3
Transfer Ownership		0
34	Water	1
Prepare Workplans for Initial Capital Upgrade Projects		71
36	Prepare Workplans for Studies	89
37	Prepare Workplans for Initial Capital Upgrades	54



Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

O&M specialists, human resources, safety, computer systems, and communications professionals. The on-site familiarization will address the following issues:

- Contract Start Date
- Implementing New Connections
- Implementing New Meter Requirements
- Approach and Time Schedule for obtaining any required operating permits
- Inventory and Transfer of Utility Assets (Fixed and Non-Fixed) Manuals and Records
- Initial Meter Readings
- Authorized Personnel and Points of Contact

This section provides a description of each element of the on-site familiarization.

JE5.1.1 Contract Start Date

The transition period will begin at contract award and will end not more than 120 days later. All HCWD1 actions will be in compliance with the contract.

After contract award, HCWD1 will plan weekly meetings during the transition period with the CO or designated representative. Weekly meetings will serve as an opportunity to discuss the implementation of the transition plan. This will also serve to coordinate with Fort Knox functions, to communicate with the Department of the Army entities, and to discuss other issues that may affect the transition process.

HCWD1 plans to assume all O&M responsibilities 120 days after award of the contract. Immediately upon taking over O&M responsibilities, we will assume all emergency response tasks 24/7. Inventories and transfers of equipment, tools, materials, and records will take place within the first 4 to 5 weeks of transition. All HCWD1 personnel will be in place and trained prior to the 120-day transfer of O&M responsibility.

HCWD1's mobilization process establishes the systems and procedures for smooth operations over the life of the contract. Responsibility for O&M of the water utility systems is scheduled to transfer not later than 120 days after contract award. This will allow time for HCWD1 to:

- Mobilize
- Hire staff
- Acquire equipment and materials
- Perform any operations testing or environmental testing
- Become familiar with the systems
- Conduct inventories with the Government and initiate preliminary repairs or improvements required for operation of the systems

This will also provide the opportunity for Fort Knox to terminate or complete any existing contracts related to the water utilities.

JE5.1.2 Implementing New Connections

Attachment JA1 of the contract indicates that there are no service connections or disconnections required upon system transfer.

JE5.1.3 Implementing New Meter Requirements

HCWD1 proposes to replace the existing water meters with 50 new radio read meters. Assuming preventive maintenance is completed on schedule, the meters are estimated to last for 20 years when they will be replaced as part of the renewals and replacement schedule (See Attachment I-5 for Meter Renewal and Replacement Scope of Work.).

JE5.1.4 Approach and Time Schedule for Obtaining Any Required Operating Permits

HCWD1 will work with the KDOW to change over the water use permit from the Government to HCWD1.Within 12-days of start-up, HCWD1 will formally request a meeting with regulators to initiate necessary processes and procedures for the timely transfer of the applicable permits. Immediately after meeting with regulators, HCWD1 will provide our Army partner with a brief of the meetings, and projected schedule, to the degree feasible based on the meeting with regulators. After this meeting and initial brief, HCWD1 will provide monthly updates to the government of the milestones and overall progress towards the transfer of permits, and will update schedules accordingly.

JE5.1.5 Inventory and Transfer of Utility Assets (Fixed and Non-fixed), Manuals, and Records

To facilitate transfer of all facilities, fixed and non-fixed equipment, and specialized tools, a comprehensive joint inventory will be conducted. The joint inventory will be used to update the maps of the water facilities and to support the easement document that will support the bill of sale for the transfer of assets.

JE5.1.5.1 Inventory and Transfer of Facilities and Fixed Equipment

A joint inventory and transfer of all fixed equipment for the water systems will be completed. The inventory and transfer will include all facilities and installed equipment as identified in Attachment JA1.

JE5.1.5.2 Inventory and Transfer of Non-Fixed Equipment and Specialized Tools

If any property, such as tools, equipment, or spare parts, is transferred with the utility systems, a joint inventory will occur with Fort Knox and HCWD1 transition staff. Any material or equipment not wanted by HCWD1 will be disposed of in accordance with Army policy.

