

1. General Duties of LWC:

- a. LWC shall operate and maintain the systems so as to provide reliable, cost-effective, and compliant service ("work") over the term of the contract as described herein. The work to be provided by LWC is divided into various categories and sections which are further defined and described in this section.
- b. LWC shall establish, maintain and adhere to a Quality Management Plan as described in APPENDIX G.
- c. The DISTRICT reserves the right to monitor and evaluate the progress and performance of LWC to assure that the terms of this Agreement are being met in accordance with applicable water quality monitoring and evaluating criteria and standards. LWC shall cooperate with the DISTRICT relating to such monitoring and evaluation.
- d. LWC shall develop and/or supply and utilize computerized programs for process control, maintenance, and laboratory Quality Assurance/Quality Control. The maintenance program will be capable of exporting information to the DISTRICT's GIS Mapping system. ????
- e. LWC shall provide sufficient financial information to the DISTRICT for the purposes of preparing accounting reports which classify costs into categories or accounts as required by the Government, and the Kentucky Public Service Commission. In lieu of duplicate reports, LWC may produce for the DISTRICT a digital computer file with its costs allocated to its own account numbers, into a spreadsheet or database program, with sufficient other explanation or use for each expense for the DISTRICT to further categorize the expenses into other required Uniform System Chart of Accounts.
- f. LWC will provide for the collection and hauling of solid waste, to an approved disposal site(s). It shall be the sole right and responsibility of the DISTRICT to designate, approve or select disposal sites to be used by LWC for the DISTRICT's waste materials. All Waste and/or byproduct treated and/or generated during LWC's performance of services is and shall remain the sole and exclusive property of the DISTRICT. All manifests or other documentation required for disposal of Waste shall be signed by or in the name of the DISTRICT or its authorized representative.
- g. Upon request of the DISTRICT, LWC will provide a listing of recommended capital improvements required for the the Central WTP, Muldraugh WTP and associated source water facilities. LWC will be relieved of its responsibility to perform if the recommendations are not implemented; provided however, that the capital improvement necessary, which are not optional to the DISTRICT, for improvements related to: (1) meet Kentucky Division of Water (DOW) and Federal water quality requirements, to include but not limited to the National Drinking Water Regulations, as set forth by the US EPA; (2) meet federal, state or local laws, rules or regulations for the safety of persons in or about the Project; or

(3) meet ADA (Americans with Disabilities Act) requirements. If the project(s) are approved, the DISTRICT will make arrangements for the design and construction of said improvements.

- h. LWC shall enter into a joint use agreement with the installation's telephone company, cable television company, and other service providers as described in APPENDIX G.
- i. Prior to operating two-way, portable, or land mobile devices on the installation LWC shall obtain approval of the Ft. Knox Directorate of Information Management (DOIM) by requesting an available clear frequency as described in APPENDIX G.
- j. LWC will be permitted to locate offices, maintenance shops, and materials storage/staging areas on Fort Knox, as approved by the DISTRICT and will be responsible for acquiring all utilities, janitorial services, building maintenance, and ground maintenance as described in APPENDIX G.
- k. LWC shall be responsible for the disposition of LWC removed or salvaged materials as described in APPENDIX G.
- l. LWC shall provide the vehicles required to perform the work. Those vehicles shall be readily identifiable as to include both the DISTRICT and LWC on the graphics, signs or logos on each vehicle.
- m. LWC shall respond to installation emergency and crisis situations as described in APPENDIX G.
- n. LWC shall comply with all applicable environmental laws and regulations as described in APPENDIX G.
- o. LWC shall comply with the Installation procedures and standards for work in and around environmentally sensitive or contaminated property as described in APPENDIX G.
- p. LWC shall adhere to the Inventory and Transfer Requirements as described APPENDIX G.
- q. In the event of Government Mobilization or Other Contingencies LWC shall promptly take those measures requested by the DISTRICT to meet any new demands placed upon the DISTRICT as described in APPENDIX G, Paragraph XIII. Extra work effort of LWC under these circumstances may entitle LWC to equitable adjustment under the Changes Clause FAR 52.243-1 Alt 1, Changes - Fixed Price.
- r. LWC shall at its expense comply with all applicable laws on occupational safety and health, the handling and storage of hazardous materials included in its scope of work and the proper handling and disposal of hazardous wastes and hazardous

substances generated by LWC during its activities as described in H.7 of APPENDIX G.

- s. Prior to operating two-way, portable, land mobile devices, telemetry or any electronic devices on the installation LWC shall obtain approval of DOIM by requesting an available clear frequency as described in APPENDIX G.
- t. LWC Duties - Personnel related work and scope:
 - i. LWC will offer first right of refusal of employment to those qualified GOVERNMENT workers displaced by the Government's award of the Contract to the DISTRICT provided full time positions are available and subject to such all such individuals taking and successfully passing a drug screen test to be administered by LWC.
 - ii. LWC will provide said employees with a competitive wage and fringe benefits package that meet or exceed the minimum requirements of the Service Contract Act and associated Wage Determination 94-2224 Rev (13) Area: KY, Louisville set forth in APPENDIX I.???????
 - iii. LWC will continue to provide employment to all personnel who accept employment with LWC, so long as their positions are necessary to LWC's performance under this Agreement, and they continue to perform their duties in a satisfactory manner. Where applicable, all such personnel must hold current licenses, certificates or authority to perform the work required of their respective positions.
 - iv. LWC will implement and maintain an employee safety program in compliance with applicable state and Federal laws, rules and regulations and make recommendations to the DISTRICT regarding the need, if any, for the DISTRICT to rehabilitate, expand or modify the Project to comply with governmental safety regulations applicable to LWC's operations hereunder and federal regulations promulgated pursuant to ADA.
 - v. LWC shall not employ any person for work on this Agreement if such person is identified as a potential threat to the health, safety, security, general well being, or operational mission of the installation or population as described in C.5.2 of APPENDIX G.
 - vi. LWC's personnel shall present a neat appearance and be readily recognized as LWC employees and shall ensure each employee obtains from Security Forces an ID card that shall include at a minimum the employee's name, photograph and LWC's name as described in C.5.2.1 of APPENDIX G. At the DISTRICT's discretion, uniforms worn by LWC employees shall include the DISTRICT's name or logo.
 - vii. LWC shall ensure that employees meet all applicable federal, state, and local certification, licensing, and health and safety requirements to

perform all assigned tasks and functions as described in C.5.2.2 of APPENDIX G.

- viii. LWC shall provide sufficient information to obtain complete and favorable National Agency Check (NAC) investigations for its employees for unescorted entrance into restricted areas on the base as described in C.5.2.3 of APPENDIX G.
 - ix. LWC shall apply for personnel security clearances required for performance after the contract is awarded as described in C.5.2.4 of APPENDIX G.
 - x. LWC shall maintain a current list of employees as described in C.5.2.5 of APPENDIX G.
 - xi. Within a reasonable time after start-up, if a majority of existing staff do not transfer employment, LWC will staff the Project with employees who have met appropriate licensing and certification requirements of the Commonwealth of Kentucky.
 - xii. LWC shall provide ongoing training and education for appropriate personnel in all necessary areas of modern water treatment, operations, maintenance, safety, and supervisory skills.
 - xiii. LWC shall operate, maintain and/or monitor the Project on a 24 hour per day, 7 days per week schedule. This initially means staffing the water plant(s) 24 hour per day 7 days per week. The DISTRICT and LWC agree to review the around the clock staffing requirement periodically throughout the term of this Agreement.
- u. LWC's Duties - Water Treatment Plant(s) and Source Water Facilities Maintenance related scope and work;
- i. LWC shall be responsible for the maintenance of the Central WTP, Muldraugh WTP and all source water facilities and appurtenances as described in APPENDIX B.
 - ii. LWC shall be responsible for maintaining all manufacturers' warranties on new equipment purchased by the DISTRICT and assist the DISTRICT in enforcing existing equipment warranties and guarantees.
 - iii. LWC shall provide the DISTRICT with full documentation that preventive maintenance is being performed on the DISTRICT owned facilities and equipment, in accordance with manufacturer's recommendations, at intervals and in sufficient detail as may be determined by the DISTRICT. Such a maintenance program must include documentation of corrective and preventive maintenance and a spare parts inventory.

- iv. LWC may modify the process and/or facilities to achieve the objectives of this Agreement and charge the Costs to the Maintenance and Repair Limit; provided, however, no modification shall be without the DISTRICT's prior written approval, if the complete modification Cost shall be in excess of Five Thousand Dollars (\$5,000.00).
- v. In any emergency affecting the safety of persons or property, LWC may act without written amendment or change order, at LWC's discretion, to prevent threatened damage, injury or loss. LWC shall be compensated by the DISTRICT for any such emergency work notwithstanding the lack of a written amendment. Such compensation shall include LWC's Costs for the emergency work plus a reasonable mark-up for overhead and profit.
- vi. Subject to the availability of funds within the Maintenance and Repair Limit, LWC will perform all Maintenance and Repairs for the Project, and submit a monthly accounting to the DISTRICT, along with a detailed invoice, if Maintenance and Repair expenditures for the Project exceed the Maintenance and Repair Limit specified in Section 6, "Fees and Compensation."
 - (1) LWC shall provide, by the 5th day of the following month, ALL Maintenance and Repairs items in excess of \$1,000 for the previous month's expenditures.
- vii. LWC shall assist the DISTRICT in preparing an Annual Renewals and Replacement plan which shall be submitted to the Government no later than February 1 of the first full year following the Contract award. Thereafter the plan shall be submitted no later than February 1 of each year.
- viii. LWC will assist the DISTRICT in the preparation of the DISTRICT's annual budget, to include estimated operating cost, anticipated capital upgrades and other pertinent information as requested.
- v. LWC's Duties - Water Treatment Plant and Source Water Facilities related work and scope;
 - i. LWC shall be liable for those fines or civil penalties imposed by a regulatory or enforcement agency for violations occurring on or after _____, 2011, of the water quality requirements provided for in APPENDIX C-1 that are a result of LWC's negligence. The DISTRICT will assist LWC to contest any such fines in administrative proceedings and/or in court prior to any payment by LWC. LWC shall pay the cost of any such contest.
 - ii. Within the design capacity and capabilities of the Water Treatment Plant(s) ("Plant") described in APPENDIX B, LWC will manage, operate and maintain the Plant so that all requirements imposed on the DISTRICT

by the DISTRICT's agreement with the US Government and Kentucky DOW and Federal EPA regulations are met.

- iii. LWC shall maintain the present industrial waste sampling and laboratory analysis program, as described in APPENDIX D. Results of all industrial sampling and testing shall be reported to the DISTRICT in a timely manner.
- iv. As required by law, permit or court order and government contract, LWC will prepare Plant performance reports and submit them to the DISTRICT for signature and transmittal to appropriate authorities.
- v. LWC will provide laboratory testing and sampling for water treatment, distribution and source water presently required by the Safe Drinking Water Act, and/or any federal, state or local rules and regulations, statutes or ordinances, permit or license requirements or judicial and regulatory orders and decrees and shall keep results of said testing and reports readily available and on-site at the Plant for inspection, review and copying by the DISTRICT whenever requested.
- vi. LWC shall staff and operate and maintain the bacteriological laboratory, in accordance with the Ky DOW regulations and shall staff with properly certified personnel and shall be responsible for performing bacteriological absence/presence test as needed, on a 24 hour, 7 days a week basis, for distribution main breaks. ???????
- vii. LWC will be responsible for reading, maintaining, and calibrating all meters on the utility systems as required in C.3.3 of APPENDIX G.
- viii. LWC shall be responsible for receiving after hours calls and notifying DISTRICT personnel as needed. LWC staff shall maintain a written electronic log of all calls received to include the time and date of the call, the name of the caller, a description of the reason for the call, the DISTRICT personnel notified, time of notification and the results of any actions taken, if applicable.
- w. LWC's Duties - Water Distribution System related scope and work;
 - i. LWC shall assist the DISTRICT as needed. LWC shall be entitled to additional compensation to include actual costs plus a reasonable amount for administrative overhead. ????????
- x. LWC Duties - Transition Service related scope and work;
 - i. LWC shall assist the DISTRICT in the coordination of DISTRICT sub contractors working on the Water Utility Systems.
 - ii. LWC shall assist the DISTRICT in the transition from GOVERNMENT to

DISTRICT ownership including all meetings, tasks, measurements, documentation and certifications required.

- iii. Fifteen (15) days prior to LWC beginning service under this Agreement, LWC shall provide a physical inventory of the DISTRICT's equipment in use at the Project and a general statement as to the condition of each vehicle or piece of equipment.
- iv. LWC shall provide the DISTRICT with a physical inventory of chemicals and other consumables on hand when LWC begins services under this Agreement.
- v. LWC shall provide the DISTRICT with the same quantity of chemicals or equivalent upon termination of this Agreement. LWC shall propose an Operational Transition Plan as described in C.13 of APPENDIX G.
- vi. LWC shall provide periodic reports to the DISTRICT for their use and for dissemination to the Government. These reports will include a monthly operating report that includes State required reports, maintenance/rehabilitation/replacement effort undertaken and outages.
- vii. LWC will also assist the DISTRICT by providing information required for the annual Public Service Commission report due by February 1 each year and the Upgrades, Renewals and Replacement Plan required by the Government February 1 of each year.

- y. LWC Duties - Initial Capital Upgrades related scope and work;
 - i. LWC shall assist the DISTRICT in the coordination of Initial Capital Upgrades .
 - ii. LWC shall assist the DISTRICT with installing radio telemetry / SCADA system at the Plant and largest lift stations.
 - iii. LWC shall assist the DISTRICT with installing the instrumentation and remote controls at the Plant.
 - iv. LWC shall make minor repairs to the facilities and equipment on a one-time basis not to exceed Twenty Five Thousand Dollars (\$25,000.00).

- z. LWC Duties - Customer Service related scope and work;
 - i. Visits may be made at a reasonable time by the DISTRICT's employees so designated by the DISTRICT's representative. Keys for the Project shall be provided to the DISTRICT by LWC for such visits. All visitors to the Project shall comply with LWC's operating and safety procedures.
 - ii. Access to the installation and utility systems is granted to LWC by the DISTRICT.
 - iii. LWC shall comply with response to Service Interruptions and Contingencies as described in C.7 of APPENDIX G. This requires a telephone response to any Emergency where power is off or sewerage is being spilled in 15 minutes and a physical presence at the location of the problem within one hour to the notification.
 - iv. LWC shall provide a repair response notification procedure to the DISTRICT as described in C.8 of APPENDIX G.
 - v. 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 as described in C.9.1 of APPENDIX G.
 - vi. LWC shall record all service request calls as described in C.9.2 of APPENDIX G.
 - vii. LWC shall coordinate connections or disconnections as described in C.9.3 of APPENDIX G.
 - viii. LWC will be required to obtain excavation permits as described in C.9.5 of APPENDIX G.
 - ix. LWC shall be responsible for locating underground utility system

components as described in C.9.6 of APPENDIX G.

- x. LWC shall be available for meetings with the GOVERNMENT and DISTRICT as described in C.9.7 of APPENDIX G.
- aa. LWC Duties - Capital Upgrades, Renewals and Replacements related scope and work;
- i. LWC shall assist the DISTRICT in coordinating DISTRICT subcontractors in carrying out capital upgrades and renewals and replacements.
 - ii. LWC shall participate with the DISTRICT in preparing a Capital Upgrades and Renewals and Replacement report as described in C.11.2 of APPENDIX G.

TO: Hardin County Water District No. 1 (HCWD1)
Mr. Jim Bruce, General Manager
1400 Rogersville Road
Radcliff, KY 40160
Telephone: (270) 351-3222
Email: jbruce@hcwd.com

REQUEST DATE: May 13, 2011

RESPONSE DATE: June 3, 2011 (Returned May 24, 2011 – By Jim Bruce, HCWD1)

RFP: SP0600-08-R-0803 – Fort Knox, Kentucky

SUBJECT: Negotiation Message #4 – 05/13/2011

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General

1. The attached message is provided for Hardin County Water District No. 1 (HCWD1) to review and to provide responses to the issues identified by the Government. The Government intends to conduct telephonic and face-to-face discussions with HCWD1 as frequently as necessary in order to resolve any outstanding issues with HCWD1's proposal.
2. Note that statements indicating that information provided by the Offeror has been "accepted," is "satisfactory," "acceptable," etc., or that no further information is requested simply mean that such information answers the Government's questions, and in no way reflect how that information will be evaluated by the Source Selection Evaluation Team(s) and/or Source Selection Authority.
3. In accordance with Section M.3, *Comparison of Offered Prices with the Government Should-Cost Estimate*, and 10 U.S.C. § 2688, authority to privatize a utility system is subject to the action being in the long-term economic interest of the Government.
4. HCWD1 is requested to carefully review the most recent update to 10 U.S.C. § 2688, which includes a new requirement that conveyance of the utility system will reduce the long term cost of utility services by 10 % versus the long term cost of utility services performed by the Government. Additionally, in order to reduce potentially substantial upfront costs by the Army for utilities privatization contracts, it is preferred that Offerors consider amortization of the recovery of initial system deficiency corrections (ISDCs) in lieu of receiving lump sum payments.
5. To determine whether those criteria in items 3 and 4 above are met, the Government will use the CLIN data in Schedule B-1, Schedule B-2, Schedule B-3, or Schedule B-4 to develop a projected 50-year cash flow. The present value of the projected cash flow will be calculated and compared to the Government's present value estimate for a 50-year cash flow for Government ownership and operations and maintenance. Present values will be calculated at the discount rate specified in Appendix C of the Office of Management and Budget (OMB) Circular A-94 that is

Source Selection Information
See FAR 2.101 and 3.104

current at the time proposals are due. The appropriate discount rate may be found at the following hyperlink: http://www.whitehouse.gov/omb/circulars/a094/a94_appx-c.html.

6. HCWD1 is advised that proposals and negotiation messages will not be incorporated by reference into any resultant Contract. Rather, the terms and conditions contained in Sections B through K of the RFP will form the terms and conditions of the Contract, with appropriate modifications to reflect: a) exceptions properly made in accordance with Section L.6.2. of the RFP and accepted by the Contracting Officer (CO); b) agreements reached as a result of negotiations; c) the actual system(s) awarded; and d) changes in terminology indicating the transition from Offeror/RFP to Contractor/Contract. Only discrete schedules and plans from the successful proposal(s) will be made a part of the contract as attachments (e.g. Contingency Operations Plan, Section B Pricing Schedule, etc.)

7. General questions regarding the RFP, the system being conveyed, or similar issues not specific to the content of the Offeror's proposal must be submitted to the CO in writing so that the Government can publish the answers to all Offerors. While the Government will conduct discussions during any face-to-face or telephonic negotiation sessions, the Government will not discuss these types of general questions. This ensures that sufficient time is allotted for the negotiation sessions and that information is distributed to all Offerors in a consistent manner.

8. Assumptions will be considered by the Government solely for evaluation purposes. Unless identified as an exception in accordance with Section L.6.2 and accepted as such by the CO, assumptions will not be deemed to be a part of any resulting contract and will not form the basis for any pricing adjustments.

9. The Government has reviewed HCWD1's alternate proposal and has decided not to accept it at this time. Thus, the attached message only discusses HCWD1's base proposal.

10. Responses to this negotiation message are due by **COB June 3, 2011**. HCWD1 must return this document after inserting responses to each issue. The responses incorporated into this document must be sent via email to the following addresses: brian.koessel@dla.mil and taina.rivera@dla.mil.

11. Fort Knox is willing to accommodate site visits from the date of this message until two weeks prior to the due date for final proposal revisions. To schedule a site visit, please contact Taina Rivera at taina.rivera@dla.mil or 703-767-8130.

12. The Government requests that CD versions (2 with tracked changes and 2 with changes accepted) of the Final Proposal Revision (FPR) be submitted by **COB June 3, 2011**. One (1) clean hard copy of the FPR shall follow by **COB June 7, 2011**. The CD version will be considered the official version.

Lastly, please be advised that you may call me at 703-767-1595 for any further questions and/or concerns.

Brian Koessel, Contracting Officer, sends...

Hardin County Water District No. 1 – Potable Water Proposal (Base)

Volume I – Technical Proposal

I.2.1 O&M Plan

See Page I-28 (Reference: RFP Sections J1.3.7 and J1.3.8)

New Issue 1: The Government requests that HCWD1 demonstrate how it intends to satisfy the planning and programming and request for action requirements. HCWD1's proposal states that it will meet the Government's requirements, but it is unclear which human capital resources HCWD1 intends to utilize. The level of effort proposed for the General Manager and Operations Manager (0.25 FTEs each), does not appear to be enough to meet this requirement.

HCWD1 Response: HCWD1 has added a new position to its organization chart shown on Exhibits I.1-3 and I.2-1. See attachment for revised organizational chart. Preston Pendley will be designated as Project Manager with a budgetary staffing level of 0.4 FTE. Preston will be the primary contact for planning and programming and requests for action. Jim Bruce will remain as the Government's primary contact for contract issues. Brett Pyles will remain as operations manager, overseeing the distribution operation supervisor.

Government Response (May 13, 2011): The Government requests that HCWD1 revise its proposal further to include the Project Manager position, its qualifications, and Mr. Pendley's credentials in Exhibit I.2-6, p. I-31. The Government also requests that HCWD1 confirm that the Project Manager will fulfill the duties and responsibilities associated with the planning and programming, and request for action requirements in addition to the proposed Project Manager tasks outlined in Vol. I, page I-58, and revise its proposal accordingly. Lastly, please revise all applicable Exhibits to include the addition of the new position.

HCWD1 Response (May 24, 2011): The FPR will include the requested information and changes.

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I.3.1 Initial System Deficiency Correction Plan

See pages I-58-62 (Reference: RFP C.11.2, J1.12, and L.4.3.1)

New Issue 2: The Government requests that HCWD1 demonstrate how it plans to provide dedicated manpower to ensure adequate project management and oversight of the ISDC projects during the first 5-years of privatization. The level of effort proposed for the General Manager and Operations Manager (0.25 FTEs each), does not appear to be enough to meet this requirement. HCWD1 does state that CH2M HILL will provide management of the capital improvement program, but what that means in terms of day-to-day support is unclear.

HCWD1 Response: Preston Pendley (0.4 FTE) will also be the primary contact for oversight of ISDC projects and Capital Improvement Program. CH2M HILL will provide engineering support to HCWD1 in developing the capital improvement program and preparing engineering plans and

Source Selection Information
See FAR 2.101 and 3.104

specifications. Depending on the size and complexity of the project, day-to-day inspections will be performed by HCWD1, CH2M HILL, or qualified inspectors through subcontract agreements.

Government Response (May 13, 2011): The Government requests that HCWD1 revise its proposal, including any applicable exhibits, to include a description of the ISDC and CIP oversight responsibilities and any additional functions proposed to be performed by the Project Manager position.

HCWD1 Response (May 24, 2011): The requested descriptions will be included in the FPR

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New Issue 3: The Government requests that HCWD1 revise its proposal to include a more detailed description of the scope of work for each ISDC project proposed, with particular attention to the projects identified in Issues 4-6, *infra*.

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HCWD1 Response: HCWD1 will revise its proposal showing the scope of works for projects identified in New Issues 4-6, below. HCWD1 believes that the current scopes of work on pages I-59 to I-63 provide sufficient detail for the remaining ISDC projects. HCWD1 has updated the cost estimate for ISDC #5 and will clarify that this project includes replacement of six 20" gate valves.

Government Response (May 13, 2011): The Government has remaining questions concerning the following eight ISDC projects:

a) ISDC #1 System Survey/Assessment and Re-map the utility system: The Government requests that HCWD1 revise its proposal to confirm that all maps and associated data will comply with the latest version of SDSFIE, and that the data collected in the computerized model will be made available to the Government upon reasonable request and with reasonable notice. The Government also requests that HCWD1 revise its proposal to state that it will maintain all maps and data collected for the Fort Knox system separately from HCWD1's existing GIS, SDI maps.

HCWD1 Response (May 24, 2011):

The FPR will include the requested information and changes.

The FPR will include a reference to the additional scope description for ISDC 1, submitted on 3-MAR-2011. In that scope, HCWD1 and its sub-consultant reference complying with current SDSFIE requirements. HCWD1 can also confirm that copies of the map will be provided to the Government and all data and maps will be kept separate from HCWD1's other GIS mapping systems and records

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b) ISDC #5 Replace 20 Inch Valves – West Point Field: The Government requests that HCWD1 revise its proposal to correct the valve sizes from 24 inches to 20 inches and adjust its price as necessary.

HCWD1 Response (May 24, 2011): The requested change will be made in the FPR and final pricing as required

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c) ISDC #7 Otter Creek PS: The Government requests that HCWD1 revise its proposal to include lightning protection for the metal roof and adjust its price as necessary.

d) ISDC #8 Muldraugh High Lift Pump Station: The Government requests that HCWD1 explain in detail the materials to be used to replace the roof at Muldraugh HLPS.

HCWD1 Response (May 24, 2011): HCWD1 has received answer from the Government for material specification or description of the roofing materials that the Government will require. HCWD1 will revise its pricing for this ISDC, if required, and include with FPR.

e) ISDC #9 Central Water Treatment Plant: The Government requests that HCWD1 revise its proposal to include any testing fees and/or removal costs associated with potential asbestos or lead-based paint materials and adjust its price as necessary.

HCWD1 Response (May 24, 2011): HCWD1 will revise its pricing for this ISDC, if required, and include with the FPR.

f) ISDC #14 Automatic Transfer Switches: The Government requests that HCWD1 revise its proposal to address in detail the integration of the automatic transfer switches with the SCADA system and adjust its price as necessary.

HCWD1 Response (May 24, 2011): HCWD1 ~~can~~ confirms that its scope and pricing for this ISDC ~~already~~ includes equipment as needed to provide this integration. It is assumed that additional PLC programming for the ATS's 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 FRP will be revised to include this information.

g) ISDC #27 Rehab Well Platforms: The Government requests that HCWD1 confirm the quantity of platforms (and associated well numbers) that will be rehabilitated. It appears that HCWD1's August 2010 proposal included 6 platforms whereas the documentation provided on March 3, 2011 included 14 platforms. Please note that there are only 13 Government-owned platforms at West Point Well Field.

HCWD1 Response (May 24, 2011): HCWD1 ~~can~~ confirms that the reference to 14 wells was a typographical error and that the pricing for ISDC 27 only included the 6 platforms originally proposed, and that the Government's list of platforms totals 13, not 14. HCWD1 also acknowledges the May 2011 J1 revision lists 13 platforms owned by the Government. (Jim, I do not understand this response.)

h) ISDC #29 Decommission Muldraugh Water Treatment Plant: The Government requests that HCWD1 revise its proposal to include lead-based paint testing, special disposal of potentially hazardous materials and appropriate disposal of demolition debris outside of Fort Knox's premises and adjust its price as necessary.

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HCWD1 Response (May 24, 2011): HCWD1 will revise its FPR pricing, as required, to include this requirement and added cost for removal and disposal of lead based paint and other hazardous materials related to ISDC 29

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New Issue 4: The Government requests that HCWD1 revise its proposal to provide a more detailed description of the scope of work it intends to accomplish for the complete renovation of Elevated Storage Tanks #5, #6, #7, and #8. Additionally, the Government requests that HCWD1 describe the approach it intends to take and the scope of work it intends to accomplish when rehabilitating all eight of the elevated storage tanks.

HCWD1 Response: HCWD1 updated the cost estimates to renovate Tanks #6, #7, and #8. See attachment for scopes of work.

Government Response (May 13, 2011): After reviewing the scopes of work and cost estimates for the renovation of Tanks #5, #6, #7, and #8, it is still uncertain whether HCWD1's proposed scopes of work sufficiently address the Government identified deficiencies. Therefore, the Government requests that HCWD1 revise its proposal to ensure that it addresses all of the elevated storage tank deficiencies identified by the Government in RFP Sections J1.2.1.1, Table 2, and J1.12, Table 12. Additionally, the Government requests that HCWD1 review RFP Amendment 0003, and revise its proposal to adjust its scope of work for Tank #7.

HCWD1 Response (May 24, 2011): HCWD1 will include additional reference in its FPR to verify that all required deficiencies and required work for storage tanks, and any impact to cost of Amendment 0003, and make required changes to work description and pricing.

New Issue 5: The Government requests that HCWD1 revise its proposal to provide a detailed description of the scope of work it plans to accomplish for ISDC project #19, SCADA System.

HCWD1 Response: HCWD1 reviewed its proposal for ISDC project #19, SCADA System and verified that the scope of work and cost estimate is accurate. See attachment for scope of work.

Government Response (May 13, 2011): No further information is requested.

New Issue 6: The Government requests that HCWD1 revise its proposal to provide a more detailed description of the scope of work it plans to accomplish for the renewal and replacement of fire hydrants (ISDC project #11), distribution pipes, and main valves (ISDC project #s 20-23).

HCWD1 Response: HCWD1 reviewed its proposal for ISDC projects #11, 20, 21, 22 and 23 and verified that the scope of work and cost estimate is accurate. See attachment for scopes of work.

Government Response (May 13, 2011): The Government requests that HCWD1 revise its proposal to expand the scope of work for ISDCs #20, 21, 22, and 23 to identify the number of valves included in the cost estimate. Additionally, the Government requests that HCWD1 clarify whether labor and equipment costs are included in its proposal. The Government further

requests that HCWD1 review the amended completion date for replacement of fire hydrants (ISDC #11), and revise its proposal accordingly. The Government also requests that HCWD1 review its assumption regarding the presence and operability of isolation valves and revise its proposal to include costs to provide operable isolation valves where none currently exist.

HCWD1 Response (May 24, 2011): HCWD1 will include additional information and clarification as requested above related to number of valves, and what is included in pricing. After further review of our pricing, it was determined that the cost for isolation valves were included in the hydrant cost, and revise its pricing for ISDC 11, if required, to include an isolation valve for each hydrant

I.3.2 Offeror Recommended Additional Upgrades

See Page I-63 (Reference: RFP Sections C.11.2.5, J1.2.1.1, p. J1-10, and J1.2.1.4, Table 5)

New Issue 7: It is anticipated that the Muldraugh High Lift Pump Station (HLPS) will continue to be utilized after the Muldraugh WTP is decommissioned. The Government therefore requests that HCWD1 revise its proposal to include appropriate changes to the renewal and replacement plan.

HCWD1 Response: HCWD1 will update its proposal to show continued operation of the Muldraugh High Lift Pump Station (HLPS) and 1.0 MG Clearwell.

Government Response (May 13, 2011): The Government requests that HCWD1 revise its proposal to include renewal and replacement of the Muldraugh High Lift Pump Station (HLPS) and 1.0 MG Clearwell in addition to any potential FTE impacts for the 50-year contract term.

HCWD1 Response (May 24, 2011): HCWD1 will revise its pricing and FPR to include the R&R costs for the above two facilities, if required in its renewal and replacement costs.

I.3.4 Description of the Contractor's Conceptual Methodology for Scheduling R&R for Contract Duration

See Page I-65 (Reference: RFP Sections C.11.2, L.4.3.4, J1.2.1.1, Table 1 and J1.2.1.4, Table 5)

New Issue 8: The Government requests that HCWD1 revise its proposal to provide a more detailed description of the scope of work it plans to accomplish for the renewal and replacement of the Raw Water Wells (and associated components) identified in Tables 1 and 5.

HCWD1 Response: The scope of work for the Raw Water Wells includes replacement of the well pump, motor, controls and well screen.

Government Response (May 13, 2011): No further information is requested.

New Issue 9: Fort Knox recently replaced the 750 kW emergency generator at the Central WTP's HLPS with a 280 kW dual-fueled (natural gas and fuel oil) emergency generator.

HCWD1 is requested to revise its proposal to include appropriate changes to the renewal and replacement plan.

HCWD1 Response: HCWD1 will update the proposal to reflect the Government's replacement of the 750kW generator at the Central WTP with a 280kW generator in 2010.

Government Response (May 13, 2011): No further information is requested.

New Issue 10: The Government requests that HCWD1 revise its proposal to include a detailed 50-year renewal and replacement plan with the technical proposal (without costs).

HCWD1 Response: HCWD1 will revise its proposal to include a detailed 50-year renewal and replacement plan with the technical proposal (without costs).

Government Response (May 13, 2011): No further information is requested.

I.4.1.3 Implementing New Meter Requirements

See Page I-71 (Reference: RFP Sections C.3.3, L.4.4.3, and J1.5)

New Issue 11: The Government requests that HCWD1 revise its proposal to provide a more detailed description of the scope of work it plans to accomplish for the renewal and replacement of meters.

HCWD1 Response: HCWD1 will revise its proposal to provide a more detailed description of the scope of work it plans to accomplish for the renewal and replacement of meters. See attachment.

Government Response (May 13, 2011): HCWD1's proposed meter replacement procedures are acceptable to the Government. However, the Government requests that HCWD1 describe the following: meter types proposed; whether installation will occur inside or outside; whether a vault will be installed (if so, how large); and if installing in a mechanical room, whether an external display will be used to avoid the need to access the mechanical room to read the meter.

HCWD1 Response (May 24, 2011): HCWD1 will include additional reference in its FPR to add the additional requested information listed above

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Volume IV – Price Proposal

General Comments / Questions

Regulated Tariff – Regulatory Process for Future Price Changes

(See Pages IV-1, IV-44, IV-45)

New Issue 12: HCWD1’s proposal states that it “proposes to provide water utility service to Fort Knox under a tariff regulated by the Kentucky Public Service Commission (PSC).” The Government requests that HCWD1 provide an estimate of the frequency of the anticipated rate changes and the timelines associated with the rate change process.

HCWD1 Response: Each year HCWD1 must complete a financial audit of its previous year. With the Ft. Knox Sewer contract, HCWD1 has increased the Government’s rate two times since 2005. The first was after three years, the second after two more years. On the sewer contract, the aggregate of the two increases are equivalent to 1.8% per year, since 2005. Our current contract for the sewer requires we notify the Government before February, for any requested increase going into effect that October.

Government Response (May 13, 2011): The Government requests that HCWD1 revise its proposal to include an annual notification to the Contracting Officer of anticipated rate adjustments (increases or decreases) in conjunction with submittal of the Annual System Deficiency Corrections/Upgrades and Renewals and Replacements Plan.

HCWD1 Response (May 24, 2011): HCWD1 will revise its FPR to note said timing for any annual tariff rate changes to be in conjunction with the above referenced annual submittal and revise its FPR as required

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Monthly Credit for Purchase Price Credit

(See Page IV-4, IV-5)

New Issue 13: HCWD1’s proposal states that it “... proposes to pay \$8,162,000 for the Ft. Knox potable water system...” through a monthly credit of “... \$82,249 per month for 120 months.” However, there is no reference to the proposed credit for the purchase price included in the tariff sheet. Additionally, it does not appear as though the credit was used to offset the monthly service charge identified in CLIN 0001. The Government requests that HCWD1 revise its proposal to include the calculation of the purchase price credit on the tariff sheet over the initial 120 months of the service.

HCWD1 Response: HCWD1 will update the Rate Schedule FKW – Water Service within Fort Knox, Kentucky on page IV-3 to show the Purchase Price Credit. The purchase price, monthly credit and recovery surcharge will also be updated to reflect the changes in the revised proposal.

Government Response (May 13, 2011): No further information is requested.

Source Selection Information
See FAR 2.101 and 3.104

**O&M / G&A Expenses
Staffing**

New Issue 14: As previously noted, it does not appear that HCWD1 adequately addressed the planning and programming or request for action requirements. The Government requests that HCWD1 review RFP Sections J1.3.7 *Planning and Programming* and J1.3.8 *Request for Action (RFA) Process* and revise its price proposal, as necessary, to address these requirements.

HCWD1 Response: HCWD1 has added a new position to its organization chart shown on Exhibit I.1-3. Preston Pendley will be designated as Project Manager with a budgetary staffing level of 0.4 FTE. Preston will be the primary contact for planning and programming and requests for action.

Government Response (May 13, 2011): The Government requests that HCWD1 revise its proposal to include the updated labor related costs and expenses associated with the additional staffing.

HCWD1 Response (May 24, 2011): HCWD1 will revise the FPR to include ~~make certain that the latest labor costs and expenses are included in its pricing submitted with its FPR for the designated Project Manager.~~

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Vehicles & Equipment

New Issue 15: The Government requests that HCWD1 review and verify its vehicle and equipment expense estimate.

HCWD1 Response: HCWD1 has updated its vehicle and equipment expense to reflect current pricing.

Government Response (May 13, 2011): The Government requests that HCWD1 revise its proposal to include the updated vehicle and equipment expenses.

HCWD1 Response (May 24, 2011): HCWD1 will revise the FPR ~~its pricing to reflect the latest vehicle costs and revise its FPR as required~~

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G&A Overhead Rate
(See Pages IV-4, IV-6, IV-8)

New Issue 16: HCWD1 proposed to apply a G&A overhead rate of 3.8 percent to the R&R project costs and O&M related costs. The Government requests that HCWD1 provide the basis for the 3.8 percent rate.

HCWD1 Response: The G&A rate has been adjusted in the proposal. In late, 2010, HCWD1 revised its charge to the Government for its Ft. Knox Sewer rate. After updating its costs and pricing, the new G&A rate is 4.4%. See attachment for supporting documentation. These charges and impacts to overall monthly fee was reviewed and approved by the Government, and then submitted to and approved by the Kentucky Public Service Commission.

Source Selection Information
See FAR 2.101 and 3.104

Government Response (May 13, 2011): The Government requests that HCWD1 revise its proposal to include the new G&A rate of 4.4%.

HCWD1 Response (May 24, 2011): HCWD1 will revise ~~it~~the FPR to include this latest G&A rate

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**Renewals & Replacements
 Replacement Cost New**

New Issue 17: The Government requests that HCWD1 review and verify the cost estimates for its proposed RCNs. Please pay particular attention to the components identified in the table below.

Component
Rate Water Intake / Mechanical Screens
Raw water wells – structures
Raw water wells – pumps / control systems
WTP – Structures
Hydrants
Water storage tanks
Water storage tank maintenance

HCWD1 Response: HCWD1 has reviewed the cost estimates and does not recommend any changes to the RCN values.

Government Response (May 13, 2011): No further information is requested.

Assumed Useful Lives

New Issue 18: The following table provides a comparison of the projected design lives reflected in the Government’s estimate and HCWD1’s proposal. The yellow highlights indicate the design life assumptions which differ. HCWD1 is requested to provide justification for each projected design life at variance with a corresponding Government projected design life.

Component	Government’s Design Life	HCWD1’s Design Life
Rate Water Intake / Mechanical Screens	75 Years	50 Years
Raw water wells – structures	75 Years	75 Years
Raw water wells – pumps / control systems	25 Years	25 Years
WTP – Structures	75 years	75 years
WTP - Pumps / Control / Chemical Feed Systems	25 years	25 years
WTP – Filter Structures	75 years	75 years
Sludge Lagoons	NA	60 years
Pipe and services	50 years	50 years
Meters and main valves	25 years	25 years
Hydrants	25 years	40 years
Backflow preventors	20 years	50 years
Water storage tanks	75 years	75 years
Pump Station – Structure	75 years	75 years

**Source Selection Information
 See FAR 2.101 and 3.104**

Component	Government's Design Life	HCWD1's Design Life
Pump Station - Pumps / Control Systems	25 years	25 years
Pressure Reducing Stations	25 years	50 years
Emergency Generators	35 years	35 years
SCADA and Cathodic Protection	25 years	25 years

HCWD1 Response: HCWD1 will update the design lives to match the Government's design lives with one exception. Main valves that are replaced with distribution pipe will have a design life of 50 years, which is equivalent to the design life of the pipe. Once HCWD1 is operating the water system, HCWD1 will implement its asset management and preventive maintenance programs which will extend the design lives of the main valves to 50 years.

Government Response (May 13, 2011): No further information is requested.

Emergency Generator at the Central WTP's HLPS

New Issue 19: Fort Knox recently replaced the 750 kW emergency generator at the Central WTP's HLPS with a 280 kW dual-fueled (natural gas and fuel oil) emergency generator. HCWD1 is requested to revise its proposal to include appropriate changes to the RCN, purchase price, and the R&R schedule.

HCWD1 Response: HCWD1 will update the proposal to reflect replacement of the 750kW generator at the Central WTP with a 280kW generator in 2010.

Government Response (May 13, 2011): The Government requests that HCWD1 revise its proposal to include any impacts to the R&R schedule in addition to the updated RCN inventory cost and purchase price.

HCWD1 Response (May 24, 2011): ~~HCWD1 will make certain that the future revise the FPR to include R&R costs related to this item is included in its pricing submitted with its FPR~~

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Muldraugh WTP's HLPS

New Issue 20: It is anticipated that the Muldraugh High Lift Pump Station (HLPS) will continue to be utilized after the Muldraugh WTP is decommissioned. The Government therefore requests that HCWD1 revise its proposal to include appropriate changes to the RCN, purchase price, and the R&R schedule. Additionally, HCWD1 is requested to review the scope of work proposed for ISDC project #29 and to remove any costs associated with the decommissioning of the Muldraugh HLPS.

HCWD1 Response: HCWD1 will update the proposal to show continued operation of the Muldraugh High Lift Pump Station (HLPS) and 1.0 MG Clearwell.

Government Response (May 13, 2011): The Government requests that HCWD1 revise its proposal to include costs for the maintenance, repair, and replacement of the Muldraugh High Lift Pump Station (HLPS) and 1.0 MG Clearwell for the 50-year contract term in addition to operation costs.

HCWD1 Response (May 24, 2011): ~~HCWD1 will revise the FPR to include make certain that the O&M and R&R costs related to these facilities is included in its pricing submitted with its FPR~~

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Discount / Interest Rates Reflected in Levelized R&R Calculations
(See Page IV-36)

New Issue 21: HCWD1's proposal states "(i)t is assumed that HCWD1 can earn 0.5 percent in interest on investments of surplus balances and pay 5.5 percent interest on deficit balances." HCWD1's proposal further states that "(t)he interest rate used to calculate the interest expense will be the "all-in total interest costs" associated with the bonds used to finance Ft. Knox water system projects." The Government requests that HCWD1 provide the supporting documentation, justification, and calculations used to support the interest rates of 0.5 percent for surplus balances and 5.5 percent for deficit balances.

HCWD1 Response: HCWD1 has reviewed its current rate it would pay for long term financing. After discussing bond options with two bond legal counsels, HCWD1 believes that any long term debt issued to finance projects for the Ft. Knox water system would not qualify for tax exempt bond issues. This is in accordance with IRS tax code Section 255, (b)(2)(a), or the "trade or business test". HCWD1 has researched current taxable bond issues sold in Kentucky, including some Build America Bonds which are available to government agencies, but are also taxable. See attachment for a partial list of these recent issues. The rates average 5.95%. HCWD1 believes it should leave the rate of 5.5% in its calculation of future long term debt issues. HCWD1 has also updated its current investment portfolio rate. See Attachment for its latest inventory of investment report which includes 25 investment instruments. The aggregate rate of return for all of its investments is 1.86%. Investment rates range from 0.25% to 5.2% (long term CD's). Some active funds accounts earn zero interest. Based on this updated analysis, HCWD1 has changed its rate of earnings on surplus funds in its pricing to 2.0%

Government Response (May 13, 2011): No further information is requested.

**Initial System Deficiency Correction Projects
Cost Estimates**

New Issue 22: The Government requests that HCWD1 review and verify the cost estimates for its proposed ISDC projects. Please pay particular attention to the ISDC projects identified in the table below.

Initial System Deficiency Correction Projects
2. System Survey/Assessment and Re-Map the Utility Systems
3. Leak Detection Survey

Source Selection Information
See FAR 2.101 and 3.104

Initial System Deficiency Correction Projects
4. Hydraulic Model
6. 20-inch Valves
11. Central WTP Clearwell
12. Fire Hydrants
14. Rehabilitate Water Storage No. 5
16. Line Between Otter Creek PS & Central WTP
20. SCADA System
35. Decommission Muldraugh WTP

HCWD1 Response: HCWD1 has reviewed its ISDC projects and has updated the cost of ISDC #6 – 20-inch valves to reflect the purchase and installation of six 20" gate valves.

Government Response (May 13, 2011): As discussed during the teleconference on February 8, 2011, the Government requests that HCWD1 revise its proposal to include detailed descriptions of each ISDC project proposed (per Issue #3, *supra*) and more detailed explanations for the calculations which support the ISDC project cost estimates.

HCWD1 Response (May 24, 2011): HCWD1 will include and reference in its FPR all recent and additional detail on scope of work for each ISDC and latest pricing for each ISDC

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Transition Surcharge
(See Page IV-41)

New Issue 23: HCWD1's proposal states "(t)he proposed Transition Surcharge assumes that the transition period will last 4 months. A longer transition period will require that an interest charge be assessed to the Government for funds expended during the transition but not recovered until the first month of operation. The annual interest rate for that charge is 5.5 percent." The Government requests that HCWD1 provide the calculation of the interest expense reflected in the \$542,170 transition period surcharge. Additionally, the Government requests that HCWD1 provide the basis for the 5.5 percent interest rate. Lastly, does HCWD1 propose any other adjustments to the transition surcharge for actual rather than proposed costs?

HCWD1 Response: The one month Transition Surcharge did not include any interest cost added, and was assuming this were paid at the beginning of the fifth month of operations. There would be no adjustment to actual expenses if varying from this amount. As included elsewhere in proposal, if the actual costs were less, those surplus funds paid by the Government would stay in the Ft. Knox Water Fund and become available for other future project funding, or O&M costs, to the benefit of the Government. If actual costs were higher, HCWD1 does not intend to request additional funding. However, HCWD1 does believe that should the payment be delayed for any reason other than HCWD1's direct control, it will need to impose a monthly added forfeited discount rate added to the surcharge of \$1,694/month. This is based on a rate of 3.75%. As HCWD1 plans to use short term borrowing for the expenses related to the transition, it will use a current line of credit with a local bank. This rate includes that cost plus 0.5% for HCWD1 processing and carrying costs of this loan. All other retail customers are charged a forfeited

Source Selection Information
See FAR 2.101 and 3.104

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HCWD1

Negotiation Message #4 – 05/13/11
Page 17 of 17

discount after their water or sewer bill due date of 10%. This rate and or fixed amount has been included in the revised tariff sheet and will also subject to approval by the PSC.

Government Response (May 13, 2011): No further information is requested.

Source Selection Information
See FAR 2.101 and 3.104

Summary of All FK Water Tank Work / Repairs

By: HCWD1 / Mike Topp

<u>ISDC#</u>	<u>Tank No</u>	<u>Location</u>	<u>Size (kgals)</u>	<u>Year Built</u>	<u>Last Built/Upgrade</u>
24	1	Educ Ctr 1	250	1935	2004
25	2	Educ Ctr 2	500	1937	2004
NA	3	WWTP / HRC	500	2010	2010
26	4	Brave Rfles	500	1941	2002
13	5	Van Voorhis	300	1958	1994
16	6	Frazier/Wilson	500	1995	1995
18	7	FKHS	500	1997	1997
17	8	Prichard	500	1997	1997

HCWD1		Complete By				
<u>Proposed Work</u>	<u>Coating System</u>	<u>End Year</u>	<u>\$ Labor</u>	<u>\$ Insp</u>	<u>\$Mtls</u>	<u>\$CathProt</u>
M, O, I, N, R	A, E, U	3	\$12,938	\$3,600	\$4,313	\$30,000
M, O, I, N, R	A, E, U	3	\$12,938	\$3,600	\$4,313	\$30,000
		1	\$0	\$2,000	\$0	\$0
A, O, I, N, R	A, E, U	3	\$25,875	\$4,500	\$8,625	\$30,000
A,S,I,F,N,R,C	E, U	1	\$237,190	\$15,000	\$80,000	\$30,000
A,S,I,F,N,R,C	E,U	2	\$210,000	\$15,000	\$70,000	\$30,000
M,I,N,R	E,U	3	\$90,000	\$7,500	\$30,000	\$30,000
M,I,N,R,C	E,U	2	\$210,000	\$15,000	\$70,000	\$30,000

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

<u>\$Alt Valve</u>	<u>\$G&A Cost</u>	<u>\$Total</u>	<u>Tank RR Life</u>	<u>Insp Interval</u>	<u>Rehab Interval</u>	<u>Replace Interval</u>	
\$13,400	\$2,827	\$67,077	75	5 yr		75	
\$13,400	\$2,827	\$67,077	75	5 yr		75	
\$0	\$88	\$2,088	75	5 yr		75	Need to ins
\$13,400	\$3,626	\$86,026	75	5 yr		75	
\$13,400	\$16,526	\$392,116	75	5 yr		75	
\$13,400	\$14,890	\$353,290	75	5 yr		75	
\$13,400	\$7,520	\$178,420	75	5 yr		75	
\$13,400	\$14,890	\$353,290	75	5 yr		75	

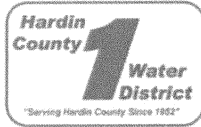
\$1,499,382 = Total tank work to complete in first 3 years

DRAFT 9-19-11

CONTACTS:

Jim Bruce, HCWD No. 1, 270-351-3222
Barbara Crow, Louisville Water Company

Work: 569-3695, Cell: 533-5006



Partnership Succeeds in Fort Knox Water Privatization Bid

Radcliff, KY; After a three plus year process, the Department of Defense, through the Defense Logistics Agency / Energy (DLA) has made a decision to accept a proposal from the partnership of Hardin County Water District No. 1 and the Louisville Water Company, to privatize and turn over ownership of the Fort Knox Potable Water system. In 2007, DLA issued a national Request for Proposals to receive bids or proposals to price owning and operating the system. Government regulations require the process to allow competitive bidding, and any proposal must save the Government at least 10%, over a 50 year period.

The partnership was entered into in May, 2008. The first proposal was submitted to DLA in October 2008, with revised proposals being submitted in 2010 and finally, in June, 2011. The system being privatized includes two, pre WWII era water treatment plants, 154 miles of water lines, 8 elevated water storage tanks, 2 pump stations, 1,900 water valves, 870 fire hydrants and other attached facilities. The partnership's proposal includes the distribution system (pipes, tanks, valves and hydrants) being operated by employees of HCWD1 with the water treatment plants, water quality and regulatory reporting being carried out by LWC employees. HCWD1 and LWC will enter into a long term operations agreement, whereby LWC will provide their services for a fixed annual fee to HCWD1. The system and utility will be owned by HCWD1, under the regulatory authority of the Kentucky Public Service Commission.

Any Government employees affected by this transfer of ownership will be offered a similar position with LWC. Those employees will be contacted soon by LWC on the process and requirements for applying for those positions. HCWD1 will transfer some employees on post who currently work out of their Radcliff headquarters, but anticipates will have to advertise and fill several positions.

The ownership of the two Fort Knox raw water sources are not included in the privatization, and the Government will retain ownership of those assets, however the operations of these will be accepted by HCWD1/LWC. Currently the water demand for Fort Knox is just over two million gallons per day.

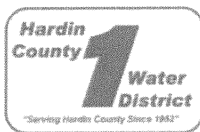
Based on the the annual average, over the 50 year pricing period, the annual revenue increase to HCWD1 will be about \$3.534 million. This would be about a 31% increase compared to their 2011 revenues. During the first 60 months, HCWD1 must also complete over \$28 million of repair projects known as Initial System Deficiency Corrections. These are capital projects which the Government has not been able to gain funding over the years, and the needs continue. Both HCWD1 and LWC will assist in designing, contracting and building these projects.

HCWD No. 1 serves approximately 10,000 customers in the City of Radcliff and northwest Hardin County, and provides wholesale water to the City of Vine Grove and Meade County Water District. In 2005, HCWD1 partnered with Veolia Water, North America, to submit a successful bid to take over ownership and operations of the Fort Knox Sanitary and Storm sewer

systems. In 2008, the City of Radcliff also decided to turn over its sanitary sewer system, with 8,800 customers, to the District. The HCWD1 continues to receive recognition for its excellence in operations, along with Veolia Water. This year, HCWD1 received awards recognizing its Pirtle Spring Water Treatment plant, as well as both Wastewater Treatment Plants operated by Veolia Water (Fort Knox and Radcliff). With the Fort Knox water privatization, HCWD1 will own five different water treatment facilities.

LWC currently serves 850,000 people in Metro Louisville and portions of Oldham, Shelby, Spencer, Bullitt and Nelson counties. On average the company pumps 130 million gallons of water per day (MGD) and has a 240 MGD capacity, with a virtually unlimited water supply in the Ohio River. In June, the utility was recognized as having the Best Tasting Water in America by the American Water Works Association.

(Quotes by Jim B, Greg H, Board chairs??)



FOR IMMEDIATE RELEASE

OCTOBER 3, 2011

CONTACT:

Jim Bruce, HCWD No. 1, 270-351-3222

Kelley Dearing Smith, Louisville Water Company 502.569.3695

Department of Defense Awards Contract to Operate Fort Knox Water System to Local Partnership

OCTOBER 3, 2011 Radcliff, KY - The Department of Defense, through the Defense Logistics Agency / Energy (DLA Energy) has accepted a proposal from Hardin County Water District No. 1 (HCWD1) to assume ownership of the Fort Knox water system. HCWD 1 will operate the system with Louisville Water as a partner. The agreement was signed September 30 and includes a four month transition period.

Under the agreement, HCWD1 will operate and maintain the distribution systems and will contract with Louisville Water to operate Fort Knox's two water treatment plants, both of which are located on the military post. Employees of the Fort Knox water system will transition to positions at HCWD 1 and Louisville Water.

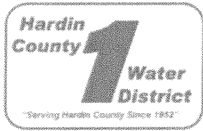
"We are excited about this opportunity to partner with Louisville Water in meeting the water supply needs of Fort Knox," said Hardin County Judge Executive, Harry L. Berry. "The collaborative effort with HCWD1 and Louisville Water to improve, maintain and operate Fort Knox's water system in a cost efficient manner will allow the military to focus on its core missions while utilizing civilian expertise to provide utility services."

The announcement culminates a more than three-year effort by HCWD1 and Louisville Water in response to a request for proposals from the Department of Defense in 2007. The Fort Knox water system includes two pre-World War II era water treatment plants, 154 miles of water main, elevated storage tanks, fire hydrants and pumping stations.

Currently, the system serves approximately 40,000 people living and working on the military base. The treatment plants produce two million gallons of drinking water daily. The U.S. Government will retain ownership of the Fort Knox water sources which include a well field in Westpoint and the McCracken Spring.

"We look forward to assisting HCWD1 in providing a reliable, abundant supply of safe drinking water to the growing Fort Knox and Hardin County area," said Greg Heitzman, President and CEO of Louisville Water. "We have developed a strong partnership with HCWD1 that will serve this region for decades to come."

---MORE---



The partnership also includes over \$28 million in system improvements for the Fort Knox system that will be funded under the agreement with the Department of Defense. The operating costs of the Fort Knox system will have no impact on water rates for customers of HCWD1 and Louisville Water.

For more information about the Fort Knox privatization, contact Jim Bruce, HCWD 1 at 270-351-x3222 or Kelley Dearing Smith, Louisville Water at 502.569.3695.

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ABOUT HCWD No. 1

HCWD No. 1 serves approximately 10,000 customers in the City of Radcliff and northwest Hardin County and provides wholesale water to the City of Vine Grove and Meade County Water District. The district also operates the Fort Knox sanitary and storm sewer systems and the City of Radcliff's sanitary sewer system. HCWD1 continues to receive recognition for its excellence in operations, along with Veolia Water. This year, HCWD1 received awards recognizing its Pirtle Spring Water Treatment plant, as well as both Wastewater Treatment Plants operated by Veolia Water (Fort Knox and Radcliff).

ABOUT LOUISVILLE WATER

Louisville Water provides an abundant supply of drinking water to over 850,000 people in Louisville Metro and parts of Oldham, Shelby, Spencer, Bullitt and Nelson counties. On average, the company produces 127 million gallons of water per day. Louisville Water began operations in 1860 as Kentucky's first public water provider and in 2008 was recognized as America's "Best Tasting Tap Water" by the American Water Works Association. In 2011, the American Society of Civil Engineers recognized Louisville Water as having the "Outstanding Civil Engineering Project in the World" for its riverbank filtration program.

Water District No. 1, Louisville Water Co. acquire Fort Knox water contract

Approval comes roughly three years after initial proposal was submitted

By Marty Finley

Tuesday, October 4, 2011 at 3:00 am (Updated: October 4, 3:02 am)

After more than three years and three proposals, Hardin County Water District No. 1 and Louisville Water Co. secured a contract to assume ownership and manage Fort Knox's water system.

The U.S. Department of Defense awarded the two companies the contract through the Defense Logistics Agency/Energy, granting them ownership of a water system that serves roughly 40,000 customers, includes two pre-World War II water treatment plants and 154 miles of water mains. The system also contains elevated storage tanks, fire hydrants and pumping stations and produces roughly 2 million gallons of drinking water daily, according to a joint statement issued Monday by the two companies.

The contract is effective Feb. 1.

"We are excited about this opportunity to partner with Louisville Water in meeting the water supply needs of Fort Knox," Hardin County Judge-Executive Harry Berry said in the statement. "The collaborative effort with HCWD No. 1 and Louisville Water to improve, maintain and operate Fort Knox's water system in a cost efficient manner will allow the military to focus on its core missions while utilizing civilian expertise to provide utility services."

The announcement comes after a lengthy bid process that started in 2008 and led to numerous revisions of a proposal at the request of the Defense Department, said Jim Bruce, general manager of HCWD No. 1.

The two companies are partners in the project, and employees affected by the privatization of water services will be hired on in positions with HCWD No. 1 or Louisville Water Co., Bruce added. HCWD No. 1 will manage the distribution systems and will contract with Louisville to run the post's two water treatment plants, according to the statement. The government, however, will retain ownership of the post's water sources, which include a well field in West Point and McCracken Spring near Otter Creek.

The contract stipulates a four-month transition, which will include the purchase and mobilization of equipment, tools, chemicals and materials needed for the companies to assume ownership, Bruce added. He said the roughly \$600,000 in transition costs will be paid for by the federal government.

The contract will not affect the rates for customers of either company, Bruce added. The Public Service Commission is "sensitive" to such contracts and will not allow customers to absorb the costs of managing the Fort Knox system, he said. "All of the accounting has to be kept separate," Bruce said.

Bruce said some fixed administrative costs, such as salaries, were rolled into the contract because staff members' roles will be expanded to tackle the new responsibilities of managing the system.

As part of the contract, HCWD No. 1 and Louisville Water Co. also are expected to complete more than \$28 million in system improvements within a five-year period, he said. The improvements, funded by the DoD, will include water pipe upgrades, water treatment roof replacements, painting and replacing water tanks, mapping the entire water system, identification and log of water leaks and creation of a computer monitoring system.

"We look forward to assisting HCWD No. 1 in providing a reliable, abundant supply of safe drinking water to the growing Fort Knox and Hardin County area," Greg Heitzman, president and CEO of Louisville Water, said in a statement. "We have developed a strong partnership with HCWD No. 1 that will serve this region for decades to come."

Kelley Dearing Smith, a spokeswoman for Louisville Water Co., said the partnership is mutually beneficial because HCWD No. 1 brings its familiarity with Fort Knox to the table while Louisville Water Co. offers its expertise in water treatment operations and water quality. She said Louisville Water Co. also can benefit the Hardin County and Fort Knox area because of its abundant supply of water from the Ohio River and a treatment capacity that has not yet been reached.

Fort Knox had been preparing to hand over its water services to local communities for years, but the DoD required a bidding process, Bruce said. Louisville Water Co. learned of the bid and approached HCWD No. 1 about a regional partnership to gain the contract. Bruce said the support of a larger supplier like Louisville Water, which serves more than 850,000 people, was needed because HCWD No. 1 does not have the funding or resources to manage the system alone.

The costs wrapped up in drafting the proposals were paid by Louisville Water, Bruce added.

"All the speculative risk was taken by Louisville Water," he said.

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Task	Description	Page
1) Standard Operating Procedures	"Standard Operating Procedures (SOPs) will be tailored to Fort Knox and address all aspects of service interruption..... SOPs developed for facility will also incorporate emergency operating conditions"	I-1/I-29
2) Computerized Maintenance Management System (CMMS)	"All preventive maintenance (PM) activities will be tracked through HCWD1's CMMS, as described in Subfactor 2."	I-2/I-26
3) Coordination of Activities	"After contact award, HCWD1 will review existing plans at Fort Knox and develop final operating procedures for water service coordination at the Post. For example, routine meetings with the master planners and engineers will ensure timely provision of water service to new facilities."	I-6
4) Emergency Response Plan	"During the first 120 days of the contract, HCWD1 will identify the critical systems required to operate through emergencies"	I-12
5) Vulnerability/Threat Assessment	"Since an effective Catastrophic Loss Plan must be site specific, HCWD1 will complete this site-specific assessment during the first 120 days of the contract"	I-19/I-28
6) Annual flushing program	"An annual fire hydrant flushing and testing program will be initiated to ensure the highest level water quality is delivered to our Fort Knox customers."	I-21
7) Operational Water Strategies	"PM scheduling, predictive maintenance, inventory management, water tank maintenance, water distribution system"	I-22
8) Preventive Maintenance	"Upon award, HCWD1 will start by creating a Master Equipment List."..... HCWD1 will establish a "baseline" condition for each critical piece of equipment identified....	I-24
9) Service Quality Benchmarks	"For this contract, HCWD1 will draft an initial set of benchmarks"	I-27/I-45
10) Cellular Telephones/Auto Dialers	"HCWD1 will equip each work crew in the field, supervisors, and other key personnel with cellular telephones.... Auto dialers will be deployed as a key part of the communication plan."	I-28
11) Engineering and Renewal and Replacement Program	"Our approach will provide a Project Engineering Manager..."	I-28
12) O&M Manuals	"Our O&M Manuals will be developed by the operations staff"....	I-29
13) Customer Feedback	"Monthly meetings with the CO/COTR and other identified stakeholders will be held to review customer satisfaction and metric performance."	I-41
14) System Inspections and Quality Assessment	"Inspection schedules and surveillance checklists will be developed for each utility system maintenance and operations element described in the O&M Plan and for each major CIP."	I-42
15) Record Keeping/MIS	"We will implement effective tools and processes to manage information in a variety of formats and media..."	I-44/I-54
16) Environmental Compliance	"Upon award of the contract, we will develop a comprehensive regulatory strategy plan that will identify all state and local regulatory and policy issues"	I-47
17) Safety Program	"Implement a comprehensive safety management program and site-specific Health and Safety Plan. Also, Project Safety Team"	I-49
18) Annual Capital Improvement Plan	"Each year, an Annual Plan will be developed. The first Annual Plan will rely upon information developed as part of the system characterization studies."	I-65/I-74
19) Periodic Studies	"HCWD1 will conduct periodic system studies..."	I-73
20) Transition Plan Activities	See schedule following I-76	I-76

Hardin County Water District 1

Technical and Engineering Support for

Fort Knox Water System Privatization

Purpose

The purpose of this proposal is to provide Hardin County Water District 1 (HCWD1) with a variety of engineering services in order to comply with the requirements of the United States Government (USG) for the start-up and transition of the Fort Knox Water System.

Project Approach

CH2M HILL has organized the project approach into three major phases, as follows:

- Transition Support
- Capital Improvement Plan Program Management
- On-Call Technical Assistance

PHASE 1 - TRANSITION SUPPORT

Task 1 -Submittals

CH2M HILL will prepare the following submittals in accordance with HCWD1's proposal to the USG:

- **Standard Operating Procedures (SOPs).** Standard Operating Procedures (SOPs) include instructive guidelines for startup, shutdown, and emergency operations. Each SOP includes safety notes, warnings, and cautions. For clarity and to facilitate comprehension, the SOPs will also include tables, diagrams, and drawings as appropriate. The SOPs will be tailored to Fort Knox and address different aspects of service interruption. These SOPs outline specific procedures for each type of interruption, as well as contingency plans for restoration of services. SOPs developed for the facility will also incorporate emergency operating considerations. CH2M HILL's level of effort assumes that Louisville Water Company will prepare the Standard Operating Procedures (SOPs) for the Water Treatment Facilities. CH2M HILL will review the documents prepared by LWC and assemble them with the SOPs developed by CH2M HILL for the distribution and storage systems.
- **Emergency Response Plan.** CH2M HILL will update the Emergency Response Plan prepared for the Fort Knox Sewer System. The plan will be developed to address essential water functions through emergency power supply and redundant systems. Based on state and national standards, the ERP will address 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.

- **Service Quality Benchmarks.** CH2M HILL will draft an initial set of benchmarks developed specifically for this project in the form of performance metrics and will establish goals for continuous improvement of the systems. The goal of this process will be to measure HCWD1's success at delivering continuous service to Fort Knox in an efficient manner and with a high degree of customer satisfaction.
- **Engineering and Renewal and Replacement Program.** CH2M HILL will update the Engineering and Renewal and Replacement Program originally prepared in HCWD1's proposal for the Fort Knox Water System.
- **Operation and Maintenance (O&M) Manuals.** The purpose of the O&M Manual is to consolidate data on the background, principles, and purpose for equipment in the system. The Manual will provide the staff with an understanding of the system goals and objectives, and will serve as a single reference source for locating the information and approaches necessary to successfully operate the system. The O&M Manual will be a valuable resource for the staff, especially when faced with operating processes that are not frequently employed, or to refresh their understanding of system operating limitations. CH2M HILL's level of effort assumes that Louisville Water Company will prepare the Operation and Maintenance (O&M) Manuals for the Water Treatment Facilities. CH2M HILL will review the documents prepared by LWC and assemble them with the O&M Manuals developed by CH2M HILL for the distribution and storage systems.
- **Environmental Compliance.** CH2M HILL will develop a regulatory strategy plan that identifies state and local regulatory and policy issues that may impact the utility privatization, along with the specific approaches to effectively address and manage these issues.
- **Annual Capital Improvement Plan.** CH2M HILL will update the Initial System Deficiency List based on the results on the initial system studies and recommendations from HCWD1 and LWC.

Task 2 - Create Schedule and CPM Chart

CH2M HILL will create a schedule in MS Project. The schedule will include a Critical Path Method Gantt chart showing all critical tasks, resources, responsible charge for each task, related and dependant tasks, budgeted amounts and start and end dates.

The schedule will be prepared updated monthly for four months. CH2M HILL will provide a draft of the schedule for HCWD1 review prior to final adoption.

Task 3 - Attend Semi-monthly Coordination Meetings with HCWD1 and LWC

CH2M HILL will send one representative to attend a total of 8 meetings, estimated to occur every two weeks for the four months post contract award. The purpose of this meeting is to

review progress on transition and start-up tasks. CH2M HILL will set agenda, coordinate time and location of meetings, facilitate discussions and prepare minutes. The meeting location will rotate between Louisville and Radcliff.

Task 4 - Attend Weekly Coordination Meetings with Fort Knox

During the first eight weeks after start-up, CH2M HILL will send one representative to attend weekly meetings at Fort Knox. The purpose of the meetings will be to review problems, track progress, and determine if additional assignments or tasks are needed. This budget assumes attendance at 8 meetings.

CH2M HILL will prepare meeting minutes.

PHASE 2 - CAPITAL IMPROVEMENT PLAN PROGRAM MANAGER

Task 5 - CIP Program Management

CH2M HILL will prepare the Capital Improvement Plan (CIP) for the Fort Knox water system for 12 months. CH2M HILL will prepare quarterly updates of progress of all capital projects, showing the stage of each project, comparison of actual to budgeted cost, and overall fund cash flow.

CH2M HILL will prepare the annual CIP report for submittal to the USG as required. CH2M HILL will hold monthly meetings to review progress, projects and collect data for cash flow reports.

CH2M HILL will provide a financial planning report and update semi-annually for report to HCWD1 Board. The financial planning report will be in a spreadsheet format similar to the report used for the Fort Knox wastewater system.

PHASE 3 - ON-CALL TECHNICAL ASSISTANCE

Task 6 - Project Needs/Cost Benefit Evaluation

CH2M HILL will prepare cost/benefit analyses for individual projects as requested by HCWD1. The analysis will evaluate the project feasibility, need, option comparisons and life cycle cost analysis. The task can also include a value engineering task to determine the least cost (life cycle) option for the project. The analysis will be summarized in a technical memorandum.

This work will be performed on an hourly rate basis with a "not-to-exceed" fee established by HCWD1 prior to commencement. CH2M HILL will notify HCWD1 when the budgeted fee is 90 percent spent.

Task 7 - Preliminary and Final Design

CH2M HILL will provide preliminary and final design services for individual projects. This task includes preparation of construction plans and specifications, bid documents, and certification of final completion.

This task will be authorized on an individual project basis once joint agreement by HCWD1 and CH2M HILL has been reached defining the project scope and fee. For those projects that CH2M HILL performs, the fee will be less than the published percentages shown in Rural Development Fee Curve. The fee will be based on the estimated construction cost at the beginning of the preliminary design phase. The fee will be developed based on the complexity of the project and required level of coordination with Fort Knox.

Task 8 - Construction Administration/Resident Representation

CH2M HILL will provide construction administration/resident representation for individual projects. This task includes bidding assistance, contract award, site inspection, document review, correspondence, resident inspection and other construction related services.

This task will be authorized on an individual basis once joint agreement by HCWD1 and CH2M HILL has been reached defining the project scope and fee. For those projects that CH2M HILL performs, the fee will be less than the published percentages shown in Rural Development Fee Curve. The fee will be originally set based on the awarded bid price and will be adjusted based on the actual construction cost at the completion of the project. The fee will be developed based on the complexity of the project and required level of coordination with Fort Knox.

Project Staff

CH2M HILL has extensive experience in the privatization of water utilities at government facilities. CH2M HILL is the owner and operator of the water systems at Fort Campbell and Fort Irwin and has assisted several municipal utilities in their acquisition of similar facilities on US Army bases. In order to provide the best service to HCWD1, we plan to use a combination of local staff from our Louisville office in conjunction with our staff that has direct experience working with the USG on similar projects. For the purpose of this proposal, we have identified the following key team members and their roles:

David Hackworth, Principal-In-Charge. David Hackworth is located in the Louisville Office and is a Vice-President with CH2M HILL. He led CH2M HILL's team in the development of Hardin County Water District 1's proposal to the USG for the Fort Knox water system. He will ensure that CH2M HILL provides the necessary resources to provide excellent service to HCWD1.

Jerry Anderson, Senior Project Manager. Jerry Anderson is also located in the Louisville Office and is a senior technologist in the water business group and serves as Chair of the AWWA Distribution and Plant Operation's Division. Jerry will be the senior project manager and technical resource for this project. He will develop and oversee the capital improvement plans.

Jon Green, Senior Operations Specialist. Jon Green is a Privatization and O&M specialist and was the Senior Project Manager for the Fort Irwin Water and wastewater Systems. This included managing all aspects of the startup at Fort Irwin. Mr. Green also was the Project Manager, and led the start-up for the operations at the Department of Energy Oak Ridge Tennessee site. Jon was an integral team member in the development of HCWD1's proposal to acquire the Fort Knox Water System. Jon Green will assist in preparing the submittals identified in Task 1.

Robert Neath, Senior Technical Consultant, is currently the Program Manager for the Fort Campbell and Fort Irwin water and sewer utilities. He was formerly the engineering manager for the Fort Campbell project and was also an integral team member in the preparation of the proposal for HCWD1. Robert will provide technical assistance to Jerry Anderson during the transition period.

Rich Tomko, Project Manager is located in our Louisville office and is a project manager for water and wastewater design projects. Although Jerry Anderson will serve as the primary contact for the program, Rich provides additional support for project design management.

Cost of Services

Tasks 1 - 5 will be paid as lump sum amounts and will be billed monthly on a percentage completion basis. The fee for Tasks 6 -9 will be determined on an individual project basis based on the guidelines discussed above.

Task	Fee
Task 1 -Submittals	\$55,000 Lump Sum
Task 2 - Create Schedule and CPM Chart	\$18,000 Lump Sum
Task 3 - Attend Bi-monthly Coordination Meetings	\$13,000 Lump Sum
Task 4 - Attend Weekly Coordination Meetings	\$13,000 Lump Sum
Task 5 - CIP Program Management	\$ 52,000 Lump Sum
Total	\$ 151,000

Hourly Rate Schedules

The hourly rates for 2012 are shown below for several job classifications that will comprise the majority of the anticipated work for Hardin County Water District No. 1 For services performed by staff not listed above, the billing rate shall be the Direct Salaries multiplied by a factor of 3.0. Direct Salaries are the amount of wages or salaries paid ENGINEER's employees for work directly performed on the PROJECT, inclusive of all payroll-related

taxes, payments, premiums, and benefits. The hourly rates will be adjusted in January 2013 and each year thereafter.

Travel expenses will be billed at cost with no mark-up. CH2M HILL uses the standard mileage rate established by the Internal Revenue Service. CH2M HILL will apply a 10 percent mark-up for services contracted through sub-consultant and/or subcontract agreements.

Classification	Staff	Hourly Rate
Principal In Charge	David Hackworth	\$195
Senior Project Manager	Jerry Anderson	\$185
Senior Technical Consultant	Robert Neath	\$185
Operation & Maintenance Specialist	Jon Green	\$175
Project Manager	Rich Tomko	\$150
Staff Engineer	Lee Blakeman/ Roy DeRoche	\$ 95
Administrative Assistant	Jen Hardin	\$ 65
Co-op	Daniel Thewes	\$ 55

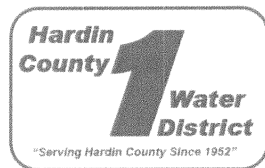
AGREEMENT

BY AND BETWEEN

HARDIN COUNTY WATER DISTRICT No. 1

AND

CH2M HILL



TO PROVIDE

**POTABLE WATER SYSTEM START-UP, TRANSITION AND
TECHNICAL AND ENGINEERING SUPPORT SERVICES**

**AT
FORT KNOX, KY**

DRAFT 10/07/2011

AGREEMENT

THIS AGREEMENT, made and entered into and effective this ____ day of _____, 2011, by and between the HARDIN COUNTY WATER DISTRICT No. 1 hereinafter referred to as the "District", and CH2M HILL, Incorporated, a _____ Corporation, herein after referred to as "CH2M", which terms shall include the respective officers, agents, directors, appointed officials and employees.

WITNESSETH:

WHEREAS, the District plans to undertake a project entitled "Fort Knox Water Utility Systems Construction Management, Technical and Engineering Support Services" ("the Project"), and

WHEREAS, the District desires to retain the services of CH2M to assist it in providing services relative thereto and the designing thereof as set forth in this agreement.

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained, the parties hereto agree as follows:

1. GENERAL PROVISIONS:

- a. Entire Agreement: This Agreement, together with any Task Order, or other incorporated document by reference, constitutes the entire understanding and Agreement between the parties relating to the Services provided by CH2M to the District and supersedes any and all prior Agreements whether written or oral, which may exist between the parties regarding the Services. This Agreement may be amended only by a written instrument signed by each party.
- b. Precedence: This Agreement shall take precedence over any inconsistent or contradictory provisions contained in any District issued Task Order, requisition, or notice to proceed.
- c. Governing Law: This Agreement shall be governed by, construed and interpreted in accordance with the laws of the Commonwealth of Kentucky. More particularly, any action pertaining to this Agreement taken in a court of law shall, unless otherwise prevented by law, shall be subject to venue and jurisdiction in Hardin County, Kentucky, exclusive of any and all other venues and jurisdictions.
- d. Severability: If any provision of this Agreement is held by a court of competent jurisdiction to be invalid, illegal, void or unenforceable, the remainder of the provisions shall remain in full force and effect, and shall in no way be affected, impaired or invalidated and such provision will be deemed amended to conform to applicable laws so as to be valid and enforceable, or if it cannot be so amended without materially altering the intention of the parties, it will be stricken. The validity, legality and enforceability of any such provision will not in any way be affected or impaired and the remainder of this Agreement will remain in full force and effect.
- e. Dispute Resolution: In the event of dispute between the District and CH2M, said parties shall immediately enter into discussions to arrive at a mutually satisfactory solution to said dispute. If a mutually satisfactory solution cannot be reached between CH2M and District, then all parties to this Agreement hereby knowingly, voluntarily and irrevocably agree that any disputes

or conflicts in any way arising out of or relating to this Agreement shall first be mediated, by a professional mediator, based in Kentucky and mutually agreed to by both parties.

- f. Appointment of Representative: Prior to the commencement of work under this Agreement, each party shall designate in writing an employee or other representative of the designating party who shall have full authority to approve changes in the Scope of Work and compensation therefore, execute written Change or Task Orders reflecting such changes, render decisions promptly, and furnish information expeditiously to the other party when necessary.
- g. Notices: All notices, communication and delivery under this Agreement shall be: (a) be made in writing and signed by the party giving it; (b) unless delivered in person, shall be given at the address specified below, with copies as specified below; (c) shall specify the section of this Agreement pursuant to which given; (d) shall be deemed to be given 1) if delivered in person, on the date delivered, 2) if sent by FAX (facsimile), on the date of telephonic confirmation of receipt, or 3) if mailed first class, by registered or certified mail, return receipt requested (with postage and other fees prepaid), on the date mailed; and (e) shall be deemed received 1) if delivered in person, on the date of personal delivery, 2) if FAX'd, on the first (1st) business day after transmitted (if the party giving the notice, or its employee or agent, has no reason to believe that the transmission was not made or received), or 3) if so mailed, on the third business day after mailing. The addresses are as follows:

If to Hardin County, to:

Mr. David Wilson
Skeeters, Bennett and Wilson & Pike, PLC
550 West Lincoln Trail Blvd.
Radcliff, KY 40160
Phone: (270) 352-4404
email; david.wilson@sbw-law.com
FAX: (270) 352-4626

With Copy To:

Mr. Jim Bruce, General Manager
Hardin County Water District No. 1
1400 Rogersville Road
Radcliff, KY 40160
Phone: (270) 351-3222
email; jbruce@hcwd.com
FAX: (270) 352-3055

If to CH2M, to:

With Copy To:

(Enter info)

2. MISCELLANEOUS:

- a. Third-party Beneficiary: Nothing in this Agreement shall be construed to create in any third party or in favor of any third party any right(s), license(s), power(s) or privilege(s).
- b. Successors and Assigns: This agreement shall be binding upon, and to the benefit of the parties hereto, their successors and assigns.

3. BASIS OF AGREEMENT:

- a. General Project Requirements. The services and work to be performed by CH2M on behalf of the District shall generally be those required or related to technical support to the District, including performance of project design and engineering, and the monitoring and oversight of District's other contractors in support of the privatization of Water Utility Systems at Fort Knox Army Installation, Kentucky.

- b. It is understood and agreed the District's contract with the United States Government (“USG”), dated September 30, 2011, (the "Contract") which includes all amendments, addendums, and changes to same) are referenced herein as if fully set forth in this Agreement and is attached as “ATTACHMENT A” and CH2M acknowledges and agrees that they have reviewed and have a complete understanding of this Contract and its requirements.
- c. Federal Acquisition Regulation Clauses: This Agreement incorporates one or more clauses or Federal Acquisition Regulations (“FAR’s”) by reference which are listed in Section “I” of the Contract and to those provisions of the Contract mandated to be passed through to the District to CH2M, as a subcontractor of the District, to the maximum possible extent as related to CH2M's Services.

4. RELATIONSHIP OF PARTIES:

- a. The parties agree that CH2M shall be an independent contractor and CH2M and their employees, subcontractors and agents shall not be an employee of the District.
- b. Subcontractors: CH2M shall not employ any Subcontractor, Supplier, or other individual or entity against whom District may have reasonable objection. District must notify CH2M of any objection to a CH2M Subcontractor, Supplier or other individual in writing with the reasons stated therein prior to any work being performed or supplies being received.
 - i. Any work performed by a CH2M Subcontractor, Supplier or other individual prior to the written notice being received by CH2M shall be paid consistent with any work order, purchase order or other commitment without set off, reduction or recoupment for any reason whatsoever.
 - ii. In addition thereto any actual increased construction or CH2M Subcontractor costs or expenses resulting from District's instructions or rejection of a CH2M subcontractor or supplier shall be shall be reimbursed to CH2M. CH2M shall not be required to employ any subcontractor, supplier or other individual or entity to furnish or perform any of the Services against whom CH2M has reasonable objection based on documented or actual prior experience with CH2M.
 - iii. CH2M shall be responsible to notify its subcontractors of any special work provisions, FAR’s or requirements within the Contract which apply to any and all of the District’s subcontractors, and their subcontractors, and CH2M shall include those requirements in any contracts it enters into with its subcontractors.
- c. Coordination of Subcontractors and Suppliers: CH2M shall be solely responsible for scheduling and coordinating its subcontractors, suppliers and other individuals and entities performing or furnishing any of the Services under a direct or indirect contract with CH2M.
- d. All work performed for CH2M by a CH2M subcontractor or supplier will be pursuant to an appropriate Design Sub-agreement or Construction Sub-agreement between CH2M and the subcontractor or supplier which specifically binds the subcontractor or supplier to the applicable terms and conditions of the Contract for the benefit of District.

5. DESCRIPTION OF SERVICES:

- a. CH2M agrees to provide the District with a variety of engineering services in order to comply with the requirements of the USG for the start-up and transition of the Fort Knox Water System. The services in support of such projects to be performed by CH2M, and anticipated to be commenced upon the execution date of this agreement and to continue during the term set forth, and include the following categories:
 - i. Transition Support Services
 - ii. Capital Improvements Program Management
 - iii. Ad-Hoc, project specific technical and engineering services
- b. More specific descriptions, deliverables, schedules for the above services are described in detail in Attachment "B", Description of Services

6. **USE OF TASK ORDERS:** Work descriptions, scope of work, fees and charges for Ad-hoc, project specific tasks or assignments, not included in items a.i and a.ii above shall be set forth in individual Task Orders to be issued by the District and all terms shall be agreed to by both parties prior to executing the Task Order. All work of each Task Order shall be under the same terms and considered part of this Agreement.

7. **DELETION / CANCELLATION OF WORK:** The District reserves the right to omit any of the tasks identified in the Scope of Services, at any time, upon written notice to CH2M.

8. **MONITORING AND EVALUATION OF SERVICES:** The District reserves the right to monitor and evaluate the progress and performance of CH2M to assure that the terms of this agreement are being satisfactorily met in accordance with the District's standards and other applicable monitoring and evaluating criteria and standards. CH2M shall cooperate with the District relating to such monitoring and evaluation.

9. **WORK DELIVERABLES:** All documentation pertaining to any and all services and work performed, pertaining to this contract, including but not limited to: photos, videos, compact discs, studies, data, computations, reports, etc., shall be provided to the District upon request or completion of a specific Task Order. Moreover, CH2M hereby agrees that all photos, videos, studies and related data, reports and any other data completed on behalf of or pertaining to this agreement is the sole property of the District.

10. STANDARD OF SERVICES:

- a. CH2M agrees to perform its services in accordance with generally accepted civil engineering practices, in effect and utilized by similar firms in the United States at the time the Services are rendered, and applying methods that are generally accepted by Kentucky state and federal utility regulatory agencies and commissions such as the Kentucky Public Service Commission, Kentucky Department of Natural Resources and the federal Environmental Protection Agency.
- b. The Services may involve the use of tests, calculations, analysis and procedures that are in a constant state of change and refinement. District recognizes that projects involving subsurface conditions, pipelines, and underground utilities may not perform as anticipated even though the Services are performed in accordance with the required level of care.

- c. Given the difficulty in predicting the condition of a site based upon limited sampling and investigative activity, District recognizes that any statements, opinions and conclusions contained in reports or used for the purposes of parameters or guidelines for the performance by CH2M of the Services, are only meant to give approximations of the condition of the Site limited to the particular purposes for which the Site is intended, including geophysical stability, contaminant(s) and/or environmental compliance issues.
11. **WARRANTY OF SERVICES:** CH2M warrants that, if any of its completed services fail to conform to the above standard of services, as set forth in Section 10, CH2M will, provided CH2M is notified of such defective services within three years of the completion of the services, either perform corrective services of the type originally performed as may be required to correct such defective services on the same basis of compensation as which the original Service was performed or refund to District the amount paid for the defective services. Said warranty shall not preclude the District from filing a claim under the provisions of CH2M's Professional Liability Insurance, or shorten the protection offered to the District under any statute of limitations for errors and omissions for professional services within the Commonwealth of Kentucky.
 12. **TERM OF AGREEMENT:** The District hereby retains CH2M to perform the services on the terms and conditions set forth herein for a term of one (1) year commencing with the effective date of this Agreement. At the end of the first year, the District and CH2M may decide to extend this agreement for an additional year, or multiple years. Should the District request additional year extensions, it shall make such request in writing no less than thirty (30) days prior to the expiration of this Agreement term and CH2M shall provide any requested changes in fees, terms, personnel or other changes. The method by which a future agreement extension is proposed and approved shall be determined by mutual agreement of both parties.
 13. **COMPENSATION AND PAYMENTS:**
 - a. CH2M shall invoice for its services on the basis of its time and material for all services as set forth in Attachment B.
 - b. CH2M agrees to provide the services for either the maximum, not to exceed amounts shown on Attachment B, or in accordance with the rates and charges listed in Attachment B. Any future Task Orders agreed to will also use the rates and fees in Attachment B, unless modified and adjusted in future Agreements or amendments to this Agreement.
 - c. The parties acknowledge that CH2M may adjust its rates upon thirty (30) days prior written notice to District, provided however, there shall be only one rate adjustment during any twelve (12) month period. CH2M understands and agrees that fees and rates received by the District from the USG are set for several years at a time, and any annual increase in fees by CH2M to the District may result in a corresponding decrease in amount of services or future Task Orders authorized in order for the District to manage its revenues from the Government pertaining to the Contract.
 14. **BILLING SUMMARIES AND INVOICES:** The District agrees to pay CH2M for services rendered pursuant to this agreement the sums set forth and in the manner set forth in this agreement. CH2M agrees that each payment request will include only those services completed and delivered. Each request for payment shall include a detailed breakdown of services provided to include unit prices for each unit of work delivered, task description and the individual project name.

CH2M shall provide a request for payment on or before the thirtieth (30) day of each month and no more than once for each thirty-day period.

- a. CH2M agrees to invoice the District in accordance with this agreement, but for the initial term of this agreement shall also agree to not bill the District an amount more than \$25,000 monthly, regardless of amount of work completed. This will require CH2M to show on their invoice additional work completed, prior work completed and invoiced (but not paid) and total amount of outstanding balance of unpaid work. CH2M may then increase future invoices by an amount required to be paid for previous completed work unpaid, but more than the current month's completed work.
- b. Initial Government Payment Delay: Due to potential delays in the Government paying the District once the Contract start date is executed, CH2M agrees to not suspend work for at least ninety (90) days after the completion of the first month services are provided to the Government, and the first month that the District bills the Government. After this period has expired, CH2M shall be able to invoice the District for all services provided during this period, plus any accrued interest as provided for herein.
- c. Interest on Unpaid Amounts: The District shall pay interest at an annual rate equal to the prime rate as published in the Wall Street Journal, said rate of interest not to exceed any limitation provided by law, on payments for services billed, received and agreed to by the District, but payment not having been made for forty-five (45) calendar days of the due date, such interest being calculated from the due date of the payment. In the event the charges hereunder might exceed any limitation provided by law, such charges shall be reduced to the highest rate or amount within such limitation.
- d. Suspension of Services: If District fails to make payment for work completed within sixty (60) days after a proper monthly invoice has been received and accepted by the District, for approved work under this Agreement, CH2M may, upon fifteen (15) days written notice to District, suspend performance for only those services previously provided, billed and not paid. In the event of suspension of services, CH2M shall have no liability to District for delay or damage incurred by District because of such suspension of services.

15. INSURANCE REQUIREMENTS: (Working on new section with HCWD1 agents)

16. INDEMNITY:

- a. CH2M Indemnity: CH2M shall indemnify and hold harmless District for any and all costs, expenses including but not limited to legal fees, and against all claims, demands, liability, damages, suits, actions or causes of action which may be brought or asserted against District to the proportionate extent arising out of the negligent acts, errors or omissions of CH2M or from any CH2M subcontractor, supplier or other individual in the performance of this Agreement.
- b. District's Indemnity: The District agrees to indemnify and save CH2M harmless from and against all claims, demands, liability, damages, suits, actions or causes of action of every kind and nature, which may be brought or asserted against CH2M arising out of the negligent acts, errors or omissions of the District or the District's sub-contractors in the performance of this agreement. The limits of insurance set forth above shall not limit the liability of the District hereunder.

- c. CH2M's and Suppliers' Remedies: Whenever any CH2M subcontractor or supplier providing services to CH2M is listed as an additional insured on the property insurance provided herein, CH2M will use diligent efforts to incorporate in any agreement with a subcontractor or supplier provisions whereby subcontractor or supplier waives all rights of recovery against District, CH2M, District's subcontractors and all other additional insured (and their officers, directors, partners, employees, agents, and other subcontractors of each party) for all losses and damages caused by any of the perils or causes of loss covered by such policies and any other property insurance applicable to the services.
- d. Force Majeure: Neither the District nor CH2M shall hold the other responsible for damages or delays in performance caused by Force Majeure or other events beyond the control of the other party and which could not reasonably have been anticipated or prevented. For purposes of this Agreement Force Majeure shall include, but not necessarily be limited to, adverse weather conditions, floods, epidemics, war, riot, strikes, lockouts and other industrial disturbances; unknown site conditions, accidents, sabotage, fire, loss of permits, court orders; acts of God; acts, orders, laws or regulations of any governmental agency; other than such laws currently in effect at the time of execution of this Agreement. Should such acts or events occur, the parties to this Agreement shall mutually agree on the terms and conditions upon which the services may be continued.

17. TERMINATION:

- a. This agreement may be terminated by either party after thirty (30) days written notice. In the event of termination by the District, other than for reason of default under this contract, the District shall be liable to pay to CH2M only for services and expenses incurred to date of termination. In the event of termination by CH2M, other than for reason of default under this contract, CH2M shall be liable for any expenses or damages incurred to the District.
- b. If District fails to make payment for work completed within forty-five (45) days after a proper Request for Payment has been received and accepted by the District, except as set forth in the payment delay provided for in Section 16.b above, for approved work under this Agreement, CH2M may, upon thirty (30) days written notice to District, suspend performance of the work. In the event of suspension of work, CH2M shall have no liability to District for delay or damage incurred by District because of such suspension of work.
- c. District shall, within thirty (30) days of termination, compensate CH2M for costs incurred up to the time of termination of any Task Order, as well as those associated with termination and post-termination activities, such as demobilization, modifying schedules, reassigning personnel, relocating equipment, disposal and replacement of consumables, but not for lost profits or other ancillary expenses except as set forth herein.

ATTACHMENT A

Utility Service Contract SP0600-08-R-0803
Between Hardin County Water District No. 1 and United States Government
Fort Knox, Kentucky, Potable Water System
Dated: 30-September-2011

(FOLLOWS THIS SHEET)

ATTACHMENT B

Description of Services, Fees and Charges

- I. Purpose: The purpose of these services are to provide Hardin County Water District 1 (HCWD1) with a variety of engineering services in order to comply with the requirements of the United States Government (USG) for the start-up and transition of the Fort Knox Water System.
- II. Project Approach: CH2M HILL has organized the project approach into three major phases, as follows:
 - A. Transition Support
 - B. Capital Improvement Plan Program Management
 - C. Ad-Hoc Technical & Engineering Assistance

III. FIRST YEAR SERVICES

A. TRANSITION SUPPORT (PHASE 1)

1. **Task 1 -Submittals:** CH2M HILL will prepare the following submittals in accordance with HCWD1's proposal to the USG. These documents may be bound in a single, or two, volume(s), but each individual item must include its own Table of Contents, page numbering, graphic exhibits with individual page numbering (not continuation of previous section). The expected content of each item shall at the very least include and address all content set forth in the Contract with the USG, and in the District's proposal submitted to the USG;
 - a. **STANDARD OPERATING PROCEDURES (SOPS):** Standard Operating Procedures (SOPs) include instructive guidelines for startup, shutdown, and emergency operations. The SOPs will also include tables, diagrams, and drawings as appropriate. The SOPs will be tailored to Fort Knox and address different aspects of service interruption. These SOPs outline specific procedures for each type of interruption, as well as contingency plans for restoration of services. SOPs developed for the facility will also incorporate emergency operating considerations. CH2M HILL's level of effort assumes that Louisville Water Company will prepare the Standard Operating Procedures (SOPs) for the Water Treatment Facilities. CH2M HILL will review the documents prepared by LWC and assemble them with the SOPs developed by CH2M HILL for the distribution and storage systems.
 - b. **EMERGENCY RESPONSE PLAN:** CH2M HILL will update the Emergency Response Plan (ERP) prepared for the Fort Knox Sewer System. The plan will be developed to address essential water functions through emergency power supply and redundant systems. Based on state and national standards, the ERP will address 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.
 - c. **SERVICE QUALITY BENCHMARKS:** (JSB Seems to me these are already fully set forth and explained in proposal and not sure we need new document)
 - d. **ENGINEERING AND RENEWAL AND CAPITAL REPLACEMENT PROGRAM:** CH2M HILL will update the Engineering and Renewal and Replacement Program originally prepared in HCWD1's proposal for the Fort Knox Water System. This document shall include a spreadsheet with each project as a row, and columns or fields to include at a minimum; Description, Estimated cost, Design start date, Construction Start date, Current status, Percent complete, Project delivery method, Engineer assigned, Source of funds and Type of project.
 - e. **OPERATION AND MAINTENANCE (O&M) MANUALS:** The purpose of the O&M Manual is to consolidate data on the background, principles, and purpose for equipment in the system. The Manual will provide the staff with an understanding of the system goals and objectives, and will serve as a single reference source for locating the information and approaches necessary to successfully operate the system. The O&M Manual will be a valuable resource for the staff, especially when faced with operating processes that are not frequently employed, or to refresh their understanding of system operating limitations. CH2M HILL's level of effort assumes that Louisville Water Company will prepare the Operation and Maintenance (O&M) Manuals

for the Water Treatment Facilities. CH2M HILL will review the documents prepared by LWC and assemble them with the O&M Manuals developed by CH2M HILL for the distribution and storage systems.

f. **ENVIRONMENTAL COMPLIANCE OUTLINE:** CH2M HILL will develop a regulatory strategy plan that identifies state and local regulatory and policy issues that may impact the utility privatization, along with the specific approaches to effectively address and manage these issues.

g. **ANNUAL CAPITAL IMPROVEMENT PLAN:** CH2M HILL will update the Initial System Deficiency List based on the results on the initial system studies and recommendations from HCWD1 and LWC.

h. JSB - MISSING ITEMS I FOUND IN PROPOSAL AND GOVT CONTRACT;

- (1) ISDC Plan and Schedule
- (2) ISDC / R&R Upgrade plan (C.11.2.4 ~ 2.7)
- (3) Service Interruption / Contingency Plan
- (4) Operations Management / Quality Management Plan (I.2)
- (5) Operations Transition Plan
- (6) Catastrophic Loss Plan (I.1.11)
- (7) Health & Safety Plan (pg I-51)
- (8) Emergency Restoration Plan (Exb I.3.1)

2. Task 2 - Create Schedule and CPM Chart (JSB - DELETE, HCWD1 will do own in-house)

3. Task 3 - Attend Semi-monthly Coordination Meetings with HCWD1 and LWC: CH2M HILL will send one representative to attend a total of 8 meetings, estimated to occur every two weeks for the four months post contract award. The purpose of this meeting is to review progress on transition and start-up tasks. CH2M HILL will set agenda, coordinate time and location of meetings, facilitate discussions and prepare minutes. The meeting location will rotate between Louisville and Radcliff.

4. Task 4 - Attend Weekly Coordination Meetings with Fort Knox: During the first eight weeks after start-up, CH2M HILL will send one representative to attend weekly meetings at Fort Knox. The purpose of the meetings will be to review problems, track progress, and determine if additional assignments or tasks are needed. This budget assumes attendance at 8 meetings. CH2M HILL will prepare meeting minutes.

B. CAPITAL IMPROVEMENT PLAN PROGRAM MANAGER (PHASE 2)

1. Task 5 - CIP Program Management: CH2M HILL will prepare the Capital Improvement Plan (CIP) for the Fort Knox water system for 12 months. CH2M HILL will prepare quarterly updates of progress of all capital projects, showing the stage of each project, comparison of actual to budgeted cost, and overall fund cash flow. CH2M HILL will prepare the annual CIP report for submittal to the USG as required. CH2M HILL will hold monthly meetings to review progress, projects and collect data for cash flow reports. CH2M HILL will provide a financial planning report and update semi-annually for report to HCWD1 Board. The financial planning report will be in a spreadsheet format similar to the report used for the Fort Knox wastewater system.

IV. AD-HOC ON-CALL TECHNICAL & ENGINEERING ASSISTANCE:

A. Task 6 - Project Needs/Cost Benefit Evaluation: CH2M HILL will prepare cost/benefit analyses for individual projects as requested by HCWD1. The analysis will evaluate the project feasibility, need, option comparisons and life cycle cost analysis. The task can also include a value engineering task to determine the least cost (life cycle) option for the project. The analysis will be summarized in a technical memorandum. This work will be performed on an hourly rate basis with a "not-to-exceed" fee established by HCWD1 prior to commencement. CH2M HILL will notify HCWD1 when the budgeted fee is 90 percent spent.

B. Task 7 - Preliminary and Final Design: CH2M HILL will provide preliminary and final design services for individual projects. This task includes preparation of constructions plans and specifications, bid documents, and certification of final completion. This task will be authorized on an individual project basis once joint agreement by HCWD1 and CH2M HILL has been reached defining the project scope and fee. For those projects that CH2M HILL performs, the fee will be less than the published percentages shown in Rural Development Fee Curve. The fee will be based on the estimated construction cost at the beginning of the preliminary design phase. The fee will be developed based on the complexity of the project and required level of coordination with Fort Knox.

C. Task 8 - Construction Administration/Resident Representation: CH2M HILL will provide construction administration/resident representation for individual projects. This task includes bidding assistance, contract award, site inspection, document review, correspondence, resident inspection and other construction related services. This task will be authorized on an individual basis once joint agreement by HCWD1 and CH2M HILL has been reached defining the project scope and fee. For those projects that CH2M HILL performs, the fee will be less than the published percentages shown in Rural Development Fee Curve. The fee will be originally set based on the awarded bid price and will be adjusted based on the actual construction cost at the completion of the project. The fee will be developed based on the complexity of the project and required level of coordination with Fort Knox.

V. FEES & CHARGES FOR SERVICES:

- A. Tasks 1 - 5 will be paid as lump sum amounts and will be billed monthly on a percentage completion basis. These services are expected to begin upon execution of the Agreement and continue to the end of the first year. The maximum not to exceed fee for all of these services is agreed to be no more than \$133,000.
- B. Tasks 6 -9 will be determined on an individual project basis based on the individuals assigned, the Scope of Work agreed to in the Task Order and the deliverables required. The current rates for CH2M individuals expected to be assigned to HCWD1 work are as follows;

<u>Title</u>	<u>Current Individual</u>	<u>Hourly Rate</u>
Principal In Charge	David Hackworth	\$195
Senior Project Manager	Jerry Anderson	\$185
Senior Technical Consultant	Robert Neath	\$185
Operation & Maintenance Specialist	Jon Green	\$175
Project Manager	Rich Tomko	\$150
Staff Engineer	Lee Blakeman/Roy DeRoche	\$ 95
Administrative Assistant	Jen Hardin	\$ 65
Co-op	Daniel Thewes	\$ 55

- C. Other individuals or discipline / expertise for persons not listed above shall be charged out at a multiplier rate, times their actual salary or equivalent hourly rate, with a multiplier of _____
- D. The above fees and charges are understood to be all inclusive of incidental costs which costs include but are not limited to; stationary, phone charges, facsimile charges, internet fees, fuel and mileage, meals, rent, document production and copies and computer leasing or rental time. No other charges will be billed or payed, other that the fees and charges above.

AGENDA

WEEKLY TRANSITION CONFERENCE CALL FORT KNOX WATER PRIVATIZATION DLA ENERGY / FORT KNOX DPW / HCWD1

OCTOBER 19, 2011

ISSUES FOR DISCUSSION

9:00 A.M.

- JE5 – OPERATIONAL TRANSITION PLAN (UPCOMING MILESTONES)
- JOINT INVENTORY PLAN (SCHEDULE)
- EXISTING EMPLOYEE TRANSITION
- SELLING OF FORT KNOX WATER (KNOX TO PROVIDE COPY OF EXISTING AGREEMENT)
- KNOX REQUIREMENTS FOR EXCAVATING, INSTALLING, BACKFILLING, COMPACTING, AND LANDSCAPING ON THE INSTALLATION (KNOX TO PROVIDE AND ADDRESS)
- ENVIRONMENTAL TOPICS OF INTEREST (IF ANY)
- NEW ITEMS

PLAN OF ACTION/PRIVATIZATION MILESTONES

09:40 A.M.

- KNOX DPW
- HCWD1
- DLA ENERGY

QUESTIONS AND ANSWERS / REMARKS

09:45 A.M.

ADJOURN

10:00 A.M.

AGREEMENT

BY AND BETWEEN

HARDIN COUNTY WATER DISTRICT No. 1

AND

CH2MHILL ENGINEERS, INC.



TO PROVIDE

**POTABLE WATER SYSTEM START-UP, TRANSITION AND
TECHNICAL AND ENGINEERING SUPPORT SERVICES**

**AT
FORT KNOX, KY**

NOVEMBER, 2011

AGREEMENT

THIS AGREEMENT, made and entered into this 29th day of November, 2011, by and between the HARDIN COUNTY WATER DISTRICT No. 1 hereinafter referred to as the "DISTRICT", and CH2M HILL Engineers, Inc. a Delaware Corporation, herein after referred to as "CH2M", which terms shall include the respective officers, agents, directors, appointed officials and employees.