JE5.1.5.3 Transfer of Manuals and Records

HCWD1 needs to acquire all operating manuals, as-built drawings, plans and specifications, maintenance records, and other such documents for the water utility systems. This inventory and transfer should occur as early within the transition period as possible to enhance the transition of O&M. Ownership of the water systems will be transferred to HCWD1 as soon as the Bill of Sale and appropriate contract documents are completed and executed. HCWD1 and the Government will negotiate a date for ownership transfer. It is proposed that ownership transfer occur as shown on the transition schedule.

JE5.1.5.4 Joint Inventory

HCWD1 will perform a joint inventory during the transition phase. System inventory will be used to update the inventory database and assess the value of the existing facilities. The inventory will be used in the initial system studies to locate system deficiencies related to capacity, compliance, and current and projected reliability. The equipment inventory will define the exact pieces of equipment and tools to be transferred with the utility systems. Each inventory item will be listed down to the major component level (e.g., pump, motor, valve, and age). The inventory will also be used to prepare updated current utility maps for the water system. The updated inventory and maps will support the easement document that will be used to facilitate transfer of the water utility systems. The end result will be an itemized listing of assets to be attached to the Bill of Sale. This listing will include all assets that HCWD1 will own and assume responsibility for. The inventory of system equipment will be entered into the CMMS for tracking and monitoring. The types of inventory data that will be collected during the on-site familiarization phase are highlighted in Exhibit JE5-2.

Exhibit JE5-2
Types of Inventory of Data to be Collected during On-Site Familiarization

Pipes (Water)	Mainline Valves	Fire Hydrants	Pumping/ Treatment Stations	Water Storage Tanks
Research record drawings and maps	Research record drawings and maps	Research record drawings and maps	GPS X,Y	GPS X,Y at tank locations
ID #	ID #	ID #	ID #	ID #
Upstream node #	X	X	X	X
Downstream node #	Y	Y	Y	Y
Diameter	Size	Z	Z	Z
Length	Valve Box Diameter	Size	Design Head (ft)	Diameter
Material	Number of Turns	Type	Design Flow (gpm)	Initial Level (ft)
Building or facility served	Location (pavement/grass)	Location (pavement/grass)	Description	Min Level (ft)
	Closest Building	Closest Building	Digital Photo	Max Level (ft)

JE5.1.6 Initial Meter Readings

HCWD1 will assign one technician to go with the Fort Knox Meter Reader to read and locate the meters. HCWD1 will have a map prepared showing which buildings and facilities are metered and will then collect a GPS location reading on each meter. The initial meter reading will be completed within 9 weeks of contract award.

JE5.1.7 Authorized Personnel and Points of Contact

Exhibit JE5-3 shows the individuals that hold authority to sign for the final transfer of operations and property as indicated.

Exhibit JE5-3
Signature Authority

Name	Title	Authority	Limit of Authority
Jim Bruce	General Manager, HCWD1	Transfer of Operations and Property	As directed by Board

JE5.2 Human Resources Transition

HCWD1 recognizes the value of the existing Fort Knox staff's experience, knowledge, and "institutional memory" concerning water systems on the installation, and we will include them as key members of our transition team. It is our anticipation that, prior to system ownership transfer, HCWD1 will be collecting and reviewing data on staffing of the various functions (planning, engineering, O&M, budgeting and accounting, personnel, and contracting) and preparing a staffing plan for service to Fort Knox.

JE5.2.1 Employee Transition

The existing employees will be offered positions with either HCWD1 or LWC, depending on their qualifications and future work assignments. HCWD1 and LWC routinely hire qualified personnel. Our team offers excellent benefit packages and competitive wages. We also offer opportunities for advancement and assignment to other HCWD1 and LWC facilities, if desired. HCWD1 and LWC anticipate the need to fill the positions identified in Exhibit JE5-4 for this project.

Exhibit JE5-4
Anticipated Positions Needed to be Filled

Position Title	Number of Personnel Required
Distribution Operators	3 (HCWD1)
Plant Mechanics/ Electrician/ I&C	3 (LWC)
GIS Technician	1 (HCWD1)
Heavy Equipment Operator	1 (HCWD1)
Water Operators	8 (LWC)

JE5.2.2 Evaluation of Existing Employees for Employment

FAR 52.207-3 (November 1991), Right of First Refusal of Employment, will be part of our contract with the Government. This clause requires that we offer positions created as a result of this new contract to qualified Government employees who are adversely affected, prior to offering those positions to other applicants. This procedure does not guarantee employment for displaced Government employees, but it does give them priority consideration over other applicants. The key factor is qualifications.

We anticipate that development of the staffing plan will be complete by the beginning of the transition period, with job offers made and accepted prior to system transfer. Analyses of employee training needs will be completed by the third month after system transfer. HCWD1 will apply a proven process to transition the affected workforce, as follows:

- Step 1, Host introduction workshops. HCWD1 will work with Fort Knox to prepare public announcements. This announcement package will communicate important information about the project and the transition process, as well as important information about HCWD1 and LWC. Along with this, each employee will receive a schedule for informational workshops. These workshops, for employees and spouses, will provide an orientation to HCWD1's and LWC's culture and to compensation and benefits programs.
- Step 2, Interview and assess potential associates. HCWD1 will send out a processing

schedule to every potential new associate. The first item on this schedule will be employee interviews. In these interviews, we will discuss each employee's personal history, job experience, and specific ideas to improve the performance of the project. This is our first opportunity to show incoming employees that we listen to their concerns. This interactive process will allow individuals to ask any specific questions that they may have regarding HCWD1 and LWC, their jobs, and compensation potential. Our goal is to eliminate employees' uncertainty about their futures and establish a positive foundation for their careers with HCWD1 and LWC.

- Step 3, Make offers of employment. Each qualifying candidate selected will receive a specific job offer clearly detailing the appropriate job title, pay rate, exempt or nonexempt status, and a complete position description. HCWD1's and LWC's human resources and benefits specialists will provide benefits enrollment packages and assist associates in completing the enrollment.
- Step 4, Implement contract startup and orientation. During the startup period of the contract, new associates will work closely with their supervisors and the Transition Team members. They will be oriented to HCWD1 operating procedures and new expectations of the positions. Capitalizing on their experience and knowledge, we will develop a team to review procedures and help revise, rewrite, and implement best-of-practice site-specific standard operating procedure formats to be used in their work areas.
- Step 5, Initiate project training program. HCWD1 and LWC recognize and build upon the value of continuous learning and development. The project training plan will be developed and implemented, with an initial target for every new associate to receive approximately 32 hours of training within the first year and every year thereafter.
- Step 6, Implement ongoing training and development. HCWD1 training includes leadership skills, health and safety, operations / technical and administrative procedures, quality management, certification, and other courses designed to improve associate skills on an ongoing basis.

JE5.2.3 Integration of Employees

HCWD1 employees will integrate into the procedures and operating environment of Fort Knox as expeditiously as possible. In conjunction with the hiring process, HCWD1 will obtain all necessary security passes and identification required by Fort Knox. HCWD1 will develop a roster of personnel and emergency contact numbers, and provide this to the COTR and the Fort Knox DPW emergency desk.

JE5.3 Administrative Transition

To complete the transition of administrative functions, HCWD1 will set up and install the project accounting and financial system, set up the monthly billing, and establish the monthly reporting systems required by the contract. HCWD1 will meet with the COR and other stakeholders as deemed appropriate by the Government, to deploy the communication procedures for client service. Procedures for requesting service (work orders), excavation permitting, and HCWD1 contact information will be disseminated. Written outlines of each of these procedures will be made available to the stakeholders.

JE5.4 Purchasing

The necessary tools, equipment, and vehicles will be obtained, or HCWD1's existing equipment will be utilized during the transition period. HCWD1 will establish and use purchasing agreements with local vendors. HCWD1 also will use existing contracts to maximize quantity discounts when possible.