WITNESSETH:

WHEREAS, the DISTRICT along with CH2M's assistance worked together to propose on the Defense Logistics Agency / Energy ("DLA" or "Government") Solicitation No. SP0600-08-R-0803 for the privatization of the potable water system at Fort Knox, Kentucky ("Proposal"); and

WHEREAS, DLA has negotiated a final contract for the privatization of the Fort Knox Potable Water System, and a contract was executed between DLA and the DISTRICT on September 30, 2011 ("Contract") which Contract requires the DISTRICT to furnish all necessary labor, management, supervision, permits, equipment, supplies, materials, transportation, and any other incidental services for the complete ownership, operation, maintenance, repair, upgrades and improvements to the Ft. Knox Potable Water Utility System (the "Project"), and

WHEREAS, the DISTRICT desires to retain the services of CH2M to assist it in providing services relative to the start-up, transition services and Technical and Engineering Support Services relative to the Project as set forth in this agreement.

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained, the parties hereto agree as follows:

1. GENERAL PROVISIONS:

- a. Entire Agreement: This Agreement, together with any Task Order, or other incorporated document by reference, constitutes the entire understanding and Agreement between the parties relating to the Services provided by CH2M to the DISTRICT and supersedes any and all prior Agreements whether written or oral, which may exist between the parties regarding the Services. This Agreement may be amended only by a written instrument signed by each party.
- b. Precedence: This Agreement shall take precedence over any inconsistent or contradictory provisions contained in any DISTRICT issued Task Order, requisition, or notice to proceed.
- c. Governing Law: This Agreement shall be governed by, construed and interpreted in accordance with the laws of the Commonwealth of Kentucky. More particularly, any action pertaining to this Agreement taken in a court of law shall, unless otherwise prevented by law, shall be subject to venue and jurisdiction in Hardin County, Kentucky, exclusive of any and all other venues and jurisdictions.
- d. Severability: If any provision of this Agreement is held by a court of competent jurisdiction to be invalid, illegal, void or unenforceable, the remainder of the provisions shall remain in full force and effect, and shall in no way be affected, impaired or invalidated and such provision will be deemed amended to conform to applicable laws so as to be valid and enforceable, or if it cannot be so

amended without materially altering the intention of the parties, it will be stricken. The validity, legality and enforceability of any such provision will not in any way be affected or impaired and the remainder of this Agreement will remain in full force and effect.

- e. Dispute Resolution: In the event of dispute between the DISTRICT and CH2M, said parties shall immediately enter into discussions to arrive at a mutually satisfactory solution to said dispute. If a mutually satisfactory solution cannot be reached between CH2M and District, then all parties to this Agreement hereby knowingly, voluntarily and irrevocably agree that any disputes or conflicts in any way arising out of or relating to this Agreement shall first be mediated, by a professional mediator, based in Kentucky and mutually agreed to by both parties.
- f. Appointment of Representative: Prior to the commencement of work under this Agreement, each party shall designate in writing an employee or other representative of the designating party who shall have full authority to approve changes in the Scope of Work and compensation therefore, execute written Change or Task Orders reflecting such changes, render decisions promptly, and furnish information expeditiously to the other party when necessary.
- g. Notices: All notices, communication and delivery under this Agreement shall: (a) be made in writing and signed by the party giving it; (b) unless delivered in person, shall be given at the address specified below, with copies as specified below; (c) shall specify the section of this Agreement pursuant to which given; (d) be deemed to be given 1) if delivered in person, on the date delivered, 2) if sent by FAX (facsimile), on the date of telephonic confirmation of receipt, or 3) if mailed first class, by registered or certified mail, return receipt requested (with postage and other fees prepaid), on the date mailed; and (e) be deemed received 1) if delivered in person, on the date of personal delivery, 2) if FAX'd, on the first (1st) business day after transmitted (if the party giving the notice, or its employee or agent, has no reason to believe that the transmission was not made or received), or 3) if so mailed, on the third business day after mailing. The addresses are as follows:

If to Hardin County, to:

Mr. David Wilson
Skeeters, Bennett and Wilson & Pike, PLC
550 West Lincoln Trail Blvd.
Radcliff, KY 40160
Phone: (270) 351-4404
email; david.wilson@sbw-law.com
FAX: (270) 352-4626

With Copy To:

Mr. Jim Bruce, General Manager
Hardin County Water DISTRICT No. 1
1400 Rogersville Road
Radcliff, KY 40160
Phone: (270) 351-3222
email; jbruce@hewd.com
FAX: (270) 352-3055

If to CH2M HILL, to:

Mr. David Hackworth
CH2M HILL Engineers, Inc.
401 West Main Street, Suite 500
Louisville, KY 40202
Phone: (502) 584-6052
email; david.hackworth@ch2m.com

2. **MISCELLANEOUS:**

- a. Third-party Beneficiary: Nothing in this Agreement shall be construed to create in any third party or in favor of any third party any right(s), license(s), power(s) or privilege(s).
- b. Successors and Assigns: This agreement shall be binding upon, and to the benefit of the parties hereto, their successors and assigns.
- c. If any litigation is necessary to enforce the terms of this Agreement, the prevailing party shall be entitled to reasonable attorney's fees, which are directly attributed to such litigation, in addition to any other relief to which it may be entitled.

3. **BASIS OF AGREEMENT:**

- a. It is understood and agreed the District's contract with the United States Government ("USG"), dated September 30, 2011 (the "Contract") which includes all amendments, addendums, and changes to same is referenced herein as if fully set forth in this Agreement and is attached as "ATTACHMENT B" and CH2M acknowledges and agrees that they have reviewed and have a complete understanding of this Contract and its requirements.
- b. General Project Requirements. The services and work to be performed by CH2M on behalf of the DISTRICT shall generally be that required or related to technical support to the District, including administrative requirements of the Contract in the Transition Period and in the Capital Improvements Program, performance of project design and engineering, and the monitoring and oversight of District's other contractors in support of the privatization of Water Utility Systems at Fort Knox Army Installation, Kentucky.
- c. Federal Acquisition Regulation Clauses: This Agreement incorporates one or more clauses or Federal Acquisition Regulations ("FAR's") by reference which are listed in Section "I" of the Contract and to those provisions of the Contract mandated to be passed through to the DISTRICT to CH2M, as a subcontractor of the District, to the maximum possible extent as related to CH2M's Services.

4. **RELATIONSHIP OF PARTIES:**

- a. The parties agree that CH2M shall be an independent contractor and CH2M and its employees, subcontractors and agents shall not be an employee of the District.
- b. Subcontractors: CH2M shall not employ any Subcontractor, Supplier, or other individual or entity against whom DISTRICT may have reasonable objection. DISTRICT must notify CH2M of any objection to a CH2M Subcontractor, Supplier or other individual in writing with the reasons stated therein prior to any work being performed or supplies being received.
 - i. Any work performed by a CH2M Subcontractor, Supplier or other individual prior to the written notice being received by CH2M shall be paid consistent with any work order, purchase order or other commitment without set off, reduction or recoupment for any reason whatsoever.

- ii. In addition thereto any actual increased construction or CH2M Subcontractor costs or expenses resulting from District's instructions or rejection of a CH2M subcontractor or supplier shall be reimbursed to CH2M. CH2M shall not be required to employ any subcontractor, supplier or other individual or entity to furnish or perform any of the Services against whom CH2M has reasonable objection based on documented or actual prior experience with CH2M.
 - iii. CH2M shall be responsible to notify its subcontractors of any special work provisions, FAR's or requirements within the Contract which apply to any and all of the District's subcontractors, and their subcontractors, and CH2M shall include those requirements in any contracts it enters into with its subcontractors.
- c. Coordination of Subcontractors and Suppliers: CH2M shall be solely responsible for scheduling and coordinating its subcontractors, suppliers and other individuals and entities performing or furnishing any of the Services under a direct or indirect contract with CH2M.
 - d. All work performed for CH2M by a CH2M subcontractor or supplier will be pursuant to an appropriate Design Sub-agreement or Construction Sub-agreement between CH2M and the subcontractor or supplier which specifically binds the subcontractor or supplier to the applicable terms and conditions of the Contract for the benefit of the DISTRICT.

5. **DESCRIPTION OF SERVICES:**

- a. CH2M agrees to provide the DISTRICT with a variety of engineering services in order to comply with the requirements of the DLA for the start-up and transition of the Fort Knox Water System. The services in support of such projects to be performed by CH2M, and anticipated to be commenced upon the execution date of this agreement and to continue during the term set forth, include the following categories:
 - i. Transition Support Services
 - ii. Capital Improvements Program Management
 - iii. Ad-Hoc, project specific technical and engineering services-
- b. More specific descriptions, deliverables, schedules for the above services are described in detail in Attachment "A", Description of Services:

6. **USE OF TASK ORDERS:** Work descriptions, scope of work, fees and charges for Ad-hoc, project specific tasks or assignments not included in items a.i and a.ii above shall be set forth in individual Task Orders to be issued by the DISTRICT and all terms shall be agreed to by both parties prior to executing the Task Order. All work of each Task Order shall be under the same terms and considered part of this Agreement.

7. **DELETION / CANCELLATION OF WORK:** The DISTRICT reserves the right to omit any of the tasks identified in the Scope of Services at any time upon written notice to CH2M.

8. **MONITORING AND EVALUATION OF SERVICES:** The DISTRICT reserves the right to monitor and evaluate the progress and performance of CH2M to assure that the terms of this agreement are being satisfactorily met in accordance with the District's standards and other applicable monitoring and evaluating criteria and standards. CH2M shall cooperate with the DISTRICT relating to such monitoring and evaluation.
9. **WORK DELIVERABLES:** All documentation pertaining to any and all services and work performed pertaining to this contract, including but not limited to: photos, videos, compact discs, studies, data, computations, reports, etc., shall be provided to the DISTRICT upon request or completion of a specific Task Order. Moreover, CH2M hereby agrees that all photos, videos, studies and related data, reports and any other data completed on behalf of or pertaining to this agreement is the sole property of the District.
10. **STANDARD OF SERVICES:**
 - a. CH2M agrees to perform its services in accordance with generally accepted civil engineering practices, in effect and utilized by similar firms in the United States at the time the Services are rendered, and applying methods that are generally accepted by Kentucky state and federal utility regulatory agencies and commissions such as the Kentucky Public Service Commission, Kentucky Energy and Environment Cabinet OR Department of Environmental Protection, and the federal Environmental Protection Agency.
 - b. The Services may involve the use of tests, calculations, analysis and procedures that are in a constant state of change and refinement. DISTRICT recognizes that projects involving subsurface conditions, pipelines, and underground utilities may not perform as anticipated even though the Services are performed in accordance with the required level of care.
 - c. Given the difficulty in predicting the condition of a site based upon limited sampling and investigative activity, DISTRICT recognizes that any statements, opinions and conclusions contained in reports or used for the purposes of parameters or guidelines for the performance by CH2M of the Services, are only meant to give approximations of the condition of the Site limited to the particular purposes for which the Site is intended, including geophysical stability, contaminant(s) and/or environmental compliance issues.
11. **WARRANTY OF SERVICES:** CH2M warrants that, if any of its completed services fail to conform to the above standard of services, as set forth in Section 10, CH2M will, provided CH2M is notified of such defective services within three years of the completion of the services, either perform corrective services of the type originally performed as may be required to correct such defective services on the same basis of compensation as which the original Service was performed or refund to DISTRICT the amount paid for the defective services. Said warranty shall not preclude the DISTRICT from filing a claim under the provisions of CH2M's Professional Liability Insurance, or shorten the protection offered to the DISTRICT under any statute of limitations for errors and omissions for professional services within the Commonwealth of Kentucky.
12. **TERM OF AGREEMENT:** The DISTRICT hereby retains CH2M to perform the services on the terms and conditions set forth herein for a term of one (1) year commencing with the effective date of this Agreement. At the end of the first year, the DISTRICT and CH2M may decide to extend this agreement for an additional year, or multiple years. Should the DISTRICT request additional year extensions, it shall make such request in writing no less than thirty (30) days prior to the

expiration of this Agreement term and CH2M shall provide any requested changes in fees, terms, personnel or other changes. The method by which a future agreement extension is proposed and approved shall be determined by mutual agreement of both parties.

13. **COMPENSATION AND PAYMENTS:**

- a. CH2M shall invoice for its services on the basis of its time and material for all services as set forth in Attachment A.
- b. CH2M agrees to provide the services for either the maximum, not to exceed amounts shown on Attachment A, or in accordance with the rates and charges listed in Attachment A. Any future Task Orders agreed to will also use the rates and fees in Attachment A, unless modified and adjusted in future Agreements or amendments to this Agreement.
- c. The parties acknowledge that CH2M may adjust its rates upon thirty (30) days prior written notice to District, provided however, there shall be only one rate adjustment during any twelve (12) month period. CH2M understands and agrees that fees and rates received by the DISTRICT from the DLA are set for several years at a time, and any annual increase in fees by CH2M to the DISTRICT may result in a corresponding decrease in amount of services or future Task Orders authorized in order for the DISTRICT to manage its revenues from the Government pertaining to the Contract.

14. **BILLING SUMMARIES AND INVOICES:** The DISTRICT agrees to pay CH2M for services rendered pursuant to this agreement the sums set forth and in the manner set forth in this agreement. CH2M agrees that each payment request will include only those services completed and delivered. Each request for payment shall include a detailed breakdown of services provided to include unit prices for each unit of work delivered, task description and the individual project name. CH2M shall provide a request for payment on or before the end of each month and no more than once for each month.

- a. CH2M agrees to invoice the DISTRICT in accordance with this agreement, but for the initial term of this agreement shall also agree to not bill the DISTRICT an amount more than \$25,000 monthly, regardless of amount of work completed. This may require CH2M to show on their invoice additional work completed, prior work completed and invoiced (but not paid) and total amount of outstanding balance of unpaid work. CH2M may then increase future invoices by an amount required to be paid for previous completed work unpaid, but more than the current month's completed work.
- b. Initial Government Payment Delay: Due to potential delays in the Government paying the DISTRICT once the Contract start date is executed, CH2M agrees to not suspend work for at least ninety (90) days after the completion of the first month services are provided to the Government, and the first month that the DISTRICT bills the Government. After this period has expired, CH2M shall be able to invoice the DISTRICT for all services provided during this period, plus any accrued interest as provided for herein.
- c. Interest on Unpaid Amounts: The DISTRICT shall pay interest at an annual rate equal to the prime rate as published in the Wall Street Journal, said rate of interest not to

exceed any limitation provided by law, on payments for services billed, received and agreed to by the District, but payment not having been made for forty-five (45) calendar days of the due date, such interest being calculated from the due date of the payment. In the event the charges hereunder might exceed any limitation provided by law, such charges shall be reduced to the highest rate or amount within such limitation.

- d. Suspension of Services: If DISTRICT fails to make payment for work completed within sixty (60) days after a proper monthly invoice has been received and accepted by the District, for approved work under this Agreement, CH2M may, upon fifteen (15) days written notice to District, suspend performance for only those services previously provided, billed and not paid. In the event of suspension of services, CH2M shall have no liability to DISTRICT for delay or damage incurred by DISTRICT because of such suspension of services.

15. **INSURANCE REQUIREMENTS:** Policies described in this section shall be for the mutual and joint benefit and protection of CH2M and the DISTRICT. Such policies shall contain a provision that the DISTRICT shall also be entitled to recover under said policies for any loss occasioned to it, its servants, agents, citizens, and employees by reason of negligence of CH2M. All required policies shall be primary policies not contributing to, or in excess of, policies which the DISTRICT may already carry.

- a. The policy must include completed operations insurance. The policy must remain in place for 12 months after the DISTRICT has accepted the work of CH2M. The limits of said insurance shall not however, limit the liability of CH2M hereunder.
- b. Additional Insured Endorsement: CH2M shall provide an additional insured endorsement, listing the DISTRICT on form CG 20 26 07 04.
- c. Insurance required shall be with companies qualified to do business in the State of Kentucky with a general policyholder's financial rating of not less than A+3A as set forth in the most current edition of "Best's Insurance Reports". No such policies shall be cancelable or subject to reduction in coverage limits or other modification except after thirty (30) days prior written notice to the DISTRICT. CH2M shall not do nor permit to be done anything which shall invalidate the insurance policies referred to in this section.
- d. CH2M will be required to provide LIABILITY INSURANCE as listed herein. A copy of the Insurance Binder, or other proof of required insurance, must be made available to the DISTRICT at the time of execution on the contract. The minimum required coverage will be:
 - i. CH2M shall procure and keep in force during the duration of this contract a policy of Professional Liability insurance including errors and omissions in addition to insurance to protect themselves from claims under Worker's Compensation Acts, for claims for damages because of bodily injury, including death, to their employees, and for other liability normally covered by such insurance and shall furnish evidence of such insurance to the DISTRICT. The policy must include completed operations insurance. The combined coverage

of the insurance shall be at least \$1,000,000. The limits of said insurance shall not, however, limit the liability of CH2M hereunder.

- ii. CH2M shall procure and keep in force during the duration of this contract a policy of Professional Liability insurance including errors and omissions in addition to insurance to protect themselves from claims under Worker's Compensation Acts, for claims for damages because of bodily injury, including death, to their employees, and for other liability normally covered by such insurance and shall furnish evidence of such insurance to the DISTRICT. The policy must include completed operations insurance. The combined coverage of the insurance shall be at least \$4,000,000. The limits of said insurance shall not, however, limit the liability of CH2M hereunder.

16. **INDEMNITY:**

- a. CH2M Indemnity: CH2M shall indemnify and hold harmless the DISTRICT for any and all costs, expenses including but not limited to legal fees, and against all claims, demands, liability, damages, suits, actions or causes of action which may be brought or asserted against DISTRICT to the proportionate extent arising out of the negligent acts, errors or omissions of CH2M or from any CH2M subcontractor, supplier or other individual in the performance of this Agreement.
- b. DISTRICT's Indemnity: The DISTRICT agrees to indemnify and save CH2M harmless from and against all claims, demands, liability, damages, suits, actions or causes of action of every kind and nature, which may be brought or asserted against CH2M arising out of the negligent acts, errors or omissions of the DISTRICT or the the DISTRICT's sub-contractors in the performance of this agreement. The limits of insurance set forth above shall not limit the liability of the DISTRICT hereunder.
- c. CH2M's and Suppliers' Remedies: Whenever any CH2M subcontractor or supplier providing services to CH2M is listed as an additional insured on the property insurance provided herein, CH2M will use diligent efforts to incorporate in any agreement with a subcontractor or supplier provisions whereby subcontractor or supplier waives all rights of recovery against District, CH2M, District's subcontractors and all other additional insured (and their officers, directors, partners, employees, agents, and other subcontractors of each party) for all losses and damages caused by any of the perils or causes of loss covered by such policies and any other property insurance applicable to the services.
- d. Force Majeure: Neither the DISTRICT nor CH2M shall hold the other responsible for damages or delays in performance caused by Force Majeure or other events beyond the control of the other party and which could not reasonably have been anticipated or prevented. For purposes of this Agreement Force Majeure shall include, but not necessarily be limited to, adverse weather conditions, floods, epidemics, war, riot, strikes, lockouts and other industrial disturbances; unknown site conditions, accidents, sabotage, fire, loss of permits, court orders; acts of God; acts, orders, laws or regulations of any governmental agency; other than such laws currently in effect at the time of execution of this Agreement. Should such acts or events occur, the parties to

this Agreement shall mutually agree on the terms and conditions upon which the services may be continued.

- e. Neither party nor their affiliated companies, nor the officers, agents and employees of any of the foregoing shall be liable to the other in any action or claim for consequential or special damages, loss of profits, loss of opportunity, loss of product or loss of use. Any protection against liability for losses or damages afforded any individual or entity by these terms shall apply whether the action in which recovery of damages is sought is based on contract, tort (including sole, concurrent or other negligence and strict liability of any protected individual or entity), and statute or otherwise. To the extent permitted by law, any statutory remedies which are inconsistent with these terms are waived.

17. TERMINATION:

- a. This agreement may be terminated by either party after thirty (30) days written notice. In the event of termination by the District, other than for reason of default under this contract, the DISTRICT shall be liable to pay to CH2M only for services and expenses incurred to date of termination. In the event of termination by CH2M, other than for reason of default under this contract, CH2M shall be liable for any expenses or damages incurred to the District.
- b. If DISTRICT fails to make payment for work completed within forty-five (45) days after a proper Request for Payment has been received and accepted by the District, except as set forth in the payment delay provided for in Section 16.b above, for approved work under this Agreement, CH2M may, upon thirty (30) days written notice to District, suspend performance of the work. In the event of suspension of work, CH2M shall have no liability to DISTRICT for delay or damage incurred by DISTRICT because of such suspension of work.
- c. District shall, within thirty (30) days of termination, compensate CH2M for costs incurred up to the time of termination of any Task Order, as well as those associated with termination and post-termination activities, such as demobilization, modifying schedules, reassigning personnel, relocating equipment, disposal and replacement of consumables, but not for lost profits or other ancillary expenses except as set forth herein.

IN WITNESS WHEREOF, the parties have hereunto set their hands the day and year first above written.

By signing below both parties acknowledge that they are authorized representatives and have the authority to enter into this contract.

HARDIN COUNTY WATER DISTRICT No. 1

By: *William J. Rissel*
Mr. William J. Rissel, Chairperson

By: *Jim Bruce*
Mr. Jim Bruce, General Manager

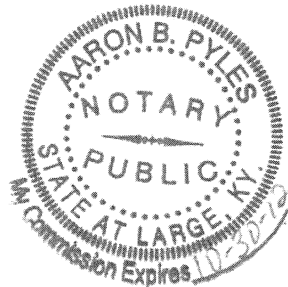
NOTARY STATEMENT:

On this 29th day of November, 2011, the above named person(s) personally appeared before me, and did provide evidence that they officially represent their respective parties, and that the instrument was signed on behalf of the organizations which they represent;

Aaron B. Pyles
Notary Public, Commonwealth of Kentucky

My commission expires 10-30-12

Aaron B. Pyles 11-29-11
(Print name) Date



CH2M HILL Engineers, Inc.

By: *David Hackworth*
Authorized CH2M Representative

David Hackworth
Printed Name

Vice President
Title

On this 23rd day of November, 2011, the above named person(s) personally appeared before me, and did provide evidence that they officially represent their respective parties, and that the instrument was signed on behalf of the organizations which they represent;

Mary P. Duncan
Notary Public, State of Kentucky

My commission expires 6/18/2012

Mary P. Duncan 11/23/11
(Print name) Date

ATTACHMENT A

Description of Services, Fees and Charges

- I. Purpose: The purpose of these services are to provide Hardin County Water DISTRICT 1 (HCWD1) with a variety of engineering services in order to comply with the requirements of the United States Government (USG) for the transition and then operation of the Fort Knox Water System.
- II. Project Approach: CH2M HILL has organized the project approach into three major phases, as follows:
 - A. Transition Support
 - B. Capital Improvement Plan Program Management
 - C. Ad-Hoc Technical & Engineering Assistance
- III. FIRST YEAR SERVICES
 - A. TRANSITION SUPPORT (PHASE 1)
 1. **TASK 1 - SUBMITTALS:** CH2M HILL will prepare the following submittals in accordance with HCWD1's proposal to the USG. These documents may be bound in a single, or two, volume(s), but each individual item must include its own Table of Contents, page numbering, graphic exhibits with individual page numbering (not continuation of previous section). The expected content of each item shall at the very least include and address all content set forth in the Contract with the USG, and in the District's proposal submitted to the USG:
 - a. **STANDARD OPERATING PROCEDURES (SOPS):** Standard Operating Procedures (SOPs) include instructive guidelines for startup, shutdown, and emergency operations. The SOPs will also include tables, diagrams, and drawings as appropriate. The SOPs will be tailored to Fort Knox and address different aspects of service interruption. These SOPs outline specific procedures for each type of interruption, as well as contingency plans for restoration of services. SOPs developed for the facility will also incorporate emergency operating considerations. CH2M HILL's level of effort assumes that Louisville Water Company will prepare the Standard Operating Procedures (SOPs) for the Water Treatment Facilities. CH2M HILL will review the documents prepared by LWC and assemble them with the SOPs developed by CH2M HILL for the distribution and storage systems.
 - b. **EMERGENCY RESPONSE PLAN (aka Catastrophic Loss Plan):** CH2M HILL will update the Emergency Response Plan (ERP) prepared for the Fort Knox Sewer System. The plan will be developed to address essential water functions through emergency power supply and redundant systems. Based on state and national standards, the ERP will address 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.
 - c. **SERVICE QUALITY BENCHMARK:** CH2M HILL will draft an initial set of benchmarks specifically for this project in the form of performance metrics and goals for continuous improvement.
 - d. **OPERATION AND MAINTENANCE (O&M) MANUALS:** The purpose of the O&M Manual is to consolidate data on the background, principles, and purpose for equipment in the system. The Manual will provide the staff with an understanding of the system goals and objectives, and will serve as a single reference source for locating the information and approaches necessary to successfully operate the system. The O&M Manual will be a valuable resource for the staff, especially when faced with operating processes that are not frequently employed, or to refresh their understanding of system operating limitations. CH2M HILL's level of effort assumes that Louisville Water Company will prepare the Operation and Maintenance (O&M) Manuals for the Water Treatment Facilities. CH2M HILL will review the documents prepared by LWC and assemble them with the O&M Manuals developed by CH2M HILL for the distribution and storage systems.
 - e. **ENVIRONMENTAL COMPLIANCE OUTLINE:** CH2M HILL will develop a regulatory strategy plan that identifies state and local regulatory and policy issues that may impact the utility privatization, along with the specific approaches to effectively address and manage these issues.

- f. **HEALTH AND SAFETY PLAN:** CH2M HILL will develop a Health and Safety Plan. The Health and Safety Plan will be tailored to site-specific activities performed by staff assigned to the Fort Knox Water System. The Safety Plan will be designed to assist HCWD1 accomplish its mission while integrating safety into its work practices.
 - g. **ANNUAL CAPITAL IMPROVEMENT PLAN:** CH2M HILL will update the Initial System Deficiency (ISDC) List based on the results on the initial system studies and recommendations from HCWD1 and LWC. CH2M HILL will update the pricing model based on recent changes to the system inventory and ISDC List. The pricing model will be used to calculate the pricing modification that is due January 1, 2012.
2. **TASK 2 - ATTEND SEMI-MONTHLY COORDINATION MEETINGS WITH HCWD1 AND LWC:** CH2M HILL will send one representative to attend a total of 8 meetings, estimated to occur every two weeks for the four months post contract award. The purpose of this meeting is to review progress on transition and start-up tasks. CH2M HILL will set agenda, coordinate time and location of meetings, facilitate discussions and prepare minutes. The meeting location will rotate between Louisville and Radcliff.
 3. **TASK 3 - ATTEND WEEKLY COORDINATION MEETINGS WITH FORT KNOX:** During the first eight weeks of start-up, CH2M HILL will send one representative to attend weekly meetings at Fort Knox. The purpose of the meetings will be to review problems, track progress, and determine if additional assignments or tasks are needed. This budget assumes attendance at 8 meetings. CH2M HILL will prepare meeting minutes.
- B. CAPITAL IMPROVEMENT PLAN PROGRAM MANAGER (PHASE 2)
1. **TASK 4 - CIP PROGRAM MANAGEMENT:** CH2M Hill will prepare contracts documents such as RFPs, RFQs, and technical specifications for the Fort Knox water system for 12 months. Each document will be requested as a separate task order, authorized on a case by case basis. The documents and task orders will be related to projects from the Capital Improvement Plan (ISDC or Replacement and Renewal). If CH2M Hill wishes to pursue an RFQ for engineering services on any project, they shall not participate in the development of the RFQ.

IV. AD-HOC ON-CALL TECHNICAL & ENGINEERING ASSISTANCE:

- A. **TASK 5 - PROJECT NEEDS/COST BENEFIT EVALUATION:** CH2M HILL will prepare cost/benefit analyses for individual projects as requested by HCWD1. The analysis will evaluate the project feasibility, need, option comparisons and life cycle cost analysis. The task can also include a value engineering task to determine the least cost (life cycle) option for the project. The analysis will be summarized in a technical memorandum. This work will be performed on an hourly rate basis with a "not-to-exceed" fee established by HCWD1 prior to commencement. CH2M HILL will notify HCWD1 when the budgeted fee is 90 percent spent.
- B. **TASK 6 - PRELIMINARY DESIGN:** CH2M HILL will provide preliminary design services for individual projects. This task includes preparation of project scope definitions and construction cost estimates. This task will be authorized on an individual project basis once joint agreement by HCWD1 and CH2M HILL has been reached defining the scope of work and deliverables required. The fee will be developed based on the complexity of the project and required level of coordination with Fort Knox.
- C. **TASK 7 - FINAL DESIGN AND CONSTRUCTION ADMINISTRATION:** CH2M HILL will provide final design and construction administration services for individual projects. This task includes preparation of constructions plans and specifications, bid documents, bidding assistance, contract award, document review and certification of final completion. This task will be authorized on an individual project basis once joint agreement by HCWD1 and CH2M HILL has been reached defining the project scope and fee. For those projects that CH2M HILL performs, the fee will be less than the published percentages shown in Rural Development Fee Curve. The fee will be based on the estimated construction cost at the beginning of the final design phase. The fee will be developed based on the complexity of the project and required level of coordination with Fort Knox.
- D. **TASK 8 - CONSTRUCTION ADMINISTRATION/RESIDENT REPRESENTATION:** CH2M HILL will provide construction resident representation for individual projects. This task includes resident inspection and other construction related services. This task will be authorized on an individual basis once joint agreement by HCWD1 and CH2M HILL has been reached defining the project scope and fee. For those projects that CH2M HILL performs, the fee will be less than the published percentages shown in Rural Development Fee Curve. The fee will be originally set based on the awarded bid price and will be adjusted based on the actual construction cost at the completion of the

project. The fee will be developed based on the complexity of the project and required level of coordination with Fort Knox.

V. FEES & CHARGES FOR SERVICES:

- A. Tasks 1 - 3 will be paid as lump sum amounts and will be billed monthly on a percentage completion basis; as follows:

Task 1: \$60,800
Task 2: \$13,000
Task 3: \$13,000

Total: \$86,800

- B. Task 4 will be paid on an individual task order basis. It will be billed at Time and Material, with each task order being negotiated with a Not To Exceed (NTE) price. CH2M Hill will invoice monthly based on % complete of all authorized task orders. Task 4 overall will have a NTE amount as noted below.

Task 4: \$57,000

These services are expected to begin on October 14, 2011 and continue to December 2012.

- C. Tasks 5 - 8 will be determined on an individual project basis based on the individuals assigned, the Scope of Work agreed to in the Task Order and the deliverables required. The current rates for CH2M individuals expected to be assigned to HCWD1 work are as follows;

<u>Title</u>	<u>Current Individual</u>	<u>Hourly Rate</u>
Principal In Charge	David Hackworth	\$195
Senior Project Manager	Jerry Anderson	\$185
Senior Technical Consultant	Robert Neath	\$185
Operation & Maintenance Specialist	Jon Green	\$175
Project Manager	Rich Tomko	\$150
Staff Engineer	Lee Blakeman/Roy DeRoche	\$ 95
Administrative Assistant	Jen Hardin	\$ 65
Co-op	Daniel Thewes	\$ 55

- D. Other individuals or discipline / expertise for persons not listed above shall be charged out at a multiplier rate, times their actual salary or equivalent hourly rate, with a multiplier of 3.0.
- E. The above fees and charges are understood to be all inclusive of incidental costs which include but are not limited to; stationery, phone charges, facsimile charges, internet fees, fuel and mileage, meals, rent, document production and copies and computer leasing or rental time. No other charges will be billed or paid, other than the fees and charges above.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
11/22/2011

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER MARSH USA, INC. 1225 17TH STREET, SUITE 2100 DENVER, CO 80202-5534	CONTACT NAME: PHONE (A/C, No, Ext): _____ FAX (A/C, No): _____ E-MAIL ADDRESS: _____	
	INSURER(S) AFFORDING COVERAGE	
15114-00124-GAWC-11/12 LOU DE	INSURER A: Greenwich Insurance Company	NAIC # 22322
INSURED CH2M HILL ENGINEERS, INC. 9127 SOUTH JAMAICA STREET ENGLEWOOD, CO 80112	INSURER B: XL Specialty Insurance Co.	37885
	INSURER C:	
	INSURER D:	
	INSURER E:	
	INSURER F:	

COVERAGES **CERTIFICATE NUMBER:** SEA-002266894-01 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> GENERAL LIABILITY	X		RGE5000255	05/01/2011	05/01/2012	EACH OCCURRENCE \$ 1,500,000
	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,500,000
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR						MED EXP (Any one person) \$
	<input checked="" type="checkbox"/> \$500,000 SIR						PERSONAL & ADV INJURY \$ 1,500,000
							GENERAL AGGREGATE \$ 5,000,000
							PRODUCTS - COMP/OP AGG \$ 5,000,000
GEN'L AGGREGATE LIMIT APPLIES PER:							
<input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC							
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY	X		RAD5000254 (AOS)	05/01/2011	05/01/2012	COMBINED SINGLE LIMIT (Ea accident) \$ 2,000,000
	<input type="checkbox"/> ANY AUTO			RAD5000256 (MA)	05/01/2011	05/01/2012	BODILY INJURY (Per person) \$
	<input type="checkbox"/> ALL OWNED AUTOS						BODILY INJURY (Per accident) \$
	<input type="checkbox"/> HIRED AUTOS						PROPERTY DAMAGE (Per accident) \$
							\$
UMBRELLA LIAB <input type="checkbox"/> OCCUR							EACH OCCURRENCE \$
EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE							AGGREGATE \$
DED RETENTION \$							\$
B	<input checked="" type="checkbox"/> WORKERS COMPENSATION AND EMPLOYERS' LIABILITY	Y/N	N/A	RWD5000252 (AOS)	05/01/2011	05/01/2012	<input checked="" type="checkbox"/> WC STATU-TORY LIMITS <input type="checkbox"/> OTH-ER
	<input type="checkbox"/> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)			RWR5000253 (WI)	05/01/2011	05/01/2012	E.L. EACH ACCIDENT \$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE \$ 1,000,000
							E.L. DISEASE - POLICY LIMIT \$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

THE CERTIFICATE HOLDER IS INCLUDED AS AN ADDITIONAL INSURED ON THE GENERAL LIABILITY AND AUTOMOBILE LIABILITY POLICIES AS REQUIRED BY WRITTEN CONTRACT OR AGREEMENT.

CERTIFICATE HOLDER HARDIN COUNTY WATER DISTRICT 1 ATTN: JIM BRUCE 1400 ROGERSVILLE ROAD RADCLIFF, KY 40160	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE of Marsh USA Inc. Sharon A. Hammer <i>Sharon A. Hammer</i>
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CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
11/22/2011

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER MARSH USA, INC. 1225 17TH STREET, SUITE 2100 DENVER, CO 80202-5534	CONTACT NAME: PHONE (A/C, No, Ext): E-MAIL ADDRESS:		FAX (A/C, No):
	15114 -00006-PLDED-11/12 LOU DE		INSURER(S) AFFORDING COVERAGE INSURER A : Zurich American Insurance Co NAIC # 16535
INSURED CH2M HILL ENGINEERS, INC. 9127 SOUTH JAMAICA STREET ENGLEWOOD, CO 80112	INSURER B :		
	INSURER C :		
	INSURER D :		
	INSURER E :		
	INSURER F :		

COVERAGES **CERTIFICATE NUMBER:** SEA-002266695-01 **REVISION NUMBER:** 2

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	GENERAL LIABILITY <input type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC					EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$ \$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS					COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	<input type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$					EACH OCCURRENCE \$ AGGREGATE \$ \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N N/A				<input type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
A	PROFESSIONAL LIABILITY*		EOC3829621-09	05/01/2011	05/01/2012	Each Claim & Total For \$2,000,000 All Claims. Retention: \$500,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

*FOR PROFESSIONAL LIABILITY COVERAGE, THE AGGREGATE LIMIT IS THE TOTAL INSURANCE AVAILABLE FOR CLAIMS PRESENTED WITHIN THE POLICY PERIOD FOR ALL OPERATIONS OF THE INSURED. THE LIMIT WILL BE REDUCED BY PAYMENTS OF INDEMNITY AND EXPENSE.

CERTIFICATE HOLDER HARDIN COUNTY WATER DISTRICT 1 ATTN: JIM BRUCE 1400 ROGERSVILLE ROAD RADCLIFF, KY 40160	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE of Marsh USA Inc. Sharon A. Hammer <i>Sharon A. Hammer</i>
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ENDORSEMENT # 007 (Revised)

This endorsement, effective 12:01 a.m., May 01, 2011 forms a part of
 Policy No. RWD5000252 issued to CH2M HILL COMPANIES, LTD.
 by XL Specialty Insurance Company.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

CANCELLATION NOTIFICATION TO OTHERS ENDORSEMENT

This endorsement modifies insurance provided under the following:

WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY INSURANCE POLICY

In the event coverage is cancelled or non renewed for any statutorily permitted reason, other than nonpayment of premium, or if there is a material reduction in coverage, advanced written notice will be mailed or emailed to person(s) or entity(ies) according to the notification schedule shown below:

Name of Person(s) or Entity(ies):	Mailing Address:	Number of Days Advanced Notice:
Per the most current schedule maintained by Marsh USA, Inc. and furnished to XL Insurance no less than 15 days prior to the 60 days of notice of cancellation, non-renewal or material reduction in coverage.		60 days

For the purpose of this endorsement, non-renewal shall mean solely non-renewal of the Policy and shall not include expiration or Notice of Conditional Renewal. Material reduction in coverage shall mean a decrease in the Policy limits, an increase in the deductible or self-insured retention or the application of a Policy exclusion not contemplated at Policy issuance.

All other terms and conditions of the Policy remain unchanged.

This endorsement changes the policy to which it is attached and is effective on the date issued unless otherwise stated.

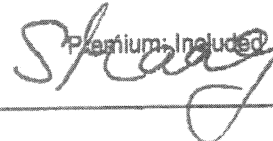
(The information below is required only when this endorsement is issued subsequent to preparation of the policy.)

Endorsement Effective May 01, 2011 Policy No. RWD5000252 Endorsement No.

Insured: CH2M HILL COMPANIES, LTD.

XL Specialty Insurance Company

Countersigned by _____

Premium Included


ENDORSEMENT # 014 (Revised)

This endorsement, effective 12:01 a.m., May 01, 2011 forms a part of
Policy No. RAD5000254 issued to CH2M HILL COMPANIES, LTD.
by Greenwich Insurance Company

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY

CANCELLATION NOTIFICATION TO OTHERS ENDORSEMENT

In the event coverage is cancelled or non renewed for any statutorily permitted reason, other than nonpayment of premium, or if coverage is materially reduced, advanced written notice will be mailed or emailed to person(s) or entity(ies) according to the notification schedule shown below:

Name of Person(s) or Entity(ies)	Mailing Address:	Number of Days Advanced Notice of Cancellation:
Per the most current schedule maintained by Marsh USA, Inc. and furnished to XL Insurance no less than 15 days prior to the 60 days of notice of cancellation, non-renewal or material reduction in coverage		60 days

For the purpose of this endorsement, non-renewal shall mean solely non-renewal of the Policy and shall not include Notice of Conditional Renewal. Material reduction in coverage shall mean a decrease in the Policy limits, an increase in the deductible or self-insured retention of greater than \$250,000 or the application of a Policy exclusion not contemplated at Policy issuance.

All other terms and conditions of the Policy remain unchanged.


(Authorized Representative)

ENDORSEMENT # 027 (Revised)

This endorsement, effective 12:01 a.m., May 01, 2011 forms a part of
Policy No. RGE5000255 issued to CH2M HILL COMPANIES, LTD.
by Greenwich Insurance Company

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY

CANCELLATION NOTIFICATION TO OTHERS ENDORSEMENT

In the event coverage is cancelled or non renewed for any statutorily permitted reason, other than nonpayment of premium, or if coverage is materially reduced, advanced written notice will be mailed or emailed to person(s) or entity(ies) according to the notification schedule shown below:

Name of Person(s) or Entity(ies)	Mailing Address:	Number of Days Advanced Notice of Cancellation:
Per the most current schedule maintained by Marsh USA, Inc. and furnished to XL Insurance no less than 15 days prior to the 60 days of notice of cancellation, non-renewal or material reduction in coverage		60 days

For the purpose of this endorsement, non-renewal shall mean solely non-renewal of the Policy and shall not include expiration or Notice of Conditional Renewal. Material reduction in coverage shall mean a decrease in the Policy limits, an increase in the deductible or self-insured retention or the application of a Policy exclusion not contemplated at Policy issuance.

All other terms and conditions of the Policy remain unchanged.


(Authorized Representative)

Endorsement # 41

Notification to Others of Cancellation Electronic Schedule

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

This endorsement modifies insurance provided under the following:

Architects and Engineers Professional Liability Insurance Policy

In consideration of the premium already charged, we agree with you, subject to all terms, exclusions, and conditions of the policy that:

- A.** If we cancel this policy by written notice to the first Named Insured for any reason other than nonpayment of premium, we will mail or deliver a copy of such written notice of cancellation:
 - 1.** To the name and address corresponding to each person or organization shown in the Schedule provided to us by the first "Named Insured". Such schedule:
 - a.** Must be initially provided to us within 15 days:
 - (1)** After the beginning of the policy period shown in the Declarations; or
 - (2)** After this endorsement has been added to the policy;
 - b.** Must contain the names and addresses of only the persons or organizations requiring notification that this Policy has been cancelled;
 - c.** Must be in an electronic format that is acceptable to us; and
 - d.** Must be accurate.Such Schedule must be updated and provided to us, by the first "Named Insured", during the policy period. Such updated Schedule must comply with paragraphs b., c., and d. above.
 - 2.** At least thirty (30) days prior to the effective date of the cancellation, as advised in our notice to the first Named Insured, or the longer number of days notice if indicated in the Schedule provided to us.
- B.** Our notification, as described in Paragraph A. of this endorsement, will be based on the most recent Schedule provided to us by the first "Named Insured" as of the date the notice of cancellation is mailed.
- C.** Proof of mailing will be sufficient proof that we have complied with Paragraph A. of this endorsement.

We are not responsible for the accuracy, integrity, timeliness and validity of information contained in the Schedule provide to us as described in Paragraphs A. of this endorsement.

ALL OTHER TERMS AND CONDITIONS OF THIS POLICY REMAIN UNCHANGED.

APPENDIX “B”

DLA CONTRACT WITH HARDIN COUNTY WATER DISTRICT No. 1

(Follows this sheet)

1. Provide each of the attachments, exhibits, and referenced documents that are listed in Section J of the Utility Service Contract.

ANSWER 1:

The final, reformatted Section J and other referenced attachments are still pending delivery from Defense Logistics Agency Energy ("DLA"). The most recent attachments, but not the final re-formatted version, have been saved on a Compact Disc which is attached hereto as **Exhibit 1**.

WITNESS: Mr. Jim Bruce, General Manager, Hardin County Water District No. 1 ("HCWD1")

2. Provide all correspondence between Hardin District and the United States Government and its representatives regarding the proposed transfer of ownership, operations, and maintenance of the Fort Knox potable water utility system.

ANSWER 2:

The requested items are on enclosed Compact Disc, with five separate folders labeled as;

Exhibit 2A, which is the first proposal;

Exhibit 2B, which is the second proposal;

Exhibit 2C, which is the third proposal; and

Exhibit 2D, which is the final proposal that was accepted by DLA

Exhibit 2E, Other correspondence, emails and documents

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

3. Provide all internal memoranda, notes, presentations, and other documents in which Hardin District discussed, reviewed or analyzed proposed service to the Fort Knox Military Installation or acquisition of the Fort Knox potable water utility system.

ANSWER 3:

HCWD1 internal documents exist within the responses and documents provided in response to Q2 and Q25 (Exhibits 2 and 10) . The internal proposal development over the three year period, developing four different proposals, used an integrated team approach which included HCWD1 staff, LWC staff and CH2M staff. Other Board presentations or internal explanation memos are included in other email documents included the other answer responses listed herein.

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

4. Provide the minutes of each meeting of Hardin District's Board of Commissioners in which the proposed transfer of ownership, operations and maintenance of the Fort Knox potable water utility system was discussed.

ANSWER 4:

See attached **Exhibit 7**.

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

Hardin County Water District No. 1
Minutes of Special Meeting
of the Board of Commissioners
July 9, 2008

Chairman Bill Rissel called the meeting to order at 11:05 am with Commissioners John Tindall, William Gossett, Ron Hockman, and Les Powers attending. Staff present included; Mr. Jim Bruce, General Manager; Mr. Brett Pyles, Operations Manager; Stephanie Brown, Administrative Assistant; and Mr. David Wilson, Attorney. Guests present at the meeting included Mr. Greg Heitzman and Mr. Jim Smith from Louisville Water Company.

Chairman Rissel opened the floor to the public comment. None were present so no comments were given and the floor was closed for public comments.

Secretary Tindall expressed appreciation to Brett Pyles and Veolia for hosting a golf scramble and donating the proceeds of \$8,500 to USA-Cares, which will provide aide to nearly 250 military families. Mr. Pyles said that the event was a great success, as well as being good public relations for both the District and Veolia.

Chairman Rissell introduced the guests, Mr. Heitzman and Mr. Smith from Louisville Water Company to the Board. Chairman Rissel asked Mr. Heitzman to give a brief history of Louisville Water Company and the events that led up to contacting the District in order to form a partnership between the two companies.

Mr. Heitzman reviewed the contents of the Partnership Agreement between the District and Louisville Water Company ("LWC"). The agreement explains that the two companies will partner in order to submit a bid to the Government for the privatization of the Fort Knox Water System. The agreement provides that LWC will be responsible for expenses related to preparing the bid documents. The agreement also states that the District would own the water system and be responsible for operating the Distribution system, while LWC would contract with the District in order to operate the water treatment plants. A new water supply from LWC to Ft. Knox, and independently to the District, was also part of the agreement. The agreement also describes that the two companies will work together in purchasing supplies, sharing in support services, installing a transmission main to connect the two water systems along with the bid submittal for the Fort Knox Water System.

The Board reviewed and discussed each section of the agreement. After all questions were answered and changes made, Commissioner Hockman made a motion authorizing the Chairman to sign the Partnership Agreement as amended between Hardin County Water District No. 1 and the Louisville Water Company. Secretary Tindall seconded the motion and it was passed.

The Board thanked both the staff of Louisville Water Company and the staff of the District for their joint cooperation in forming this partnership that will be beneficial to both companies.

Being no further business before the Board, Commissioner Hockman made a motion to adjourn the meeting at 12:05 pm which was seconded Treasurer Gossett and passed.

(Minutes submitted by Ms. Stephanie Brown)

Hardin County Water District No. 1
Minutes of Regular Meeting
of the Board of Commissioners
July 15, 2008

Chairman Bill Rissel called the meeting to order at 5:30 p.m. with Commissioners John Tindall, William Gossett, Ron Hockman, and Les Powers attending. Staff present included; Mr. Jim Bruce, General Manager; Mr. Brett Pyles, Operations Manager; Stephanie Brown, Administrative Assistant; Jenny Huff, Accountant; Charlene Easter, Customer Service Manager; Beverly McDonald, Customer Service Representative; and attorney David Wilson. Dinner was provided for the Board and staff.

Ms. Easter introduced Ms. Beverly McDonald, a new Customer Service Representative to the Board and reviewed her employment history with the Board. The Board welcomed Ms. McDonald to the District. Ms. Easter and Ms. McDonald left the meeting at this time.

Chairman Rissel opened the floor to the public comment. None were present so no comments were given and the floor was closed for public comments.

Chairman Rissel asked for a motion to accept the Secretary's Report for the June 17 Regular Board meeting. Treasurer Gossett made a motion to accept the minutes which was seconded by Commissioner Powers and passed.

Ms. Huff presented the Board with the Treasurer's Report and reviewed the highlights. She noted that some allocations have been made for expenses from water to the Radcliff sewer utility, but more standard monthly allocation amounts needed to be established. Chairman Rissel suggested a new format showing all three funds as well as a consolidated column for the financial statements in order to simplify the report for the Board members. There was a consensus from the Board for staff to develop a consolidated monthly report for all utilities. Ms. Huff and Mr. Bruce answered all other questions from the Board. Secretary Tindall made a motion to approve the Treasurer's Report for both May and June. The motion was seconded by Treasurer Gossett and passed.

Chairman Rissel asked Mr. Bruce to review the General Manager's report. Mr. Bruce informed the Board that Louisville Water Company ("LWC") will be sending a press release to the local media announcing the partnership between LWC and the District. Mr. Bruce also informed the Board that the process had begun to respond to the RFP for the Ft. Knox Water System and that the staff will meet on a regular basis with LWC in order to complete this process. Mr. Bruce updated the Board on the status of the Mobile Home Park Master Meter Tariff and stated that there is a conference call scheduled with staff from the PSC in order to discuss the tariff. Chairman Rissel asked that the staff review the need for using an armored car service to take the deposits to the bank now that the new check system has been implemented. Mr. Bruce answered all other questions from the Board.

Chairman Rissel asked Mr. Pyles to review the Operation Manager's report. Mr. Pyles answered all questions from the Board.

HCWD1 Vehicle / Equipment Consolidated List: Mr Bruce presented the Board with a detailed list of all District vehicles and equipment that includes both the Radcliff and Fort Knox sewer systems. This list includes those vehicles that are leased by Veolia, used for operations, but not owned by the District. Mr. Bruce pointed out that the list also includes an estimated replacement year for each vehicle. As new equipment is purchased or old equipment retired the list will be updated. Mr. Bruce stated that this list will be used in order to establish a future Vehicle/Equipment Replacement Policy, and he would be asking Veolia for a comprehensive list of equipment, personnel and vehicles that may be shared between the Ft. Knox and Radcliff sewer projects.

Hardin County Water District No. 1
Minutes of Special Meeting
of the Board of Commissioners

August 28, 2008

Chairman Bill Rissel called the meeting to order at 5:30 p.m. with Commissioners Ron Hockman, Les Powers, William Gossett and John Tindall attending. Staff present included Jim Bruce, General Manager; Brett Pyles, Operations Manager; Stephanie Brown, Administrative Assistant; and attorney David Wilson. Guests present included Mr. Steve Walton, incoming Commissioner; Ms. Christie Campbell, Administrative Clerk; Mr. Jeff Greer and Mr. Anthony Link, Veolia Water North America South. Dinner was provided for the Board and staff.

Chairman Rissel asked staff if the appropriate notification was sent to the media regarding the Special Meeting and Ms. Brown confirmed that the media was notified and the agenda was posted 24 hours in advance of the meeting.

Chairman Rissel opened the floor for public comment. There were no public comments offered and the floor was closed to public comment.

Mr. Bruce introduced Ms. Christie Campbell as the new Administrative Clerk and explained her employment history to the Board. Mr. Rissel welcomed Ms. Campbell to the District on behalf of the Board. Ms. Campbell left the meeting at this time.

Chairman Rissel asked for a motion to approve the July 9, 2008 Special Meeting Minutes, the July 15, 2008 Regular Meeting Minutes and the August 14, 2008 Special Meeting Minutes. Commissioner Powers made a motion to approve the minutes to all three meetings. The motion was seconded by Treasurer Gossett and passed.