JE5.5 Safety and Security

Integrating the Army facilities into existing HCWD1 safety and security practices and procedures will be a critical element of transition. The site visits conducted in August 2008 enabled the HCWD1 to formulate initial recommendations on safety and security upgrades for the Army facilities. Ground-truthing of these observations and development of safety plans still must take place during the transition period. Security must also be addressed during the transition period. Activities in the transition process related to safety and security include:

- Conduct safety inspection/evaluation and develop priority list of changes. In conjunction with on-site familiarization activities, HCWD1 staff will tour the acquired facilities and note specific safety issues to be corrected or addressed through operating procedures. HCWD1 will prepare a prioritized list of recommended safety changes and upgrades and review the list with the Army. For any capital upgrades needed to respond to safety issues that were not identified during the initial site visits, a determination will be made as to whether to add these projects to the Capital Upgrades Plan.
- Review safety procedures and hold training sessions. Safety procedures specific to the Army facilities will be developed as needed and integrated into existing HCWD1 safety plans. Staff will be trained on these procedures in sessions held at each installation.

All required safety and emergency response plans and procedures will be developed upon contract award. HCWD1 will ensure all personnel have appropriate safety and health training upon employment. A survey of all utility system facilities will be conducted early in the transition phase to identify any deficiencies.

JE5.6 Transfer of System Operations

A period of joint operation with Fort Knox personnel is desired for the water system during the transition period. HCWD1 will assume full responsibility for training employees and this is built in to the transition schedule. As part of the operational transition, HCWD1 will develop or update SOPs specific to the Fort Knox water systems. These SOPs will be a major component of the employee training program. HCWD1 will review and validate all existing data, and develop laboratory procedures and schedules. During transition, HCWD1 will develop a comprehensive Process Control Strategy and a Water Sampling and Analysis Plan. All employees will be trained to become familiar with these plans. Process control meetings will be held with employees initially on a bi-monthly basis and monthly afterward. These meetings will allow for the open discussion of current process control strategies, and allow for a high level of communication between all employees. This communication strategy will be a key element in the provision of the highest quality water and service to our Fort Knox customers.

JE5.7 Transfer of System Maintenance

Transfer of system maintenance activities will coincide with the startup of the CMMS. Job plans for maintenance activities will be developed and added to the CMMS, and work orders will be used to document maintenance activities. PM activities will be developed, and equipment repair and replacement requirements will be documented. Inventory controls will be developed and used to track spare parts and critical equipment replacement parts for high-risk water system utility components.

JE5.8 Transfer of Ownership

Transfer of ownership will occur at the end of the transition period, which is 120 days after contract award. During the transition period, HCWD1 will work closely with the COR, the Fort Knox Contracting Office, and other associated Government entities to facilitate the development, review, and execution of the necessary instruments to ensure a smooth and timely transfer of ownership at the end of the transition period.

JE5.9 Prepare Work Plans for Initial Capital Upgrade Projects

Work plans will be developed for the initial capital upgrade projects, including the system survey assessment project, the leak detection survey, and the hydraulic modeling project. Since many of the initial capital upgrade projects need to be completed in the first year of performance, the work plans will be used to secure the necessary resources to begin the capital upgrade projects immediately after the transition period.

JE5.10 Tasks to be Completed by the Government Prior to Transition

In order to make this transition as smooth and effective as possible, we have assumed that Fort Knox will perform the following tasks prior to the transition period:

- Complete actions required related to adversely affected staff (RIF notices).
- Review Program Objectives Manual to determine availability of funds for transition process, contract management costs, and the new utility contract costs.
- Assign COTR at Fort Knox as HCWD1's primary contact during transition.
- Initiate modification or cancellation of existing permits and ensure transfer of existing permits.
- Modify any host-tenant agreements.
- Review real estate documents and identify explosive-safety quantity zones, airfield clearance zones, or other restrictions affecting utility operations.
- Collect relevant drawings, documents, and manuals for transfer.
- Inventory and identify Government items to be transferred.
- Identify Government equipment to be removed.
- Identify Fort Knox personnel for points of contact.
- Ensure all existing contracts for the utility systems are terminated upon start of performance.
- Ensure all recurring service contracts for the utility systems terminate upon start of performance.
- Identify whether temporary transition office space will be available for HCWD1 personnel.