Ms. Huff presented the Board with the Treasurer's Report for July and passed out an updated Statement of Cash Flows for the Radcliff Sewer utility and the simplified consolidated statement with all the utilities included on it that the Board had asked for at a previous meeting. Ms. Huff answered all other questions from the Board. Secretary Tindall made a motion to approve the Treasurer's Report and Commissioner Powers seconded the motion and it was passed.

Chairman Rissel asked Mr. Bruce to review the General Manager's Report. Mr. Bruce updated the Board on the Ft. Knox Water System Privatization, stating that staff is hoping to bring a final price to the Board at the September 16 Board meeting and that the process was going very smoothly with the District, Louisville Water Company and CH2M Hill. Mr. Bruce answered all other questions from the Board.

Sewer Territory Boundary - Update: Chairman Rissel updated the Board on the sewer boundary meeting with the District and HCWD2, held with the General Managers and Chairmen from both districts. Chairman Rissel explained that HCWD2 wasn't concerned with the District serving customers in Radcliff and that the two Chairmen asked that the General Managers meet to develop lines based on streets in order to determine the service area with regards to basins and sewer customers. Chairman Rissel pointed out that HCWD2 is interested in providing cluster systems that will feed into the basins in order to generate future revenues; therefore they are not interested in releasing the basins. Secretary Tindall encouraged staff to ensure that the high density areas for the District remain in our service area

Hardin County Water District No. 1
Minutes of Regular Meeting
of the Board of Commissioners

September 16, 2008

Chairman Bill Rissel called the meeting to order at 5:30 p.m. with Commissioners William Gossett, Ron Hockman, John Tindall and Steve Walton attending. Staff present included Jim Bruce, General Manager; Brett Pyles, Operations Manager; Stephanie Brown, Administrative Assistant; Jenny Huff, Accountant; Charlene Easter, Customer Service Manager; and attorney David Wilson. Guests present included Mr. Jim Smith, Louisville Water Company and Mr. David Hackworth, CH2M Hill. Dinner was provided for the Board and staff.

Chairman Rissel opened the floor for public comment. There were no public comments offered and the floor was closed to public comment.

Chairman Rissel asked for a motion to August 28, 2008 Special Meeting Minutes. Treasurer Gossett made a motion to approve the minutes. The motion was seconded by Commissioner Hockman and passed.

Ms. Huff presented the Board with the Treasurer's Report for August. Ms. Huff answered all other questions from the Board. There was discussion about whether or not the Government should pay interest on late sewer payments. It was determined that the District's tariff, nor contract with the Government, provided for interest added to late payments. Commissioner Walton made a motion to approve the Treasurer's Report and Secretary Tindall seconded the motion and it was passed.

Chairman Rissel asked Mr. Bruce to review the General Manager's Report. There was a consensus from the Board to allow Mr. Bruce to remove all topics from the General Manager's Report that have no current or new information to report to the Board. Mr. Bruce informed the Board that a meeting date has been set to meet with the General Manager of HCWD2 in order to work out the sewer service boundaries. Mr. Bruce also pointed out that there are new developments that are close the District's current sewer service area, but are in HCWD2's water, which is an area that will have to be discussed in the meeting. Mr. Bruce answered all other questions from the Board.

Chairman Rissel asked Mr. Pyles to review the Operation's Manager's Report. Mr. Pyles passed out the current list of all capital projects being completed by the District, to include the Ft. Knox Stormwater, Ft. Knox Sanitary Sewer System and the Radcliff Sanitary Sewer System. Mr. Pyles answered all other questions from the Board.

Ft. Knox Water - Bid Proposal Presentation: Mr. Bruce introduced Mr. Jim Smith from Louisville Water Company and Mr. David Hackworth from CH2M Hill. Mr. Hackworth reviewed a slide presentation regarding the Ft. Know Water Privatization Bid Proposal. Mr. Rissel asked the staff's opinion of increasing the general and administrative overhead (G&A) rate from 3.8%. Mr. Bruce informed Mr. Rissel that the staff does not object to increasing the overhead rate as CH2M Hill's representatives instructed that this was a low percentage to charge for overhead. Secretary Tindall made a motion to authorize the team to use a range for G&A with a minimum of 3.8% and a ceiling of 5% to ensure that the District's bid is still competitive but will still properly fund the necessary projects and

Hardin County Water District No. 1
Minutes of Regular Meeting of the Board of Commissioners
September 16, 2008

Continued

continued operations if awarded the bid for the Ft. Knox Water System. The motion was seconded by Commissioner Hockman and passed.

Mr. Hackworth and Mr. Smith answered all other questions from the Board. Commissioner Hockman made a motion to authorize staff, and legal counsel, and Chairman, to execute and sign any and all documents in order for the District to submit both a base and alternate proposal to the United States Government, to own and operate their water utility at Ft. Knox, Kentucky, as anticipated in its partnership agreement with the Louisville Water Company. Treasurer Gossett seconded the motion and it passed.

Chairman Rissel thanked the staff of Louisville Water Company for taking the financial responsibility for preparation of the bid with the risk of the bid not being awarded to the team and he also thanked the staff of CH2M Hill for their efforts put forth for this bid. Mr. Smith and Mr. Hackworth left the meeting at this time.

In-Service Training Days: Ms. Easter presented the Board with the option of allowing the staff to set aside two in-service training days, Veteran's Day and President's Day, where the office would be closed but all District employees would be required to attend the full day of training or work to cover emergency calls. This would allow the District to be able to share and compare information for operations in order to improve their business performance and enhance the service provided to the public as well as experience a cost savings through such a program. Secretary Tindall made a motion to authorize staff to close the main office for Veteran's Day and President's Day in order to provide in-service training for all employees, which would be mandatory for all employees to attend, and to report back to the Board at the end of 2009 to discuss possibly extending to future years. The motion was seconded by Commissioner Walton and passed.

2008 Budget Items # 12, 18 and 23: Mr. Bruce presented the Board with three items that were funded in the 2008 Budget but had not yet been approved by the Board. These items include a Large Field Meter Tester (#12), a Mueller B101 Tapping Machine (#18) and a Concrete Retaining Rock Storage (#23). Treasurer Gossett made a motion to authorize staff to purchase a Large Meter Field Tester, a Mueller B101 Tapping Machine and the materials needed to construct concrete Rock and Material Storage bins, for a combined total not to exceed \$12,000, which motion was seconded by Commissioner Hockman and passed.

Water Rate Adjustment: Mr. Bruce informed the Board that when the current water rates were approved in August of 2007 they were based upon the 2005 test year. In the PSC order it was noted that the revenue requirements were \$88,821 more than what we had requested. Since 2005 there have been numerous accounts and expenses that have increased significantly. Mr. Bruce informed the Board that the staff may be able to file a small water rate increase, requesting the amount that was not granted in PSC order in August of 2007, which would result in a 2.1% increase per customer.

There was much discussion regarding submitting the full difference between the 2005 test year expenses and our current expenses and whether or not this would qualify as a interim rate case. The Board asked legal counsel and staff to find out what the PSC defines as an interim rate adjustment. Secretary Tindall made a motion to charge staff to investigate which option would be considered interim by the PSC and

Hardin County Water District No. 1
Minutes of Regular Meeting
of the Board of Commissioners

March 17, 2009

Acting Chairman William Gossett called the meeting to order at 5:30 p.m. due to with Commissioners John Tindall, Ron Hockman, and Steve Walton attending. (Chairman Rissel was attending another meeting and notified Treasurer Gossett that he would arrive late, and to Chair the meeting). Staff present included Jim Bruce, General Manager; Brett Pyles, Operations Manager; Stephanie Brown, Administrative Assistant; Jenny Huff, Accountant; Scott Schmuck Finance and Accounting Manager; and attorney, David Wilson. Dinner was provided for the Board and staff.

Chairman Gossett opened the floor for public comment. There were no public comments offered and the floor was closed to public comment.

Mr. Bruce introduced Mr. Scott Schmuck as the new Finance and Accounting Manager for the District and gave a brief description of his educational and employment background. The Board welcomed Mr. Schmuck to the District.

Chairman Gossett asked for a motion to accept both the February 11, 2009 Special Meeting Minutes and the February 17, 2009 Regular Meeting Minutes. Commissioner Hockman suggested one change on the February 11, 2009 Special Meeting Minutes. Commissioner Walton made a motion to accept the minutes with the suggested amendment. The motion was seconded by Commissioner Hockman and passed.

Ms. Huff presented the financial reports for December 2008, January and February 2009. (Chairman Rissel entered the meeting at this time). Commissioner Hockman asked about the procedure for collecting Bad Debt as the amount in Bad Debt Expense has increased. Ms. Huff explained the District's procedure to expense bad debt once it is sent to the collection agency. The Board also asked about a net loss shown for Radcliff sewer. Mr. Bruce said that staff needed to do more work on allocating costs between funds, and this may change the impact to Radcliff sewer in future months.

Secretary Tindall asked if the Army had been making timely payments for Ft. Knox sewer services. The staff informed the Board that the payments have been late. Commissioner Rissel suggested that the staff possibly write to the contracting officer, or their superior, regarding late payments. Mr. Bruce informed the Board that he can bring up this topic at the monthly status meeting and explain how this late payment impacts the District's cash flows and how the District would appreciate attention placed on this matter. Secretary Tindall suggested negotiating a discount for early payment and a penalty for a late payment. Mr. Bruce informed the Board that this can be addressed in the next rate increase for Ft. Knox Sewer.

Chairman Gossett asked Mr. Bruce to review the General Manager's Report. Mr. Bruce updated the Board on the Ft. Knox Water Privatization bid, informing them that the negotiations are expected to start within the next month. Mr. Bruce informed the Board that the Mobile Home Park Master Meter tariff has been sent and received by the Public Service Commission. Mr. Bruce also thanked Mr. Pyles for preparing this month's Board packet while he was at a conference, and said that he had done an excellent job

Hardin County Water District No. 1
Minutes of Regular Meeting
of the Board of Commissioners

April 21, 2009

Chairman Bill Rissel called the meeting to order at 5:30 p.m. with Commissioners William Gossett, John Tindall, Ron Hockman, and Steve Walton attending. Staff present included Jim Bruce, General Manager; Brett Pyles, Operations Manager; Stephanie Brown, Administrative Assistant; Scott Schmuck, Finance and Accounting Manager; and attorney, David Wilson. Dinner was provided for the Board and staff.

Chairman Rissel opened the floor for public comment. There were no public comments offered and the floor was closed to public comment.

Chairman Rissel asked for a motion to accept the March 17, 2009 Regular Meeting Minutes. Commissioner Hockman made a motion to approve the minutes. The motion was seconded by Commissioner Walton and passed.

Mr. Schmuck presented the Board with a brief form of the financial statements and pointed out that he is still learning the accounting processes for the District and is working on developing more efficient accounting system for the District. Mr. Schmuck also pointed out that there has been a correction in the allocation method used for allocating expenses between the different utilities. There was a consensus from the Board to table all action taken on the Treasurer's Report until the next meeting and encouraged Mr. Schmuck to develop a more automated process that is as standard as needed to meet the District's accounting needs.

Chairman Rissel asked Mr. Bruce to review the General Manager's Report. Mr. Bruce informed the Board that the District has not heard anything from Ft. Belvoir / DESC regarding the Ft. Knox Water Privatization Bid. Mr. Bruce also informed the Board that a meeting had been held with Louisville Water Company and reviewed what was discussed at that meeting.

Mr. Bruce informed the Board that the District has received a formal pleading from the PSC regarding the Master Meter Tariff. The formal pleading represents several mobile home communities, who have hired an attorney to represent them. Mr. Wilson pointed out that this may lead to negotiations or dialogue between the park owners and the District.

Secretary Tindall pointed out that he felt the District should not have to continue to loose money through leaked water. Commissioner Walton also suggested that the District require relocation of those meters that are not accessible to District employees and if not then the meter can be turned off. Chairman Rissel asked how the two parties could negotiate, outside of the PSC being party, or the Board approving what was being discussed. Mr. Wilson advised that any agreement or offers would have to be approved by the Board, and the PSC would eventually have to agree to any resolution.

Chairman Rissel asked Mr. Pyles to review the Operation's Manager's Report. Mr. Pyles pointed out that there were no lost time accidents for all four utilities for the first quarter of 2009. Mr. Pyles also informed the Board that the District had received an award for the Water Treatment Plant from the

Hardin County Water District No. 1
Minutes of Special Meeting
of the Board of Commissioners

October 27, 2009

Chairman Bill Rissel called the meeting to order at 5:30 p.m. with Commissioners William Gossett, John Tindall, Ron Hockman, and Steve Walton attending. Staff present included Jim Bruce, General Manager; Brett Pyles, Operations Manager; Stephanie Brown, Administrative Assistant; Scott Schmuck, Finance and Accounting Manager; and attorney, David Wilson. Guests present at the meeting were Mr. Robert Ender, Fort Knox DPW, Mr. Roger Humphrey, Fort Knox DPW, and Ms. Stephanie Bowman, Fort Knox Contracting. Dinner was provided for the Board and staff.

Chairman Rissel opened the floor for public comment. There were no public comments offered and the floor was closed to the public comment portion of the meeting.

Chairman Rissel asked for a motion to accept the September 15, 2009 Regular Meeting Minutes. Treasurer Gossett made a motion to approve the minutes. The motion was seconded by Commissioner Walton and passed.

Mr. Schmuck presented the financial statements for September. Mr. Bruce pointed out that he will have Resolutions for the BRAC grant funds at the next meeting. The Board suggested holding a Special Board meeting to approve the Resolutions. Mr. Bruce also updated the Board on the status of an issue regarding reserve funds as raised by US Bank, bond trustee. Commissioner Walton made a motion to approve the financial statements for September and Secretary Tindall seconded the motion and it was passed.

Chairman Rissel asked Mr. Bruce to review the General Manager's Report. Mr. Bruce introduced the representatives from Ft. Knox, Robert Ender, Roger Humphrey and Stephanie Bowman, and gave a brief background of each person and their role with the District's Ft. Knox Sewer systems contract. Chairman Rissel thanked the staff from Ft. Knox for having a good working relationship with the District. The guests answered a few questions for the Board, and then left at this time. Mr. Bruce informed the Board of Karen Brown's retirement from the District effective in February and stated the District plans to fill the Accounting Specialist Position before year end. Mr. Bruce informed the Board that there will be a retirement dinner in Ms. Brown's honor and the Board will be invited to attend.

Mr. Bruce informed the Board that the negotiations for the Ft. Knox Water Privatization have begun and are going well. Mr. Bruce stated that hopefully the negotiations will be complete before the year end. The Board asked if there were any concerns regarding the contract with Louisville Water Company. Mr. Bruce informed the Board that there are not any. The Board did point out the continued concern regarding the mixing of chlorine treated water with chloramine treated water and asked that this issued be moved to top priority. Mr. Bruce informed the Board that LWC is going to hire a third party to complete the analysis to determine if the two treated waters can be mixed with each other or converted.

Mr. Wilson updated the Board on the Mobile Home Park Master Meter Tariff. The agreement between the District and the Mobile Home Communities is being finalized and then will be brought to the Board. Mr. Bruce answered all other questions from the Board.

Hardin County Water District No. 1
Minutes of Special Meeting
of the Board of Commissioners

January 26, 2010

Chairman Rissel called the meeting to order at 5:32pm with Commissioners John Tindall, Ron Hockman and Steve Walton attending. Treasurer Gossett attended by video-teleconference from Ft. Meyers, Florida. Staff present at the meeting included Jim Bruce, General Manager; Brett Pyles, Operations Manager; Scott Schmuck, Finance and Accounting Manager; Stephanie Brown, Administrative Assistant; Karen Brown, Accounting Specialist; Karen Morrison, Accounting Specialist; and Attorney David Wilson. Dinner was provided for the Board and staff.

Chairman Rissel opened the floor for public comments. There were no public comments offered and the Public Comment portion of the meeting was closed.

Chairman Rissel asked for a motion to accept both December 15, 2009 Regular Meeting minutes and the December 21, 2009 Special Meeting minutes. Commissioner Hockman made a motion to approve both sets of minutes. Secretary Tindall seconded the motion and it passed.

Mr. Bruce and Mr. Schmuck introduced Ms. Karen Morrison to the Board. Mr. Schmuck stated that Ms. Morrison is filling the position of Accounting Specialist, as Karen Brown is retiring and gave a brief description of her work history. The Board welcomed Ms. Morrison to the District. Chairman Rissel commended Karen Brown for her 20 years of work for the District and wished her the best of luck on behalf of the Board during her retirement, to which the Board applauded Karen. Ms. Brown and Ms. Morrison left the meeting at this time.

Mr. Schmuck presented the financial statements for December, highlighting the key points for all four funds. Mr. Schmuck explained the loss for the Radcliff Sewer fund, being due to the electrical overages and water sales being down, due to having a wet year. Secretary Tindall pointed out that often times the electric companies have lower industrial or large commercial rate structures and asked staff to look into this possibility for the District. Mr. Bruce noted that Veolia Water is proceeding with an Energy Savings Study for Radcliff Sewer, and this should be part of that study. Chairman Rissel pointed out that having a consolidated Net Income of 1.1 million is probably the highest on record for District, which Mr. Bruce confirmed. After all discussion, Secretary Tindall made a motion to approve the Treasurer's Report for December / un-audited 2009 year end. The motion was seconded by Commissioner Walton and passed.

Mr. Gossett entered the meeting at this time at 5:45pm via video teleconference from Ft. Meyers, Florida.

Chairman Rissel asked Mr. Bruce to review the General Manager's report. The Board asked for an update on receiving the BRAC grant funds. Mr. Bruce informed the Board that Ms. Carolyn Ritchie, County Treasurer, was able to have additional requested reimbursements approved and that a meeting will be held in the next week with the LTADD to determine what other denied items might also be re-considered and approved. Mr. Bruce also informed the Board that the Ft. Knox water privatization award has been postponed until September, 2010 and that the District along with those partnering in the bid will be responding the DESC regarding the pricing of the bid due to the postponement. Secretary Tindall suggested it would be best for the District to respond to DESC as soon as possible, with the least delay. Mr. Bruce answered all other questions from the Board.

Hardin County Water District No. 1
Minutes of Regular Meeting
of the Board of Commissioners

May 18, 2010

Acting Chairman William Gossett called the meeting to order at 5:30 p.m. with Commissioners John Tindall, Ron Hockman, and Steve Walton attending. (Chairman Rissel was out of state attending a business meeting). Staff present included Jim Bruce, General Manager; Brett Pyles, Operations Manager; Christie Campbell, Administrative Clerk; Scott Schmuck Finance and Accounting Manager; and attorneys David Wilson and Derrick Staton. Guests present included Mr. Jerry Hensley and Mr. Brad Hayes both with Ray, Foley, Hensley & Company, PLLC/CPA. Dinner was provided for the Board and staff.

Chairman Gossett opened the floor for public comment. There were no public comments offered and the floor was closed to public comment.

2009 Financial Audit Report: Chairman Gossett asked and gained consensus from the Board to allow Mr. Hayes from the District's CPA, Ray, Foley, Hensley & Company, PLLC/CPA, to discuss the District's Annual Financial Audit. Mr. Hayes presented the Board with the findings of the District's Annual Audit and commended Mr. Schmuck for gathering all of the necessary documents in a timely manner and making it an easier process. Mr. Hensley explained the District's net worth as a whole and for each separate water and sewer fund. Mr. Hayes, Mr. Hensley, Mr. Schmuck and Mr. Bruce answered several questions from the Board. Commissioner Hockman made a motion to accept the 2009 Annual Financial Statements and report as prepared and presented by the District's Certified Public Accountant. The motion was seconded by Secretary Tindall and passed.

Chairman Gossett asked for a motion to accept the April 27, 2010 Special Meeting Minutes. Commissioner Hockman made a motion to accept the minutes. The motion was seconded by Commissioner Walton and passed.

Mr. Schmuck presented the financial statements for April. He noted that Bad Debt Expense is currently lower than last year and budget and Bad Debt Recovered is up 35% compared to last year. Mr. Schmuck answered all other questions from the Board. Secretary Tindall made a motion to accept the April 2010 Treasurers Report. Commissioner Walton seconded the motion and passed.

Chairman Gossett asked Mr. Bruce to review the General Manager's Report. Mr Bruce reported that staff had met and prepared a list of topics to present to the Board at the Strategic planning Session. He will email the Commissioners with possible dates to schedule the Planning Session. Secretary Tindall questioned if there was any news on the Fort Knox privatization bid. Mr. Bruce stated that there is no news as of yet, but Louisville Water Company was coming down Friday to tour the Pirtle WTP.

Commissioner Walton asked about the status of the MHP Master Meter Tariff Report. Mr. Bruce informed the Board that staff was still answering the 26 questions for the PSC's latest data request which was due to the PSC by the May 28th extension deadline. Secretary Tindall and Commissioner Walton both agreed the park owners need to be held responsible for any water that is leaked in their park.

Hardin County Water District No. 1
Minutes of Regular Meeting
of the Board of Commissioners

August 17, 2010

Chairman Bill Rissel called the meeting to order at 5:32 p.m. with Commissioners William Gossett, John Tindall, Ron Hockman, and Steve Walton attending. Staff present included Jim Bruce, General Manager; Brett Pyles, Operations Manager; Scott Schmuck, Finance and Accounting Manager; Charlene Easter, Customer Service Manager; Christie Campbell, Administrative Clerk and attorney David Wilson. Dinner was provided for the Board and staff.

Chairman Rissel opened the floor for public comment. There were no public comments offered and the public comment portion of the meeting was closed.

Chairman Rissel asked for a motion to accept the June 15, 2010 Regular Board Minutes and the July 16, 2010 Special Meeting Minutes. Commissioner Walton made a motion to accept both meeting minutes. Treasurer Gossett seconded the motion and motion passed.

Mr. Schmuck presented the financial statements for June and July and provided a handout of the Net Income Comparisons for 2009 and 2010. Chairman Rissel asked staff to explain the relevance between the positive net income shown for Radcliff sewer and the recent report on rate changes needed to maintain 100% cost recovery. Mr. Bruce and Mr. Schmuck explained that summer months have shown a higher income as customers water their lawns, fill swimming pools and consume more water outdoors. Since 2009, there has been a marked increase also in number of active accounts. Also, compared to 2009, there have been fewer capitalized expenses incurred by Veolia, which helped net operating income. Secretary Tindall asked for further clarification on this difference, which was provided.

Mr. Schmuck mentioned that another factor is that some of the expenses are capitalized expenses, which are expensed over the life of the asset through its depreciation expense. Mr. Bruce pointed out that like in 2009, the net income for 2010 will drop considerably or become negative when summer months are over and water / sewer sales drop considerably, which could even end the year with a negative net income. Commissioner Hockman made a motion to approve the financial statements for June and July. Secretary Tindall seconded the motion and it was passed.

General Managers Report: Chairman Rissel asked Mr. Bruce to review the General Manager's Report. Mr. Bruce and the Board discussed what progress had been made with the privatization of Fort Knox Water privatization proposal. Chairman Rissel questioned what time line the District would have to convert disinfection methods, using Louisville Water. Mr. Bruce explained that the proposal and Government assumed that it would take up to five years to phase out the Muldraugh Water Treatment Plant, after which time a larger portion of water used by Ft. Knox would be supplied by LWC. There was also discussion on what would need to be included in the contract agreement with LWC for operations and purchased water supply.

Chairman Rissel addressed the Board about what the plans are for the Board Strategic Planning Session. It was the consensus of the Board to meet in September 2010. There will be two, half day sessions. The first meeting will be for staff presentation and the second meeting will be schedule about a week later. Mr. Bruce asked Ms. Campbell to email the Board with possible dates that they are available and get a definite schedule.

Continued

due balance reached \$3,000. Motion was seconded by Commissioner Hockman and motion passed. Commissioner Hockman expressed concern about including list of names of past due customers in the Board packet, as these documents were open records. Mr. Bruce said in future packets he would only show account numbers and Board members could ask about owner names during meeting if they wanted to.

Chairman Rissel asked Mr. Bruce to update the Board concerning the Ft. Knox water negotiations. Mr. Bruce informed them of the current status and answered all questions. Commissioner Hockman asked if there had been any contact with the Vine Grove Mayor, Mr. Bruce answered all questions.

Chairman Rissel asked if there were any questions about the Operation's Manager's Report. Secretary Tindall asked about the current water loss percentage. Mr. Pyles explained that the percentage was high due to timing issues with the reading of the meters and the tracking of the water treated and that is why the water loss is tracked by a running average.

Consent Agenda Items: Chairman Rissel asked if there were any questions on the Consent Agenda.. Commissioner Walton made a motion to approve Consent Agenda items No. 4 (Capital item No. 23, Replace ½ ton truck with F-450 flat bed for \$40,000 using state bids), No. 5 (General Manager - Executive Assistant reclassification, Budget item No.13) and No. 6 (Bid Award - Ft. Knox Primary Treatment Building Electrical to Marine Electric for \$120,258). Treasurer Gossett seconded the motion and motion passed.

Employee Benefit Insurance Options: Staff answered all questions and noted that there has been substantial savings on the Health Insurance costs by using the current \$2,500 deductible, High Deductible / Low Premium (HDLP) type plan with the District paying the deductible amount between \$500 and \$2,500. There was discussion about other aspects of the different plans. Ms. Morrison explained the current coverages and stated that the proposed provider changes offered the same benefits and some were even better than the current. Mr. Bruce noted that the 15% increase in health insurance was included in the 2011 Budget.

Commissioner Hockman expressed concern about switching dental insurance providers after plan year had started, and possible making employees have to find new dentists. Secretary Tindall made a motion to authorize staff to execute paperwork and agreements as needed to change the employee's life insurance and long term disabilities policies to the plans as quoted by Lincoln National, with plan effective dates as soon as possible. Commissioner Walton seconded the motion and the motion passed. Chairman Rissel thanked Ms. Morrison for her time and efforts in preparing this information. Ms. Morrison exited the meeting at this time.

Fort Knox Rate Adjustment: After discussion, Secretary Tindall made the motion to authorize staff to present a rate adjustment to Ft. Knox for their monthly sewer rate to increase by 2.3%, effective October 1, 2011, or to a total monthly rate of \$275,055 as needed to recover new operating costs from Veolia which have been requested to increase October, 2011. Treasurer Gossett seconded the motion and the motion passed. Commissioner Hockman abstained from voting noting that he had a relative the worked for Veolia Water, the company providing operating services at the Fort Knox sewer utility.

Part Time Temporary Employee: Mr. Bruce informed the Board that he planned to hire a part time temporary employee for construction inspection. Mr. Pendley explained the need and the role this person would have and answered all questions. It was also pointed out that this was a project specific assignment and would end when the project were complete. Chairman Rissel asked there were any potential

Hardin County Water District No. 1
Minutes of Regular Meeting
of the Board of Commissioners

June 21, 2011

Chairman Rissel called the meeting to order at 5:30 p.m. with Commissioners Ron Hockman, John Tindall, Steve Walton and William Gossett in attendance. Staff present included Jim Bruce, General Manager; Brett Pyles, Operations Manager; Scott Schmuck, Finance & Accounting Manager; Preston Pendley, Engineering Manager; Andrea Palmer, Executive Assistant; and attorneys David Wilson and Dustin Humphrey. There were no guests present. Dinner was provided for the Board and staff.

Chairman Rissel opened the floor for public comment. There were no public comments offered and the floor was closed to public comment.

Chairman Rissel asked for a motion to accept the April 19, 2011 Regular Meeting Minutes. Treasurer Gossett made a motion to accept the minutes. The motion was seconded by Commissioner Walton and passed.

Chairman Rissel asked if there were any questions about the Treasurer's report. Secretary Tindall questioned the held payment to Bowen Excavating. Mr. Bruce explained that final payment is being held due to the claims filed by the military families due to losses caused by the sewer backup and the costs to clean up and finish the project. Treasurer Gossett asked if the families were satisfied or if there is potential of future claims or legal action. Mr. Wilson answered that any future claims should be covered by the contractor's insurance. Mr. Bruce confirmed that preventative measures are or will be in place to avoid this in the future and that each payment mailed to the families included a statement telling them they were releasing the District of any liability upon the cashing of the check. Commissioner Walton made a motion to accept the April 2011 Treasurer's Report. The motion was seconded by Secretary Tindall and motion passed.

[Board Monitoring Reports: Mr. Bruce updated the Board on the status of the Ft. Knox Water Privatization Bid, which is in review pending the answer to seven additional questions sent by the government. He also informed the Board that the LWC study will be completed in the fall. There was some discussion regarding the Radcliff Sewer Rate Study and the HCWD2 Wholesale Treatment Rate.]

Chairman Rissel inquired whether or not HCWD2 could fall under the terms of the Town of Muldraugh sewer tariff and rate. Mr. Bruce explained that the Muldraugh tariff was specific only to that customer, based on treatment costs at Ft. Knox. There was some discussion about HCWD2's projected flowrate, and Secretary Tindall suggested that staff validate and verify the flow amounts and then request that HCWD2 pay to upgrade the District's system, if needed, in order to accommodate their added flow, which could not be handled by existing infrastructure. There was also discussion about future combining of the two wastewater treatment plants, as a way to better utilize these facilities and avoid a costly plant expansion project.

Mr. Bruce introduced Ms. Andrea Palmer as the new Executive Assistant. He gave a brief description of her background, education, and current job duties. The Board welcomed her. He also informed the Board that Charlie Miller, Project Coordinator, is retiring. Customer Service

Continued

explained that this is required when new AMR meters are installed and replace an older meter, if the older meter had not been fully depreciated, the residual value must be written off. Commissioner Hockman asked if this was also the case with the disposed line and Mr. Schmuck replied that the line was replaced and the old line was not fully depreciated.

Secretary Tindall made a motion to accept the June 2011 Treasurer's Report. The motion was seconded by Treasurer Gossett and motion passed.

Board Monitoring Reports: Commissioner Hockman asked for an update on the Ft. Knox Privatization Bid. Mr. Bruce stated that the District has yet to receive a final contract, but that during a recent conference call with the Government, they said that if an award was made, it would be completed by the end of September. Chairman Rissel asked Mr. Bruce if he had the authority to sign a contract on behalf of the Board, if one were presented near the end of the month which required immediate action. Mr. Bruce answered that he did not find any Board action to make that authorization, and also noted that with the Sewer Privatization Contract sent in 2004, that the Government had only given the District about a day to sign and execute the contract. Mr. Rissel pointed out that without that authorization, the Board would be required to have an emergency meeting regarding the contract, if one were presented before the end of the month.

Secretary Tindall asked if it would be inappropriate to inquire about the status of the bid award or the schedule. Mr. Bruce answered that the District had made a recent inquiry, and the response seemed positive, and seemed to indicate that a final contract award was close. Secretary Tindall also stated that if a contract were to be presented in the next week, then he felt that the Board could make the authorization at this meeting. Mr. Wilson also said that as this were a regular meeting, the Board could take action on any subject. Secretary Tindall then made a motion to give the General Manager the authority to sign a contract for the Ft. Knox Water System Privatization Bid after review by the District's attorney and the Chairman of the Board, should he be available. The motion was seconded by Treasurer Gossett and motion passed.

Chairman Rissel asked if there were any questions about the Operation Manager's Report. There were none. He asked for the status of the Mobile Home Parks – was it better or worse this month – and Mr. Schmuck answered that it is better. Mr. Bruce noted that one park owner asked for tips on finding leaks and then found his own leak after meeting with staff.

Secretary Tindall asked about water loss in comparison to the past. Mr. Pyles answered that District staff found a rather large leak off of Hardinsburg Road. He stated that with the repair complete, the District should show a reduction in water loss going forward. Mr. Pyles also complimented the Distribution staff for their persistence and efforts in finding two large leaks recently on rural roads.

Chairman Rissel asked if Staff is concerned that the Veolia lateral lining project is only at 57% at this point in the year. Mr. Pyles responded that the District requested an action plan from Veolia and received it. Secretary Tindall showed concern for a fixed fee on this service provided. He asked if they have met their goal in the past years which Mr. Pyles answered that they had.

5. Provide a map that shows all significant facilities of the Fort Knox potable water utility system, including treatment facilities, master meters, and transmission and large distribution mains, and their relationship to Hardin District facilities that are located outside the Fort Knox Military Installation.

ANSWER 5:

See attached **Exhibit 8**, which is a custom exhibit prepared by HCWD1

WITNESS: Mr. Daniel Clifford, GIS / Planning Specialist, HCWD1

CASE NO: 2011-00416

Hardin Co Water District #1

CONTAINS

LARGE OR OVERSIZED

MAP(S)

RECEIVED ON: December 7, 2011

6. a. State whether Hardin District considers the Fort Knox potable water utility system as currently operated by the United States Government to be a "utility" as KRS 278.01 O(3) defines "utility." Explain.
- b. If Hardin District does not consider the Fort Knox potable water utility system as currently operated by the United States Government to be a "utility" as KRS 278.01 O(3) defines "utility," explain why KRS 278.020(5) requires Commission approval of the proposed transfer of ownership, operations and maintenance of the Fort Knox potable water utility system.

ANSWER 6:

- a. In October, 2004, HCWD1 filed almost an identical application to the Commission requesting approval to take over the Ft. Knox sanitary and storm sewer systems. The Commission issued a thirteen page order (Case No. 2004-00422) authorizing HCWD1 to proceed with that and acknowledging that the sanitary sewer should and would be regulated. The resulting HCWD1 sewer utility would indeed be a "public utility" (See Conclusions of Law, page 7~11, par 1 ~ 22). In section (page 11), par 1. Part of that order (par. 3, pg. 12) also applied KRS 74.110 requiring that HCWD1 expand its territorial limits to add the new sewer system. It is HCWD's position that the United States Governments (USG's) water system, once transferred to and owned by HCWD1, satisfies the statutory definition of utility.
- b. HCWD1 does consider the Fort Knox Potable Water Utility System as currently operated by the United States Government to be a utility as defined. Even if the Commission were to find that the Fort Knox Potable Water System did not qualify as a "utility" as defined in KRS 278.010(3)(d), HCWD1 would submit that the USG has nonetheless consented to PSC regulation as previously recognized by the Commission in Case no. 2004-00422 and in accordance with the Kentucky decision of *Brandenburg Telephone Company vs. South Central Bell Telephone Company*, KY. 506 SW 2d 513 (1974). The decision by the Defense Logistics Agency / Energy ("DLA") to select HCWD1 was predicated upon the expectation that the on-going relationship would be regulated by the KY Public Service Commission. Note that in the final contract presented to HCWD1, DLA included in the preamble section verbiage which reflects that the contract was contingent on Kentucky PSC approval. Furthermore, paragraph 5, page 5 of the contract reads as follows: "The contract award shall be conditioned upon the KY 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". In light of the above, HCWD1, submits that DLA has submitted to PSC jurisdiction and regulation.

WITNESS: Mr. David T. Wilson II, Legal Counsel for HCWD1

7. State whether Hardin District considers the Utility Service Contract with the United States Government to be an evidence of indebtedness. Explain.

ANSWER 7:

No. HCWD1 did not execute a debt instrument, nor is HCWD1 required to make any payments for the system. The USG did require HCWD1 propose a "purchase price" to purchase the system based on an estimate of fair market value. The "purchase price" is paid in the form of a credit given the District by the USG. The net effect is a zero cash transaction between the parties. Since this would result in the USG paying for the assets it already owns, the USG requires this charge to be offset through an equal credit against the charge.

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

8. State for each calendar year from 2000 to 2010 the amount of water produced at the Fort Knox water treatment plant and the amount of water sold or otherwise transferred to non-United States Government entities.

ANSWER 8:

HCWD1 has only been provided Monthly Operating Reports from 2005 to the present. Water produced and water sales/transfers can be found in the table below:

Date	Central Production	Muldraugh Production	Total Water Produced	Total Water Sold	Water Sold to Hardin District	Water Sold to Muldraugh
2000	Hardin District does not have this data					
2001	Hardin District does not have this data					
2002	Hardin District does not have this data					
2003	Hardin District does not have this data					
2004	Hardin District does not have this data					
2005	245,798,000	842,373,000	1,088,171,000	54,522,700	22,526,000	31,996,700
2006	140,950,000	950,192,000	1,091,142,000	87,424,000	59,134,000	28,290,000
2007	145,844,000	903,378,000	1,049,222,000	103,776,930	76,175,000	27,601,930
2008	103,861,000	938,058,000	1,041,919,000	79,642,000	28,602,760	108,244,760
2009	194,638,000	897,440,000	1,092,078,000	180,471,300	26,605,760	207,077,060
2010	138,960,000	903,736,000	1,042,696,000	84,739,000	28,209,930	112,948,930
2011*	59,320,000	659,538,000	718,858,000	43,201,000	23,518,840	66,719,840
TOTALS	1,029,371,000	6,094,715,000	7,124,086,000	633,776,930	264,772,290	582,879,220

* Data from 2011 is for the months of January through September.
Annualized estimate for 2011 total = 958,477,300

WITNESS: Mr. Preston Pendley, P.E., Engineering Manager, HCWD1

9. Provide all projections of future water usage of the Fort Knox Military Installation. For each estimate provided, state all assumptions used to derive these estimates.

ANSWER 9:

HCWD1 is not privy to future plans or changes at Ft. Knox which will affect water use. However, the change in average day demand from 2005 to 2011 declined by 12% (see table, question 8). According to a study completed in 2001 (Hardin County Regional Water Feasibility Study, Quest Engineers), the 1999 Ft. Knox daily water demand was 4.949 mg/d (including off post sales). Using 1999 as the base amount, the change from 1999 to 2011 projected would be a decline of 47%.

Over the last five years, the BRAC process has significantly changed the mission and purpose of Ft. Knox. Basic training, Armor training, and the Armor School have moved from Ft. Knox to Ft. Benning, Georgia. Several large administrative functions have been centralized at Ft. Knox, the largest being the Human Resource Center of Excellence. With future defense spending cuts, there could be more changes in the mission at Ft. Knox and all military installations. Again, HCWD1 has no direct knowledge nor has the Dept. of the Army shared future plans which might affect Ft. Knox water demand and population on post.

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

10. Provide all reports, analyses, estimates and reviews regarding the Fort Knox potable water utility system deficiencies and required improvements that were prepared by or commissioned for Hardin District or provided to Hardin District by the United States Government.

ANSWER 10:

See attached **Exhibit 9**.

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

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

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

Proposed Budget

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	<u>\$15,500.00</u>
	\$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=	<u>\$2,600</u>
Total =	\$44,252

ISDC 3
Hydraulic Model



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/HCCWD No. 1

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 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.



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

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	If	\$ 100.00	\$ 800	100	ft/day	0.08
20	In Easement	Dirt	16	If	\$ 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
 Page 2 of 2

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 40356
Phone 225-4448 Fax: 225-9995



Fax

To: Richard Stranahan From: Tim Stensky

From: (270) 352-3055 Pages: 1

Phone: Date: 8/27/2008

Re: Roof quotes CC:

Urgent For Review Please Comment Please Reply Please Reply

Comments

Attention: Richard - here are the numbers. I will write up a formal proposal to send you when we are doing and fax it to you later.

Organ Creek Pump House \$22,933.00 (remove slate roof and haul away and install pre-ins. cu
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	\$31,200	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:	\$97,200	

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 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 \$31,200.00.

Please review and let us know if you have any questions.

Sincerely,

Judy Construction Company

A handwritten signature in black ink that reads "Kista Thomas". The signature is written in a cursive style with a small mark above the letter 'i' in "Kista".

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

A handwritten signature in cursive script that reads "Kista Thomas".

Kista Thomas

Attachment

cc: File
Dale Wilson

KT/lj

ISDC 10

Central Water Treatment Plant Clearwell



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

Andrea E. Williams, R.F.
 Licensed Professional Engineer in Hydraulics
 Franklin Water Company
 301 S. 10th St., Ste. 500
 Franklin, WI 53128

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		Complete By	End Year	\$ Labor	\$ Insp	\$Mtl	\$CathProt	\$Alt Valve	\$Total
						Proposed Work	Coating System								
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 Rifles	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



February 10, 2011

Mr. Brett Pyles
Operations Manager
Hardin County Water District No. 1
1400 Rogerville Road
Radcliff, Kentucky 40160

Re: Automatic Transfer Switch Costs

Dear Brett,

Pursuant to your email, I have generated the following cost estimates for turnkey and installing automatic transfer switches at three of your facilities. The se costs use the sepower data presented in your email plus an assumed nominal amount of miscellaneous load. Each of these transfer switches can service rated in stand alone outdoor enclosure with disconnect normal and emergency switches for servicing one while the other remains in service.

Facility a
430V/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
430V/1200A ATS \$25,000
Installation \$40,000
Start up \$2,500
Total \$67,500

Please let me know if you have any questions.

BR, City

Thank you for your time.

Sincerely,
[Signature]

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	
	<hr/> 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 2007 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

o 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

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	\$6,853.00	12	\$6,853.00
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

This page contains unprotected data and proprietary analytical methods that shall not be disclosed outside the Government and shall not be duplicated, used or disclosed—in whole or in part—for any purpose other than to evaluate this proposal. If, however, a contract is awarded to this offeror as a result of—or in connection with—the submission of this data, the Government shall have the right to duplicate, use, or disclose the data and analytical methods to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction.

11. Refer to Utility Service Contract, Section B.5, Schedule 2. Describe Hardin District's efforts to estimate the cost of each project. For each project, provide all estimates that Hardin District prepared or obtained prior to entering the contract.

ANSWER 11:

See attached **Exhibit 9B**. HCWD1 and its team, Louisville Water Company ("LWC") and CH2M (who was retained by LWC to do all work on preparing proposal documents, assisting with proposal pricing and ensuring all submittal requirements to USG were met) completed extensive due diligence on developing proposals. As these prices were only for a proposal to USG to be considered, HCWD1 did not complete actual final design and field surveying for all projects, nor bid actual designed projects. HCWD1 proposed a five year surcharge to fund all these projects and also advised the USG that HCWD1 would need to account for all revenues, and expenditures, for the surcharge, and at the end of the five year period, any balance or reserves that had not been spent may be subject to refund to the USG, if required by the Commission. As the basis of proposal and surcharge is also cost based, submit to future changes, if the project costs and inflation require more than the surcharge, then HCWD1 and the USG would agree to an increase in the surcharge or an adjustment to projects planned. This was acceptable to the USG.

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

- Workers' Compensation and Employers' Liability—\$500,000
- Property--\$28,000,000
- Umbrella/Excess Liability Coverage—\$1,000,000 per occurrence and \$1,000,000 in aggregate. This is in excess of general, automobile, and employers' liability coverage types shown above.

Other Direct Costs

Operational supplies, training, and support activities were based on standard costs for the number of personnel required for equivalent-sized facilities

R&R and ISDC Costs

All estimates used to develop the ISDC and R&R project costs are based on various estimating methods. In preparing the cost estimates, HCWD1 reviewed actual, recent local bids for various types of construction. These included review of actual bids received by HCWD1, LWC and other local engineers. These actual bids were then applied as parametric units by size for estimating various future ISDC and R&R projects.

All capital costs were estimated in 2011 dollars. Pricing includes fully loaded contractor costs for labor, materials and systems to be in place and ready for use and reflects local area conditions. Construction cost estimates were prepared using the following resources and general methods:

- Data available on the system inventory identified in the RFP (Attachment J1)
- Comparison with bid tabulations from recent similar projects in the Kentucky area available in HCWD1, LWC, and CH2M HILL databases
- Consideration of estimating procedures included in R.S. Means Co. *Building Construction Cost Data*. Kingston, Massachusetts.

The estimating process was simplified to an approach that assumed all facilities have much in common, and the approach took into account only limited site-specific features. These estimates are generally Class 5 estimates with a level of accuracy in accordance with the Association for the Advancement of Cost Engineering (AACE) guidelines. Following contract award and increasing

levels of project definition, the cost estimates can be further refined.

Unit costs were developed for system inventory in which replacement-in-kind upgrades are anticipated. In cases where existing materials are no longer available or are not permitted to be installed, the unit costs were developed based on materials that would be used to replace the existing materials when necessary. For example, transite pipe upgrades are programmed to be replaced with PVC pipe. Unit costs were then multiplied by the number of units. Depending on the basis for the estimate for specific inventory items, allowances for costs associated with the installment were added. In those cases, the allowances were consistent with typically those used in standard cost estimating procedures.

Our estimates include typical allowance costs for planning, engineering, permitting, construction management, and state sales tax.

A frequent detailed analysis of local market conditions will be made throughout the contract period to confirm cost estimates are aligned with actual conditions. This will include consideration of the following:

- Number of qualified contractors
- Current workload of contractors
- Contractors selectively bidding projects
- Premium wage requirements to retain skilled workers and management staff
- Availability of crafts/trades
- Abnormal fuel impacts and uncertainty (Oil > \$100 barrel, Diesel > \$4.00/gal)
- Abnormal material impacts of the last 2 years
- Impact of recent natural disasters

The summary approach for key components is described below. More detail on the estimating approach is provided in Attachment IV-5.

Water Facilities

Water facility construction capital costs were developed for raw water supplies, treatment facilities, and pumping stations by use of the following general approaches. New facility cost

Use of this sheet is subject to the restriction on the title page of this proposal.

estimates represent the construction cost to construct on a near-virgin site, which is free from utility obstruction and interferences. The new facilities would be located in close proximity to the existing facilities to minimize additional site/civil improvements and to maintain continued operation of existing facilities during construction. Only necessary selective demolition is included. Building costs are based on square footage of the floor area. Materials of construction would be equal to or better than existing.

Pipelines

Pipeline construction capital costs were developed based on typical unit prices for pipe installation in Kentucky. Pipeline lengths and diameters were based on the asset inventory provided by the Government in the J1 Attachment. Materials of construction for pipeline replacement are based on current HCWD1's design standard in which PVC pipe is used for pipes that are 10 inches or smaller in diameter, and ductile iron pipe is used for pipes that are 12 inches or larger in diameter. The estimate also assumes that the number of existing hydrants and mainline valves are appropriate for fire protection and line isolation, and that pipe installation will predominantly occur in soil adjacent to roadways.

Use of this sheet is subject to the restriction on the title page of this proposal.

Fort Knox Potable Water Utility System
Hardin County Water District No. 1
Fort Knox, Kentucky
BASIS OF ESTIMATE



Project Number: 398340
Project Name: Fort Knox Potable Water Utility System
Class Estimate: Class 5
Requested By: Dave Hackworth/LOU
Estimated By: Jay Bilmon/WPB
Estimator Phone: 561-940-7586
Estimate Date: July 31, 2010
CCI Index: 8864.72 (July 2010)
Material Index: 2719.55 (July 2010)

Jay Bilmon/WPB
ESTIMATOR

Purpose of Estimate

The purpose of this Engineer's Estimate is for valuation of existing potable water facilities as listed in Request for Proposal (RFP) SP0600-08-R-0803 solicitation (Attachment J1).

General Project Description

Hardin County Water District No.1 (HCWD1) offers to purchase the Fort Knox potable water systems based on a development of Replacement Cost New Less Depreciation (RCNLD). This is consistent with utility rate making practice in North America where utility "rate base" is based on book value of utility assets that are "used and useful". RCNLD is a surrogate for book value and is proposed because Fort Knox does not maintain an accounting record of the book value of its utility systems. The RCNLD valuation is based on:

- The system inventory data provided in the solicitation (J1).
- Data available on the installation date of system components identified solicitation (Attachment J1).
- Our estimate of the cost to replace each component in current year dollars.
- An estimate of the percentage depreciation of each system component based on its age and average useful life.
- Cost recovery of the purchase price payment will occur as a component of the general monthly service fee for O&M. As the Fort Knox potable water systems serve only Fort Knox, the facilities have no inherent value other than to provide service to the Government.

Estimate Classification

This cost estimate prepared is considered a conceptual level or class 5 estimate as defined by the American Association of Cost Engineering (AACE). It is considered accurate to +50% to -30%, based upon available system data.

The cost estimates shown have been prepared for guidance in project evaluation and implementation from the information available at the time of the estimate. The final cost of the project will depend upon the actual labor and material costs, competitive market conditions, final project costs, implementation schedule and other variable factors. As a result, the final project costs will vary from the estimates presented herein. Because of this, project feasibility and funding needs must be carefully reviewed prior to making specific financial decisions to help ensure proper project evaluation and adequate funding. Our estimate is based on material, equipment, and labor pricing as of July 2010.

Cost Resources

The following is a list of the various cost resources used in the development of the cost estimate.

- Louisville Water Company Historical Data

- Hardin County Water District No. 1 Historical Data
- CH2M HILL Historical Data
- R.S. Means 2010
- Parametric Modeling
- Vendor Quotes on Equipment and Materials where appropriate.

Labor unit prices reflect a burdened rate, including: workers compensation, unemployment taxes, Fringe Benefits, and medical insurance.

Estimate Methodology

The purchase price estimate for the Fort Knox potable water systems is based on a development of the Replacement Cost New Less Depreciation (RCNLD). This is consistent with utility rate making practice in North America where utility "rate base" is based on book value of utility assets that are "used and useful." The development of the estimate for existing potable water facilities is based on the following:

- Costs for replacement of each component are in current dollars and update to current materials as necessary.
- An estimate of the percentage depreciation of each system component is based on its age and average useful life.
- The RCNLD valuation is based on the inventory data provided in the solicitation (Attachment J1). The valuations are as accurate and complete as the information provided.
- The estimate includes allowance costs and dollars per unit cost for certain components of the estimate. Pricing is fully loaded contractor rates for labor, materials, and systems in place and ready for use to reflect local area conditions. The fully loaded rate includes contractor overhead and profit and sales tax for contractor purchased materials and supplies.

Replacement Cost New (RCN)

The RCN value of the system was estimated by multiplying the current installed unit costs for a given inventory component times the number of those units included in the inventory. These RCN unit costs were estimated primarily from the following sources:

- Louisville Water Company engineering databases. This data was developed from actual bid prices on pipeline construction projects in an urban water system dating January 2009 to the present.
- Hardin County Water District No. 1 engineering databases, including data developed from the 2008 reconstruction of the Pirtle Spring Water Treatment Plant.
- CH2MHILL engineering databases. This data was developed from experience on similar projects in similar conditions.
- Unit costs in cases where existing materials are no longer permitted to be installed, the corresponding permitted material option was assigned to replace the existing. For instance, cast iron pipe would be replaced with ductile iron and PVC pipe would be replaced with PVC DR-18.

- Unit costs were then multiplied by percentages to account for associated engineering and construction management costs associated with the installment of the inventory components. These percentages are current industry standards.
- Limited application of adjustment factors reflecting site-specific conditions. For ease, speed, and consistency, the estimating process was reduced to an approach that assumed all facilities have much in common, and took into account only limited site-specific features. The estimates are therefore generic and subject to refinement at a later date. Unit prices account for materials sales tax, security badge issuance and security related access delays.

Raw water sources

McCracken Spring Intake based on approximately 6' x 6' concrete and galvanized steel intake structure performed when area is drained to permit work in relatively dry strata conditions.

Central Water Treatment Plant

The elements to the Central WTP unit prices were estimated parametrically based on the number of gallons. The pumps and controls similarly were estimated parametrically based on the horsepower of the pump. Generators were priced on historical costs of generator installations of similar capacity.

Water distribution

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. Valves and fittings are included in the distribution piping and raw water line unit prices. 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.

Elevated Storage Tanks

Elevated storage tanks unit prices were estimated parametrically based on a steel structure and the capacity in gallons. Price includes foundation, piping, valves, floor drain, cathodic protection, climbing equipment and railings, painting, flushing/disinfection and connection to existing system. Tank rehabilitation noted in the ISDC is based upon contractor supplied quote issued in 2008 and escalated to today's dollar.

Fire Hydrants

Fire hydrants are based on actual costs and include hydrant and concrete pad, 6" diameter riser line, 90deg. elbow fitting, 6" lateral line, 6" gate valve and valve box and T- fitting at water main.

Cost Methodology

All initial capital upgrade and R&R projects include feasibility studies, engineering, design, permitting and construction. The estimates for construction costs for these improvements were prepared by use of the following general methods:

- Comparison with bid tabulations from recent similar projects in the Kentucky area available in Louisville Water Company, Hardin County Water District No. 1 and CH2M HILL databases.
- Review of the solicitation (Attachment J1) for the RFP.

Labor Costs and Unit Costs

The estimates are based on actual labor rates and bid prices from local, similar projects.

Escalation Rate

Escalation was not factored in the estimate.

Allowance Costs

Engineering, design and SDC estimated at 15% of total construction cost.

Major Assumptions

Hardin County Water District No. 1 price proposal uses information earned through years of work in the Kentucky area, performing services specifically applicable to those contained in the Government's solicitation. As such, we have been able to minimize the assumptions used in our pricing, and have ensured that the assumptions we did use are the most reasonable for the environment and conditions expected at the Fort Knox post. The assumptions reflect the unknowns in developing the price and will be investigated during a period of due diligence

The estimate is based on the assumption the work will be done on a competitive bid or design build basis and the contractor will have a reasonable amount of time to complete the work. All contractors are equal, with a reasonable project schedule, no overtime, constructed as under a single contract, no liquidated damages.

Excluded Costs

The cost estimate excludes the following costs:

- Non-construction or soft costs for land or legal costs.
- Electricity, energy or other utility requirements

12. Refer to Utility Service Contract, Section B.5, Schedule 2. Identify the projects for which Hardin District intends to apply to the Commission for a Certificate of Public Convenience and Necessity prior to commencing construction of the project. For each project for which Hardin District does not intend to request a Certificate of Public Convenience and Necessity, explain why not.

ANSWER 12:

HCWD1 submits that all projects are exempt from the necessity of a Certificate of Public Convenience and Necessity in accordance with KRS 278.020. No project will require additional debt or financing. Each project was requested by DLA and will be paid for by DLA. Each project is a direct replacement of an existing asset, primarily raw water transmission mains, or constitutes a large maintenance related project. Further, the projects serve only one customer, being DLA, and each is located within the confines of the Fort Knox Military Installation. No project constitutes duplication of existing assets.

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

13. Identify all licenses, permits, and certifications that Hardin District must I obtain and maintain to operate the Fort Knox potable water utility system.

ANSWER 13:

PWSID: The party listed on the Public Water System ID number will be transferred from Fort Knox Military Installation to Hardin District. It has not been determined yet if the Division of Water will allow HCWD1 to combine both these water systems under a single PWSID, with three different WTP identifiers, or, if the two systems will remain under two separate PWSID's.

Monthly Operating Reports (Water Treatment): As HCWD1 will become owner of the water system, HCWD1 will become responsible for the MOR's as well as completing and distributing the annual Consumer Confidence Reports (CCR's).

Raw Water Withdrawal Permits: (for 15 groundwater wells near West Point): In 1968, three of these wells and pumps were constructed by Hardin District to supply water to the now-eliminated HCWD1's Muldraugh Water Treatment Plant (MWTP). In 1995, which was after the HCWD1 MWTP closed, HCWD1 signed a "Water Purchase Agreement Between U.S. Army Armor Center and Fort Knox Directorate of Public Works and Hardin County Water District No. 1". Part of that agreement allowed FK to use the three HCWD1 groundwater wells to transmit raw water to the FK Central WTP, using the HCWD1 14 inch raw transmission main from its 3 wells. The withdrawal permits for the 12 FK wells at West Point, as well as the Withdrawal Permit for Otter Creek/McCracken Springs (surface water source) will remain with Fort Knox Military Installation, as the USG retains ownership of the raw water commodity, as noted in C.3.5 of the Contract Award; "Water commodity supply is not included in this contract). The 3 HCWD1 wells and withdrawal permits for those will revert back to HCWD1.

Discharge Monitoring Reports: (For the lime sludge lagoons at Muldraugh WTP): HCWD1 will be listed as co-permittee, but will not own the actual sludge lagoons. The USG remains permit holder for all non-point discharge / outfall permits under the Clean Water Act for discharges on post at Ft. Knox. FK recently applied for and received a temporary discharge permit for one of the HCWD1 wells to discharge directly into the Ohio River. The purpose of this was to draw a high Chloride plume, which has existed in the West Point Aquifer for decades, toward the HCWD1 well and away from the other wells. Because the well being used for this discharge is owned by HCWD1 (and will again be operated by HCWD1) that DMR will have to transfer from FK back to HCWD1.

Operator Certifications: The FK system requires a Class IV-D Distribution Operator as well as a Class IV-A Treatment Operator. HCWD1 has multiple Class IV Distribution Operators and multiple Class IV Treatment Operators and will maintain these certifications. Louisville Water Company (LWC) has multiple Class IV Treatment Operators and will maintain these certifications. All of these operators information will be supplied to the Division of Water and posted as required at the facilities.

Drinking Water Quality Laboratory: HCWD1 must use a state certified laboratories for water quality testing. Both Hardin District and Louisville Water Company own and operate certified labs, and have licensed Laboratory Analysts on staff, but will continue to also use third party, state certified labs.

Bill of Sale and Right of Access: Both of these documents will be prepared by the USG and presented to HCWD1 once complete. We have been informed that the preparation of same is in process. The Bill of Sale transfers assets to HCWD1 and the Right of Access acts as an easement to allow HCWD1 and its contractors to operate on the USG property and within the Ft. Knox installation boundaries.

WITNESS: Mr. Preston Pendley, P.E., Engineering Manager, HCWD1

14. a. State the number of water sub-meters on the Fort Knox potable water utility system that the United States Government currently maintains and operates.
- b. State whether Hardin District expects the number of water submeters used for the Fort Knox potable water utility system to increase. Explain.

ANSWER 14:

- a. The inventory in Appendix JA1.5.1 includes 52 meters to be read and maintained by HCWD1 (not for billing purposes to the end user). That is the only information provided to date.
- b. See answer to Q9. HCWD1 does not have any specific information or projections on future sub-meters planned by the USG at Ft. Knox. All current sub-meters will be maintained by HCWD1 and tested according to Commission regulations. However, the existing sub-metered customers will not be direct customers of HCWD1 and will remain a reimbursable customer of the United States Government ("USG").

WITNESS: Mr. Brett Pyles, Operations Manager, HCWD1

15. Refer to Utility Service Contract, Section C.3.5.
 - a. Describe Hardin District's rights to use water sources located within the Fort Knox Military Installation to serve Hardin District customers who are located outside that installation.
 - b. State whether, if Hardin District has a right to use water sources located within the Fort Knox Military Installation to serve other Hardin District customers, it must compensate the United States Government for such use. Explain.

ANSWER 15:

- a. HCWD1 is a body corporate authorized to enter into contract pursuant to KRS 74.070. HCWD1 has been connected to and has purchased water from FK since 1988. The FK source waters have been treated at FK WTP's since this time, and delivered into the HCWD1 system. A new purchased water agreement was signed 29-SEP-1995 between the parties allowing HCWD1 to purchase up to 2.7 mg/d from the post / Government. The Commission in Case 97-388 authorized HCWD1 to close its aging Muldraugh Water Treatment Plant, and build the new Ft. Knox ("FK") Interconnect for \$1.543 million. . This facility was finished in 1998 and includes an automated pump station (proven hydraulic pump capacity of 5.1 mg/d) and a 1.25 MG concrete ground storage tank. Since that time, FK has sold water as needed to HCWD1, and HCWD1 has used the pumping facility located on post to deliver water to HCWD1's customers. In 2010, HCWD1 purchased 7.6% of its total demand needs from FK. During several emergency events, such as the 2009 Ice Storm, HCWD1 has purchased 100% of its supply from FK.
- b. It is certainly anticipated that Hardin District will compensate the USG for water purchased by HCWD1 and delivered to its residential and commercial customers. HCWD1 has been purchasing water from the USG for almost three decades. HCWD1 does not envision that the acquisition of the Fort Knox Military Installation Water System will serve to obviate its contractual obligation to pay for potable water purchased. Stated differently, HCWD1 is being paid by Fort Knox to operate and maintain its water system. Neither HCWD1 nor DLA perceive this contractual obligation to alleviate HCWD1's obligations to pay for water delivered from the Fort Knox system to HCWD1.

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

16. Utility Service Contract, Section C.4, provides that "within service area and upon the Government's request, the Contractor shall provide utility service to all existing and new customers." State whether the United States Government has identified potential new customers and such customers' expected use. If such customers have been identified, provide all documents and materials related to this identification and estimate.

ANSWER 16:

No list or projection of future customers has been provided

(See also answer No. 9)

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

17. Refer to Utility Service Contract, Section C.4.1.
- a. State whether the US. Government has agreed to permit Hardin District to use the acquired facilities to serve Hardin District customers who are not located on the Fort Knox Military Installation.
 - b. If the U.S. Government has agreed to permit Hardin District to use the acquired facilities to serve customers outside of the Fort Knox Military Installation, describe the terms of such permission and provide all documents that evidence such permission.
 - c. If the US. Government has not agreed to permit Hardin District to use the acquired facilities to serve Hardin District customers who are not located on the Fort Knox Military Installation, describe how other Hardin District customers will benefit from the proposed acquisition.
 - d. State Hardin District's current intentions regarding the use of the Fort Knox potable water utility system to provide water service to persons located outside the Fort Knox Military Installation.
 - e. State whether, if Hardin District serves customers located outside the Fort Knox Military Installation using portions of the Fort Knox potable water utility system, Hardin District will charge a rate that differs from that charged to customers served through its other distribution facilities. Explain.
 - f. Describe the effect on the Monthly Service Charge if Hardin District serves customers located outside the Fort Knox Military Installation using portions of the Fort Knox potable water utility system.

ANSWER 17:

- a. See answer to data request No. 15, a. and b.
- b. See answer to data request No. 15, a. and b. .
- c. It is HCWD1's position that this "non-agreement" has not occurred nor been communicated to HCWD1. As for other benefits to HCWD1 current customers, certain fixed existing costs of HCWD1 will begin being paid from the new FK water contract and revenues. This shared cost then becomes a benefit to existing HCWD1 customers. All new and added costs to take on the FK system, HCWD1 believes, have been fully incorporated and are recovered in the proposed fee and charges to the USG.
- d. The same as has occurred since 1988 and continues to occur. (See also same answer as to No. 15, a. and b.)
- e. As long as the cost to purchase or take water off post, does not significantly increase to HCWD1, the current retail and wholesale rates in its tariff recover purchased water costs (other than HCWD1 will be filing a Purchased Water Adjustment for FK rate increases to HCWD1 since its last rate case filed in 2006). HCWD1 has no current plans to change its retail or wholesale rates as a result of taking ownership of the FK water system, nor has the USG provided any notice of an increased rate to HCWD1 as a result of this contract or privatization.
- f. Using the FK system to benefit off post customers does not change the cost of service or agreed charges to serve the USG. Taking water off post requires compensation to the USG, so the off post system also does not gain a subsidy or lowered or free purchased water costs. By the USG being compensated for water taken off post, it itself receive an aggregate benefit since it receives new revenues for this action. However, the cost USG has to pay HCWD1 to operate and own the FK water system does not change as a result of HCWD1 using that source of water for its existing, off post customers.

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

18. Describe Hardin District's plans, if any, to connect its existing distribution system to the Fort Knox potable water utility system.

ANSWER 18:

HCWD1's distribution system has been connected to the Fort Knox Water system since 1988 (See also answer No. 15, a. and b.). Also, see map at **Exhibit 8** filed in response to data request No. 5.

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

19. Refer to Utility Service Contract, Section C.4.2.2.2.
- a. Identify each lease to which this section refers, describe the nature of the lease, and state the date on which the lease ends.
 - b. Identify any additional leases that Hardin District expects it may enter into with third parties regarding the attachment of third-party equipment.

ANSWER 19:

- a. FK does have current leases with cellular phone companies with antenna located on elevated water tanks. During the three year negotiation process, DLA told offerors that those leases would remain between the USG and the lessees, contrary to the language in C.4.2.2.2.
- b. Hardin District does not expect to enter into any new leases with third parties regarding the attachment of third-party equipment.

WITNESSES: Mr. Preston Pendley, P.E., Engineering Manager, HCWD1

20. a. State whether Hardin District anticipates hiring additional employees or purchasing additional equipment to perform its duties under the Utility Service Contract.
- b. If yes, identify the number of additional employees that Hardin District anticipates hiring and the nature and amount of additional equipment that it anticipates purchasing.
- c. State whether, if additional equipment is purchased or additional employees are retained, the use of this equipment and employees will be restricted to the Fort Knox Military Installation.

ANSWER 20:

- a. Yes.
- b. HCWD1 will hire one (1) Distribution Supervisor, one (1) Accounting Specialist, one (1) Heavy Equipment Operator, one (1) IVD Distribution Operator, two (2) ID/IID Distribution Operators and one (1) GIS/Planning Specialist. Significant additional Equipment includes: Four (4) desktop computers, one (1) GIS computer, four (4) laptop computers, one (1) plotter/printer, miscellaneous furniture, one (1) copy/fax/printer, three (3) 2-inch trash pumps, two (2) pipe saws, one (1) hydraulic unit w/ tools, two (2) line locators, one (1) Mueller B101 Tapping Machine, two (2) metal detectors, one (1) valve exerciser, one (1) set of backhoe forks, two (2) air monitors, one (1) F-750 (or equivalent) dump truck, three (3) F-250 (or equivalent) utility bed trucks, one (1) F-250 (or equivalent) extended cab regular bed truck, one (1) Case 580 (or equivalent) backhoe, one (1) 10-ton equipment trailer. The HCWD1 Board recently authorized hiring of these persons and the revised Organizational Chart is enclosed showing these new positions. All the costs for these new employees, including benefits and overhead, and costs for all new equipment, has been included in the proposed charges for services, which charges and rates have been agreed to and accepted by the USG.
- c. Yes. However, as with all HCWD1 operations, during an emergency or shortage of personnel, HCWD1 will assign other employees between utility systems as needed. If those events occur, HCWD1's accounting system and procedures provide that the costs for those re-assignments be allocated and charged to the system, fund or utility receiving that benefit of those increased employees or equipment.

WITNESSES: Mr. Brett Pyles, Operations Manager, HCWD1

21. State whether, under the terms of the Utility Service Contract, Hardin District is required to obtain outside sources of water to meet the demands of the Fort Knox Military Installation if the water sources or supplies within the military installation are insufficient to meet those demands.

ANSWER 21:

No. As set forth in the Request for Proposal from DLA, the USG will be responsible for finding replacement source(s) of water to replace or supplement future needs for the FK system. The water commodity ownership was not part of the system transfer and that component remains with the USG.

Section C.3.5 of the Contract Award (September 30, 2011) explicitly states "Water commodity supply is not included in this contract, even if water production facilities are included as part of the system to be conveyed."

Section C.3.5 additionally says, "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."

WITNESSES: Mr. Preston Pendley, P.E., HCWD1 Engineering Manager and Mr. Jim Bruce, HCWD1 General Manager

22. State whether Hardin District has studied possible courses of action in the event the sources of water supply on the Fort Knox Military Installation are insufficient to meet the military installation's demand. If yes, describe these courses of action and provide all studies and reviews conducted on each course of action.

ANSWER 22:

No, HCWD1 is not required to provide additional or future sources of water to meet the needs of Fort Knox and the USG. See also response to data request No. 21. HCWD1 has been in discussion with Louisville Water Company regarding an interconnect which will provide an additional source of water to HCWD1. This source may potentially be available to the FK Installation at some point in the future. Because of the location of the HCWD1 / LWC interconnect, the point of service or delivery point will be on FK property (See exhibit provided to question No. 5) at the same point where both a 24 inch, USG raw water main, and a 14 inch HCWD1 raw water main, converge and are located within a few hundred yards of each other (the 24 inch will become owned by HCWD1), so a future connection to LWC can serve the distribution systems and customer needs of those located on FK and within the HCWD1's off post distribution system.

WITNESS: Mr. Preston Pendley, P.E., HCWD1 Engineering Manager and Mr. Jim Bruce, HCWD1 General Manager.

23. Describe Hardin District's plans to connect the Fort Knox potable water utility system to Hardin District's existing water distribution system.

ANSWER 23:

See answers to data requests No. 5 and 18 herein.

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

24. Refer to Defense Energy Support Center, Request for Proposal SP0600- 08-R-0803, Section J1 (August 2008) at J1-IO. Describe the present status of the United States Government's plans to purchase "water from a local municipality to replace the potable water capacity at the Muldraugh WTP facility."

ANSWER 24:

Hardin County Water District 1 is not required to provide additional or future sources of water to meet the needs of Fort Knox and the USG. See response to data request No. 21 and 22. HCWD1 does note that in recent discussions with representatives of DLA Hardin District was advised that no progress has been made by DLA regarding the procurement of a replacement source of water for the Fort Knox Military Installation. The planned closure of the Muldraugh WTP ("MWTP") on post is not scheduled for five years, as presented in the HCWD1 proposal, and the USG has agreed to pay for five years of operating costs to continue to operate the MWTP.

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

25. Refer to Hardin District Press Release of October 3, 2011, "Department of Defense Awards Contract to Operate Fort Knox Water System to Local Partnership."
- a. Provide a copy of all agreements between Hardin District and Louisville Water Company ("LWC") for LWC to operate Fort Knox water system's water treatment plants.
 - b. State whether the United States Government has approved the agreement between Hardin District and LWC for the operation of the Fort Knox water treatment plants.
 - c. Provide all correspondence, memoranda, electronic mail messages, presentations, and any other documents or materials in which an agreement between Hardin District and LWC for the operation of Fort Knox water system's water treatment plants is discussed.

ANSWER 25:

- a. That agreement has not yet been approved by the respective Boards. The agreement has been negotiated between both LWC and HCWD1's staff, and a final draft is in process. Agreement will be completed and signed before HCWD1 takes over the FK system. As soon as the agreement is complete and signed, HCWD1 will file a copy with the Commission as requested.
- b. No. The USG is not authorized or entitled to review/approve the agreement between Hardin District and LWC, nor requested a copy to review during negotiations.
- c. See attached **Exhibit 10**.

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

26. Refer to Utility Service Contract, Section B.3. For each charge listed below, describe how the charge was derived. Show all calculations, state all assumptions, and provide all workpapers used.
- a. Monthly Utility Service Charge - Year I ;
 - b. Transition Charge; and,
 - c. Initial System Deficiency Corrections Surcharge.

ANSWER 26 a, b, c:

First, it should be noted that LWC contracted with CH2M HILL Engineers to prepare all proposal documents, and to provide required calculations. Both HCWD1 and LWC staff were directly and actively involved in reviewing the pricing and assumptions. Over a three year period, four different proposals were developed and submitted to the USG for consideration. The proposals are attached to this data request and identified respectively as **Exhibits 2A, 2B, 2C and 2D** (on Compact Discs). The majority of the methodology was prescribed by the USG during the three year negotiation period. It should also be noted that in reviewing the multiple proposals submitted by HCWD1, the USG engaged several nationally recognized consulting firms to review and assess the HCWD1 proposal.

- a. Monthly Utility Service Charge – Year 1: See attached **Exhibit 11**.
- b. Transition Charge: See attached **Exhibit 12**.
- c. Initial System Deficiency Corrections Surcharge: See attached **Exhibit 13**.

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

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	\$
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

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Base - LABOR & EXPENSES - Water Treatment (Central Only) and Distribution- Years 1 - 5				Year 1		Year 2-5	
				HRS	\$	HRS	\$
LABOR							
Labor Category	# of Emps	U/M	Labor Cost				
Project Manager	0.4	Hr	\$39.40	874	34,424.03	874	34,424.03
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
Water Distribution Supervisor	1	Hr	\$35.44	2,184	77,391.13	2,184	77,391.13
Distribution Operator IV	1	Hr	\$24.24	2,184	52,929.24	2,184	52,929.24
Equipment Operator	1	Hr	\$27.18	2,184	59,366.58	2,184	59,366.58
Distribution Operator I	2	Hr	\$19.00	4,368	82,970.16	4,368	82,970.16
GIS Technician/Dist Op IV	1	Hr	\$23.25	2,184	50,783.46	2,184	50,783.46
Accounting Specialist	1	Hr	\$22.93	2,080	47,684.00	2,080	47,684.00
LWC Overhead/Service Center	NA	Annual	\$80,841.00	1	80,841.00	1	80,841.00
TOTAL LABOR (Raw + Fringe)	12.9			28,070	1,054,992.59	28,070	1,054,992.59
			HCWD1 Bene Rate for 2011		31.0%		
			LWC Bene Rate for 2011		68.5%		
EXPENSES	U/M	Unit Rate	QTY	\$	QTY	\$	
OPERATING EXPENSES							
Bulk Lime		Ton	\$124.00	89	10,994.52	89	10,994.52
Carbon Dioxide		lb	\$0.07	7,574	530.18	7,574	530.18
Alum		lb	\$0.15	94,846	14,226.90	94,846	14,226.90
Fluoride		lb	\$0.42	3,679	1,545.35	3,679	1,545.35
Chlorine		lb	\$0.50	9,561	4,780.32	9,561	4,780.32
Telephone		Month	\$408.33	12	4,899.96	12	4,899.96
Tools		Lot	\$229.17	12	2,750.04	12	2,750.04
Lab Supplies		Month	\$625.00	12	7,500.00	12	7,500.00
Fuel		Monthly	\$2,136.26	12	25,635.10	12	25,635.10
Training and Tuition		Monthly	\$410.71	12	4,928.54	12	4,928.54
Safety Supplies		Monthly	\$239.59	12	2,875.08	12	2,875.08
Vehicle Repair and Maintenance		Monthly	\$329.33	12	3,951.96	12	3,951.96
Repair Parts		Monthly	\$9,041.66	12	108,499.96	12	108,499.96
Annual Tank Inspection and Repair (average)		Yearly	\$6,400.00	1	6,400.00	1	6,400.00
Postage and Freight		Month	\$83.33	12	1,000.00	12	1,000.00
Operating Supplies		Month	\$2,500.00	12	30,000.00	12	30,000.00
CO2 Lease		Month	\$37.50	12	450.00	12	450.00
Subtotal					230,967.91		230,967.91
OUTSIDE SERVICES / SUBCONTRACTS / PURCHASES							
PSC Regulatory Fees		per \$K	\$1.50	8,500	\$ 12,750.00	8,500	12,750.00
Insurance		Month	\$3,710.00	12	\$ 44,520.00	12	44,520.00
Uniforms	11.5	Month	\$460.00	12	\$ 7,360.00	12	5,520.00
Contract Lab Services		Month	\$4,737.75	12	\$ 56,853.00	12	56,853.00
Cell Phones/Pagers	4	Month	\$200.00	12	\$ 2,400.00	12	2,400.00
Outside rentals		Month	\$100.00	12	\$ 1,200.00	12	1,200.00
Sludge Hauling Disposal		Tons	\$35.00	820	\$ 28,716.10	820	28,716.10
Subtotal					153,799.10		151,959.10
TOTAL EXPENSES					384,767.01		382,927.01
TOTAL LABOR AND EXPENSES					1,439,759.59		1,437,919.59

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Base - LABOR & EXPENSES - Water Treatment (Central Only) and Distribution- Years 6 - 50				Year 1		Year 2-5	
				HRS	\$	HRS	\$
LABOR							
Labor Category	# of Emps	U/M	Labor Cost				
Project Manager	0.4	Hr	\$39.40	874	34,424.03	874	34,424.03
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
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Accounting Specialist	1	Hr	\$22.93	2,080	47,684.00	2,080	47,684.00
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EXPENSES							
		U/M	Unit Rate	QTY	\$	QTY	\$
OPERATING EXPENSES							
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Carbon Dioxide		lb	\$0.07	7,574	530.18	7,574	530.18
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Fluoride		lb	\$0.42	3,679	1,545.35	3,679	1,545.35
Chlorine		lb	\$0.50	9,561	4,780.32	9,561	4,780.32
Telephone		Month	\$408.33	12	4,899.96	12	4,899.96
Tools		Lot	\$229.17	12	2,750.04	12	2,750.04
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Vehicle Repair and Maintenance		Monthly	\$329.33	12	3,951.96	12	3,951.96
Repair Parts		Monthly	\$9,041.66	12	108,499.96	12	108,499.96
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Postage and Freight		Month	\$83.33	12	1,000.00	12	1,000.00
Operating Supplies		Month	\$2,500.00	12	30,000.00	12	30,000.00
CO2 Lease		Month	\$37.50	12	450.00	12	450.00
Subtotal					230,967.91		230,967.91
OUTSIDE SERVICES / SUBCONTRACTS / PURCHASES							
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Insurance		Month	\$3,710.00	12	\$ 44,520.00	12	\$ 44,520.00
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Contract Lab Services		Month	\$4,737.75	12	\$ 56,853.00	12	\$ 56,853.00
Cell Phones/Pagers	4	Month	\$200.00	12	\$ 2,400.00	12	\$ 2,400.00
Outside rentals		Month	\$100.00	12	\$ 1,200.00	12	\$ 1,200.00
Sludge Hauling Disposal		Tons	\$35.00	820	\$ 28,716.10	820	\$ 28,716.10
Subtotal					153,799.10		151,959.10
TOTAL EXPENSES					384,767.01		382,927.01
TOTAL LABOR AND EXPENSES					1,358,918.59		1,357,078.59

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Fort Knox Potable Water Utility System
Renewal and Replacement Schedule

This Sheet is Outdated and Abandoned

20105

J1.12 Government Recognized System Deficiencies			
System Component	Cost	Year to be Completed*	ISDC #
System Survey/Assessment and Re-Map the Utility Systems	118,515	2012	1
Leak Detection Survey	40,706	2012	2
Hydraulic Model	21,670	2012	3
Master Flow Meters at the WTPs	24,460	2012	4
20-inch Valves	69,700	2012	5
New Raw Water from the Muldraugh WTP to 16-inch Raw Water Line Between Otter Creek PS & Central WTP	1,869,210	2012	6
Otter Creek PS	102,500	2012	7
Muldraugh HLPS	68,000	2012	8
Central WTP	68,500	2012	9
Central WTP Cleanwell	1,370,000	2012	10
Fire Hydrants	1,923,900	2012	11
Water Storage No. 3	Deleted ISDC	2012	12
Water Storage No. 5	316,250	2012	13
Automatic Transfer Switches	22,500	2013	14
Line Between Otter Creek PS & Central WTP	1,743,268	2013	15
Water Storage Tank No. 6	299,000	2013	16
Water Storage Tank No. 8	310,500	2013	17
Water Storage Tank No. 7	316,250	2014	18
SCADA System	330,000	2014	19
Distribution Pipe & Valves - Transite	1,094,155	2014	20
Distribution Pipe & Valves - DIP	2,981,864	2014	21
Distribution Pipe & Valves - CIP HR Center	165,157	2014	22
Distribution Pipe & Valves - CIP	6,503,896	2015	23

* Note: Contract Year Start Date = 2012

Total \$ 19,811,041

Special Added Inventory						
Item	Year Installed/Upgraded	Quantity	Unit Cost	Design Life	Replacement Year	Other Notes
Operation & Maintenance Building	2012	1 ea	\$ 425,000	75	2087	Base and Alternate Case

\$25,743,686

J1.12 Government Recognized System Deficiencies - Supplement			
System Component	Cost	Year to be Completed*	HCWD#1 ISDC #
Tanks - Rehab	17,250	2014	24
Tank No. W7001	17,250	2014	25
Tank No. W7002	34,500	2014	26
Tank No. W7004			
West Point Well Platforms	56,000	2012	27
Well Platforms - Rehab (6)			
Van Voorhis Pump House	7,500	2012	28
Pump House - Rehab	340,000	2017	29
Decommission Muldraugh WTP			
Muldraugh operation-Year 1	1,093,053	2012	30
Muldraugh operation-Year 2	1,091,773	2013	31
Muldraugh operation-Year 3	1,091,773	2014	32
Muldraugh operation-Year 4	1,091,773	2015	33
Muldraugh operation-Year 5	1,091,773	2016	34

Total \$ 5,932,645

17250 \$25,743,686

Inflation 1.752678%

Central Plant	5,000		
Pump Rm - Rehab	5,000		
Chemical Rm. - Rehab	3,000		
Main Bldg. - Rehab	3,000		
Sedimentation Basin - Rehab	9,500		
Lime Tank - Rehab	20,500		
Sludge Tank - Rehab	7,500		
Backwash Tank - Rehab	5,000		ISDC # 9
Misc. Site Repairs	58,500		
subtotal			
Clear Well 2.0 MG	1,225,000	Option 1	
Remove & Replace Roof	145,000	Option 2	ISDC # 10
Replace Liner & Vents	1,370,000		
subtotal			
Otter Creek Pump Station	7,500		
Pump Rm - Rehab	95,000		ISDC # 7
Build & Pipe	102,500		
subtotal			
Muldraugh WTP	88,000		ISDC # 8
Main Bldg. - Rehab	88,000		
subtotal			

Inflation Index Inputs	
Year	Index
1940	0.103
1941	0.108
1942	0.116
1943	0.123
1944	0.128
1945	0.131
1946	0.140
1947	0.157
1948	0.170
1949	0.177
1950	0.174
1951	0.184
1952	0.191
1953	0.194
1954	0.196
1955	0.198
1956	0.204
1957	0.211
1958	0.217
1959	0.221
1960	0.223
1961	0.226
1962	0.229
1963	0.232
1964	0.235
1965	0.239
1966	0.244
1967	0.252
1968	0.261
1969	0.272
1970	0.287
1971	0.302
1972	0.317
1973	0.331
1974	0.355
1975	0.390
1976	0.418
1977	0.451
1978	0.481
1979	0.519
1980	0.563
1981	0.617
1982	0.660
1983	0.689
1984	0.715
1985	0.738
1986	0.756

1987	0.776
1988	0.801
1989	0.832
1990	0.863
1991	0.895
1992	0.916
1993	0.939
1994	0.961
1995	0.981
1996	1.000
1997	1.017
1998	1.030
1999	1.043
2000	1.059
2001	1.080
2002	1.102
2003	1.124
2004	1.146
2005	1.169
2006	1.193
2007	1.216
2008	1.241
2009	1.266
2010	1.291
2011	1.317
2012	1.343
2013	1.370
2014	1.397
2015	1.425
2016	1.454
2017	1.483
2018	1.512
2019	1.543
2020	1.574
2021	1.605
2022	1.637
2023	1.670
2024	1.703
2025	1.737
2026	1.772
2027	1.808
2028	1.844
2029	1.881
2030	1.918
2031	1.957
2032	1.996
2033	2.036
2034	2.076
2035	2.118
2036	2.160
2037	2.203
2038	2.247

2039	2.292
2040	2.338
2041	2.385
2042	2.433
2043	2.481
2044	2.531
2045	2.582
2046	2.633
2047	2.686
2048	2.740
2049	2.794
2050	2.850
2051	2.907
2052	2.965
2053	3.025
2054	3.085
2055	3.147

Table IV-2

Renewal and Replacement Schedule (2012\$)

Please do not make any changes in

This table generally follows the format included in RFP Schedule 2--Renewals and Replacement
Notes: For each inventory component/item listed in the applicable J-section inventory, clearly show the

Item and Size	Quant	Unit	Approx Year Installed	Existing Item Service Life
RAW WATER SOURCES				
McCracken Spring Intake	1	Each	1937	77
CI Line to Otter Creek PS - 16"	2,500	LF	1937	77
Otter Creek PS (Facility No. 9213) - Structure	1,701	SF	1936	79
Intake /Mechanical Screen	1	Each	1953	61
Pump Controls	3	Each	1995	25
Pump No. 4 - 1,200 gpm, 150 HP	1	Each	1983	34
Pump No. 9 - 2,100 gpm, 230 HP	1	Each	1983	34
Pump No. 10 - 2,100 gpm, 250 HP	1	Each	2008	25
Emergency Generator - 350 KW	1	Each	1981	35
CI Line to Central WTP - 16-inch	11,963	LF	1937	80
Central WTP (Facility No 1205) - 3.5 MGD				
Central WTP (Facility No. 1205) - Structure	6,799	SF	1937	75
Chemical Feed Systems				
Clarifier - 3.5 MG	1	Each	1937	83
Multi-Media Filters - 1 MG	3	Each	1937	83
Filter Back Wash Tank - 150,000 gallons	1	Each	1978	75
Clear Well No. 1 - 0.5 MG	1	Each	1937	83
Clear Well No. 2 - 2 MG - 1945	1	Each	1945	75
Central WTP High Lift				
Pump No. 1 & Controls - 4,850 gpm, 250 HP	1	Each	1970	43
Pump No. 2 & Controls - 1,000 gpm, 70 HP	1	Each	1984	29
Pump No. 3 & Controls - 1,400 gpm, 60 HP	1	Each	1984	29
Filter Back Wash Pump & Controls - 5,400 gpm	1	Each	1994	25
Emergency Generator - 280 KW	1	Each	2010	35
West Point Well Field				
Well No. 1. Pump/Controls - 750 gpm, 125 HP	1	Each	1998	25
Well No. 2. Pump/Controls - 750 gpm, 125 HP	1	Each	2004	25
Well No. 3. Pump/Controls - 750 gpm, 125 HP	1	Each	2004	25
Well No. 5. Pump/Controls - 750 gpm, 125 HP	1	Each	2002	25
Well No. 6. Pump/Controls - 500 gpm, 75 HP	1	Each	2000	25
Well No. 7. Pump/Controls - 750 gpm, 125 HP	1	Each	1985	27
Well No. 8. Pump/Controls - 750 gpm, 125 HP	1	Each	1998	25
Well No. 9. Pump/Controls - 750 gpm, 125 HP	1	Each	1998	25
Well No. 10. Pump/Controls - 750 gpm, 125 HP	1	Each	1999	25
Well No. 11. Pump/Controls - 750 gpm, 125 HP	1	Each	2000	25
Well No. 12A. Pump/Controls - 750 gpm, 125 HP	1	Each	1985	27
Well No. 12B. Pump/Controls - 750 gpm, 125 HP	1	Each	2003	25
Well No. 13. Pump/Controls - 750 gpm, 125 HP	1	Each	1992	25
Well Field Header - 16-inch	3,960	LF	1937	78
CI Line to Muldraugh WTP - 24 inch	15,840	LF	1937	82

Muldraugh WTP (Facility No. 3009) - 7.0 MGD	1	Each	1941	0
Muldraugh WTP (Facility No. 3009) - Structure	14,860	SF	1941	0
Chemical Feed Systems (value included in WTP cost)	0	0	0	0
Clarifier No. 1 - 5.0 MG	1	Each	1998	0
Clarifier No. 2 - 2.0 MG	1	Each	1998	0
Multi-Media Filters - 1 MGD	7	Each	1997	75
Filter Back Wash Tank - 150,000 gallons	1	Each	1978	0
Clear Well - 1.0 MG	1	Each	1989	75
Sludge Lagoons	4	Each	1978	0

Muldraugh High Lift (Facility No. 3008) - Structure	1,840	SF	1977	75
Pump A & Controls - 3,500 gpm, 250 HP	1	Each	1984	30
Pump B & Controls - 4,850 gpm, 350 HP	1	Each	1970	44
Pump C & Controls - 2,200 gpm, 150 HP	1	Each	1984	30
Filter Backwash Pump & Controls - 5,400 gpm	1	Each	2008	0
Emergency Generator - 600 KW	1	Each	1990	0
CI Line to Cantonment Area - 24 inch	10,449	LF	1941	0

Valves

Valves: Note--Replacement of valves will occur

0.75"	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
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	
Zussman Range (Mt.Eden) - Valves				
1"	4	Each	1997	
1"	2	Each	2002	
1.5"	1	Each	2002	
4"	2	Each	1997	
4"	13	Each	2002	
Yano Range - Valves				
2"	2	Each	1990	
Pressure Reducing Valves	2	Each	1990	
Meters				
Meters	50	ea	1998	25
Basham's Corner - Meters				
Meters	2	ea	2004	25
Basham's Corner - Back Flow Preventers				
Basham's Corner - Back Flow Preventers	2	ea	2004	20
Pressure Reducing Station				
Pressure Reducing Station	1	ea	2003	25
SCADA				
SCADA (Pump Controls)	3	ea	1995	--
New SCADA System	1	ea	ISDC	--
Automatic Transfer Switches				
Install switches at Otter creek PS, Central WTP and Mt.	1	0	2011	25
Well Control System				
Well Control System	1	ea	1995	25
Van Voorhis BPS (Facility No. 5898)				
Van Voorhis BPS - Structure	1,500	SF	1995	75
Pump No. 1 & Pressure Tank - 175 gpm, 10 HP	1	ea	1995	25
Pump No. 2 & Pressure Tank - 175 gpm, 10 HP	1	ea	1995	25
Pump No. 3 & Pressure Tank - 175 gpm, 10 HP	1	ea	1995	25
Fire Protection (Diesel Fueled) - 2,000 gpm, 125 HP	1	ea	1995	30
Elevated Storage Tanks (Steel) Repairs				
Tank No. 1 & cathodic protection - 250,000 gallons	250,000	Gal	1935	94
Tank No. 2 & cathodic protection - 500,000 gallons	500,000	Gal	1937	92
Tank No. 3 & cathodic protection - 500,000 gallons	500,000	Gal	2009	75
Tank No. 4 & cathodic protection - 500,000 gallons	500,000	Gal	1941	86
Tank No. 5 & cathodic protection - 300,000 gallons	300,000	Gal	1958	77
Tank No. 6 & cathodic protection - 500,000 gallons	500,000	Gal	1995	75
Tank No. 7 & cathodic protection - 500,000 gallons	500,000	Gal	1997	75
Tank No. 8 & cathodic protection - 500,000 gallons	500,000	Gal	1997	75
DISTRIBUTION PIPE - CAST IRON (12" and Over Replaced with DIP)				
Unknown Diameter (assume 6")	1,420	LF	1935	79
0.75" (NA - DIP starts at 4" Diameter)	1,155	LF	1935	79
1 " (NA - DIP starts at 4" Diameter)	4,463	LF	1935	79
1.25" (NA - DIP starts at 4" Diameter)	4,207	LF	1935	79
1.5" (NA - DIP starts at 4" Diameter)	12,470	LF	1935	79

2" (NA - DIP starts at 4" Diameter)	28,836	LF	1935	79
2.5" (NA - DIP starts at 4" Diameter)	4,785	LF	1935	79
3" (NA - DIP starts at 4" Diameter)	9,504	LF	1935	79
4"	13,331	LF	1935	79
5" (NA Pipe diameters even numbers - use 6")	410	LF	1935	79
6"	216,645	LF	1935	79
8"	158,064	LF	1935	79
8" - HR Center	4,237	LF	1935	78
10"	46,690	LF	1935	79
12"	30,122	LF	1935	79
14"	16,393	LF	1935	79
16"	3,920	LF	1935	79
24"	10,560	LF	1935	79
DISTRIBUTION PIPE - DUCTILE IRON				
1" (NA - DIP starts at 4" Diameter)	180	LF	1958	55
1.25" (NA - DIP starts at 4" Diameter)	7,076	LF	1958	55
1.5" (NA - DIP starts at 4" Diameter)	4,293	LF	1958	55
2" (NA - DIP starts at 4" Diameter)	11,436	LF	1958	55
3" (NA - DIP starts at 4" Diameter)	1,115	LF	1958	55
6"	25,835	LF	1958	55
8"	18,035	LF	1958	55
8"	4,118	LF	2007	50
10"	4,677	LF	1958	55
12"	897	LF	1958	55
12"	9,183	LF	1994	50
14"	192	LF	1958	55
DISTRIBUTION PIPE - TRANSITE (Replaced with C-900/PVC sch 80)				
1"	834	LF	1935	78
1.5"	1,988	LF	1935	78
2"	3,726	LF	1935	78
3"	284	LF	1935	78
6"	4,231	LF	1935	78
8"	6,472	LF	1935	78
10"	5,927	LF	1935	78
DISTRIBUTION PIPE - PVC (Replaced with C-900/PVC sch 80)				
1.5"	16,608	LF	2005	50
2"	10,698	LF	2008	50
3"	473	LF	2007	50
3"	603	LF	2008	50
4"	24	LF	1997	50
4"	334	LF	2005	50
4"	443	LF	2007	50
4"	6,368	LF	2008	50
6"	9,224	LF	1994	50
6"	7,640	LF	2003	50
6"	2,912	LF	2005	50
6"	6,372	LF	2007	50
6"	5,033	LF	2008	50
8"	10,211	LF	1994	50
8"	14,522	LF	1997	50
8"	18,915	LF	2005	50
8"	2,223	LF	2007	50

8"	4,644	LF	2008	50
10"	1,555	LF	1994	50
10"	106	LF	2005	50
12"	1,996	LF	1994	50
Zussman Range (Mt.Eden) - Pipe Material - PVC				
1"	110	LF	1997	50
1"	383	LF	2002	50
1.5"	60	LF	2002	50
4"	30,177	LF	1997	50
Zussman Range (Mt.Eden) - Pipe Material - PE				
1"	1,111	LF	2002	50
4"	13,668	LF	2002	50
Yano Range - Pipe Material - PVC				
2"	2,500	LF	1990	50
Basham's Corner - Pipe Material - PVC				
1.25"	72	LF	2004	50
2"	60	LF	2004	50
6"	256	LF	2004	50
FIRE HYDRANTS				
Fire Hydrants	600	Each	1935	40
Fire Hydrants	122	Each	1935	40
Fire Hydrants	83	Each	1958	40
Fire Hydrants	14	Each	1997	40
Fire Hydrants	1	Each	1990	40
Fire Hydrants	2	Each	2004	40
Fire Hydrants	54	Each	2005	40
Operation & Maintenance Building	1 ea			75
Vehicles/Equipment				
Water Lab Equipment + Backhoe				
Tools, and Furniture				
Admin Equipment, Power Equipment				

1. Includes contractor overhead and profit, permitting, G&A, and contingency.

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50 YEAR SCHEDULE

\$value of the planned R&R (if any) for each year 1-50

First Expected Replacement Date	Number of Years to Replace if >1	% ISDC	% R&R	New Item	Theoretical New Item Service Life	New Item Service Life
2014				Same as existing	75	75
2014				Ductile Iron Pipe	75	75
2015				Same as existing	75	75
2014				Same as existing	75	75
Part of ISDC				Same as existing	25	25
2017				Same as existing	25	25
2017				Same as existing	25	25
2033				Same as existing	25	25
2016				Same as existing	35	35
2017				Ductile Iron Pipe	50	50
2012				Same as existing	75	75
2020				Same as existing	75	75
2020				Same as existing	75	75
2053				Same as existing	75	75
2020				Same as existing	75	75
2020				Same as existing	75	75
2013				Same as existing	25	25
2013				Same as existing	25	25
2013				Same as existing	25	25
2019				Same as existing	25	25
2045				Same as existing	35	35
2023				Same as existing	25	25
2029				Same as existing	25	25
2029				Same as existing	25	25
2027				Same as existing	25	25
2025				Same as existing	25	25
2012				Same as existing	25	25
2023				Same as existing	25	25
2023				Same as existing	25	25
2024				Same as existing	25	25
2025				Same as existing	25	25
2012				Same as existing	25	25
2028				Same as existing	25	25
2017				Same as existing	25	25
2015				Ductile Iron Pipe	75	75
2019				Ductile Iron Pipe	50	50

				Included with pipe	25	
				Included with pipe	25	
				Included with pipe	25	
				Included with pipe	25	
				Included with pipe	40	
				Included with pipe	40	
				Included with pipe	40	
				Included with pipe	40	
				Included with pipe	40	
				Included with pipe	40	
				Included with pipe	40	
2023				Same as existing	25	25
2029				Same as existing	25	25
2024				Same as existing	20	20
2028				Same as existing	25	25
In New Scada				Same as existing	0	--
2037		100		Same as existing	25	25
2036				Same as existing	25	25
2020				Same as existing	25	25
2070				Same as existing	75	75
2020				Same as existing	25	25
2020				Same as existing	25	25
2020				Same as existing	25	25
2025				Same as existing	30	30
2029				Same as existing	75	75
2029				Same as existing	75	75
2084				Same as existing	75	75
2027				Same as existing	75	75
2035				Same as existing	75	75
2070				Same as existing	75	75
2072				Same as existing	75	75
2072				Same as existing	75	75
2014	15	0%	100%	PVC	50	50
2014	15	0%	100%	PVC	50	50
2014	15	22%	78%	PVC	50	50
2014	15	1%	99%	PVC	50	50
2014	15	6%	94%	PVC	50	50

2014	15	13%	87%	PVC	50	50
2014	15	10%	90%	PVC	50	50
2014	15	45%	55%	PVC	50	50
2014	15	28%	72%	PVC	50	50
2014	15	0%	100%	PVC	50	50
2014	15	28%	72%	PVC	50	50
2014	15	24%	76%	PVC	50	50
2013	15	100%	0%	PVC	50	50
2014	15	37%	63%	PVC	50	50
2014	15	14%	86%	Ductile Iron	50	50
2014	15	10%	90%	Ductile Iron	50	50
2014	15	0%	100%	Ductile Iron	50	50
2014	15	0%	100%	Ductile Iron	50	50
2013	15	100%	0%	PVC	50	50
2013	15	100%	0%	PVC	50	50
2013	15	100%	0%	PVC	50	50
2013	15	100%	0%	PVC	50	50
2013	15	100%	0%	PVC	50	50
2013	15	100%	0%	PVC	50	50
2013	15	100%	0%	PVC	50	50
2057	15	0%	100%	PVC	50	50
2013	15	100%	0%	PVC	50	50
2013	15	100%	0%	Ductile Iron	50	50
2044	15	0%	100%	Ductile Iron	50	50
2013	15	100%	0%	Ductile Iron	50	50
2013	15	100%	0%	PVC	50	50
2013	15	100%	0%	PVC	50	50
2013	15	100.0000%	0.00000%	PVC	50	50
2013	15	100%	0%	PVC	50	50
2013	15	100%	0%	PVC	50	50
2013	15	100%	0%	PVC	50	50
2013	15	100%	0%	PVC	50	50
2055	15	0%	100%	PVC	50	50
2058	15	0%	100%	PVC	50	50
2057	15	0%	100%	PVC	50	50
2058	15	0%	100%	PVC	50	50
2047	15	0%	100%	PVC	50	50
2055	15	0%	100%	PVC	50	50
2057	15	0%	100%	PVC	50	50
2058	15	0%	100%	PVC	50	50
2044	15	0%	100%	PVC	50	50
2053	15	0%	100%	PVC	50	50
2055	15	0%	100%	PVC	50	50
2057	15	0%	100%	PVC	50	50
2058	15	0%	100%	PVC	50	50
2044	15	0%	100%	PVC	50	50
2047	15	0%	100%	PVC	50	50
2055	15	0%	100%	PVC	50	50
2057	15	0%	100%	PVC	50	50

2058	15	0%	100%	PVC	50	50
2044	15	0%	100%	PVC	50	50
2055	15	0%	100%	PVC	50	50
2044	15	0%	100%	Ductile Iron	50	50
2047	15	0%	100%	PVC	50	50
2052	15	0%	100%	PVC	50	50
2052	15	0%	100%	PVC	50	50
2047	15	0%	100%	PVC	50	50
2052	15	0%	100%	PVC	50	50
2052	15	0%	100%	PVC	50	50
2040	15	0%	100%	PVC	50	50
2054	15	0%	100%	PVC	50	50
2054	15	0%	100%	PVC	50	50
2054	15	0%	100%	PVC	50	50
2015	10	100%	0%	Same as existing	25	25
2014	10	0%	100%	Same as existing	25	25
2014	10	0%	100%	Same as existing	25	25
2022	10	0%	100%	Same as existing	25	25
2015	10	0%	100%	Same as existing	25	25
2029	10	0%	100%	Same as existing	25	25
2030	10	0%	100%	Same as existing	25	25
2012		0%	100%	Same as existing	75	75
2012				Same as existing	7	7
2012				Same as existing	10	10
2012				Same as existing	15	15
2012				Same as existing	5	5



New Unit Cost RCN	New Item RCN	Rehab Cost	Rehab Year	Expected Subsequent Replacement Dates		
				Second R&R	Third R&R	Fourth R&R
\$ 23,000	\$23,000					
\$ 105	\$262,500					
\$ 46	\$78,246					
\$ 23,000	\$23,000					
\$ 34,500	\$103,500			0		
\$ 34,500	\$34,500			2042		
\$ 52,900	\$52,900			2042		
\$ 57,500	\$57,500			2058		
\$ 104,545	\$104,545			2051		
\$ 105	\$1,256,115					
\$ 80	\$543,920					
\$ 3,450,000	\$3,450,000					
\$ 376,050	\$1,128,150					
\$ 747,500	\$747,500					
\$ 287,500	\$287,500					
\$ 1,150,000	\$1,150,000					
\$ 57,500	\$57,500			2038		
\$ 16,100	\$16,100			2038		
\$ 13,800	\$13,800			2038		
\$ 72,300	\$72,300			2044		
\$ 100,000	\$100,000					
\$ 66,125	\$66,125			2048		
\$ 66,125	\$66,125			2054		
\$ 66,125	\$66,125			2054		
\$ 66,125	\$66,125			2052		
\$ 46,575	\$46,575			2050		
\$ 66,125	\$66,125			2037		
\$ 66,125	\$66,125			2048		
\$ 66,125	\$66,125			2048		
\$ 66,125	\$66,125			2049		
\$ 66,125	\$66,125			2050		
\$ 66,125	\$66,125			2037		
\$ 66,125	\$66,125			2053		
\$ 66,125	\$66,125			2042		
\$ 105	\$415,800					
\$ 181	\$2,867,040					

\$	-	\$0		
\$	-	\$0		
\$	-	\$0		
\$	-	\$0		
\$	-	\$0		
\$	-	\$0		
\$	-	\$0		
\$	-	\$0		
\$	-	\$0		
\$	2,620	\$131,000		2048
\$	2,620	\$5,240		2054
\$	4,500	\$9,000		2044
\$	4,500	\$4,500		2053
\$	-	\$0		--
\$	330,000	\$330,000		
\$	22,500	\$22,500		
\$	-	\$0		2045
\$	80	\$120,000		
\$	3,943	\$3,943		2045
\$	3,949	\$3,949		2045
\$	3,949	\$3,949		2045
\$	7,550	\$7,550		2055
\$	2.07	\$517,500	\$195,000	2054
\$	2.07	\$1,035,000	\$390,000	2054
--		\$1,035,000	\$390,000	2034
\$	2.07	\$1,035,000	\$390,000	2052
\$	2.07	\$621,000	\$390,000	2060
\$	2.07	\$1,035,000	\$390,000	2036
\$	2.07	\$1,035,000	\$390,000	2037
\$	2.07	\$1,035,000	\$390,000	2036
\$	37	\$52,540		
\$	20	\$23,100		
\$	21	\$93,723		
\$	22	\$92,554		
\$	22	\$274,340		