SMALL BUSINESS SUBCONTRACTING PLAN

Offeror name and address:	Date: 10/01/08; revised 06/01/11
Hardin County Water District No. 1 1400 Rogersville Rd. Radcliff, KY 40160	Type of plan (check one): If Individual, supply solicitation number; if Commercial, supply effective period. ☒ Individual SP0600-08-R-0803 (Solicitation number) ☐ Commercial _____ (Effective begin date) _____ (Effective end date)

The following, along with any attachments, is hereby submitted as a Subcontracting Plan to satisfy the applicable requirements of Public Law 95-507, Public Law 99-661, and paragraph (d) of FAR Clause 52.219-9, Small Business Subcontracting Plan.

TERMS AND DEFINITIONS

The following terms and acronyms are used throughout this form:

- **Commercial Plan** – a subcontracting plan (including goals) that covers the offeror's fiscal year and that applies to the entire production of commercial items sold by either the company or a portion thereof (e.g. division, plant, or production line).
- **Individual Plan** – a subcontracting plan that covers the entire contract period.
- **SB –** Small Business concern
- **VOSB** – Veteran Owned Small Business concern
- **SD-VOSB** – Service-Disabled Veteran Owned Small Business concern
- **HUBZone** – Historically Underutilized Business Zone
- **SDB** – Small Disadvantaged Business concern
- **WOSB** – Women-Owned Small Business concern
- **Direct and Indirect Cost** – Overhead activities may be used to supplement direct charge activities. Contractors are encouraged to use indirect costs to meet goals when direct costs subcontracting opportunities are restrictive toward meeting established goals.

PART 1 – SUBCONTRACTING GOALS

A. Total dollars planned to be subcontracted: $ 90,000,000

		Dollars	Percentage
B. Dollars and percentages planned to be subcontracted to large business concerns.	LB	$ 67,500,000	75 %
	SB	$ 22,500,000	25 %
C. Dollars and percentages planned to be subcontracted to SB concerns. Percentages should be expressed as a percentage of the total dollars planned to be subcontracted. The offeror shall include all subcontracts that contribute to contract performance.	VOSB	$ 6,300,000	7 %
	SD-VOSB	$ 2,700,000	3 %
	HUBZone	$ 4,500,000	5 %
	SDB	$ 4,500,000	5 %
	WOSB	$ 4,500,000	5 %

D. Description of principal types of supplies and services to be subcontracted to each of the SB concerns:

SB	General contracting, engineering, geotechnical, GIS/surveying, maintenance
VOSB	General contracting, engineering, geotechnical, GIS/surveying, electrical, plumbing, office supplies
SD-VOSB	General contracting, GIS/surveying
HUBZone	General contracting, engineering, electrical, plumbing, janitorial
SDB	General contracting, engineering, GIS/surveying, electrical, plumbing
WOSB	General contracting, engineering, office supplies, general supplies/equipment, laboratory, trucking,

SMALL BUSINESS SUBCONTRACTING PLAN

E. Describe method used to develop these goals (e.g. based on procurement history, available resources, etc.):

HCWD1 currently has a Small Business Subcontracting Plan for the privatization of Ft. Knox Wastewater and Stormwater Systems. This plan was submitted in July 2005 and meets the requirements and regulations of the Ft. Knox Army Contracting Agency and FAR Subpart 19.7. This plan was updated on Sept. 30, 2008 to include:

Evaluation of resources needed and appropriate areas for SB subcontracting
Utilize database of existing vendors
Attend/host networking events
Prepare targeted mailings to SBs
Use SBA's CCR database of SBs in local area
These methods were part of the SB subcontracting pool for this proposal.