\$	24	\$692,064
\$	25	\$119,625
\$	25	\$237,600
\$	28	\$366,603
\$	37	\$15,170
\$	37	\$8,015,865
\$	38	\$6,006,432
\$	38	\$161,006
\$	66	\$3,081,540
\$	74	\$2,229,028
\$	84	\$1,377,012
\$	92	\$360,640
\$	181	\$1,911,360
\$	21	\$3,780
\$	22	\$155,672
\$	23	\$98,739
\$	24	\$274,464
\$	25	\$27,875
\$	37	\$955,895
\$	38	\$685,330
\$	38	\$156,484
\$	66	\$308,682
\$	74	\$66,378
\$	74	\$679,542
\$	84	\$16,128
\$	21	\$17,514
\$	22	\$43,736
\$	24	\$89,424
\$	25	\$7,100
\$	37	\$156,547
\$	38	\$245,936
\$	66	\$391,182
\$	23	\$381,984
\$	24	\$256,752
\$	25	\$11,825
\$	25	\$15,075
\$	28	\$660
\$	28	\$9,185
\$	28	\$12,183
\$	28	\$175,120
\$	37	\$341,288
\$	37	\$282,680
\$	37	\$107,744
\$	37	\$235,764
\$	37	\$186,221
\$	38	\$388,018
\$	38	\$551,836
\$	38	\$718,770
\$	38	\$84,474

\$	38	\$176,472			
\$	66	\$102,630			
\$	66	\$6,996			
\$	75	\$149,700			
\$	24	\$2,657			
\$	24	\$9,249			
\$	26	\$1,587			
\$	28	\$829,868			
\$	24	\$26,831			
\$	28	\$375,870			
\$	28	\$69,000			
\$	25	\$1,822			
\$	28	\$1,656			
\$	37	\$9,472			
\$	3,207	\$1,923,900	2040		
\$	2,915	\$355,630	2039		
\$	2,915	\$241,945	2039		
\$	2,915	\$40,810	2047		
\$	2,915	\$2,915	2040		
\$	2,915	\$5,830	2054		
\$	2,915	\$157,410	2055		
\$	425,000	\$425,000			
		\$180,000	2019	2026	2033
		\$117,300	2022	2032	2042
		\$85,600	2027	2042	2057
		\$56,350	2017	2022	2027

\$84,166,221

		266306.54 ERROR
		409091.22 ERROR
		754979.03 ERROR
		35507.538 ERROR
\$103,500	\$103,500	341481.32 ERROR
\$34,500		90544.222 ERROR
\$52,900		138834.47 ERROR
		150907.04 ERROR
\$104,545		230799 ERROR
		1957583.3 ERROR
		13970885 ERROR
		3017696.9 ERROR
		0 OK
		3728291.5 ERROR
		1741644.7 ERROR
		1153995 ERROR
		1242763.8 ERROR
		4971055.3 ERROR
		OK
\$57,500		177537.69 ERROR
\$16,100		68884.624 ERROR
\$13,800		62848.342 ERROR
\$72,300		186414.57 ERROR
\$100,000		301814.07 ERROR
		OK
		102084.17 ERROR
		102084.17 ERROR
		102084.17 ERROR
		102084.17 ERROR
		71902.764 ERROR
		102084.17 ERROR
		102084.17 ERROR
		102084.17 ERROR
		102084.17 ERROR
		102084.17 ERROR
		102084.17 ERROR
		102084.17 ERROR
		102084.17 ERROR
		648000.5 ERROR
		6721150.9 ERROR

\$0	OK
\$0	OK
\$0	OK
	OK
	OK
	OK
	OK
	OK
	OK
	OK
	OK
	OK
	OK
	OK
\$131,000	48822.865 ERROR
	1952.9146 ERROR
	ERROR
	OK
	7989.1961 ERROR
	0 OK
	341481.32 ERROR
	OK
	39945.98 ERROR
	OK
	0 ERROR
	OK
\$3,943	665766.34 ERROR
\$3,949	6036.2815 ERROR
\$3,949	6036.2815 ERROR
\$7,550	6036.2815 ERROR
	11539.95 ERROR
	OK
	1331532.7 ERROR
	2663065.4 ERROR
	2663065.4 ERROR
	2663065.4 ERROR
	1597839.2 ERROR
	2663065.4 ERROR
	2663065.4 ERROR
	2663065.4 ERROR
	OK
	82563.903 ERROR
	55365.129 ERROR
	218609.56 ERROR
	209132.3 ERROR
	622325.88 ERROR

1465706.2 ERROR
247634.45 ERROR
500458.58 ERROR
726357.09 ERROR
23089.132 ERROR
12596519 ERROR
10399895 ERROR
278775.4 ERROR
3591725.4 ERROR
2954654.1 ERROR
2145237.7 ERROR
641455.04 ERROR
4480767.2 ERROR
OK
8816.8768 ERROR
351751.87 ERROR
214245.79 ERROR
581280.91 ERROR
58713.312 ERROR
1502139.7 ERROR
1186621.3 ERROR
270945.74 ERROR
359787.96 ERROR
87986.348 ERROR
900756.56 ERROR
25125.702 ERROR
OK
40851.529 ERROR
99212.819 ERROR
189439.83 ERROR
14954.781 ERROR
246005.54 ERROR
425828.27 ERROR
455946.81 ERROR
OK
828836.27 ERROR
543769.08 ERROR
24907.082 ERROR
31752.58 ERROR
1307.6716 ERROR
18198.43 ERROR
24137.438 ERROR
346968.87 ERROR
536316.51 ERROR
444217.05 ERROR
169314.14 ERROR
370490.98 ERROR
292636.71 ERROR
671837.52 ERROR
955481.79 ERROR
1244521.3 ERROR
146263.33 ERROR

305554.15 ERROR
119621.61 ERROR
8154.2706 ERROR
195786.79 ERROR

OK

5388.0914 ERROR
18760.354 ERROR
2994.3507 ERROR
1644233.6 ERROR

OK

54419.723 ERROR
744718.98 ERROR

OK

127072.6 ERROR

OK

3579.1598 ERROR
3049.7424 ERROR
14884.76 ERROR

OK

\$1,923,900
\$355,630
\$241,945

3575964.2 ERROR
727112.71 ERROR
494675.04 ERROR
83439.164 ERROR
5959.9403 ERROR
11919.881 ERROR
321836.77 ERROR

\$123,396

HCWD

Item	Quantity	Each	Total
Admin			
Computers-PC	4	\$1,200	\$4,800
GIS PC	1	\$2,200	\$2,200
Computers-Laptop	4	\$1,500	\$6,000
Plotter	1	\$4,000	\$4,000
GPS & Software	1	\$12,000	\$12,000
		Sub Total	\$29,000
Desks	4	\$700	\$2,800
Misc Furniture	1	\$2,500	\$2,500
Other Misc	1	\$10,000	\$10,000
Copy/FAX Machine	1	\$2,500	\$2,500
Purchase/License CMMS	1	\$25,000	\$25,000
		Sub Total	\$42,800
Tools			
Trash Pumps	3	\$650	\$1,950
Pipe Saws	2	\$1,200	\$2,400
Hydraulic Unit/Tools	1	\$8,000	\$8,000
Muller B101Tapping Machine	1	\$3,000	\$3,000
Hand Tools	3	\$1,333	\$4,000
Shop Tools	1	\$8,000	\$8,000
		Sub Total	\$27,350
Parts Storage Systems	4	\$1,000	\$4,000
Line Locators	2	\$3,200	\$6,400
Metal Detector	2	\$200	\$400
Valve Ex/Vac	1	\$7,700	\$7,700
Backhoe Forks	1	\$1,700	\$1,700
Air Monitor	2	\$1,300	\$2,600
Misc (safety, other)	1	\$20,000	\$20,000
		Sub Total	\$42,800
Water Labs			
Instruments	1	\$ 26,000	\$ 26,000.00
Lab-ware/Glass-ware	1	\$ 12,000	\$ 12,000.00
Safety Supplies/Hardware	1	\$ 8,000	\$ 8,000.00
Work Station (PC, desk, etc)	2	\$ 1,900	\$ 3,800.00
Chemicals	1	\$ 8,000	\$ 8,000.00
		Sub Total	\$49,800
Vehicles/Equipment			
F-750 Dump Truck	1	\$52,000	\$52,000
F-250 Utility Bed 4x4	3	\$28,000	\$84,000
F-250 4x4 Ext. Cab Reg Bed	1	\$23,000	\$23,000
580 4x4 Case Backhoe	1	\$67,500	\$67,500
Equipment trailer	1	\$11,000	\$11,000
Other	1	\$10,000	\$10,000

Sub Total **\$247,500**

	Replacement Cycle (Years)	Amount
Vehicles/Equipment	7	\$180,000
Water Lab Equipment + Backhoe	10	\$117,300
Admin Equipment, Power Equipment	5	\$56,350
Tools, and Furniture	15	\$85,600
		\$439,250
		\$439,250

1 R&R Plan and Schedule

Year New	Replacement Frequency (years)	Notes & BOE
Year 1 of performance period	5	Closet match from HCWD1 is
Year 1 of performance period	5	Closet match from HCWD1 is
Year 1 of performance period	5	Closet match from HCWD1 is
Year 1 of performance period	5	Closet match from HCWD1 is
Year 1 of performance period	5	Closet match from HCWD1 is
Year 1 of performance period	15	Office furniture and equip. at
Year 1 of performance period	15	Office furniture and equip. at
Year 1 of performance period	15	Office furniture and equip. at
Year 1 of performance period	15	Office furniture and equip. at
Year 1 of performance period	15	Office furniture and equip. at
Year 1 of performance period	5	Equipment power operated at
Year 1 of performance period	5	Equipment power operated at
Year 1 of performance period	5	Equipment power operated at
Year 1 of performance period	5	Equipment power operated at
Year 1 of performance period	5	Tool, work & safety equipmer
Year 1 of performance period	5	Tool, work & safety equipmer
Year 1 of performance period	15	Tool, work & safety equipmer
Year 1 of performance period	15	Tool, work & safety equipmer
Year 1 of performance period	15	Tool, work & safety equipmer
Year 1 of performance period	15	Tool, work & safety equipmer
Year 1 of performance period	15	Tool, work & safety equipmer
Year 1 of performance period	15	Tool, work & safety equipmer
Year 1 of performance period	10	Lab equipment at 10-years
Year 1 of performance period	10	Lab equipment at 10-years
Year 1 of performance period	10	Lab equipment at 10-years
Year 1 of performance period	10	Lab equipment at 10-years
Year 1 of performance period	NA	Consumable, not included
Year 1 of performance period	7	Transportation equipment at
Year 1 of performance period	7	Transportation equipment at
Year 1 of performance period	7	Transportation equipment at
Year 1 of performance period	10	Transportation equipment at
Year 1 of performance period	7	Transportation equipment at
Year 1 of performance period	7	Transportation equipment at

Replacement Years

1,8,15,22,29,36,43

1,11,21,31,41

1,6,11,16,21,26,31,36,41,46

1,16,31,46

=====

- ∶ Office furniture and equip. at 10-20 years. In my opinion this is too long for computers and related equipment.
- ∶ Office furniture and equip. at 10-20 years. In my opinion this is too long for computers and related equipment.
- ∶ Office furniture and equip. at 10-20 years. In my opinion this is too long for computers and related equipment.
- ∶ Office furniture and equip. at 10-20 years. In my opinion this is too long for computers and related equipment.
- ∶ Office furniture and equip. at 10-20 years. In my opinion this is too long for computers and related equipment.

10-20 years. Used average at 15-years
10-20 years. Used average at 15-years
10-20 years. Used average at 15-years
10-20 years. Used average at 15-years
10-20 years. Used average at 15-years

t 10-years
t 10-years
t 10-years
t 10-years
it at 15-years
it at 15-years

it at 15-years
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it at 15-years
it at 15-years

7-years
7-years
7-years
7-years
7-years
7-years

SCHEDULE B-1 REGULATED TARIFF³
Payment by the Government for Utility Service
(Nominal Dollars)

Fort Knox, Kentucky											
Utility System ² : Ft. Knox Water Utility											
CLINs	Supplies/Services									Tariff/Schedule/Rate	
0001	Applicable Tariff(s) ¹ (See B 5 1)--Monthly Service Charge Component Detailed, Year by Year Charges:										
	Year	1	2	3	4	5	6	7	8	9	10
	O&M/G&A Expenses	\$ 128,484	\$ 128,484	\$ 131,778	\$ 134,088	\$ 136,438	\$ 132,182	\$ 134,499	\$ 136,856	\$ 139,255	\$ 141,695
	Capital Costs	\$ 117,687	\$ 117,687	\$ 119,750	\$ 121,849	\$ 123,984	\$ 126,158	\$ 128,369	\$ 130,619	\$ 132,908	\$ 135,237
	Federal Income Taxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Tariff Rate	\$ 246,172	\$ 246,172	\$ 251,528	\$ 255,936	\$ 260,422	\$ 258,340	\$ 262,867	\$ 267,475	\$ 272,163	\$ 276,933
	Year	11	12	13	14	15	16	17	18	19	20
	O&M/G&A Expenses	\$ 144,179	\$ 146,706	\$ 149,277	\$ 151,893	\$ 154,556	\$ 157,265	\$ 160,021	\$ 162,826	\$ 165,679	\$ 168,583
	Capital Costs	\$ 137,608	\$ 140,019	\$ 142,474	\$ 144,971	\$ 147,511	\$ 150,097	\$ 152,728	\$ 155,404	\$ 158,128	\$ 160,900
	Federal Income Taxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Tariff Rate	\$ 281,786	\$ 286,725	\$ 291,751	\$ 296,864	\$ 302,067	\$ 307,361	\$ 312,748	\$ 318,230	\$ 323,807	\$ 329,483
	Year	21	22	23	24	25	26	27	28	29	30
	O&M/G&A Expenses	\$ 171,538	\$ 174,544	\$ 177,604	\$ 180,716	\$ 183,884	\$ 187,107	\$ 190,386	\$ 193,723	\$ 197,118	\$ 200,573
	Capital Costs	\$ 163,720	\$ 166,589	\$ 169,509	\$ 172,480	\$ 175,503	\$ 178,579	\$ 181,709	\$ 184,894	\$ 188,134	\$ 191,432
	Federal Income Taxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Tariff Rate	\$ 335,258	\$ 341,134	\$ 347,113	\$ 353,196	\$ 359,387	\$ 365,686	\$ 372,095	\$ 378,616	\$ 385,252	\$ 392,005
	Year	31	32	33	34	35	36	37	38	39	40
	O&M/G&A Expenses	\$ 204,088	\$ 207,665	\$ 211,305	\$ 215,009	\$ 218,777	\$ 222,612	\$ 226,513	\$ 230,483	\$ 234,523	\$ 238,633
	Capital Costs	\$ 194,787	\$ 198,201	\$ 201,675	\$ 205,209	\$ 208,806	\$ 212,466	\$ 216,189	\$ 219,979	\$ 223,834	\$ 227,757
	Federal Income Taxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Tariff Rate	\$ 398,875	\$ 405,866	\$ 412,980	\$ 420,218	\$ 427,583	\$ 435,077	\$ 442,703	\$ 450,462	\$ 458,357	\$ 466,390
	Year	41	42	43	44	45	46	47	48	49	50
	O&M/G&A Expenses	\$ 242,816	\$ 247,072	\$ 251,402	\$ 255,808	\$ 260,292	\$ 264,854	\$ 269,496	\$ 274,219	\$ 279,025	\$ 283,916
	Capital Costs	\$ 231,749	\$ 235,811	\$ 239,944	\$ 244,149	\$ 248,428	\$ 252,783	\$ 257,213	\$ 261,721	\$ 266,308	\$ 270,976
	Federal Income Taxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Tariff Rate	\$ 474,565	\$ 482,882	\$ 491,346	\$ 499,957	\$ 508,720	\$ 517,636	\$ 526,709	\$ 535,940	\$ 545,334	\$ 554,892
	Monthly Credit as Payment for Purchase Price (See B 5 2)									Purchase Price: \$ 8,903,000	
	\$ 85,968	Monthly Credit									
	120	# months									
	3.0%	Interest Rate									
0002	Initial System Deficiency Corrections / Connection Charges ^b (See B 5 3 and B 7 4 (Schedule 3). This amount should not be included in the price offered for CLIN 0001.)									(First 60 Months Only) \$ 473,831	
0003	Recoverable Portion of Purchase Price ^b (see B 5 4 and B 7 5 (Schedule 4). This amount should not be included in the price offered for CLIN 0001.)									(First 120 Months Only) \$ 85,968 - See Schedule 4	
0004	Transition Period									(First Month Only) \$ 592,518 - See Schedule 3	
^a Utility system to be filled in by Offeror. A B-1 must be completed for each utility system offered. Utility systems shown in Schedule A paragraph B 3, <i>Systems to be Privatized</i> . Offerors shall provide a comprehensive description of proposed tariffs in their Price Proposals. See B 5 1.											
^b CLINs 0002 and 0003 are required <u>only</u> if tariff provides for <u>separate</u> identification of connection charges and the recoverable portion of the purchase price. If separate identification is not provided, it will be assumed the tariff rate includes these costs.											
NOTES: 1 The Purchase Price, Recoverable Portion of the Purchase Price, interest rate and amortization period are proposed by the Offeror. 2 Tariff rates presented in CLIN 0001 are nominal dollar values. Both Nominal and Constant 2011\$ tariffs are presented in the applicable J45 schedule.											

Table IV-1

**Annual O&M Costs for Planned Operational Phases for Water Utility
Service at Ft. Knox**

Dollar Basis, Cost Components	Transition Period	Year 1	Years 2-5	Years 6-50
Constant 2011 Dollars				
Labor and Benefits	\$ 80,296	\$1,054,993	\$1,054,993	\$ 974,152
Purchased Water	-	-	-	-
Other Operating Expenses	487,250	384,767	382,927	382,927
Total Direct Costs	\$ 567,546	\$1,439,760	\$1,437,920	\$1,357,079
General and Administrative Cost	24,972	63,349	63,268	59,711
Total (Annual)	\$ 592,518	\$1,503,109	\$1,501,188	\$1,416,790
Total (Monthly)	\$ 49,377	\$ 125,259	\$ 125,099	\$ 118,066
Constant 2009 Dollars (for Input to RFP Schedule 5)				
Labor and Benefits	\$ 77,554	\$ 1,018,961	\$ 1,018,961	\$ 940,881
Purchased Water	\$ -	\$ -	\$ -	\$ -
Other Operating Expenses	\$ 470,609	\$ 371,626	\$ 369,849	\$ 369,849
Total Direct Costs	\$ 548,163	\$1,390,587	\$1,388,810	\$1,310,730
General and Administrative Cost	24,119	61,186	61,108	57,672
Total (Annual)	\$ 572,282	\$1,451,773	\$1,449,918	\$1,368,402
Total (Monthly)	\$ 47,690	\$ 120,981	\$ 120,826	\$ 114,034
Constant 2012-13 Dollars*				
Labor and Benefits	\$ 80,296	\$ 1,082,850	\$ 1,082,850	\$ 999,874
Purchased Water	\$ -	\$ -	\$ -	\$ -
Other Operating Expenses	\$ 487,250	\$ 394,927	\$ 393,038	\$ 393,038
Total Direct Costs	\$ 567,546	\$1,477,776	\$1,475,888	\$1,392,912
General and Administrative Cost	24,972	65,022	64,939	61,288
Total (Annual)	\$ 592,518	\$1,542,799	\$1,540,827	\$1,454,200
Total (Monthly)	\$ 49,377	\$ 128,567	\$ 128,402	\$ 121,183

Table IV-2

Renewal and Replacement Schedule

(2011\$)

This table generally follows the format included in RFP Schedule

Notes: For each inventory component/item listed in the applicable

Item and Size	New Item RCN	Rehab Cost	Rehab Year	Expected Subsequent Replacement Dates		
				Second R&R	Third R&R	Fourth R&R
24"		\$0				
Zussman Range (Mt.Eden) - Valves						
1"		\$0				
1"		\$0				
1.5"		\$0				
4"		\$0				
4"		\$0				
Yano Range - Valves						
2"		\$0				
Pressure Reducing Valves		\$0				
Meters						
Meters		\$131,000			2048	
Basham's Corner - Meters						
Meters		\$5,240			2054	
Basham's Corner - Back Flow Preventers						
Basham's Corner - Back Flow Preventers		\$9,000			2044	
Pressure Reducing Station						
Pressure Reducing Station		\$4,500			2053	
SCADA						
SCADA (Pump Controls)		\$0				
New SCADA System		\$330,000				
Automatic Transfer Switches						
Install switches at Otter creek PS, Central WTP and Muldrau		\$22,500				
Well Control System						
Well Control System		\$0			2045	
Van Voorhis BPS (Facility No. 5898)						
Van Voorhis BPS - Structure		\$120,000				
Pump No. 1 & Pressure Tank - 175 gpm, 10 HP		\$3,943			2045	
Pump No. 2 & Pressure Tank - 175 gpm, 10 HP		\$3,949			2045	
Pump No. 3 & Pressure Tank - 175 gpm, 10 HP		\$3,949			2045	
Fire Protection (Diesel Fueled) - 2,000 gpm, 125 HP		\$7,550			2055	
Elevated Storage Tanks (Steel) Repairs						
Tank No. 1 & cathodic protection - 250,000 gallons		\$517,500	\$195,000	2054		
Tank No. 2 & cathodic protection - 500,000 gallons - 1937		\$1,035,000	\$390,000	2054		
Tank No. 3 & cathodic protection - 500,000 gallons - 1941		\$1,035,000	\$390,000	2034		
Tank No. 4 & cathodic protection - 500,000 gallons - 1947		\$1,035,000	\$390,000	2052		
Tank No. 5 & cathodic protection - 300,000 gallons - 1951		\$621,000	\$390,000	2060		
Tank No. 6 & cathodic protection - 500,000 gallons		\$1,035,000	\$390,000	2036		
Tank No. 7 & cathodic protection - 500,000 gallons		\$1,035,000	\$390,000	2037		
Tank No. 8 & cathodic protection - 500,000 gallons		\$1,035,000	\$390,000	2036		
DISTRIBUTION PIPE - CAST IRON (12" and Over Replaced w						
Unknown Diameter (assume 6")		\$52,540				
0.75" (NA - DIP starts at 4" Diameter)		\$23,100				
1" (NA - DIP starts at 4" Diameter)		\$93,723				
1.25" (NA - DIP starts at 4" Diameter)		\$92,554				

Table IV-2

Renewal and Replacement Schedule

(2011\$)

This table generally follows the format included in RFP Sch

Notes: For each inventory component/item listed in the applicab

Item and Size	New Item RCN	Rehab Cost	Rehab Year	Expected Subsequent Replacement Dates		
				Second R&R	Third R&R	Fourth R&R
RAW WATER SOURCES						
McCracken Spring Intake	\$23,000					
CI Line to Otter Creek PS - 16"	\$262,500					
Otter Creek PS (Facility No. 9213) - Structure	\$78,246					
Intake /Mechanical Screen	\$23,000					
Pump Controls	\$103,500					
Pump No. 4 - 1,200 gpm, 150 HP	\$34,500			2042		
Pump No. 9 - 2,100 gpm, 230 HP	\$52,900			2042		
Pump No. 10 - 2,100 gpm, 250 HP	\$57,500			2058		
Emergency Generator - 350 KW	\$104,545			2051		
CI Line to Central WTP - 16-inch	\$1,256,115					
Central WTP (Facility No 1205) - 3.5 MGD						
Central WTP (Facility No. 1205) - Structure	\$543,920					
Chemical Feed Systems						
Clarifier - 3.5 MG	\$3,450,000					
Multi-Media Filters - 1 MG	\$1,128,150					
Filter Back Wash Tank - 150,000 gallons	\$747,500					
Clear Well No. 1 - 0.5 MG	\$287,500					
Clear Well No. 2 - 2 MG - 1945	\$1,150,000					
Central WTP High Lift						
Pump No. 1 & Controls - 4,850 gpm, 250 HP	\$57,500			2038		
Pump No. 2 & Controls - 1,000 gpm, 70 HP	\$16,100			2038		
Pump No. 3 & Controls - 1,400 gpm, 60 HP	\$13,800			2038		
Filter Back Wash Pump & Controls - 5,400 gpm	\$72,300			2044		
Emergency Generator - 280 KW	\$100,000					
West Point Well Field						
Well No. 1. Pump/Controls - 750 gpm, 125 HP	\$66,125			2048		
Well No. 2. Pump/Controls - 750 gpm, 125 HP	\$66,125			2054		
Well No. 3. Pump/Controls - 750 gpm, 125 HP	\$66,125			2054		
Well No. 5. Pump/Controls - 750 gpm, 125 HP	\$66,125			2052		
Well No. 6. Pump/Controls - 500 gpm, 75 HP	\$46,575			2050		
Well No. 7. Pump/Controls - 750 gpm, 125 HP	\$66,125			2037		
Well No. 8. Pump/Controls - 750 gpm, 125 HP	\$66,125			2048		
Well No. 9. Pump/Controls - 750 gpm, 125 HP	\$66,125			2048		
Well No. 10. Pump/Controls - 750 gpm, 125 HP	\$66,125			2049		
Well No. 11. Pump/Controls - 750 gpm, 125 HP	\$66,125			2050		
Well No. 12A. Pump/Controls - 750 gpm, 125 HP	\$66,125			2037		
Well No. 12B. Pump/Controls - 750 gpm, 125 HP	\$66,125			2053		
Well No. 13. Pump/Controls - 750 gpm, 125 HP	\$66,125			2042		
Well Field Header - 16-inch	\$415,800					
CI Line to Muldraugh WTP - 24 inch	\$2,867,040					
Muldraugh WTP (Facility No. 3009) - 7.0 MGD	\$4,923,380					
Muldraugh WTP (Facility No. 3009) - Structure	\$1,367,120					
Chemical Feed Systems (value included in WTP cost)	\$0					
Clarifier No. 1 - 5.0 MG	\$5,750,000					
Clarifier No. 2 - 2.0 MG	\$2,300,000					
Multi-Media Filters - 1 MGD	\$2,632,350					
Filter Back Wash Tank - 150,000 gallons	\$747,500					

Table IV-2

Renewal and Replacement Schedule

(2011\$)

This table generally follows the format included in RFP Sch

Notes: For each inventory component/item listed in the applicabl

Item and Size	New Item RCN	Rehab Cost	Rehab Year	Expected Subsequent Replacement Dates		
				Second R&R	Third R&R	Fourth R&R
Clear Well - 1.0 MG	\$1,150,000					
Sludge Lagoons	\$69,000					
Muldraugh High Lift (Facility No. 3008) - Structure	\$317,400					
Pump A & Controls - 3,500 gpm, 250 HP	\$115,000			2039		
Pump B & Controls - 4,850 gpm, 350 HP	\$154,100			2039		
Pump C & Controls - 2,200 gpm, 150 HP	\$75,900			2039		
Filter Backwash Pump & Controls - 5,400 gpm	\$120,750					
Emergency Generator - 600 KW	\$184,000					
CI Line to Cantonment Area - 24 inch	\$3,977,412					
Valves						
0.75"	\$0					
1"	\$0					
1.25"	\$0					
1.25"	\$0					
1.5"	\$0					
1.5"	\$0					
2"	\$0					
2"	\$0					
2"	\$0					
2"	\$0					
2.5"	\$0					
3"	\$0					
3"	\$0					
4"	\$0					
4"	\$0					
4"	\$0					
4"	\$0					
5"	\$0					
6"	\$0					
6"	\$0					
6"	\$0					
6"	\$0					
6"	\$0					
8"	\$0					
8"	\$0					
8"	\$0					
8"	\$0					
8"	\$0					
10"	\$0					
10"	\$0					
10"	\$0					
12"	\$0					
12"	\$0					
12"	\$0					
14"	\$0					
16"	\$0					
20"	\$0					

Table IV-2

Renewal and Replacement Schedule

(2011\$)

This table generally follows the format included in RFP Schedule 2--Renewals and Replacements--50 YEAR SCHEDULE

Notes: For each inventory component/item listed in the applicable J-section inventory, clearly show the \$value of the planned R&R (if any) for each year 1-50

Item and Size	Quant	Unit	Approx Year Installed	Existing Item Service Life	First Expected Replacement Date	Number of Years to Replace if >1	% ISDC	% R&R	New Item	New Item Service Life	New Unit Cost RCN	New Item RCN	Rehab Cost	Rehab Year	Expected Subsequent Replacement Dates		
															Second R&R	Third R&R	Fourth R&R
1.5" (NA - DIP starts at 4" Diameter)	12470	LF	1935	79	2014	15	6%	94%	PVC	50	\$22	\$274,340					
2" (NA - DIP starts at 4" Diameter)	28836	LF	1935	79	2014	15	13%	87%	PVC	50	\$24	\$692,064					
2.5" (NA - DIP starts at 4" Diameter)	4785	LF	1935	79	2014	15	10%	90%	PVC	50	\$25	\$119,625					
3" (NA - DIP starts at 4" Diameter)	9504	LF	1935	79	2014	15	45%	55%	PVC	50	\$25	\$237,600					
4"	13331	LF	1935	79	2014	15	28%	72%	PVC	50	\$28	\$366,603					
5" (NA Pipe diameters even numbers - use 6")	410	LF	1935	79	2014	15	0%	100%	PVC	50	\$37	\$15,170					
6"	216645	LF	1935	79	2014	15	28%	72%	PVC	50	\$37	\$8,015,865					
8"	158064	LF	1935	79	2014	15	24%	76%	PVC	50	\$38	\$6,006,432					
8" - HR Center	4237	LF	1935	78	2013	15	100%	0%	PVC	50	\$38	\$161,006					
10"	46690	LF	1935	79	2014	15	37%	63%	PVC	50	\$66	\$3,081,540					
12"	30122	LF	1935	79	2014	15	14%	86%	Ductile Iron	50	\$74	\$2,229,028					
14"	16393	LF	1935	79	2014	15	10%	90%	Ductile Iron	50	\$84	\$1,377,012					
16"	3920	LF	1935	79	2014	15	0%	100%	Ductile Iron	50	\$92	\$360,640					
24"	10560	LF	1935	79	2014	15	0%	100%	Ductile Iron	50	\$181	\$1,911,360					
DISTRIBUTION PIPE - DUCTILE IRON																	
1" (NA - DIP starts at 4" Diameter)	180	LF	1958	55	2013	15	100%	0%	PVC	50	\$21	\$3,780					
1.25" (NA - DIP starts at 4" Diameter)	7076	LF	1958	55	2013	15	100%	0%	PVC	50	\$22	\$155,672					
1.5" (NA - DIP starts at 4" Diameter)	4293	LF	1958	55	2013	15	100%	0%	PVC	50	\$23	\$98,739					
2" (NA - DIP starts at 4" Diameter)	11436	LF	1958	55	2013	15	100%	0%	PVC	50	\$24	\$274,464					
3" (NA - DIP starts at 4" Diameter)	1115	LF	1958	55	2013	15	100%	0%	PVC	50	\$25	\$27,875					
6"	25835	LF	1958	55	2013	15	100%	0%	PVC	50	\$37	\$955,895					
8"	18035	LF	1958	55	2013	15	100%	0%	PVC	50	\$38	\$685,330					
8"	4118	LF	2007	50	2057	15	0%	100%	PVC	50	\$38	\$156,484					
10"	4677	LF	1958	55	2013	15	100%	0%	PVC	50	\$66	\$308,682					
12"	897	LF	1958	55	2013	15	100%	0%	Ductile Iron	50	\$74	\$66,378					
12"	9183	LF	1994	50	2044	15	0%	100%	Ductile Iron	50	\$74	\$679,542					
14"	192	LF	1958	55	2013	15	100%	0%	Ductile Iron	50	\$84	\$16,128					
DISTRIBUTION PIPE - TRANSITE (Replaced with C-900/PVC sch 80)																	
1"	834	LF	1935	78	2013	15	100%	0%	PVC	50	\$21	\$17,514					
1.5"	1988	LF	1935	78	2013	15	100%	0%	PVC	50	\$22	\$43,736					
2"	3726	LF	1935	78	2013	15	100%	0%	PVC	50	\$24	\$89,424					
3"	284	LF	1935	78	2013	15	100%	0%	PVC	50	\$25	\$7,100					
6"	4231	LF	1935	78	2013	15	100%	0%	PVC	50	\$37	\$156,547					
8"	6472	LF	1935	78	2013	15	100%	0%	PVC	50	\$38	\$245,936					
10"	5927	LF	1935	78	2013	15	100%	0%	PVC	50	\$66	\$391,182					
DISTRIBUTION PIPE - PVC (Replaced with C-900/PVC sch 80)																	
1.5"	16608	LF	2005	50	2055	15	0%	100%	PVC	50	\$23	\$381,984					
2"	10698	LF	2008	50	2058	15	0%	100%	PVC	50	\$24	\$256,752					
3"	473	LF	2007	50	2057	15	0%	100%	PVC	50	\$25	\$11,825					
3"	603	LF	2008	50	2058	15	0%	100%	PVC	50	\$25	\$15,075					
4"	24	LF	1997	50	2047	15	0%	100%	PVC	50	\$28	\$660					
4"	334	LF	2005	50	2055	15	0%	100%	PVC	50	\$28	\$9,185					
4"	443	LF	2007	50	2057	15	0%	100%	PVC	50	\$28	\$12,183					
4"	6368	LF	2008	50	2058	15	0%	100%	PVC	50	\$28	\$175,120					
6"	9224	LF	1994	50	2044	15	0%	100%	PVC	50	\$37	\$341,288					
6"	7640	LF	2003	50	2053	15	0%	100%	PVC	50	\$37	\$282,680					
6"	2912	LF	2005	50	2055	15	0%	100%	PVC	50	\$37	\$107,744					
6"	6372	LF	2007	50	2057	15	0%	100%	PVC	50	\$37	\$235,764					

Table IV-2

Renewal and Replacement Schedule
(2011\$)

This table generally follows the format included in RFP Schedule 2--Renewals and Replacements--50 YEAR SCHEDULE

Notes: For each inventory component/item listed in the applicable J-section inventory, clearly show the \$value of the planned R&R (if any) for each year 1-50

Item and Size	Quant	Unit	Approx Year Installed	Existing Item Service Life	First Expected Replacement Date	Number of Years to Replace if >1	% ISDC	% R&R	New Item	New Item Service Life	New Unit Cost RCN	New Item RCN	Rehab Cost	Rehab Year	Expected Subsequent Replacement Dates			
															Second R&R	Third R&R	Fourth R&R	
6"	5033	LF	2008	50	2058	15	0%	100%	PVC	50	\$37	\$186,221						
8"	10211	LF	1994	50	2044	15	0%	100%	PVC	50	\$38	\$388,018						
8"	14522	LF	1997	50	2047	15	0%	100%	PVC	50	\$38	\$551,836						
8"	18915	LF	2005	50	2055	15	0%	100%	PVC	50	\$38	\$718,770						
8"	2223	LF	2007	50	2057	15	0%	100%	PVC	50	\$38	\$84,474						
8"	4644	LF	2008	50	2058	15	0%	100%	PVC	50	\$38	\$176,472						
10"	1555	LF	1994	50	2044	15	0%	100%	PVC	50	\$66	\$102,630						
10"	106	LF	2005	50	2055	15	0%	100%	PVC	50	\$66	\$6,996						
12"	1996	LF	1994	50	2044	15	0%	100%	Ductile Iron	50	\$75	\$149,700						
Zussman Range (Mt.Eden) - Pipe Material - PVC																		
1"	110	LF	1997	50	2047	15	0%	100%	PVC	50	\$24	\$2,657						
1"	383	LF	2002	50	2052	15	0%	100%	PVC	50	\$24	\$9,249						
1.5"	60	LF	2002	50	2052	15	0%	100%	PVC	50	\$26	\$1,587						
4"	30177	LF	1997	50	2047	15	0%	100%	PVC	50	\$28	\$829,868						
Zussman Range (Mt.Eden) - Pipe Material - PE																		
1"	1111	LF	2002	50	2052	15	0%	100%	PVC	50	\$24	\$26,831						
4"	13668	LF	2002	50	2052	15	0%	100%	PVC	50	\$28	\$375,870						
Yano Range - Pipe Material - PVC																		
2"	2500	LF	1990	50	2040	15	0%	100%	PVC	50	\$28	\$69,000						
Basham's Corner - Pipe Material - PVC																		
1.25"	72	LF	2004	50	2054	15	0%	100%	PVC	50	\$25	\$1,822						
2"	60	LF	2004	50	2054	15	0%	100%	PVC	50	\$28	\$1,656						
6"	256	LF	2004	50	2054	15	0%	100%	PVC	50	\$37	\$9,472						
FIRE HYDRANTS																		
Fire Hydrants	600	Each	1935	40	2015	10	100%	0%	Same as existing	25	\$3,207	\$1,923,900				2040		
Fire Hydrants	122	Each	1935	40	2014	10	0%	100%	Same as existing	25	\$2,915	\$355,630				2039		
Fire Hydrants	83	Each	1958	40	2014	10	0%	100%	Same as existing	25	\$2,915	\$241,945				2039		
Fire Hydrants	14	Each	1997	40	2022	10	0%	100%	Same as existing	25	\$2,915	\$40,810				2047		
Fire Hydrants	1	Each	1990	40	2015	10	0%	100%	Same as existing	25	\$2,915	\$2,915				2040		
Fire Hydrants	2	Each	2004	40	2029	10	0%	100%	Same as existing	25	\$2,915	\$5,830				2054		
Fire Hydrants	54	Each	2005	40	2030	10	0%	100%	Same as existing	25	\$2,915	\$157,410				2055		
Operation & Maintenance Building	1	ea		75	2012		0%	100%	Same as existing	75	\$425,000	\$425,000						
Vehicles/Equipment					2012				Same as existing	7		\$180,000				2019	2026	2033
Water Lab Equipment + Backhoe					2012				Same as existing	10		\$117,300				2022	2032	2042
Tools, and Furniture					2012				Same as existing	15		\$85,600				2027	2042	2057
Admin Equipment, Power Equipment					2012				Same as existing	5		\$56,350				2017	2022	2027

Table IV-3

**Renewals and Replacement Costs
and Residual Values**

(2011 Dollars except where noted)

Item and Size	2054 43	2055 44	2056 45	2057 46	2058 47	2059 48	2060 49	2061 50	Residual Value of R&R in 2011 \$	Residual Value of R&R in Nominal \$
16"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
20"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
24"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Zussman Range (Mt.Eden) - Valves										
1"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
1"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
1.5"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
4"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
4"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Yano Range - Valves										
2"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Pressure Reducing Valves	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Meters										
Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$62,880	\$117,534
Basham's Corner - Meters										
Meters	\$5,240	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,773	\$7,827
Basham's Corner - Back Flow Preventers										
Basham's Corner - Back Flow Preventers	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,350	\$2,354
Pressure Reducing Station										
Pressure Reducing Station	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,060	\$6,239
SCADA										
SCADA (Pump Controls)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
New SCADA System	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,200	\$20,381
Automatic Transfer Switches										
Install switches at Otter creek PS, Central WTP ar	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Well Control System										
Well Control System	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Van Voorhis BPS (Facility No. 5898)										
Van Voorhis BPS - Structure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Pump No. 1 & Pressure Tank - 175 gpm, 10 HF	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,419	\$2,519
Pump No. 2 & Pressure Tank - 175 gpm, 10 HF	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,422	\$2,522
Pump No. 3 & Pressure Tank - 175 gpm, 10 HF	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,422	\$2,522
Fire Protection (Diesel Fueled) - 2,000 gpm, 12	\$0	\$7,550	\$0	\$0	\$0	\$0	\$0	\$0	\$6,040	\$12,750
Elevated Storage Tanks (Steel) Repairs										
Tank No. 1 & cathodic protection - 250,000 gall	\$195,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$296,700	\$398,655
Tank No. 2 & cathodic protection - 500,000 gall	\$390,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$593,400	\$797,310
Tank No. 3 & cathodic protection - 500,000 gall	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Tank No. 4 & cathodic protection - 500,000 gall	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$565,800	\$734,261
Tank No. 5 & cathodic protection - 300,000 gall	\$0	\$0	\$0	\$0	\$0	\$0	\$390,000	\$0	\$405,720	\$605,036
Tank No. 6 & cathodic protection - 500,000 gall	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Tank No. 7 & cathodic protection - 500,000 gall	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Tank No. 8 & cathodic protection - 500,000 gall	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
DISTRIBUTION PIPE - CAST IRON (12" and Ove										
Unknown Diameter (assume 6")	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,508	\$12,287

Table IV-3

**Renewals and Replacement Costs
and Residual Values**

(2011 Dollars except where noted)

Item and Size	2054 43	2055 44	2056 45	2057 46	2058 47	2059 48	2060 49	2061 50	Residual Value of R&R in 2011 \$	Residual Value of R&R in Nominal \$
0.75" (NA - DIP starts at 4" Diameter)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,620	\$5,402
1 " (NA - DIP starts at 4" Diameter)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,570	\$17,036
1.25" (NA - DIP starts at 4" Diameter)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$18,383	\$21,495
1.5" (NA - DIP starts at 4" Diameter)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$51,528	\$60,250
2" (NA - DIP starts at 4" Diameter)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$120,557	\$140,963
2.5" (NA - DIP starts at 4" Diameter)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,510	\$25,151
3" (NA - DIP starts at 4" Diameter)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$26,120	\$30,541
4"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$52,674	\$61,589
5" (NA Pipe diameters even numbers - use 6")	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,034	\$3,548
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,147,466	\$1,341,691
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$910,548	\$1,064,672
8" - HR Center	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$391,037	\$457,225
12"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$384,341	\$449,396
14"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$247,430	\$289,311
16"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$72,128	\$84,337
24"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$382,272	\$446,977
DISTRIBUTION PIPE - DUCTILE IRON										
1" (NA - DIP starts at 4" Diameter)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.25" (NA - DIP starts at 4" Diameter)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.5" (NA - DIP starts at 4" Diameter)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2" (NA - DIP starts at 4" Diameter)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3" (NA - DIP starts at 4" Diameter)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$10,432	\$10,432	\$10,432	\$10,432	\$10,432	\$50,075	\$113,312
10"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12"	\$45,303	\$45,303	\$45,303	\$45,303	\$45,303	\$0	\$0	\$0	\$543,634	\$1,070,519
14"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
DISTRIBUTION PIPE - TRANSITE (Replaced wit										
1"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.5"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
DISTRIBUTION PIPE - PVC (Replaced with C-90										
1.5"	\$0	\$25,466	\$25,466	\$25,466	\$25,466	\$25,466	\$25,466	\$25,466	\$167,564	\$372,639
2"	\$0	\$0	\$0	\$0	\$17,117	\$17,117	\$17,117	\$17,117	\$66,413	\$151,594
3"	\$0	\$0	\$0	\$788	\$788	\$788	\$788	\$788	\$3,784	\$8,563
3"	\$0	\$0	\$0	\$0	\$1,005	\$1,005	\$1,005	\$1,005	\$3,899	\$8,901
4"	\$44	\$44	\$44	\$44	\$44	\$44	\$44	\$44	\$568	\$1,178
4"	\$0	\$612	\$612	\$612	\$612	\$612	\$612	\$612	\$4,029	\$8,960
4"	\$0	\$0	\$0	\$812	\$812	\$812	\$812	\$812	\$3,898	\$8,821
4"	\$0	\$0	\$0	\$0	\$11,675	\$11,675	\$11,675	\$11,675	\$45,298	\$103,396

Table IV-3
**Renewals and Replacement Costs
and Residual Values**
(2011 Dollars except where noted)

Item and Size	2012 1	2013 2	2014 3	2015 4	2016 5	2017 6	2018 7	2019 8	2020 9	2021 10	2022 11	2023 12	2024 13	2025 14
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Zussman Range (Mt.Eden) - Pipe Material - PVC														
1"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.5"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Zussman Range (Mt.Eden) - Pipe Material - PE														
1"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Yano Range - Pipe Material - PVC														
2"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Basham's Corner - Pipe Material - PVC														
1.25"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
FIRE HYDRANTS														
Fire Hydrants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Fire Hydrants	\$0	\$0	\$35,563	\$35,563	\$35,563	\$35,563	\$35,563	\$35,563	\$35,563	\$35,563	\$35,563	\$35,563	\$0	\$0
Fire Hydrants	\$0	\$0	\$24,195	\$24,195	\$24,195	\$24,195	\$24,195	\$24,195	\$24,195	\$24,195	\$24,195	\$24,195	\$0	\$0
Fire Hydrants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,081	\$4,081	\$4,081	\$4,081
Fire Hydrants	\$0	\$0	\$0	\$292	\$292	\$292	\$292	\$292	\$292	\$292	\$292	\$292	\$292	\$0
Fire Hydrants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Fire Hydrants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operation & Maintenance Building														
Vehicles/Equipment	\$425,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Water Lab Equipment + Backhoe														
Tools, and Furniture	\$180,000	\$0	\$0	\$0	\$0	\$0	\$0	\$180,000	\$0	\$0	\$0	\$0	\$0	\$0
Admin Equipment, Power Equipment														
Tools, and Furniture	\$117,300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$117,300	\$0	\$0	\$0
Admin Equipment, Power Equipment	\$85,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Admin Equipment, Power Equipment	\$56,350	\$0	\$0	\$0	\$0	\$56,350	\$0	\$0	\$0	\$0	\$56,350	\$0	\$0	\$0
Subtotal--2011\$	\$1,540,420	\$87,400	\$1,999,500	\$1,840,337	\$1,450,836	\$2,812,281	\$1,346,291	\$4,465,631	\$7,373,782	\$1,346,291	\$1,524,022	\$1,679,747	\$1,365,740	\$1,410,573
Subtotal--2012\$	\$1,567,419	\$88,932	\$2,034,545	\$1,872,592	\$1,476,265	\$2,861,571	\$1,369,887	\$4,543,899	\$7,503,021	\$1,369,887	\$1,550,733	\$1,709,188	\$1,389,677	\$1,435,296
General and Administrative Overhead--2012\$	\$68,966	\$3,913	\$89,520	\$82,394	\$64,956	\$125,909	\$60,275	\$199,932	\$330,133	\$60,275	\$68,232	\$75,204	\$61,146	\$63,153
Total Cost--2012\$	\$1,636,385	\$92,845	\$2,124,064	\$1,954,986	\$1,541,220	\$2,987,481	\$1,430,162	\$4,743,831	\$7,833,154	\$1,430,162	\$1,618,966	\$1,784,392	\$1,450,823	\$1,498,449

Table IV-3

**Renewals and Replacement Costs
and Residual Values**

(2011 Dollars except where noted)

Item and Size	2026 15	2027 16	2028 17	2029 18	2030 19	2031 20	2032 21	2033 22	2034 23	2035 24	2036 25	2037 26	2038 27	2039 28
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Zussman Range (Mt.Eden) - Pipe Material - PVC														
1"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.5"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Zussman Range (Mt.Eden) - Pipe Material - PE														
1"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Yano Range - Pipe Material - PVC														
2"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Basham's Corner - Pipe Material - PVC														
1.25"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
FIRE HYDRANTS														
Fire Hydrants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Fire Hydrants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$35,563
Fire Hydrants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$24,195
Fire Hydrants	\$4,081	\$4,081	\$4,081	\$4,081	\$4,081	\$4,081	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Fire Hydrants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Fire Hydrants	\$0	\$0	\$0	\$583	\$583	\$583	\$583	\$583	\$583	\$583	\$583	\$583	\$583	\$0
Fire Hydrants	\$0	\$0	\$0	\$0	\$15,741	\$15,741	\$15,741	\$15,741	\$15,741	\$15,741	\$15,741	\$15,741	\$15,741	\$15,741
Operation & Maintenance Building														
Vehicles/Equipment	\$180,000	\$0	\$0	\$0	\$0	\$0	\$0	\$180,000	\$0	\$0	\$0	\$0	\$0	\$0
Water Lab Equipment + Backhoe														
Tools, and Furniture	\$0	\$85,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Admin Equipment, Power Equipment														
Admin Equipment, Power Equipment	\$0	\$56,350	\$0	\$0	\$0	\$0	\$56,350	\$0	\$0	\$0	\$0	\$56,350	\$0	\$0
Subtotal--2011\$	\$1,470,323	\$2,533,398	\$1,360,948	\$1,694,654	\$20,405	\$20,405	\$189,974	\$253,824	\$406,324	\$637,324	\$818,824	\$924,924	\$103,724	\$420,499
Subtotal--2012\$	\$1,496,093	\$2,577,801	\$1,384,801	\$1,724,356	\$20,763	\$20,763	\$193,304	\$258,273	\$413,446	\$648,494	\$833,175	\$941,135	\$105,542	\$427,868
General and Administrative Overhead--2012\$	\$65,828	\$113,423	\$60,931	\$75,872	\$914	\$914	\$8,505	\$11,364	\$18,192	\$28,534	\$36,660	\$41,410	\$4,644	\$18,826
Total Cost--2012\$	\$1,561,921	\$2,691,224	\$1,445,733	\$1,800,227	\$21,676	\$21,676	\$201,809	\$269,637	\$431,637	\$677,028	\$869,835	\$982,545	\$110,186	\$446,695

Table IV-3

**Renewals and Replacement Costs
and Residual Values**

(2011 Dollars except where noted)

Item and Size	2040 29	2041 30	2042 31	2043 32	2044 33	2045 34	2046 35	2047 36	2048 37	2049 38	2050 39	2051 40	2052 41	2053 42
6"	\$0	\$0	\$0	\$0	\$22,753	\$22,753	\$22,753	\$22,753	\$22,753	\$22,753	\$22,753	\$22,753	\$22,753	\$22,753
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$18,845
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$0	\$25,868	\$25,868	\$25,868	\$25,868	\$25,868	\$25,868	\$25,868	\$25,868	\$25,868	\$25,868
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$36,789	\$36,789	\$36,789	\$36,789	\$36,789	\$36,789	\$36,789
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10"	\$0	\$0	\$0	\$0	\$6,842	\$6,842	\$6,842	\$6,842	\$6,842	\$6,842	\$6,842	\$6,842	\$6,842	\$6,842
10"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12"	\$0	\$0	\$0	\$0	\$9,980	\$9,980	\$9,980	\$9,980	\$9,980	\$9,980	\$9,980	\$9,980	\$9,980	\$9,980
Zussman Range (Mt.Eden) - Pipe Material - PVC														
1"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$177	\$177	\$177	\$177	\$177	\$177	\$177
1"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$617	\$617
1.5"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$106	\$106
4"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$55,325	\$55,325	\$55,325	\$55,325	\$55,325	\$55,325	\$55,325
Zussman Range (Mt.Eden) - Pipe Material - PE														
1"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,789	\$1,789
4"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25,058	\$25,058
Yano Range - Pipe Material - PVC														
2"	\$4,600	\$4,600	\$4,600	\$4,600	\$4,600	\$4,600	\$4,600	\$4,600	\$4,600	\$4,600	\$4,600	\$4,600	\$4,600	\$4,600
Basham's Corner - Pipe Material - PVC														
1.25"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
FIRE HYDRANTS														
Fire Hydrants	\$192,390	\$192,390	\$192,390	\$192,390	\$192,390	\$192,390	\$192,390	\$192,390	\$192,390	\$192,390	\$192,390	\$0	\$0	\$0
Fire Hydrants	\$35,563	\$35,563	\$35,563	\$35,563	\$35,563	\$35,563	\$35,563	\$35,563	\$35,563	\$35,563	\$0	\$0	\$0	\$0
Fire Hydrants	\$24,195	\$24,195	\$24,195	\$24,195	\$24,195	\$24,195	\$24,195	\$24,195	\$24,195	\$24,195	\$0	\$0	\$0	\$0
Fire Hydrants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,081	\$4,081	\$4,081	\$4,081	\$4,081	\$4,081	\$4,081
Fire Hydrants	\$292	\$292	\$292	\$292	\$292	\$292	\$292	\$292	\$292	\$292	\$292	\$0	\$0	\$0
Fire Hydrants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Fire Hydrants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operation & Maintenance Building														
Vehicles/Equipment	\$180,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Water Lab Equipment + Backhoe	\$0	\$0	\$117,300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$117,300	\$0
Tools, and Furniture	\$0	\$0	\$85,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Admin Equipment, Power Equipment	\$0	\$0	\$56,350	\$0	\$0	\$0	\$0	\$56,350	\$0	\$0	\$0	\$0	\$56,350	\$0
Subtotal--2011\$	\$437,039	\$257,039	\$669,814	\$257,039	\$449,084	\$479,625	\$367,784	\$700,550	\$793,575	\$470,567	\$324,461	\$316,306	\$1,186,505	\$1,076,300
Subtotal--2012\$	\$444,699	\$261,544	\$681,554	\$261,544	\$456,955	\$488,031	\$374,230	\$712,828	\$807,484	\$478,815	\$330,148	\$321,850	\$1,207,301	\$1,095,164
General and Administrative Overhead--2012\$	\$19,567	\$11,508	\$29,988	\$11,508	\$20,106	\$21,473	\$16,466	\$31,364	\$35,529	\$21,068	\$14,526	\$14,161	\$53,121	\$48,187
Total Cost--2012\$	\$464,266	\$273,052	\$711,542	\$273,052	\$477,061	\$509,505	\$390,696	\$744,193	\$843,013	\$499,883	\$344,674	\$336,011	\$1,260,422	\$1,143,352

Table IV-3

**Renewals and Replacement Costs
and Residual Values**

(2011 Dollars except where noted)

Item and Size	2054 43	2055 44	2056 45	2057 46	2058 47	2059 48	2060 49	2061 50	Residual Value of R&R in 2011 \$	Residual Value of R&R in Nominal \$
6"	\$22,753	\$22,753	\$22,753	\$22,753	\$22,753	\$0	\$0	\$0	\$273,030	\$537,649
6"	\$18,845	\$18,845	\$18,845	\$18,845	\$18,845	\$18,845	\$18,845	\$18,845	\$156,039	\$341,034
6"	\$0	\$7,183	\$7,183	\$7,183	\$7,183	\$7,183	\$7,183	\$7,183	\$47,264	\$105,108
6"	\$0	\$0	\$0	\$15,718	\$15,718	\$15,718	\$15,718	\$15,718	\$75,444	\$170,719
6"	\$0	\$0	\$0	\$0	\$12,415	\$12,415	\$12,415	\$12,415	\$48,169	\$109,950
8"	\$25,868	\$25,868	\$25,868	\$25,868	\$25,868	\$0	\$0	\$0	\$310,414	\$611,266
8"	\$36,789	\$36,789	\$36,789	\$36,789	\$36,789	\$36,789	\$36,789	\$36,789	\$474,579	\$984,542
8"	\$0	\$47,918	\$47,918	\$47,918	\$47,918	\$47,918	\$47,918	\$47,918	\$315,300	\$701,187
8"	\$0	\$0	\$0	\$5,632	\$5,632	\$5,632	\$5,632	\$5,632	\$27,032	\$61,169
8"	\$0	\$0	\$0	\$0	\$11,765	\$11,765	\$11,765	\$11,765	\$45,647	\$104,194
10"	\$6,842	\$6,842	\$6,842	\$6,842	\$6,842	\$0	\$0	\$0	\$82,104	\$161,679
10"	\$0	\$466	\$466	\$466	\$466	\$466	\$466	\$466	\$3,069	\$6,825
12"	\$9,980	\$9,980	\$9,980	\$9,980	\$9,980	\$0	\$0	\$0	\$119,760	\$235,830
Zussman Range (Mt.Eden) - Pipe Material - PVC										
1"	\$177	\$177	\$177	\$177	\$177	\$177	\$177	\$177	\$2,285	\$4,740
1"	\$617	\$617	\$617	\$617	\$617	\$617	\$617	\$617	\$5,611	\$12,158
1.5"	\$106	\$106	\$106	\$106	\$106	\$106	\$106	\$106	\$963	\$2,086
4"	\$55,325	\$55,325	\$55,325	\$55,325	\$55,325	\$55,325	\$55,325	\$55,325	\$713,686	\$1,480,583
Zussman Range (Mt.Eden) - Pipe Material - PE										
1"	\$1,789	\$1,789	\$1,789	\$1,789	\$1,789	\$1,789	\$1,789	\$1,789	\$16,277	\$35,267
4"	\$25,058	\$25,058	\$25,058	\$25,058	\$25,058	\$25,058	\$25,058	\$25,058	\$228,028	\$494,058
Yano Range - Pipe Material - PVC										
2"	\$4,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$49,680	\$91,261
Basham's Corner - Pipe Material - PVC										
1.25"	\$121	\$121	\$121	\$121	\$121	\$121	\$121	\$121	\$904	\$1,992
2"	\$110	\$110	\$110	\$110	\$110	\$110	\$110	\$110	\$821	\$1,811
6"	\$631	\$631	\$631	\$631	\$631	\$631	\$631	\$631	\$4,698	\$10,358
FIRE HYDRANTS										
Fire Hydrants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$654,126	\$1,150,539
Fire Hydrants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$106,689	\$184,422
Fire Hydrants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$72,584	\$125,468
Fire Hydrants	\$4,081	\$4,081	\$4,081	\$0	\$0	\$0	\$0	\$0	\$25,302	\$50,260
Fire Hydrants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$991	\$1,743
Fire Hydrants	\$583	\$583	\$583	\$583	\$583	\$583	\$583	\$583	\$4,011	\$8,843
Fire Hydrants	\$0	\$15,741	\$15,741	\$15,741	\$15,741	\$15,741	\$15,741	\$15,741	\$96,965	\$215,636
Operation & Maintenance Building										
Vehicles/Equipment	\$180,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$147,333	\$147,333
Water Lab Equipment + Backhoe	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Water Lab Equipment + Backhoe	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,730	\$23,503
Tools, and Furniture	\$0	\$0	\$0	\$85,600	\$0	\$0	\$0	\$0	\$62,773	\$137,195
Admin Equipment, Power Equipment	\$0	\$0	\$0	\$56,350	\$0	\$0	\$0	\$0	\$11,270	\$24,631
Subtotal--2011\$	\$1,162,112	\$359,958	\$352,408	\$523,659	\$493,185	\$324,940	\$714,940	\$324,940	\$16,345,497	\$24,934,269
Subtotal--2012\$	\$1,182,480	\$366,267	\$358,584	\$532,837	\$501,829	\$330,635	\$727,470	\$330,635		
General and Administrative Overhead--2012\$	\$52,029	\$16,116	\$15,778	\$23,445	\$22,080	\$14,548	\$32,009	\$14,548		
Total Cost--2012\$	\$1,234,509	\$382,383	\$374,362	\$556,282	\$523,909	\$345,183	\$759,479	\$345,183		

Table IV-4

Renewal and Replacement Cash Flow

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Contract Year	Project Costs 2012\$	Cash Flow (Current Year \$)*								R&R Revenues 2009\$
		R&R Revenues	Project Costs	Net Revenues	Beginning Balance	Average Balance	Interest Income	Interest Expense	Ending Balance	
1	1,636,385	1,412,248	1,636,385	(224,137)	-	(112,068)	-	6,164	(230,300)	1,340,521
2	92,845	1,412,248	94,472	1,317,776	(230,300)	428,588	8,572	-	1,096,047	1,317,430
3	2,124,064	1,437,000	2,199,173	(762,173)	1,096,047	714,961	14,299	-	348,174	1,317,430
4	1,954,986	1,462,186	2,059,593	(597,406)	348,174	49,471	989	-	(248,242)	1,317,430
5	1,541,220	1,487,814	1,652,145	(164,331)	(248,242)	(330,408)	-	18,172	(430,746)	1,317,430
6	2,987,481	1,513,890	3,258,625	(1,744,734)	(430,746)	(1,303,113)	-	71,671	(2,247,151)	1,317,430
7	1,430,162	1,540,424	1,587,305	(46,881)	(2,247,151)	(2,270,592)	-	124,883	(2,418,915)	1,317,430
8	4,743,831	1,567,423	5,357,351	(3,789,929)	(2,418,915)	(4,313,879)	-	237,263	(6,446,107)	1,317,430
9	7,833,154	1,594,895	9,001,263	(7,406,368)	(6,446,107)	(10,149,291)	-	558,211	(14,410,686)	1,317,430
10	1,430,162	1,622,848	1,672,238	(49,390)	(14,410,686)	(14,435,381)	-	793,946	(15,254,022)	1,317,430
11	1,618,966	1,651,291	1,926,177	(274,885)	(15,254,022)	(15,391,464)	-	846,531	(16,375,438)	1,317,430
12	1,784,392	1,680,233	2,160,203	(479,970)	(16,375,438)	(16,615,423)	-	913,848	(17,769,256)	1,317,430
13	1,450,823	1,709,682	1,787,164	(77,482)	(17,769,256)	(17,807,997)	-	979,440	(18,826,178)	1,317,430
14	1,498,449	1,739,647	1,878,183	(138,536)	(18,826,178)	(18,895,446)	-	1,039,250	(20,003,963)	1,317,430
15	1,561,921	1,770,138	1,992,054	(221,916)	(20,003,963)	(20,114,921)	-	1,106,321	(21,332,200)	1,317,430
16	2,691,224	1,801,163	3,492,509	(1,691,346)	(21,332,200)	(22,177,873)	-	1,219,783	(24,243,329)	1,317,430
17	1,445,733	1,832,731	1,909,069	(76,337)	(24,243,329)	(24,281,498)	-	1,335,482	(25,655,149)	1,317,430
18	1,800,227	1,864,853	2,418,838	(553,985)	(25,655,149)	(25,932,141)	-	1,426,268	(27,635,401)	1,317,430
19	21,676	1,897,538	29,635	1,867,903	(27,635,401)	(26,701,450)	-	1,468,580	(27,236,078)	1,317,430
20	21,676	1,930,796	30,155	1,900,641	(27,236,078)	(26,285,758)	-	1,445,717	(26,781,154)	1,317,430
21	201,809	1,964,636	285,665	1,678,971	(26,781,154)	(25,941,668)	-	1,426,792	(26,528,975)	1,317,430
22	269,637	1,999,070	388,367	1,610,704	(26,528,975)	(25,723,623)	-	1,414,799	(26,333,070)	1,317,430
23	431,637	2,034,107	632,598	1,401,510	(26,333,070)	(25,632,315)	-	1,409,777	(26,341,338)	1,317,430
24	677,028	2,069,759	1,009,627	1,060,131	(26,341,338)	(25,811,272)	-	1,419,620	(26,700,826)	1,317,430
25	869,835	2,106,035	1,319,889	786,146	(26,700,826)	(26,307,753)	-	1,446,926	(27,361,607)	1,317,430
26	982,545	2,142,947	1,517,045	625,901	(27,361,607)	(27,048,656)	-	1,487,676	(28,223,381)	1,317,430
27	110,186	2,180,506	173,108	2,007,398	(28,223,381)	(27,219,682)	-	1,497,083	(27,713,066)	1,317,430
28	446,695	2,218,723	714,083	1,504,640	(27,713,066)	(26,960,746)	-	1,482,841	(27,691,267)	1,317,430
29	464,266	2,257,610	755,180	1,502,431	(27,691,267)	(26,940,051)	-	1,481,703	(27,670,539)	1,317,430
30	273,052	2,297,179	451,934	1,845,245	(27,670,539)	(26,747,917)	-	1,471,135	(27,296,430)	1,317,430
31	711,542	2,337,441	1,198,329	1,139,112	(27,296,430)	(26,726,873)	-	1,469,978	(27,627,295)	1,317,430
32	273,052	2,378,409	467,915	1,910,494	(27,627,295)	(26,672,048)	-	1,466,963	(27,183,764)	1,317,430
33	477,061	2,420,095	831,843	1,588,252	(27,183,764)	(26,389,638)	-	1,451,430	(27,046,942)	1,317,430
34	509,505	2,462,511	903,985	1,558,526	(27,046,942)	(26,267,679)	-	1,444,722	(26,933,138)	1,317,430
35	390,696	2,505,671	705,340	1,800,331	(26,933,138)	(26,032,973)	-	1,431,814	(26,564,620)	1,317,430
36	744,193	2,549,587	1,367,068	1,182,519	(26,564,620)	(25,973,361)	-	1,428,535	(26,810,636)	1,317,430
37	843,013	2,594,273	1,575,741	1,018,533	(26,810,636)	(26,301,370)	-	1,446,575	(27,238,679)	1,317,430
38	499,883	2,639,743	950,746	1,688,997	(27,238,679)	(26,394,180)	-	1,451,680	(27,001,362)	1,317,430
39	344,674	2,686,009	667,038	2,018,970	(27,001,362)	(25,991,877)	-	1,429,553	(26,411,945)	1,317,430
40	336,011	2,733,086	661,670	2,071,416	(26,411,945)	(25,376,237)	-	1,395,693	(25,736,222)	1,317,430
41	1,260,422	2,780,988	2,525,514	255,474	(25,736,222)	(25,608,485)	-	1,408,467	(26,889,215)	1,317,430
42	1,143,352	2,829,730	2,331,093	498,637	(26,889,215)	(26,639,896)	-	1,465,194	(27,855,772)	1,317,430
43	1,234,509	2,879,326	2,561,060	318,266	(27,855,772)	(27,696,639)	-	1,523,315	(29,060,822)	1,317,430
44	382,383	2,929,791	807,178	2,122,613	(29,060,822)	(27,999,515)	-	1,539,973	(28,478,182)	1,317,430
45	374,362	2,981,141	804,099	2,177,043	(28,478,182)	(27,389,661)	-	1,506,431	(27,807,571)	1,317,430
46	556,282	3,033,391	1,215,788	1,817,603	(27,807,571)	(26,898,770)	-	1,479,432	(27,469,401)	1,317,430
47	523,909	3,086,557	1,165,105	1,921,451	(27,469,401)	(26,508,675)	-	1,457,977	(27,005,927)	1,317,430
48	345,183	3,140,654	781,095	2,359,559	(27,005,927)	(25,826,147)	-	1,420,438	(26,066,806)	1,317,430
49	759,479	3,195,699	1,748,705	1,446,995	(26,066,806)	(25,343,309)	-	1,393,882	(26,013,693)	1,317,430
50	345,183	3,251,710	808,715	2,442,994	(26,013,693)	(24,792,196)	-	1,363,571	(24,934,269)	1,317,430

* Includes projected future inflation of 2.5 percent per year

1. Provide each of the attachments, exhibits, and referenced documents that are listed in Section J of the Utility Service Contract.

ANSWER 1:

The final, reformatted Section J and other referenced attachments are still pending delivery from Defense Logistics Agency Energy ("DLA"). The most recent attachments, but not the final re-formatted version, have been saved on a Compact Disc which is attached hereto as **Exhibit 1**.

WITNESS: Mr. Jim Bruce, General Manager, Hardin County Water District No. 1 ("HCWD1")

2. Provide all correspondence between Hardin District and the United States Government and its representatives regarding the proposed transfer of ownership, operations, and maintenance of the Fort Knox potable water utility system.

ANSWER 2:

The requested items are on enclosed Compact Disc, with five separate folders labeled as;

Exhibit 2A, which is the first proposal;

Exhibit 2B, which is the second proposal;

Exhibit 2C, which is the third proposal; and

Exhibit 2D, which is the final proposal that was accepted by DLA

Exhibit 2E, Other correspondence, emails and documents

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

3. Provide all internal memoranda, notes, presentations, and other documents in which Hardin District discussed, reviewed or analyzed proposed service to the Fort Knox Military Installation or acquisition of the Fort Knox potable water utility system.

ANSWER 3:

HCWD1 internal documents exist within the responses and documents provided in response to Q2 and Q25 (Exhibits 2 and 10) . The internal proposal development over the three year period, developing four different proposals, used an integrated team approach which included HCWD1 staff, LWC staff and CH2M staff. Other Board presentations or internal explanation memos are included in other email documents included the other answer responses listed herein.

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

4. Provide the minutes of each meeting of Hardin District's Board of Commissioners in which the proposed transfer of ownership, operations and maintenance of the Fort Knox potable water utility system was discussed.

ANSWER 4:

See attached **Exhibit 7**.

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

Hardin County Water District No. 1
Minutes of Special Meeting
of the Board of Commissioners
July 9, 2008

Chairman Bill Rissel called the meeting to order at 11:05 am with Commissioners John Tindall, William Gossett, Ron Hockman, and Les Powers attending. Staff present included; Mr. Jim Bruce, General Manager; Mr. Brett Pyles, Operations Manager; Stephanie Brown, Administrative Assistant; and Mr. David Wilson, Attorney. Guests present at the meeting included Mr. Greg Heitzman and Mr. Jim Smith from Louisville Water Company.

Chairman Rissel opened the floor to the public comment. None were present so no comments were given and the floor was closed for public comments.

Secretary Tindall expressed appreciation to Brett Pyles and Veolia for hosting a golf scramble and donating the proceeds of \$8,500 to USA-Cares, which will provide aide to nearly 250 military families. Mr. Pyles said that the event was a great success, as well as being good public relations for both the District and Veolia.

Chairman Rissell introduced the guests, Mr. Heitzman and Mr. Smith from Louisville Water Company to the Board. Chairman Rissel asked Mr. Heitzman to give a brief history of Louisville Water Company and the events that led up to contacting the District in order to form a partnership between the two companies.

Mr. Heitzman reviewed the contents of the Partnership Agreement between the District and Louisville Water Company ("LWC"). The agreement explains that the two companies will partner in order to submit a bid to the Government for the privatization of the Fort Knox Water System. The agreement provides that LWC will be responsible for expenses related to preparing the bid documents. The agreement also states that the District would own the water system and be responsible for operating the Distribution system, while LWC would contract with the District in order to operate the water treatment plants. A new water supply from LWC to Ft. Knox, and independently to the District, was also part of the agreement. The agreement also describes that the two companies will work together in purchasing supplies, sharing in support services, installing a transmission main to connect the two water systems along with the bid submittal for the Fort Knox Water System.

The Board reviewed and discussed each section of the agreement. After all questions were answered and changes made, Commissioner Hockman made a motion authorizing the Chairman to sign the Partnership Agreement as amended between Hardin County Water District No. 1 and the Louisville Water Company. Secretary Tindall seconded the motion and it was passed.

The Board thanked both the staff of Louisville Water Company and the staff of the District for their joint cooperation in forming this partnership that will be beneficial to both companies.

Being no further business before the Board, Commissioner Hockman made a motion to adjourn the meeting at 12:05 pm which was seconded Treasurer Gossett and passed.

(Minutes submitted by Ms. Stephanie Brown)

Hardin County Water District No. 1
Minutes of Regular Meeting
of the Board of Commissioners
July 15, 2008

Chairman Bill Rissel called the meeting to order at 5:30 p.m. with Commissioners John Tindall, William Gossett, Ron Hockman, and Les Powers attending. Staff present included; Mr. Jim Bruce, General Manager; Mr. Brett Pyles, Operations Manager; Stephanie Brown, Administrative Assistant; Jenny Huff, Accountant; Charlene Easter, Customer Service Manager; Beverly McDonald, Customer Service Representative; and attorney David Wilson. Dinner was provided for the Board and staff.

Ms. Easter introduced Ms. Beverly McDonald, a new Customer Service Representative to the Board and reviewed her employment history with the Board. The Board welcomed Ms. McDonald to the District. Ms. Easter and Ms. McDonald left the meeting at this time.

Chairman Rissel opened the floor to the public comment. None were present so no comments were given and the floor was closed for public comments.

Chairman Rissel asked for a motion to accept the Secretary's Report for the June 17 Regular Board meeting. Treasurer Gossett made a motion to accept the minutes which was seconded by Commissioner Powers and passed.

Ms. Huff presented the Board with the Treasurer's Report and reviewed the highlights. She noted that some allocations have been made for expenses from water to the Radcliff sewer utility, but more standard monthly allocation amounts needed to be established. Chairman Rissel suggested a new format showing all three funds as well as a consolidated column for the financial statements in order to simplify the report for the Board members. There was a consensus from the Board for staff to develop a consolidated monthly report for all utilities. Ms. Huff and Mr. Bruce answered all other questions from the Board. Secretary Tindall made a motion to approve the Treasurer's Report for both May and June. The motion was seconded by Treasurer Gossett and passed.

Chairman Rissel asked Mr. Bruce to review the General Manager's report. Mr. Bruce informed the Board that Louisville Water Company ("LWC") will be sending a press release to the local media announcing the partnership between LWC and the District. Mr. Bruce also informed the Board that the process had begun to respond to the RFP for the Ft. Knox Water System and that the staff will meet on a regular basis with LWC in order to complete this process. Mr. Bruce updated the Board on the status of the Mobile Home Park Master Meter Tariff and stated that there is a conference call scheduled with staff from the PSC in order to discuss the tariff. Chairman Rissel asked that the staff review the need for using an armored car service to take the deposits to the bank now that the new check system has been implemented. Mr. Bruce answered all other questions from the Board.

Chairman Rissel asked Mr. Pyles to review the Operation Manager's report. Mr. Pyles answered all questions from the Board.

HCWD1 Vehicle / Equipment Consolidated List: Mr Bruce presented the Board with a detailed list of all District vehicles and equipment that includes both the Radcliff and Fort Knox sewer systems. This list includes those vehicles that are leased by Veolia, used for operations, but not owned by the District. Mr. Bruce pointed out that the list also includes an estimated replacement year for each vehicle. As new equipment is purchased or old equipment retired the list will be updated. Mr. Bruce stated that this list will be used in order to establish a future Vehicle/Equipment Replacement Policy, and he would be asking Veolia for a comprehensive list of equipment, personnel and vehicles that may be shared between the Ft. Knox and Radcliff sewer projects.

Hardin County Water District No. 1
Minutes of Special Meeting
of the Board of Commissioners

August 28, 2008

Chairman Bill Rissel called the meeting to order at 5:30 p.m. with Commissioners Ron Hockman, Les Powers, William Gossett and John Tindall attending. Staff present included Jim Bruce, General Manager; Brett Pyles, Operations Manager; Stephanie Brown, Administrative Assistant; and attorney David Wilson. Guests present included Mr. Steve Walton, incoming Commissioner; Ms. Christie Campbell, Administrative Clerk; Mr. Jeff Greer and Mr. Anthony Link, Veolia Water North America South. Dinner was provided for the Board and staff.

Chairman Rissel asked staff if the appropriate notification was sent to the media regarding the Special Meeting and Ms. Brown confirmed that the media was notified and the agenda was posted 24 hours in advance of the meeting.

Chairman Rissel opened the floor for public comment. There were no public comments offered and the floor was closed to public comment.

Mr. Bruce introduced Ms. Christie Campbell as the new Administrative Clerk and explained her employment history to the Board. Mr. Rissel welcomed Ms. Campbell to the District on behalf of the Board. Ms. Campbell left the meeting at this time.

Chairman Rissel asked for a motion to approve the July 9, 2008 Special Meeting Minutes, the July 15, 2008 Regular Meeting Minutes and the August 14, 2008 Special Meeting Minutes. Commissioner Powers made a motion to approve the minutes to all three meetings. The motion was seconded by Treasurer Gossett and passed.

Ms. Huff presented the Board with the Treasurer's Report for July and passed out an updated Statement of Cash Flows for the Radcliff Sewer utility and the simplified consolidated statement with all the utilities included on it that the Board had asked for at a previous meeting. Ms. Huff answered all other questions from the Board. Secretary Tindall made a motion to approve the Treasurer's Report and Commissioner Powers seconded the motion and it was passed.

Chairman Rissel asked Mr. Bruce to review the General Manager's Report. Mr. Bruce updated the Board on the Ft. Knox Water System Privatization, stating that staff is hoping to bring a final price to the Board at the September 16 Board meeting and that the process was going very smoothly with the District, Louisville Water Company and CH2M Hill. Mr. Bruce answered all other questions from the Board.

Sewer Territory Boundary - Update: Chairman Rissel updated the Board on the sewer boundary meeting with the District and HCWD2, held with the General Managers and Chairmen from both districts. Chairman Rissel explained that HCWD2 wasn't concerned with the District serving customers in Radcliff and that the two Chairmen asked that the General Managers meet to develop lines based on streets in order to determine the service area with regards to basins and sewer customers. Chairman Rissel pointed out that HCWD2 is interested in providing cluster systems that will feed into the basins in order to generate future revenues; therefore they are not interested in releasing the basins. Secretary Tindall encouraged staff to ensure that the high density areas for the District remain in our service area

Hardin County Water District No. 1
Minutes of Regular Meeting
of the Board of Commissioners

September 16, 2008

Chairman Bill Rissel called the meeting to order at 5:30 p.m. with Commissioners William Gossett, Ron Hockman, John Tindall and Steve Walton attending. Staff present included Jim Bruce, General Manager; Brett Pyles, Operations Manager; Stephanie Brown, Administrative Assistant; Jenny Huff, Accountant; Charlene Easter, Customer Service Manager; and attorney David Wilson. Guests present included Mr. Jim Smith, Louisville Water Company and Mr. David Hackworth, CH2M Hill. Dinner was provided for the Board and staff.

Chairman Rissel opened the floor for public comment. There were no public comments offered and the floor was closed to public comment.

Chairman Rissel asked for a motion to August 28, 2008 Special Meeting Minutes. Treasurer Gossett made a motion to approve the minutes. The motion was seconded by Commissioner Hockman and passed.

Ms. Huff presented the Board with the Treasurer's Report for August. Ms. Huff answered all other questions from the Board. There was discussion about whether or not the Government should pay interest on late sewer payments. It was determined that the District's tariff, nor contract with the Government, provided for interest added to late payments. Commissioner Walton made a motion to approve the Treasurer's Report and Secretary Tindall seconded the motion and it was passed.

Chairman Rissel asked Mr. Bruce to review the General Manager's Report. There was a consensus from the Board to allow Mr. Bruce to remove all topics from the General Manager's Report that have no current or new information to report to the Board. Mr. Bruce informed the Board that a meeting date has been set to meet with the General Manager of HCWD2 in order to work out the sewer service boundaries. Mr. Bruce also pointed out that there are new developments that are close the District's current sewer service area, but are in HCWD2's water, which is an area that will have to be discussed in the meeting. Mr. Bruce answered all other questions from the Board.

Chairman Rissel asked Mr. Pyles to review the Operation's Manager's Report. Mr. Pyles passed out the current list of all capital projects being completed by the District, to include the Ft. Knox Stormwater, Ft. Knox Sanitary Sewer System and the Radcliff Sanitary Sewer System. Mr. Pyles answered all other questions from the Board.

Ft. Knox Water - Bid Proposal Presentation: Mr. Bruce introduced Mr. Jim Smith from Louisville Water Company and Mr. David Hackworth from CH2M Hill. Mr. Hackworth reviewed a slide presentation regarding the Ft. Know Water Privatization Bid Proposal. Mr. Rissel asked the staff's opinion of increasing the general and administrative overhead (G&A) rate from 3.8%. Mr. Bruce informed Mr. Rissel that the staff does not object to increasing the overhead rate as CH2M Hill's representatives instructed that this was a low percentage to charge for overhead. Secretary Tindall made a motion to authorize the team to use a range for G&A with a minimum of 3.8% and a ceiling of 5% to ensure that the District's bid is still competitive but will still properly fund the necessary projects and

Hardin County Water District No. 1
Minutes of Regular Meeting of the Board of Commissioners
September 16, 2008

Continued

continued operations if awarded the bid for the Ft. Knox Water System. The motion was seconded by Commissioner Hockman and passed.

Mr. Hackworth and Mr. Smith answered all other questions from the Board. Commissioner Hockman made a motion to authorize staff, and legal counsel, and Chairman, to execute and sign any and all documents in order for the District to submit both a base and alternate proposal to the United States Government, to own and operate their water utility at Ft. Knox, Kentucky, as anticipated in its partnership agreement with the Louisville Water Company. Treasurer Gossett seconded the motion and it passed.

Chairman Rissel thanked the staff of Louisville Water Company for taking the financial responsibility for preparation of the bid with the risk of the bid not being awarded to the team and he also thanked the staff of CH2M Hill for their efforts put forth for this bid. Mr. Smith and Mr. Hackworth left the meeting at this time.

In-Service Training Days: Ms. Easter presented the Board with the option of allowing the staff to set aside two in-service training days, Veteran's Day and President's Day, where the office would be closed but all District employees would be required to attend the full day of training or work to cover emergency calls. This would allow the District to be able to share and compare information for operations in order to improve their business performance and enhance the service provided to the public as well as experience a cost savings through such a program. Secretary Tindall made a motion to authorize staff to close the main office for Veteran's Day and President's Day in order to provide in-service training for all employees, which would be mandatory for all employees to attend, and to report back to the Board at the end of 2009 to discuss possibly extending to future years. The motion was seconded by Commissioner Walton and passed.

2008 Budget Items # 12, 18 and 23: Mr. Bruce presented the Board with three items that were funded in the 2008 Budget but had not yet been approved by the Board. These items include a Large Field Meter Tester (#12), a Mueller B101 Tapping Machine (#18) and a Concrete Retaining Rock Storage (#23). Treasurer Gossett made a motion to authorize staff to purchase a Large Meter Field Tester, a Mueller B101 Tapping Machine and the materials needed to construct concrete Rock and Material Storage bins, for a combined total not to exceed \$12,000, which motion was seconded by Commissioner Hockman and passed.

Water Rate Adjustment: Mr. Bruce informed the Board that when the current water rates were approved in August of 2007 they were based upon the 2005 test year. In the PSC order it was noted that the revenue requirements were \$88,821 more than what we had requested. Since 2005 there have been numerous accounts and expenses that have increased significantly. Mr. Bruce informed the Board that the staff may be able to file a small water rate increase, requesting the amount that was not granted in PSC order in August of 2007, which would result in a 2.1% increase per customer.

There was much discussion regarding submitting the full difference between the 2005 test year expenses and our current expenses and whether or not this would qualify as a interim rate case. The Board asked legal counsel and staff to find out what the PSC defines as an interim rate adjustment. Secretary Tindall made a motion to charge staff to investigate which option would be considered interim by the PSC and

**Hardin County Water District No. 1
Minutes of Regular Meeting
of the Board of Commissioners**

March 17, 2009

Acting Chairman William Gossett called the meeting to order at 5:30 p.m. due to with Commissioners John Tindall, Ron Hockman, and Steve Walton attending. (Chairman Rissel was attending another meeting and notified Treasurer Gossett that he would arrive late, and to Chair the meeting). Staff present included Jim Bruce, General Manager; Brett Pyles, Operations Manager; Stephanie Brown, Administrative Assistant; Jenny Huff, Accountant; Scott Schmuck Finance and Accounting Manager; and attorney, David Wilson. Dinner was provided for the Board and staff.

Chairman Gossett opened the floor for public comment. There were no public comments offered and the floor was closed to public comment.

Mr. Bruce introduced Mr. Scott Schmuck as the new Finance and Accounting Manager for the District and gave a brief description of his educational and employment background. The Board welcomed Mr. Schmuck to the District.

Chairman Gossett asked for a motion to accept both the February 11, 2009 Special Meeting Minutes and the February 17, 2009 Regular Meeting Minutes. Commissioner Hockman suggested one change on the February 11, 2009 Special Meeting Minutes. Commissioner Walton made a motion to accept the minutes with the suggested amendment. The motion was seconded by Commissioner Hockman and passed.

Ms. Huff presented the financial reports for December 2008, January and February 2009. (Chairman Rissel entered the meeting at this time). Commissioner Hockman asked about the procedure for collecting Bad Debt as the amount in Bad Debt Expense has increased. Ms. Huff explained the District's procedure to expense bad debt once it is sent to the collection agency. The Board also asked about a net loss shown for Radcliff sewer. Mr. Bruce said that staff needed to do more work on allocating costs between funds, and this may change the impact to Radcliff sewer in future months.

Secretary Tindall asked if the Army had been making timely payments for Ft. Knox sewer services. The staff informed the Board that the payments have been late. Commissioner Rissel suggested that the staff possibly write to the contracting officer, or their superior, regarding late payments. Mr. Bruce informed the Board that he can bring up this topic at the monthly status meeting and explain how this late payment impacts the District's cash flows and how the District would appreciate attention placed on this matter. Secretary Tindall suggested negotiating a discount for early payment and a penalty for a late payment. Mr. Bruce informed the Board that this can be addressed in the next rate increase for Ft. Knox Sewer.

Chairman Gossett asked Mr. Bruce to review the General Manager's Report. Mr. Bruce updated the Board on the Ft. Knox Water Privatization bid, informing them that the negotiations are expected to start within the next month. Mr. Bruce informed the Board that the Mobile Home Park Master Meter tariff has been sent and received by the Public Service Commission. Mr. Bruce also thanked Mr. Pyles for preparing this month's Board packet while he was at a conference, and said that he had done an excellent job

**Hardin County Water District No. 1
Minutes of Regular Meeting
of the Board of Commissioners**

April 21, 2009

Chairman Bill Rissel called the meeting to order at 5:30 p.m. with Commissioners William Gossett, John Tindall, Ron Hockman, and Steve Walton attending. Staff present included Jim Bruce, General Manager; Brett Pyles, Operations Manager; Stephanie Brown, Administrative Assistant; Scott Schmuck, Finance and Accounting Manager; and attorney, David Wilson. Dinner was provided for the Board and staff.

Chairman Rissel opened the floor for public comment. There were no public comments offered and the floor was closed to public comment.

Chairman Rissel asked for a motion to accept the March 17, 2009 Regular Meeting Minutes. Commissioner Hockman made a motion to approve the minutes. The motion was seconded by Commissioner Walton and passed.

Mr. Schmuck presented the Board with a brief form of the financial statements and pointed out that he is still learning the accounting processes for the District and is working on developing more efficient accounting system for the District. Mr. Schmuck also pointed out that there has been a correction in the allocation method used for allocating expenses between the different utilities. There was a consensus from the Board to table all action taken on the Treasurer's Report until the next meeting and encouraged Mr. Schmuck to develop a more automated process that is as standard as needed to meet the District's accounting needs.

Chairman Rissel asked Mr. Bruce to review the General Manager's Report. Mr. Bruce informed the Board that the District has not heard anything from Ft. Belvoir / DESC regarding the Ft. Knox Water Privatization Bid. Mr. Bruce also informed the Board that a meeting had been held with Louisville Water Company and reviewed what was discussed at that meeting.

Mr. Bruce informed the Board that the District has received a formal pleading from the PSC regarding the Master Meter Tariff. The formal pleading represents several mobile home communities, who have hired an attorney to represent them. Mr. Wilson pointed out that this may lead to negotiations or dialogue between the park owners and the District.

Secretary Tindall pointed out that he felt the District should not have to continue to loose money through leaked water. Commissioner Walton also suggested that the District require relocation of those meters that are not accessible to District employees and if not then the meter can be turned off. Chairman Rissel asked how the two parties could negotiate, outside of the PSC being party, or the Board approving what was being discussed. Mr. Wilson advised that any agreement or offers would have to be approved by the Board, and the PSC would eventually have to agree to any resolution.

Chairman Rissel asked Mr. Pyles to review the Operation's Manager's Report. Mr. Pyles pointed out that there were no lost time accidents for all four utilities for the first quarter of 2009. Mr. Pyles also informed the Board that the District had received an award for the Water Treatment Plant from the

**Hardin County Water District No. 1
Minutes of Special Meeting
of the Board of Commissioners**

October 27, 2009

Chairman Bill Rissel called the meeting to order at 5:30 p.m. with Commissioners William Gossett, John Tindall, Ron Hockman, and Steve Walton attending. Staff present included Jim Bruce, General Manager; Brett Pyles, Operations Manager; Stephanie Brown, Administrative Assistant; Scott Schmuck, Finance and Accounting Manager; and attorney, David Wilson. Guests present at the meeting were Mr. Robert Ender, Fort Knox DPW, Mr. Roger Humphrey, Fort Knox DPW, and Ms. Stephanie Bowman, Fort Knox Contracting. Dinner was provided for the Board and staff.

Chairman Rissel opened the floor for public comment. There were no public comments offered and the floor was closed to the public comment portion of the meeting.

Chairman Rissel asked for a motion to accept the September 15, 2009 Regular Meeting Minutes. Treasurer Gossett made a motion to approve the minutes. The motion was seconded by Commissioner Walton and passed.

Mr. Schmuck presented the financial statements for September. Mr. Bruce pointed out that he will have Resolutions for the BRAC grant funds at the next meeting. The Board suggested holding a Special Board meeting to approve the Resolutions. Mr. Bruce also updated the Board on the status of an issue regarding reserve funds as raised by US Bank, bond trustee. Commissioner Walton made a motion to approve the financial statements for September and Secretary Tindall seconded the motion and it was passed.

Chairman Rissel asked Mr. Bruce to review the General Manager's Report. Mr. Bruce introduced the representatives from Ft. Knox, Robert Ender, Roger Humphrey and Stephanie Bowman, and gave a brief background of each person and their role with the District's Ft. Knox Sewer systems contract. Chairman Rissel thanked the staff from Ft. Knox for having a good working relationship with the District. The guests answered a few questions for the Board, and then left at this time. Mr. Bruce informed the Board of Karen Brown's retirement from the District effective in February and stated the District plans to fill the Accounting Specialist Position before year end. Mr. Bruce informed the Board that there will be a retirement dinner in Ms. Brown's honor and the Board will be invited to attend.

Mr. Bruce informed the Board that the negotiations for the Ft. Knox Water Privatization have begun and are going well. Mr. Bruce stated that hopefully the negotiations will be complete before the year end. The Board asked if there were any concerns regarding the contract with Louisville Water Company. Mr. Bruce informed the Board that there are not any. The Board did point out the continued concern regarding the mixing of chlorine treated water with chloramine treated water and asked that this issued be moved to top priority. Mr. Bruce informed the Board that LWC is going to hire a third party to complete the analysis to determine if the two treated waters can be mixed with each other or converted.

Mr. Wilson updated the Board on the Mobile Home Park Master Meter Tariff. The agreement between the District and the Mobile Home Communities is being finalized and then will be brought to the Board. Mr. Bruce answered all other questions from the Board.

Hardin County Water District No. 1
Minutes of Special Meeting
of the Board of Commissioners

January 26, 2010

Chairman Rissel called the meeting to order at 5:32pm with Commissioners John Tindall, Ron Hockman and Steve Walton attending. Treasurer Gossett attended by video-teleconference from Ft. Meyers, Florida. Staff present at the meeting included Jim Bruce, General Manager; Brett Pyles, Operations Manager; Scott Schmuck, Finance and Accounting Manager; Stephanie Brown, Administrative Assistant; Karen Brown, Accounting Specialist; Karen Morrison, Accounting Specialist; and Attorney David Wilson. Dinner was provided for the Board and staff.

Chairman Rissel opened the floor for public comments. There were no public comments offered and the Public Comment portion of the meeting was closed.

Chairman Rissel asked for a motion to accept both December 15, 2009 Regular Meeting minutes and the December 21, 2009 Special Meeting minutes. Commissioner Hockman made a motion to approve both sets of minutes. Secretary Tindall seconded the motion and it passed.

Mr. Bruce and Mr. Schmuck introduced Ms. Karen Morrison to the Board. Mr. Schmuck stated that Ms. Morrison is filling the position of Accounting Specialist, as Karen Brown is retiring and gave a brief description of her work history. The Board welcomed Ms. Morrison to the District. Chairman Rissel commended Karen Brown for her 20 years of work for the District and wished her the best of luck on behalf of the Board during her retirement, to which the Board applauded Karen. Ms. Brown and Ms. Morrison left the meeting at this time.

Mr. Schmuck presented the financial statements for December, highlighting the key points for all four funds. Mr. Schmuck explained the loss for the Radcliff Sewer fund, being due to the electrical overages and water sales being down, due to having a wet year. Secretary Tindall pointed out that often times the electric companies have lower industrial or large commercial rate structures and asked staff to look into this possibility for the District. Mr. Bruce noted that Veolia Water is proceeding with an Energy Savings Study for Radcliff Sewer, and this should be part of that study. Chairman Rissel pointed out that having a consolidated Net Income of 1.1 million is probably the highest on record for District, which Mr. Bruce confirmed. After all discussion, Secretary Tindall made a motion to approve the Treasurer's Report for December / un-audited 2009 year end. The motion was seconded by Commissioner Walton and passed.

Mr. Gossett entered the meeting at this time at 5:45pm via video teleconference from Ft. Meyers, Florida.

Chairman Rissel asked Mr. Bruce to review the General Manager's report. The Board asked for an update on receiving the BRAC grant funds. Mr. Bruce informed the Board that Ms. Carolyn Ritchie, County Treasurer, was able to have additional requested reimbursements approved and that a meeting will be held in the next week with the LTADD to determine what other denied items might also be re-considered and approved. Mr. Bruce also informed the Board that the Ft. Knox water privatization award has been postponed until September, 2010 and that the District along with those partnering in the bid will be responding the DESC regarding the pricing of the bid due to the postponement. Secretary Tindall suggested it would be best for the District to respond to DESC as soon as possible, with the least delay. Mr. Bruce answered all other questions from the Board.

Hardin County Water District No. 1
Minutes of Regular Meeting
of the Board of Commissioners

May 18, 2010

Acting Chairman William Gossett called the meeting to order at 5:30 p.m. with Commissioners John Tindall, Ron Hockman, and Steve Walton attending. (Chairman Rissel was out of state attending a business meeting). Staff present included Jim Bruce, General Manager; Brett Pyles, Operations Manager; Christie Campbell, Administrative Clerk; Scott Schmuck Finance and Accounting Manager; and attorneys David Wilson and Derrick Staton. Guests present included Mr. Jerry Hensley and Mr. Brad Hayes both with Ray, Foley, Hensley & Company, PLLC/CPA. Dinner was provided for the Board and staff.

Chairman Gossett opened the floor for public comment. There were no public comments offered and the floor was closed to public comment.

2009 Financial Audit Report: Chairman Gossett asked and gained consensus from the Board to allow Mr. Hayes from the District's CPA, Ray, Foley, Hensley & Company, PLLC/CPA, to discuss the District's Annual Financial Audit. Mr. Hayes presented the Board with the findings of the District's Annual Audit and commended Mr. Schmuck for gathering all of the necessary documents in a timely manner and making it an easier process. Mr. Hensley explained the District's net worth as a whole and for each separate water and sewer fund. Mr. Hayes, Mr. Hensley, Mr. Schmuck and Mr. Bruce answered several questions from the Board. Commissioner Hockman made a motion to accept the 2009 Annual Financial Statements and report as prepared and presented by the District's Certified Public Accountant. The motion was seconded by Secretary Tindall and passed.

Chairman Gossett asked for a motion to accept the April 27, 2010 Special Meeting Minutes. Commissioner Hockman made a motion to accept the minutes. The motion was seconded by Commissioner Walton and passed.

Mr. Schmuck presented the financial statements for April. He noted that Bad Debt Expense is currently lower than last year and budget and Bad Debt Recovered is up 35% compared to last year. Mr. Schmuck answered all other questions from the Board. Secretary Tindall made a motion to accept the April 2010 Treasurers Report. Commissioner Walton seconded the motion and passed.

Chairman Gossett asked Mr. Bruce to review the General Manager's Report. Mr Bruce reported that staff had met and prepared a list of topics to present to the Board at the Strategic planning Session. He will email the Commissioners with possible dates to schedule the Planning Session. Secretary Tindall questioned if there was any news on the Fort Knox privatization bid. Mr. Bruce stated that there is no news as of yet, but Louisville Water Company was coming down Friday to tour the Pirtle WTP.

Commissioner Walton asked about the status of the MHP Master Meter Tariff Report. Mr. Bruce informed the Board that staff was still answering the 26 questions for the PSC's latest data request which was due to the PSC by the May 28th extension deadline. Secretary Tindall and Commissioner Walton both agreed the park owners need to be held responsible for any water that is leaked in their park.

Hardin County Water District No. 1
Minutes of Regular Meeting
of the Board of Commissioners

August 17, 2010

Chairman Bill Rissel called the meeting to order at 5:32 p.m. with Commissioners William Gossett, John Tindall, Ron Hockman, and Steve Walton attending. Staff present included Jim Bruce, General Manager; Brett Pyles, Operations Manager; Scott Schmuck, Finance and Accounting Manager; Charlene Easter, Customer Service Manager; Christie Campbell, Administrative Clerk and attorney David Wilson. Dinner was provided for the Board and staff.

Chairman Rissel opened the floor for public comment. There were no public comments offered and the public comment portion of the meeting was closed.

Chairman Rissel asked for a motion to accept the June 15, 2010 Regular Board Minutes and the July 16, 2010 Special Meeting Minutes. Commissioner Walton made a motion to accept both meeting minutes. Treasurer Gossett seconded the motion and motion passed.

Mr. Schmuck presented the financial statements for June and July and provided a handout of the Net Income Comparisons for 2009 and 2010. Chairman Rissel asked staff to explain the relevance between the positive net income shown for Radcliff sewer and the recent report on rate changes needed to maintain 100% cost recovery. Mr. Bruce and Mr. Schmuck explained that summer months have shown a higher income as customers water their lawns, fill swimming pools and consume more water outdoors. Since 2009, there has been a marked increase also in number of active accounts. Also, compared to 2009, there have been fewer capitalized expenses incurred by Veolia, which helped net operating income. Secretary Tindall asked for further clarification on this difference, which was provided.

Mr. Schmuck mentioned that another factor is that some of the expenses are capitalized expenses, which are expensed over the life of the asset through its depreciation expense. Mr. Bruce pointed out that like in 2009, the net income for 2010 will drop considerably or become negative when summer months are over and water / sewer sales drop considerably, which could even end the year with a negative net income. Commissioner Hockman made a motion to approve the financial statements for June and July. Secretary Tindall seconded the motion and it was passed.

General Managers Report: Chairman Rissel asked Mr. Bruce to review the General Manager's Report. Mr. Bruce and the Board discussed what progress had been made with the privatization of Fort Knox Water privatization proposal. Chairman Rissel questioned what time line the District would have to convert disinfection methods, using Louisville Water. Mr. Bruce explained that the proposal and Government assumed that it would take up to five years to phase out the Muldraugh Water Treatment Plant, after which time a larger portion of water used by Ft. Knox would be supplied by LWC. There was also discussion on what would need to be included in the contract agreement with LWC for operations and purchased water supply.

Chairman Rissel addressed the Board about what the plans are for the Board Strategic Planning Session. It was the consensus of the Board to meet in September 2010. There will be two, half day sessions. The first meeting will be for staff presentation and the second meeting will be schedule about a week later. Mr. Bruce asked Ms. Campbell to email the Board with possible dates that they are available and get a definite schedule.

Continued

due balance reached \$3,000. Motion was seconded by Commissioner Hockman and motion passed. Commissioner Hockman expressed concern about including list of names of past due customers in the Board packet, as these documents were open records. Mr. Bruce said in future packets he would only show account numbers and Board members could ask about owner names during meeting if they wanted to.

Chairman Rissel asked Mr. Bruce to update the Board concerning the Ft. Knox water negotiations. Mr. Bruce informed them of the current status and answered all questions. Commissioner Hockman asked if there had been any contact with the Vine Grove Mayor, Mr. Bruce answered all questions.

Chairman Rissel asked if there were any questions about the Operation's Manager's Report. Secretary Tindall asked about the current water loss percentage. Mr. Pyles explained that the percentage was high due to timing issues with the reading of the meters and the tracking of the water treated and that is why the water loss is tracked by a running average.

Consent Agenda Items: Chairman Rissel asked if there were any questions on the Consent Agenda.. Commissioner Walton made a motion to approve Consent Agenda items No. 4 (Capital item No. 23, Replace ½ ton truck with F-450 flat bed for \$40,000 using state bids), No. 5 (General Manager - Executive Assistant reclassification, Budget item No.13) and No. 6 (Bid Award - Ft. Knox Primary Treatment Building Electrical to Marine Electric for \$120,258). Treasurer Gossett seconded the motion and motion passed.

Employee Benefit Insurance Options: Staff answered all questions and noted that there has been substantial savings on the Health Insurance costs by using the current \$2,500 deductible, High Deductible / Low Premium (HDLP) type plan with the District paying the deductible amount between \$500 and \$2,500. There was discussion about other aspects of the different plans. Ms. Morrison explained the current coverages and stated that the proposed provider changes offered the same benefits and some were even better than the current. Mr. Bruce noted that the 15% increase in health insurance was included in the 2011 Budget.

Commissioner Hockman expressed concern about switching dental insurance providers after plan year had started, and possible making employees have to find new dentists. Secretary Tindall made a motion to authorize staff to execute paperwork and agreements as needed to change the employee's life insurance and long term disabilities policies to the plans as quoted by Lincoln National, with plan effective dates as soon as possible. Commissioner Walton seconded the motion and the motion passed. Chairman Rissel thanked Ms. Morrison for her time and efforts in preparing this information. Ms. Morrison exited the meeting at this time.

Fort Knox Rate Adjustment: After discussion, Secretary Tindall made the motion to authorize staff to present a rate adjustment to Ft. Knox for their monthly sewer rate to increase by 2.3%, effective October 1, 2011, or to a total monthly rate of \$275,055 as needed to recover new operating costs from Veolia which have been requested to increase October, 2011. Treasurer Gossett seconded the motion and the motion passed. Commissioner Hockman abstained from voting noting that he had a relative the worked for Veolia Water, the company providing operating services at the Fort Knox sewer utility.