F. Were indirect costs included in establishing these goals? ☐ Yes ☒ No

If yes, describe the method used to determine proportionate share of indirect costs to be incurred with each of the SB concerns:		
	SB	
	VOSB	
	SD-VOSB	
	HUBZone	
	SDB	
	WOSB	

PART 2 – SUBCONTRACTING PROCEDURES

A. Individual who will administer the offeror's subcontracting program

(Reference FAR Part 52.219-9, Small Business Subcontracting Plan, (Para 9-11) for specific duties as they relate to the firm's subcontracting program and include additional duties the company has designated).

Name:	Patty Vanvooren		
Title:	HDR/Quest Administrative Manager		
E-Mail	patty.vanvooren@hdrinc.com	Phone:	859-223-3755

Description of Duties:

Prepare and ensure compliance with small business subcontracting plans for Fort Knox utility privatization contracts.

B. Indicate methods used to identify potential sources for solicitation purposes:

☒ Existing company source lists
☒ Central Contractor Registration (CCR) Dynamic Small Business Search
☒ National Minority Purchasing Council Vendor Information Service
☒ Trade Associations
☒ Federal government development centers such as DoD's Procurement Technical Assistance Center (PTAC), SBA's Small Business Development Center (SBDC) and Department of Commerce's Minority Business Development Center (MBDC)
☐ Other: _____

SMALL BUSINESS SUBCONTRACTING PLAN

C: Describe methods used to assure that SB, VOSB, SD-VOSB, HUBZone, SDB and WOSB concerns are provided an equitable opportunity to compete for subcontracts.

Attain SB goals in all categories
Recruit SB contractors
Account for SB utilization with SF294/295 reporting
Create opportunities for outreach to SBs and organizations and Associations that support SBs
Structure bid packages to permit SB participation
Include SBs on all solicitations for services they are capable of providing
Utilize existing vendor/subcontracting database
Monitor records to support award data and solicitations
Provide technical assistance to SBs

PART 3 – SUBCONTRACTING PLAN MANAGEMENT

The offeror certifies, by signature on this plan, that the following procedures regarding management of this subcontracting plan will be enacted and maintained. The contractor agrees to provide the following:

(1) Assist small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation by such concerns. Where the Contractor's lists of potential small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business subcontractors are excessively long, reasonable effort shall be made to give all such small business concerns an opportunity to compete over a period of time.

(2) Provide adequate and timely consideration of the potentialities of small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns in all "make-or-buy" decisions.

(3) Counsel and discuss subcontracting opportunities with representatives of small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business firms.

(5) Provide notice to subcontractors concerning penalties and remedies for misrepresentations of business status as small, veteran-owned small business, HUBZone small, small disadvantaged or women-owned small business for the purpose of obtaining a subcontract that is to be included as part or all of a goal contained in the Contractor's subcontracting plan.

(6) Assurances that the offeror will include the clause of this contract entitled "Utilization of Small Business Concerns" in all subcontracts that offer further subcontracting opportunities, and that the offeror will require all subcontractors (except small business concerns) that receive subcontracts in excess of $550,000 ($1,000,000 for construction of any public facility with further subcontracting possibilities) to adopt a plan similar to the plan that complies with the requirements of this clause.

(7) Assurances that the offeror will --

(i) Cooperate in any studies or surveys as may be required;

(ii) Submit periodic reports so that the Government can determine the extent of compliance by the offeror with the subcontracting plan;

SMALL BUSINESS SUBCONTRACTING PLAN

(iii) Submit the Individual Subcontracting Report (ISR) and/or the Summary Subcontract Report (SSR), in accordance with the paragraph (l) of this clause using the Electronic Subcontracting Reporting System (eSRS) at http://esrs.gov. The reports shall provide information on subcontract awards to small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, women-owned small business concerns, and Historically Black Colleges and Universities and Minority Institutions. Reporting shall be in accordance with this clause, or as provided in agency regulations;

(iv) Ensure that its subcontractors with subcontracting plans agree to submit the ISR and/or the SSR using eSRS;

(8) A description of the types of records that will be maintained concerning procedures that have been adopted to comply with the requirements and goals in the plan, including establishing source lists; and a description of the offeror's efforts to locate small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns and award subcontracts to them. The records shall include at least the following (on a plant-wide or company-wide basis, unless otherwise indicated):

(i) Source lists (*e.g.*, CCR), guides, and other data that identify small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns.

(ii) Organizations contacted in an attempt to locate sources that are small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, or women-owned small business concerns.

(iii) Records on each subcontract solicitation resulting in an award of more than $100,000, indicating

(A) Whether small business concerns were solicited and if not, why not;

(B) Whether veteran-owned small business concerns were solicited and, if not, why not;

(C) Whether service-disabled veteran-owned small business concerns were solicited and, if not, why not;

(D) Whether HUBZone small business concerns were solicited and, if not, why not;

(E) Whether small disadvantaged business concerns were solicited and if not, why not;

(F) Whether women-owned small business concerns were solicited and if not, why not; and

(G) If applicable, the reason award was not made to a small business concern.

(iv) Records of any outreach efforts to contact --

(A) Trade associations;

(B) Business development organizations;

(C) Conferences and trade fairs to locate small, HUBZone small, small disadvantaged, and women-owned small business sources; and

(D) Veterans service organizations.

(v) Records of internal guidance and encouragement provided to buyers through --

(A) Workshops, seminars, training, etc., and

(B) Monitoring performance to evaluate compliance with the program's requirements.

(vi) On a contract-by-contract basis, records to support award data submitted by the offeror to the Government, including the name, address, and business size of each subcontractor. Contractors having commercial plans need not comply with this requirement.

PART 4 – AGREEMENT AND APPROVAL SIGNATURES

A. Offeror's agreement

Offeror's signature	Typed name and title	Date
James Bruce	James Bruce, General Manager, HCWD1	01-JUN-2011

B. Reviewed By:

Contract Specialist 's signature	Typed name and title	Date
Taina M. Rivera	Taina M. Rivera, Contract Specialist	27-June-2011

C. Contracting Officer's determination of acceptance

Contracting Officer's signature	Typed name and title	Date
[signature]	BRIAN J. KOESSEL, CONTRACTING OFFICER	6/28/11

D. Division Chief's approval

Is SDB goal less than 5%? ☐ Yes ☑ No

If yes, a Division Chief's signature, one level above Contracting Officer is required:

Deputy's/Director's signature	Typed name and title	Date

E. Small Business Office ☒ Concur ☐ Non-concur

Small Business Specialist's signature	Typed name and title	Date
[signature]	Carrell Armstrong, Small Business Specialist	6/29/11

Small Business Special's Rationale:

Please have the CO sign block F and return a copy to the Small Business office. Only needs to send a copy of this page.

F. Contracting Officer's approval

Contracting Officer's signature	Typed name and title	Date
[signature]	BRIAN KOESSEL, CONTRACTING OFFICER	7/8/11

FOR Fort Knox, Kentucky

P.S.C. Ky. No. 1

Original Sheet No. 17

Hardin County Water District No. 1

CLASSIFICATION OF SERVICE:

RATES, SURCHARGES AND MONTHLY CHARGES

Rate Schedule FKW—Water Service within Fort Knox, Kentucky[1]

Terms and conditions for water utility service to Fort Knox are as provided in the service agreement between the U.S. Army and Hardin County Water HCWD1 No. 1.

The following rates are hereby prescribed for water supply and distribution services provided within Fort Knox, Kentucky military reservation:

Monthly Service Charge	$246,172 per month
Initial System Deficiency Correction Surcharge	$473,831 per month for 60 months*
Transition Surcharge	$592,518 per month, for one month only*
Purchase Price Recovery Surcharge	$ 85,968 per month for 120 Months
Credit as Payment of Purchase Price (reduces net charge)	$ 85,968 per month for 120 Months

* From the effective date of this tariff

DATE OF ISSUE: Draft—Under Review

DATE EFFECTIVE: Draft— Under Review

ISSUED BY: /s/ Jim Bruce

TITLE: General Manager