Part Time Temporary Employee: Mr. Bruce informed the Board that he planned to hire a part time temporary employee for construction inspection. Mr. Pendley explained the need and the role this person would have and answered all questions. It was also pointed out that this was a project specific assignment and would end when the project were complete. Chairman Rissel asked there were any potential

Hardin County Water District No. 1
Minutes of Regular Meeting
of the Board of Commissioners

June 21, 2011

Chairman Rissel called the meeting to order at 5:30 p.m. with Commissioners Ron Hockman, John Tindall, Steve Walton and William Gossett in attendance. Staff present included Jim Bruce, General Manager; Brett Pyles, Operations Manager; Scott Schmuck, Finance & Accounting Manager; Preston Pendley, Engineering Manager; Andrea Palmer, Executive Assistant; and attorneys David Wilson and Dustin Humphrey. There were no guests present. Dinner was provided for the Board and staff.

Chairman Rissel opened the floor for public comment. There were no public comments offered and the floor was closed to public comment.

Chairman Rissel asked for a motion to accept the April 19, 2011 Regular Meeting Minutes. Treasurer Gossett made a motion to accept the minutes. The motion was seconded by Commissioner Walton and passed.

Chairman Rissel asked if there were any questions about the Treasurer's report. Secretary Tindall questioned the held payment to Bowen Excavating. Mr. Bruce explained that final payment is being held due to the claims filed by the military families due to losses caused by the sewer backup and the costs to clean up and finish the project. Treasurer Gossett asked if the families were satisfied or if there is potential of future claims or legal action. Mr. Wilson answered that any future claims should be covered by the contractor's insurance. Mr. Bruce confirmed that preventative measures are or will be in place to avoid this in the future and that each payment mailed to the families included a statement telling them they were releasing the District of any liability upon the cashing of the check. Commissioner Walton made a motion to accept the April 2011 Treasurer's Report. The motion was seconded by Secretary Tindall and motion passed.

[Board Monitoring Reports: Mr. Bruce updated the Board on the status of the Ft. Knox Water Privatization Bid, which is in review pending the answer to seven additional questions sent by the government. He also informed the Board that the LWC study will be completed in the fall. There was some discussion regarding the Radcliff Sewer Rate Study and the HCWD2 Wholesale Treatment Rate.]

Chairman Rissel inquired whether or not HCWD2 could fall under the terms of the Town of Muldraugh sewer tariff and rate. Mr. Bruce explained that the Muldraugh tariff was specific only to that customer, based on treatment costs at Ft. Knox. There was some discussion about HCWD2's projected flowrate, and Secretary Tindall suggested that staff validate and verify the flow amounts and then request that HCWD2 pay to upgrade the District's system, if needed, in order to accommodate their added flow, which could not be handled by existing infrastructure. There was also discussion about future combining of the two wastewater treatment plants, as a way to better utilize these facilities and avoid a costly plant expansion project.

Mr. Bruce introduced Ms. Andrea Palmer as the new Executive Assistant. He gave a brief description of her background, education, and current job duties. The Board welcomed her. He also informed the Board that Charlie Miller, Project Coordinator, is retiring. Customer Service

Continued

explained that this is required when new AMR meters are installed and replace an older meter, if the older meter had not been fully depreciated, the residual value must be written off. Commissioner Hockman asked if this was also the case with the disposed line and Mr. Schmuck replied that the line was replaced and the old line was not fully depreciated.

Secretary Tindall made a motion to accept the June 2011 Treasurer's Report. The motion was seconded by Treasurer Gossett and motion passed.

Board Monitoring Reports: Commissioner Hockman asked for an update on the Ft. Knox Privatization Bid. Mr. Bruce stated that the District has yet to receive a final contract, but that during a recent conference call with the Government, they said that if an award was made, it would be completed by the end of September. Chairman Rissel asked Mr. Bruce if he had the authority to sign a contract on behalf of the Board, if one were presented near the end of the month which required immediate action. Mr. Bruce answered that he did not find any Board action to make that authorization, and also noted that with the Sewer Privatization Contract sent in 2004, that the Government had only given the District about a day to sign and execute the contract. Mr. Rissel pointed out that without that authorization, the Board would be required to have an emergency meeting regarding the contract, if one were presented before the end of the month.

Secretary Tindall asked if it would be inappropriate to inquire about the status of the bid award or the schedule. Mr. Bruce answered that the District had made a recent inquiry, and the response seemed positive, and seemed to indicate that a final contract award was close. Secretary Tindall also stated that if a contract were to be presented in the next week, then he felt that the Board could make the authorization at this meeting. Mr. Wilson also said that as this were a regular meeting, the Board could take action on any subject. Secretary Tindall then made a motion to give the General Manager the authority to sign a contract for the Ft. Knox Water System Privatization Bid after review by the District's attorney and the Chairman of the Board, should he be available. The motion was seconded by Treasurer Gossett and motion passed.

Chairman Rissel asked if there were any questions about the Operation Manager's Report. There were none. He asked for the status of the Mobile Home Parks – was it better or worse this month – and Mr. Schmuck answered that it is better. Mr. Bruce noted that one park owner asked for tips on finding leaks and then found his own leak after meeting with staff.

Secretary Tindall asked about water loss in comparison to the past. Mr. Pyles answered that District staff found a rather large leak off of Hardinsburg Road. He stated that with the repair complete, the District should show a reduction in water loss going forward. Mr. Pyles also complimented the Distribution staff for their persistence and efforts in finding two large leaks recently on rural roads.

Chairman Rissel asked if Staff is concerned that the Veolia lateral lining project is only at 57% at this point in the year. Mr. Pyles responded that the District requested an action plan from Veolia and received it. Secretary Tindall showed concern for a fixed fee on this service provided. He asked if they have met their goal in the past years which Mr. Pyles answered that they had.

5. Provide a map that shows all significant facilities of the Fort Knox potable water utility system, including treatment facilities, master meters, and transmission and large distribution mains, and their relationship to Hardin District facilities that are located outside the Fort Knox Military Installation.

ANSWER 5:

See attached **Exhibit 8**, which is a custom exhibit prepared by HCWD1

WITNESS: Mr. Daniel Clifford, GIS / Planning Specialist, HCWD1

CASE NO: 2011-00416

Hardin Co Water District #1

CONTAINS

LARGE OR OVERSIZED

MAP(S)

RECEIVED ON: December 7, 2011

6. a. State whether Hardin District considers the Fort Knox potable water utility system as currently operated by the United States Government to be a "utility" as KRS 278.01 O(3) defines "utility." Explain.
- b. If Hardin District does not consider the Fort Knox potable water utility system as currently operated by the United States Government to be a "utility" as KRS 278.01 O(3) defines "utility," explain why KRS 278.020(5) requires Commission approval of the proposed transfer of ownership, operations and maintenance of the Fort Knox potable water utility system.

ANSWER 6:

- a. In October, 2004, HCWD1 filed almost an identical application to the Commission requesting approval to take over the Ft. Knox sanitary and storm sewer systems. The Commission issued a thirteen page order (Case No. 2004-00422) authorizing HCWD1 to proceed with that and acknowledging that the sanitary sewer should and would be regulated. The resulting HCWD1 sewer utility would indeed be a "public utility" (See Conclusions of Law, page 7~11, par 1 ~ 22). In section (page 11), par 1. Part of that order (par. 3, pg. 12) also applied KRS 74.110 requiring that HCWD1 expand its territorial limits to add the new sewer system. It is HCWD's position that the United States Governments (USG's) water system, once transferred to and owned by HCWD1, satisfies the statutory definition of utility.
- b. HCWD1 does consider the Fort Knox Potable Water Utility System as currently operated by the United States Government to be a utility as defined. Even if the Commission were to find that the Fort Knox Potable Water System did not qualify as a "utility" as defined in KRS 278.010(3)(d), HCWD1 would submit that the USG has nonetheless consented to PSC regulation as previously recognized by the Commission in Case no. 2004-00422 and in accordance with the Kentucky decision of *Brandenburg Telephone Company vs. South Central Bell Telephone Company*, KY. 506 SW 2d 513 (1974). The decision by the Defense Logistics Agency / Energy ("DLA") to select HCWD1 was predicated upon the expectation that the on-going relationship would be regulated by the KY Public Service Commission. Note that in the final contract presented to HCWD1, DLA included in the preamble section verbiage which reflects that the contract was contingent on Kentucky PSC approval. Furthermore, paragraph 5, page 5 of the contract reads as follows: "The contract award shall be conditioned upon the KY 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". In light of the above, HCWD1, submits that DLA has submitted to PSC jurisdiction and regulation.

WITNESS: Mr. David T. Wilson II, Legal Counsel for HCWD1

7. State whether Hardin District considers the Utility Service Contract with the United States Government to be an evidence of indebtedness. Explain.

ANSWER 7:

No. HCWD1 did not execute a debt instrument, nor is HCWD1 required to make any payments for the system. The USG did require HCWD1 propose a "purchase price" to purchase the system based on an estimate of fair market value. The "purchase price" is paid in the form of a credit given the District by the USG. The net effect is a zero cash transaction between the parties. Since this would result in the USG paying for the assets it already owns, the USG requires this charge to be offset through an equal credit against the charge.

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

8. State for each calendar year from 2000 to 2010 the amount of water produced at the Fort Knox water treatment plant and the amount of water sold or otherwise transferred to non-United States Government entities.

ANSWER 8:

HCWD1 has only been provided Monthly Operating Reports from 2005 to the present. Water produced and water sales/transfers can be found in the table below:

Date	Central Production	Muldraugh Production	Total Water Produced	Total Water Sold	Water Sold to Hardin District	Water Sold to Muldraugh
2000	Hardin District does not have this data					
2001	Hardin District does not have this data					
2002	Hardin District does not have this data					
2003	Hardin District does not have this data					
2004	Hardin District does not have this data					
2005	245,798,000	842,373,000	1,088,171,000	54,522,700	22,526,000	31,996,700
2006	140,950,000	950,192,000	1,091,142,000	87,424,000	59,134,000	28,290,000
2007	145,844,000	903,378,000	1,049,222,000	103,776,930	76,175,000	27,601,930
2008	103,861,000	938,058,000	1,041,919,000	79,642,000	28,602,760	108,244,760
2009	194,638,000	897,440,000	1,092,078,000	180,471,300	26,605,760	207,077,060
2010	138,960,000	903,736,000	1,042,696,000	84,739,000	28,209,930	112,948,930
2011*	59,320,000	659,538,000	718,858,000	43,201,000	23,518,840	66,719,840
TOTALS	1,029,371,000	6,094,715,000	7,124,086,000	633,776,930	264,772,290	582,879,220

* Data from 2011 is for the months of January through September.
Annualized estimate for 2011 total = 958,477,300

WITNESS: Mr. Preston Pendley, P.E., Engineering Manager, HCWD1

9. Provide all projections of future water usage of the Fort Knox Military Installation. For each estimate provided, state all assumptions used to derive these estimates.

ANSWER 9:

HCWD1 is not privy to future plans or changes at Ft. Knox which will affect water use. However, the change in average day demand from 2005 to 2011 declined by 12% (see table, question 8). According to a study completed in 2001 (Hardin County Regional Water Feasibility Study, Quest Engineers), the 1999 Ft. Knox daily water demand was 4.949 mg/d (including off post sales). Using 1999 as the base amount, the change from 1999 to 2011 projected would be a decline of 47%.

Over the last five years, the BRAC process has significantly changed the mission and purpose of Ft. Knox. Basic training, Armor training, and the Armor School have moved from Ft. Knox to Ft. Benning, Georgia. Several large administrative functions have been centralized at Ft. Knox, the largest being the Human Resource Center of Excellence. With future defense spending cuts, there could be more changes in the mission at Ft. Knox and all military installations. Again, HCWD1 has no direct knowledge nor has the Dept. of the Army shared future plans which might affect Ft. Knox water demand and population on post.

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

10. Provide all reports, analyses, estimates and reviews regarding the Fort Knox potable water utility system deficiencies and required improvements that were prepared by or commissioned for Hardin District or provided to Hardin District by the United States Government.

ANSWER 10:

See attached **Exhibit 9**.

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

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

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

Proposed Budget

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	<u>\$15,500.00</u>
	\$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=	<u>\$2,600</u>
Total =	\$44,252

ISDC 3
Hydraulic Model



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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

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 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.



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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

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
 Page 2 of 2

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 40356
Phone 225-4448 Fax: 225-9995



Fax

To: Richard Stranahan From: Tim Stensky

From: (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 for you and when we are doing and fax it to you later.

Organ Creek Pump House \$22,933.00 (remove slate roof and haul away and install pre-finish 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	\$31,200	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:	\$97,200	

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 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 \$31,200.00.

Please review and let us know if you have any questions.

Sincerely,

Judy Construction Company

A handwritten signature in cursive script that reads "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

A handwritten signature in cursive script that reads "Kista Thomas".

Kista Thomas

Attachment

cc: File
Dale Wilson

KT/lj

ISDC 10

Central Water Treatment Plant Clearwell



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

Andrea E. Williams, R.F.
 Licensed Professional Engineer in Hydraulics
 Franklin Water Company
 301 S. 10th St., Ste. 500
 Franklin, WI 53128

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		Complete By	End Year	\$ Labor	\$ Insp	\$ Mtl's	\$ CathProt	\$ Alt Valve	\$ Total
						Proposed Work	Coating System								
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 Rifles	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



February 10, 2011

Mr. Brett Pyles
Operations Manager
Hardin County Water District No. 1
1400 Rogerville Road
Radcliff, Kentucky 40160

Re: Automatic Transfer Switch Costs

Dear Brett,

Pursuant to your email, I have generated the following cost estimates for turnkey and installing automatic transfer switches at three of your facilities. The se costs use the sepower data presented in your email plus an assumed nominal amount of miscellaneous load. Each of these transfer switches can service rated in stand alone outdoor enclosure with disconnect normal and emergency switches for servicing one while the other remains in service.

Facility a
430V/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
430V/1200A ATS \$25,000
Installation \$40,000
Start up \$2,500
Total \$67,500

Please let me know if you have any questions.

Best regards,

David L. Hays

Senior Project Engineer

10000 Highway 100, Louisville, KY 40241

502.261.1100

dhays@hdr.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	
	<hr/> 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 2007 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

o 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

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	\$6,853.00	12	\$6,853.00
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

This page contains unprotected data and proprietary analytical methods that shall not be disclosed outside the Government and shall not be duplicated, used or disclosed—in whole or in part—for any purpose other than to evaluate this proposal. If, however, a contract is awarded to this offeror as a result of—or in connection with—the submission of this data, the Government shall have the right to duplicate, use, or disclose the data and analytical methods to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction.

11. Refer to Utility Service Contract, Section B.5, Schedule 2. Describe Hardin District's efforts to estimate the cost of each project. For each project, provide all estimates that Hardin District prepared or obtained prior to entering the contract.

ANSWER 11:

See attached **Exhibit 9B**. HCWD1 and its team, Louisville Water Company ("LWC") and CH2M (who was retained by LWC to do all work on preparing proposal documents, assisting with proposal pricing and ensuring all submittal requirements to USG were met) completed extensive due diligence on developing proposals. As these prices were only for a proposal to USG to be considered, HCWD1 did not complete actual final design and field surveying for all projects, nor bid actual designed projects. HCWD1 proposed a five year surcharge to fund all these projects and also advised the USG that HCWD1 would need to account for all revenues, and expenditures, for the surcharge, and at the end of the five year period, any balance or reserves that had not been spent may be subject to refund to the USG, if required by the Commission. As the basis of proposal and surcharge is also cost based, submit to future changes, if the project costs and inflation require more than the surcharge, then HCWD1 and the USG would agree to an increase in the surcharge or an adjustment to projects planned. This was acceptable to the USG.

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

- Workers' Compensation and Employers' Liability—\$500,000
- Property--\$28,000,000
- Umbrella/Excess Liability Coverage—\$1,000,000 per occurrence and \$1,000,000 in aggregate. This is in excess of general, automobile, and employers' liability coverage types shown above.

Other Direct Costs

Operational supplies, training, and support activities were based on standard costs for the number of personnel required for equivalent-sized facilities

R&R and ISDC Costs

All estimates used to develop the ISDC and R&R project costs are based on various estimating methods. In preparing the cost estimates, HCWD1 reviewed actual, recent local bids for various types of construction. These included review of actual bids received by HCWD1, LWC and other local engineers. These actual bids were then applied as parametric units by size for estimating various future ISDC and R&R projects.

All capital costs were estimated in 2011 dollars. Pricing includes fully loaded contractor costs for labor, materials and systems to be in place and ready for use and reflects local area conditions. Construction cost estimates were prepared using the following resources and general methods:

- Data available on the system inventory identified in the RFP (Attachment J1)
- Comparison with bid tabulations from recent similar projects in the Kentucky area available in HCWD1, LWC, and CH2M HILL databases
- Consideration of estimating procedures included in R.S. Means Co. *Building Construction Cost Data*. Kingston, Massachusetts.

The estimating process was simplified to an approach that assumed all facilities have much in common, and the approach took into account only limited site-specific features. These estimates are generally Class 5 estimates with a level of accuracy in accordance with the Association for the Advancement of Cost Engineering (AACE) guidelines. Following contract award and increasing

levels of project definition, the cost estimates can be further refined.

Unit costs were developed for system inventory in which replacement-in-kind upgrades are anticipated. In cases where existing materials are no longer available or are not permitted to be installed, the unit costs were developed based on materials that would be used to replace the existing materials when necessary. For example, transite pipe upgrades are programmed to be replaced with PVC pipe. Unit costs were then multiplied by the number of units. Depending on the basis for the estimate for specific inventory items, allowances for costs associated with the installment were added. In those cases, the allowances were consistent with typically those used in standard cost estimating procedures.

Our estimates include typical allowance costs for planning, engineering, permitting, construction management, and state sales tax.

A frequent detailed analysis of local market conditions will be made throughout the contract period to confirm cost estimates are aligned with actual conditions. This will include consideration of the following:

- Number of qualified contractors
- Current workload of contractors
- Contractors selectively bidding projects
- Premium wage requirements to retain skilled workers and management staff
- Availability of crafts/trades
- Abnormal fuel impacts and uncertainty (Oil > \$100 barrel, Diesel > \$4.00/gal)
- Abnormal material impacts of the last 2 years
- Impact of recent natural disasters

The summary approach for key components is described below. More detail on the estimating approach is provided in Attachment IV-5.

Water Facilities

Water facility construction capital costs were developed for raw water supplies, treatment facilities, and pumping stations by use of the following general approaches. New facility cost

Use of this sheet is subject to the restriction on the title page of this proposal.

estimates represent the construction cost to construct on a near-virgin site, which is free from utility obstruction and interferences. The new facilities would be located in close proximity to the existing facilities to minimize additional site/civil improvements and to maintain continued operation of existing facilities during construction. Only necessary selective demolition is included. Building costs are based on square footage of the floor area. Materials of construction would be equal to or better than existing.

Pipelines

Pipeline construction capital costs were developed based on typical unit prices for pipe installation in Kentucky. Pipeline lengths and diameters were based on the asset inventory provided by the Government in the J1 Attachment. Materials of construction for pipeline replacement are based on current HCWD1's design standard in which PVC pipe is used for pipes that are 10 inches or smaller in diameter, and ductile iron pipe is used for pipes that are 12 inches or larger in diameter. The estimate also assumes that the number of existing hydrants and mainline valves are appropriate for fire protection and line isolation, and that pipe installation will predominantly occur in soil adjacent to roadways.

Use of this sheet is subject to the restriction on the title page of this proposal.

Fort Knox Potable Water Utility System
Hardin County Water District No. 1
Fort Knox, Kentucky
BASIS OF ESTIMATE



Project Number: 398340
Project Name: Fort Knox Potable Water Utility System
Class Estimate: Class 5
Requested By: Dave Hackworth/LOU
Estimated By: Jay Bilmon/WPB
Estimator Phone: 561-940-7586
Estimate Date: July 31, 2010
CCI Index: 8864.72 (July 2010)
Material Index: 2719.55 (July 2010)

Jay Bilmon/WPB
ESTIMATOR

Purpose of Estimate

The purpose of this Engineer's Estimate is for valuation of existing potable water facilities as listed in Request for Proposal (RFP) SP0600-08-R-0803 solicitation (Attachment J1).

General Project Description

Hardin County Water District No.1 (HCWD1) offers to purchase the Fort Knox potable water systems based on a development of Replacement Cost New Less Depreciation (RCNLD). This is consistent with utility rate making practice in North America where utility "rate base" is based on book value of utility assets that are "used and useful". RCNLD is a surrogate for book value and is proposed because Fort Knox does not maintain an accounting record of the book value of its utility systems. The RCNLD valuation is based on:

- The system inventory data provided in the solicitation (J1).
- Data available on the installation date of system components identified solicitation (Attachment J1).
- Our estimate of the cost to replace each component in current year dollars.
- An estimate of the percentage depreciation of each system component based on its age and average useful life.
- Cost recovery of the purchase price payment will occur as a component of the general monthly service fee for O&M. As the Fort Knox potable water systems serve only Fort Knox, the facilities have no inherent value other than to provide service to the Government.

Estimate Classification

This cost estimate prepared is considered a conceptual level or class 5 estimate as defined by the American Association of Cost Engineering (AACE). It is considered accurate to +50% to -30%, based upon available system data.

The cost estimates shown have been prepared for guidance in project evaluation and implementation from the information available at the time of the estimate. The final cost of the project will depend upon the actual labor and material costs, competitive market conditions, final project costs, implementation schedule and other variable factors. As a result, the final project costs will vary from the estimates presented herein. Because of this, project feasibility and funding needs must be carefully reviewed prior to making specific financial decisions to help ensure proper project evaluation and adequate funding. Our estimate is based on material, equipment, and labor pricing as of July 2010.

Cost Resources

The following is a list of the various cost resources used in the development of the cost estimate.

- Louisville Water Company Historical Data

- Hardin County Water District No. 1 Historical Data
- CH2M HILL Historical Data
- R.S. Means 2010
- Parametric Modeling
- Vendor Quotes on Equipment and Materials where appropriate.

Labor unit prices reflect a burdened rate, including: workers compensation, unemployment taxes, Fringe Benefits, and medical insurance.

Estimate Methodology

The purchase price estimate for the Fort Knox potable water systems is based on a development of the Replacement Cost New Less Depreciation (RCNLD). This is consistent with utility rate making practice in North America where utility "rate base" is based on book value of utility assets that are "used and useful." The development of the estimate for existing potable water facilities is based on the following:

- Costs for replacement of each component are in current dollars and update to current materials as necessary.
- An estimate of the percentage depreciation of each system component is based on its age and average useful life.
- The RCNLD valuation is based on the inventory data provided in the solicitation (Attachment J1). The valuations are as accurate and complete as the information provided.
- The estimate includes allowance costs and dollars per unit cost for certain components of the estimate. Pricing is fully loaded contractor rates for labor, materials, and systems in place and ready for use to reflect local area conditions. The fully loaded rate includes contractor overhead and profit and sales tax for contractor purchased materials and supplies.

Replacement Cost New (RCN)

The RCN value of the system was estimated by multiplying the current installed unit costs for a given inventory component times the number of those units included in the inventory. These RCN unit costs were estimated primarily from the following sources:

- Louisville Water Company engineering databases. This data was developed from actual bid prices on pipeline construction projects in an urban water system dating January 2009 to the present.
- Hardin County Water District No. 1 engineering databases, including data developed from the 2008 reconstruction of the Pirtle Spring Water Treatment Plant.
- CH2MHILL engineering databases. This data was developed from experience on similar projects in similar conditions.
- Unit costs in cases where existing materials are no longer permitted to be installed, the corresponding permitted material option was assigned to replace the existing. For instance, cast iron pipe would be replaced with ductile iron and PVC pipe would be replaced with PVC DR-18.

- Unit costs were then multiplied by percentages to account for associated engineering and construction management costs associated with the installment of the inventory components. These percentages are current industry standards.
- Limited application of adjustment factors reflecting site-specific conditions. For ease, speed, and consistency, the estimating process was reduced to an approach that assumed all facilities have much in common, and took into account only limited site-specific features. The estimates are therefore generic and subject to refinement at a later date. Unit prices account for materials sales tax, security badge issuance and security related access delays.

Raw water sources

McCracken Spring Intake based on approximately 6' x 6' concrete and galvanized steel intake structure performed when area is drained to permit work in relatively dry strata conditions.

Central Water Treatment Plant

The elements to the Central WTP unit prices were estimated parametrically based on the number of gallons. The pumps and controls similarly were estimated parametrically based on the horsepower of the pump. Generators were priced on historical costs of generator installations of similar capacity.

Water distribution

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. Valves and fittings are included in the distribution piping and raw water line unit prices. 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.

Elevated Storage Tanks

Elevated storage tanks unit prices were estimated parametrically based on a steel structure and the capacity in gallons. Price includes foundation, piping, valves, floor drain, cathodic protection, climbing equipment and railings, painting, flushing/disinfection and connection to existing system. Tank rehabilitation noted in the ISDC is based upon contractor supplied quote issued in 2008 and escalated to today's dollar.

Fire Hydrants

Fire hydrants are based on actual costs and include hydrant and concrete pad, 6" diameter riser line, 90deg. elbow fitting, 6" lateral line, 6" gate valve and valve box and T- fitting at water main.

Cost Methodology

All initial capital upgrade and R&R projects include feasibility studies, engineering, design, permitting and construction. The estimates for construction costs for these improvements were prepared by use of the following general methods:

- Comparison with bid tabulations from recent similar projects in the Kentucky area available in Louisville Water Company, Hardin County Water District No. 1 and CH2M HILL databases.
- Review of the solicitation (Attachment J1) for the RFP.

Labor Costs and Unit Costs

The estimates are based on actual labor rates and bid prices from local, similar projects.

Escalation Rate

Escalation was not factored in the estimate.

Allowance Costs

Engineering, design and SDC estimated at 15% of total construction cost.

Major Assumptions

Hardin County Water District No. 1 price proposal uses information earned through years of work in the Kentucky area, performing services specifically applicable to those contained in the Government's solicitation. As such, we have been able to minimize the assumptions used in our pricing, and have ensured that the assumptions we did use are the most reasonable for the environment and conditions expected at the Fort Knox post. The assumptions reflect the unknowns in developing the price and will be investigated during a period of due diligence

The estimate is based on the assumption the work will be done on a competitive bid or design build basis and the contractor will have a reasonable amount of time to complete the work. All contractors are equal, with a reasonable project schedule, no overtime, constructed as under a single contract, no liquidated damages.

Excluded Costs

The cost estimate excludes the following costs:

- Non-construction or soft costs for land or legal costs.
- Electricity, energy or other utility requirements

12. Refer to Utility Service Contract, Section B.5, Schedule 2. Identify the projects for which Hardin District intends to apply to the Commission for a Certificate of Public Convenience and Necessity prior to commencing construction of the project. For each project for which Hardin District does not intend to request a Certificate of Public Convenience and Necessity, explain why not.

ANSWER 12:

HCWD1 submits that all projects are exempt from the necessity of a Certificate of Public Convenience and Necessity in accordance with KRS 278.020. No project will require additional debt or financing. Each project was requested by DLA and will be paid for by DLA. Each project is a direct replacement of an existing asset, primarily raw water transmission mains, or constitutes a large maintenance related project. Further, the projects serve only one customer, being DLA, and each is located within the confines of the Fort Knox Military Installation. No project constitutes duplication of existing assets.

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

13. Identify all licenses, permits, and certifications that Hardin District must I obtain and maintain to operate the Fort Knox potable water utility system.

ANSWER 13:

PWSID: The party listed on the Public Water System ID number will be transferred from Fort Knox Military Installation to Hardin District. It has not been determined yet if the Division of Water will allow HCWD1 to combine both these water systems under a single PWSID, with three different WTP identifiers, or, if the two systems will remain under two separate PWSID's.

Monthly Operating Reports (Water Treatment): As HCWD1 will become owner of the water system, HCWD1 will become responsible for the MOR's as well as completing and distributing the annual Consumer Confidence Reports (CCR's).

Raw Water Withdrawal Permits: (for 15 groundwater wells near West Point): In 1968, three of these wells and pumps were constructed by Hardin District to supply water to the now-eliminated HCWD1's Muldraugh Water Treatment Plant (MWTP). In 1995, which was after the HCWD1 MWTP closed, HCWD1 signed a "Water Purchase Agreement Between U.S. Army Armor Center and Fort Knox Directorate of Public Works and Hardin County Water District No. 1". Part of that agreement allowed FK to use the three HCWD1 groundwater wells to transmit raw water to the FK Central WTP, using the HCWD1 14 inch raw transmission main from its 3 wells. The withdrawal permits for the 12 FK wells at West Point, as well as the Withdrawal Permit for Otter Creek/McCracken Springs (surface water source) will remain with Fort Knox Military Installation, as the USG retains ownership of the raw water commodity, as noted in C.3.5 of the Contract Award; "Water commodity supply is not included in this contract). The 3 HCWD1 wells and withdrawal permits for those will revert back to HCWD1.

Discharge Monitoring Reports: (For the lime sludge lagoons at Muldraugh WTP): HCWD1 will be listed as co-permittee, but will not own the actual sludge lagoons. The USG remains permit holder for all non-point discharge / outfall permits under the Clean Water Act for discharges on post at Ft. Knox. FK recently applied for and received a temporary discharge permit for one of the HCWD1 wells to discharge directly into the Ohio River. The purpose of this was to draw a high Chloride plume, which has existed in the West Point Aquifer for decades, toward the HCWD1 well and away from the other wells. Because the well being used for this discharge is owned by HCWD1 (and will again be operated by HCWD1) that DMR will have to transfer from FK back to HCWD1.

Operator Certifications: The FK system requires a Class IV-D Distribution Operator as well as a Class IV-A Treatment Operator. HCWD1 has multiple Class IV Distribution Operators and multiple Class IV Treatment Operators and will maintain these certifications. Louisville Water Company (LWC) has multiple Class IV Treatment Operators and will maintain these certifications. All of these operators information will be supplied to the Division of Water and posted as required at the facilities.

Drinking Water Quality Laboratory: HCWD1 must use a state certified laboratories for water quality testing. Both Hardin District and Louisville Water Company own and operate certified labs, and have licensed Laboratory Analysts on staff, but will continue to also use third party, state certified labs.

Bill of Sale and Right of Access: Both of these documents will be prepared by the USG and presented to HCWD1 once complete. We have been informed that the preparation of same is in process. The Bill of Sale transfers assets to HCWD1 and the Right of Access acts as an easement to allow HCWD1 and its contractors to operate on the USG property and within the Ft. Knox installation boundaries.

WITNESS: Mr. Preston Pendley, P.E., Engineering Manager, HCWD1

14. a. State the number of water sub-meters on the Fort Knox potable water utility system that the United States Government currently maintains and operates.
- b. State whether Hardin District expects the number of water submeters used for the Fort Knox potable water utility system to increase. Explain.

ANSWER 14:

- a. The inventory in Appendix JA1.5.1 includes 52 meters to be read and maintained by HCWD1 (not for billing purposes to the end user). That is the only information provided to date.
- b. See answer to Q9. HCWD1 does not have any specific information or projections on future sub-meters planned by the USG at Ft. Knox. All current sub-meters will be maintained by HCWD1 and tested according to Commission regulations. However, the existing sub-metered customers will not be direct customers of HCWD1 and will remain a reimbursable customer of the United States Government ("USG").

WITNESS: Mr. Brett Pyles, Operations Manager, HCWD1

15. Refer to Utility Service Contract, Section C.3.5.
 - a. Describe Hardin District's rights to use water sources located within the Fort Knox Military Installation to serve Hardin District customers who are located outside that installation.
 - b. State whether, if Hardin District has a right to use water sources located within the Fort Knox Military Installation to serve other Hardin District customers, it must compensate the United States Government for such use. Explain.

ANSWER 15:

- a. HCWD1 is a body corporate authorized to enter into contract pursuant to KRS 74.070. HCWD1 has been connected to and has purchased water from FK since 1988. The FK source waters have been treated at FK WTP's since this time, and delivered into the HCWD1 system. A new purchased water agreement was signed 29-SEP-1995 between the parties allowing HCWD1 to purchase up to 2.7 mg/d from the post / Government. The Commission in Case 97-388 authorized HCWD1 to close its aging Muldraugh Water Treatment Plant, and build the new Ft. Knox ("FK") Interconnect for \$1.543 million. . This facility was finished in 1998 and includes an automated pump station (proven hydraulic pump capacity of 5.1 mg/d) and a 1.25 MG concrete ground storage tank. Since that time, FK has sold water as needed to HCWD1, and HCWD1 has used the pumping facility located on post to deliver water to HCWD1's customers. In 2010, HCWD1 purchased 7.6% of its total demand needs from FK. During several emergency events, such as the 2009 Ice Storm, HCWD1 has purchased 100% of its supply from FK.
- b. It is certainly anticipated that Hardin District will compensate the USG for water purchased by HCWD1 and delivered to its residential and commercial customers. HCWD1 has been purchasing water from the USG for almost three decades. HCWD1 does not envision that the acquisition of the Fort Knox Military Installation Water System will serve to obviate its contractual obligation to pay for potable water purchased. Stated differently, HCWD1 is being paid by Fort Knox to operate and maintain its water system. Neither HCWD1 nor DLA perceive this contractual obligation to alleviate HCWD1's obligations to pay for water delivered from the Fort Knox system to HCWD1.

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

16. Utility Service Contract, Section C.4, provides that "within service area and upon the Government's request, the Contractor shall provide utility service to all existing and new customers." State whether the United States Government has identified potential new customers and such customers' expected use. If such customers have been identified, provide all documents and materials related to this identification and estimate.

ANSWER 16:

No list or projection of future customers has been provided

(See also answer No. 9)

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

17. Refer to Utility Service Contract, Section C.4.1.
- a. State whether the US. Government has agreed to permit Hardin District to use the acquired facilities to serve Hardin District customers who are not located on the Fort Knox Military Installation.
 - b. If the U.S. Government has agreed to permit Hardin District to use the acquired facilities to serve customers outside of the Fort Knox Military Installation, describe the terms of such permission and provide all documents that evidence such permission.
 - c. If the US. Government has not agreed to permit Hardin District to use the acquired facilities to serve Hardin District customers who are not located on the Fort Knox Military Installation, describe how other Hardin District customers will benefit from the proposed acquisition.
 - d. State Hardin District's current intentions regarding the use of the Fort Knox potable water utility system to provide water service to persons located outside the Fort Knox Military Installation.
 - e. State whether, if Hardin District serves customers located outside the Fort Knox Military Installation using portions of the Fort Knox potable water utility system, Hardin District will charge a rate that differs from that charged to customers served through its other distribution facilities. Explain.
 - f. Describe the effect on the Monthly Service Charge if Hardin District serves customers located outside the Fort Knox Military Installation using portions of the Fort Knox potable water utility system.

ANSWER 17:

- a. See answer to data request No. 15, a. and b.
- b. See answer to data request No. 15, a. and b. .
- c. It is HCWD1's position that this "non-agreement" has not occurred nor been communicated to HCWD1. As for other benefits to HCWD1 current customers, certain fixed existing costs of HCWD1 will begin being paid from the new FK water contract and revenues. This shared cost then becomes a benefit to existing HCWD1 customers. All new and added costs to take on the FK system, HCWD1 believes, have been fully incorporated and are recovered in the proposed fee and charges to the USG.
- d. The same as has occurred since 1988 and continues to occur. (See also same answer as to No. 15, a. and b.)
- e. As long as the cost to purchase or take water off post, does not significantly increase to HCWD1, the current retail and wholesale rates in its tariff recover purchased water costs (other than HCWD1 will be filing a Purchased Water Adjustment for FK rate increases to HCWD1 since its last rate case filed in 2006). HCWD1 has no current plans to change its retail or wholesale rates as a result of taking ownership of the FK water system, nor has the USG provided any notice of an increased rate to HCWD1 as a result of this contract or privatization.
- f. Using the FK system to benefit off post customers does not change the cost of service or agreed charges to serve the USG. Taking water off post requires compensation to the USG, so the off post system also does not gain a subsidy or lowered or free purchased water costs. By the USG being compensated for water taken off post, it itself receive an aggregate benefit since it receives new revenues for this action. However, the cost USG has to pay HCWD1 to operate and own the FK water system does not change as a result of HCWD1 using that source of water for its existing, off post customers.

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

18. Describe Hardin District's plans, if any, to connect its existing distribution system to the Fort Knox potable water utility system.

ANSWER 18:

HCWD1's distribution system has been connected to the Fort Knox Water system since 1988 (See also answer No. 15, a. and b.). Also, see map at **Exhibit 8** filed in response to data request No. 5.

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

19. Refer to Utility Service Contract, Section C.4.2.2.2.
- a. Identify each lease to which this section refers, describe the nature of the lease, and state the date on which the lease ends.
 - b. Identify any additional leases that Hardin District expects it may enter into with third parties regarding the attachment of third-party equipment.

ANSWER 19:

- a. FK does have current leases with cellular phone companies with antenna located on elevated water tanks. During the three year negotiation process, DLA told offerors that those leases would remain between the USG and the lessees, contrary to the language in C.4.2.2.2.
- b. Hardin District does not expect to enter into any new leases with third parties regarding the attachment of third-party equipment.

WITNESSES: Mr. Preston Pendley, P.E., Engineering Manager, HCWD1

20. a. State whether Hardin District anticipates hiring additional employees or purchasing additional equipment to perform its duties under the Utility Service Contract.
- b. If yes, identify the number of additional employees that Hardin District anticipates hiring and the nature and amount of additional equipment that it anticipates purchasing.
- c. State whether, if additional equipment is purchased or additional employees are retained, the use of this equipment and employees will be restricted to the Fort Knox Military Installation.

ANSWER 20:

- a. Yes.
- b. HCWD1 will hire one (1) Distribution Supervisor, one (1) Accounting Specialist, one (1) Heavy Equipment Operator, one (1) IVD Distribution Operator, two (2) ID/IID Distribution Operators and one (1) GIS/Planning Specialist. Significant additional Equipment includes: Four (4) desktop computers, one (1) GIS computer, four (4) laptop computers, one (1) plotter/printer, miscellaneous furniture, one (1) copy/fax/printer, three (3) 2-inch trash pumps, two (2) pipe saws, one (1) hydraulic unit w/ tools, two (2) line locators, one (1) Mueller B101 Tapping Machine, two (2) metal detectors, one (1) valve exerciser, one (1) set of backhoe forks, two (2) air monitors, one (1) F-750 (or equivalent) dump truck, three (3) F-250 (or equivalent) utility bed trucks, one (1) F-250 (or equivalent) extended cab regular bed truck, one (1) Case 580 (or equivalent) backhoe, one (1) 10-ton equipment trailer. The HCWD1 Board recently authorized hiring of these persons and the revised Organizational Chart is enclosed showing these new positions. All the costs for these new employees, including benefits and overhead, and costs for all new equipment, has been included in the proposed charges for services, which charges and rates have been agreed to and accepted by the USG.
- c. Yes. However, as with all HCWD1 operations, during an emergency or shortage of personnel, HCWD1 will assign other employees between utility systems as needed. If those events occur, HCWD1's accounting system and procedures provide that the costs for those re-assignments be allocated and charged to the system, fund or utility receiving that benefit of those increased employees or equipment.

WITNESSES: Mr. Brett Pyles, Operations Manager, HCWD1

21. State whether, under the terms of the Utility Service Contract, Hardin District is required to obtain outside sources of water to meet the demands of the Fort Knox Military Installation if the water sources or supplies within the military installation are insufficient to meet those demands.

ANSWER 21:

No. As set forth in the Request for Proposal from DLA, the USG will be responsible for finding replacement source(s) of water to replace or supplement future needs for the FK system. The water commodity ownership was not part of the system transfer and that component remains with the USG.

Section C.3.5 of the Contract Award (September 30, 2011) explicitly states "Water commodity supply is not included in this contract, even if water production facilities are included as part of the system to be conveyed."

Section C.3.5 additionally says, "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."

WITNESSES: Mr. Preston Pendley, P.E., HCWD1 Engineering Manager and Mr. Jim Bruce, HCWD1 General Manager

22. State whether Hardin District has studied possible courses of action in the event the sources of water supply on the Fort Knox Military Installation are insufficient to meet the military installation's demand. If yes, describe these courses of action and provide all studies and reviews conducted on each course of action.

ANSWER 22:

No, HCWD1 is not required to provide additional or future sources of water to meet the needs of Fort Knox and the USG. See also response to data request No. 21. HCWD1 has been in discussion with Louisville Water Company regarding an interconnect which will provide an additional source of water to HCWD1. This source may potentially be available to the FK Installation at some point in the future. Because of the location of the HCWD1 / LWC interconnect, the point of service or delivery point will be on FK property (See exhibit provided to question No. 5) at the same point where both a 24 inch, USG raw water main, and a 14 inch HCWD1 raw water main, converge and are located within a few hundred yards of each other (the 24 inch will become owned by HCWD1), so a future connection to LWC can serve the distribution systems and customer needs of those located on FK and within the HCWD1's off post distribution system.

WITNESS: Mr. Preston Pendley, P.E., HCWD1 Engineering Manager and Mr. Jim Bruce, HCWD1 General Manager.

23. Describe Hardin District's plans to connect the Fort Knox potable water utility system to Hardin District's existing water distribution system.

ANSWER 23:

See answers to data requests No. 5 and 18 herein.

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

24. Refer to Defense Energy Support Center, Request for Proposal SP0600- 08-R-0803, Section J1 (August 2008) at J1-IO. Describe the present status of the United States Government's plans to purchase "water from a local municipality to replace the potable water capacity at the Muldraugh WTP facility."

ANSWER 24:

Hardin County Water District 1 is not required to provide additional or future sources of water to meet the needs of Fort Knox and the USG. See response to data request No. 21 and 22. HCWD1 does note that in recent discussions with representatives of DLA Hardin District was advised that no progress has been made by DLA regarding the procurement of a replacement source of water for the Fort Knox Military Installation. The planned closure of the Muldraugh WTP ("MWTP") on post is not scheduled for five years, as presented in the HCWD1 proposal, and the USG has agreed to pay for five years of operating costs to continue to operate the MWTP.

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

25. Refer to Hardin District Press Release of October 3, 201 1, "Department of Defense Awards Contract to Operate Fort Knox Water System to Local Partnership."
- a. Provide a copy of all agreements between Hardin District and Louisville Water Company ("LWC") for LWC to operate Fort Knox water system's water treatment plants.
 - b. State whether the United States Government has approved the agreement between Hardin District and LWC for the operation of the Fort Knox water treatment plants.
 - c. Provide all correspondence, memoranda, electronic mail messages, presentations, and any other documents or materials in which an agreement between Hardin District and LWC for the operation of Fort Knox water system's water treatment plants is discussed.

ANSWER 25:

- a. That agreement has not yet been approved by the respective Boards. The agreement has been negotiated between both LWC and HCWD1's staff, and a final draft is in process. Agreement will be completed and signed before HCWD1 takes over the FK system. As soon as the agreement is complete and signed, HCWD1 will file a copy with the Commission as requested.
- b. No. The USG is not authorized or entitled to review/approve the agreement between Hardin District and LWC, nor requested a copy to review during negotiations.
- c. See attached **Exhibit 10**.

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

26. Refer to Utility Service Contract, Section B.3. For each charge listed below, describe how the charge was derived. Show all calculations, state all assumptions, and provide all workpapers used.
- a. Monthly Utility Service Charge - Year I ;
 - b. Transition Charge; and,
 - c. Initial System Deficiency Corrections Surcharge.

ANSWER 26 a, b, c:

First, it should be noted that LWC contracted with CH2M HILL Engineers to prepare all proposal documents, and to provide required calculations. Both HCWD1 and LWC staff were directly and actively involved in reviewing the pricing and assumptions. Over a three year period, four different proposals were developed and submitted to the USG for consideration. The proposals are attached to this data request and identified respectively as **Exhibits 2A, 2B, 2C and 2D** (on Compact Discs). The majority of the methodology was prescribed by the USG during the three year negotiation period. It should also be noted that in reviewing the multiple proposals submitted by HCWD1, the USG engaged several nationally recognized consulting firms to review and assess the HCWD1 proposal.

- a. Monthly Utility Service Charge – Year 1: See attached **Exhibit 11**.
- b. Transition Charge: See attached **Exhibit 12**.
- c. Initial System Deficiency Corrections Surcharge: See attached **Exhibit 13**.

WITNESS: Mr. Jim Bruce, General Manager, HCWD1

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	\$
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

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Base - LABOR & EXPENSES - Water Treatment (Central Only) and Distribution- Years 1 - 5				Year 1		Year 2-5	
				HRS	\$	HRS	\$
LABOR							
Labor Category	# of Emps	U/M	Labor Cost				
Project Manager	0.4	Hr	\$39.40	874	34,424.03	874	34,424.03
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
Water Distribution Supervisor	1	Hr	\$35.44	2,184	77,391.13	2,184	77,391.13
Distribution Operator IV	1	Hr	\$24.24	2,184	52,929.24	2,184	52,929.24
Equipment Operator	1	Hr	\$27.18	2,184	59,366.58	2,184	59,366.58
Distribution Operator I	2	Hr	\$19.00	4,368	82,970.16	4,368	82,970.16
GIS Technician/Dist Op IV	1	Hr	\$23.25	2,184	50,783.46	2,184	50,783.46
Accounting Specialist	1	Hr	\$22.93	2,080	47,684.00	2,080	47,684.00
LWC Overhead/Service Center	NA	Annual	\$80,841.00	1	80,841.00	1	80,841.00
TOTAL LABOR (Raw + Fringe)	12.9			28,070	1,054,992.59	28,070	1,054,992.59
			HCWD1 Bene Rate for 2011		31.0%		
			LWC Bene Rate for 2011		68.5%		
EXPENSES	U/M	Unit Rate	QTY	\$	QTY	\$	
OPERATING EXPENSES							
Bulk Lime		Ton	\$124.00	89	10,994.52	89	10,994.52
Carbon Dioxide		lb	\$0.07	7,574	530.18	7,574	530.18
Alum		lb	\$0.15	94,846	14,226.90	94,846	14,226.90
Fluoride		lb	\$0.42	3,679	1,545.35	3,679	1,545.35
Chlorine		lb	\$0.50	9,561	4,780.32	9,561	4,780.32
Telephone		Month	\$408.33	12	4,899.96	12	4,899.96
Tools		Lot	\$229.17	12	2,750.04	12	2,750.04
Lab Supplies		Month	\$625.00	12	7,500.00	12	7,500.00
Fuel		Monthly	\$2,136.26	12	25,635.10	12	25,635.10
Training and Tuition		Monthly	\$410.71	12	4,928.54	12	4,928.54
Safety Supplies		Monthly	\$239.59	12	2,875.08	12	2,875.08
Vehicle Repair and Maintenance		Monthly	\$329.33	12	3,951.96	12	3,951.96
Repair Parts		Monthly	\$9,041.66	12	108,499.96	12	108,499.96
Annual Tank Inspection and Repair (average)		Yearly	\$6,400.00	1	6,400.00	1	6,400.00
Postage and Freight		Month	\$83.33	12	1,000.00	12	1,000.00
Operating Supplies		Month	\$2,500.00	12	30,000.00	12	30,000.00
CO2 Lease		Month	\$37.50	12	450.00	12	450.00
Subtotal					230,967.91		230,967.91
OUTSIDE SERVICES / SUBCONTRACTS / PURCHASES							
PSC Regulatory Fees		per \$K	\$1.50	8,500	\$ 12,750.00	8,500	12,750.00
Insurance		Month	\$3,710.00	12	\$ 44,520.00	12	44,520.00
Uniforms	11.5	Month	\$460.00	12	\$ 7,360.00	12	5,520.00
Contract Lab Services		Month	\$4,737.75	12	\$ 56,853.00	12	56,853.00
Cell Phones/Pagers	4	Month	\$200.00	12	\$ 2,400.00	12	2,400.00
Outside rentals		Month	\$100.00	12	\$ 1,200.00	12	1,200.00
Sludge Hauling Disposal		Tons	\$35.00	820	\$ 28,716.10	820	28,716.10
Subtotal					153,799.10		151,959.10
TOTAL EXPENSES					384,767.01		382,927.01
TOTAL LABOR AND EXPENSES					1,439,759.59		1,437,919.59

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Base - LABOR & EXPENSES - Water Treatment (Central Only) and Distribution- Years 6 - 50				Year 1		Year 2-5	
				HRS	\$	HRS	\$
LABOR							
Labor Category	# of Emps	U/M	Labor Cost				
Project Manager	0.4	Hr	\$39.40	874	34,424.03	874	34,424.03
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
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Distribution Operator IV	1	Hr	\$24.24	2,184	52,929.24	2,184	52,929.24
Equipment Operator	1	Hr	\$27.18	2,184	59,366.58	2,184	59,366.58
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Accounting Specialist	1	Hr	\$22.93	2,080	47,684.00	2,080	47,684.00
TOTAL LABOR (Raw + Fringe)	12.5			28,070	974,151.59	28,070	974,151.59
		HCWD1 Bene Rate for 2011	31.0%				
		LWC Bene Rate for 2011	68.5%				
EXPENSES				U/M	Unit Rate	QTY	\$
OPERATING EXPENSES							
Bulk Lime		Ton	\$124.00	89	10,994.52	89	10,994.52
Carbon Dioxide		lb	\$0.07	7,574	530.18	7,574	530.18
Alum		lb	\$0.15	94,846	14,226.90	94,846	14,226.90
Fluoride		lb	\$0.42	3,679	1,545.35	3,679	1,545.35
Chlorine		lb	\$0.50	9,561	4,780.32	9,561	4,780.32
Telephone		Month	\$408.33	12	4,899.96	12	4,899.96
Tools		Lot	\$229.17	12	2,750.04	12	2,750.04
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Safety Supplies		Monthly	\$239.59	12	2,875.08	12	2,875.08
Vehicle Repair and Maintenance		Monthly	\$329.33	12	3,951.96	12	3,951.96
Repair Parts		Monthly	\$9,041.66	12	108,499.96	12	108,499.96
Annual Tank Inspection and Repair (average)		Yearly	\$6,400.00	1	6,400.00	1	6,400.00
Postage and Freight		Month	\$83.33	12	1,000.00	12	1,000.00
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CO2 Lease		Month	\$37.50	12	450.00	12	450.00
Subtotal					230,967.91		230,967.91
OUTSIDE SERVICES / SUBCONTRACTS / PURCHASES							
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Insurance		Month	\$3,710.00	12	\$ 44,520.00	12	\$ 44,520.00
Uniforms	11.5	Month	\$460.00	12	\$ 7,360.00	12	\$ 5,520.00
Contract Lab Services		Month	\$4,737.75	12	\$ 56,853.00	12	\$ 56,853.00
Cell Phones/Pagers	4	Month	\$200.00	12	\$ 2,400.00	12	\$ 2,400.00
Outside rentals		Month	\$100.00	12	\$ 1,200.00	12	\$ 1,200.00
Sludge Hauling Disposal		Tons	\$35.00	820	\$ 28,716.10	820	\$ 28,716.10
Subtotal					153,799.10		151,959.10
TOTAL EXPENSES					384,767.01		382,927.01
TOTAL LABOR AND EXPENSES					1,358,918.59		1,357,078.59

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Fort Knox Potable Water Utility System
Renewal and Replacement Schedule

This Sheet is Outdated and Abandoned

20105

J1.12 Government Recognized System Deficiencies			
System Component	Cost	Year to be Completed*	ISDC #
System Survey/Assessment and Re-Map the Utility Systems	118,515	2012	1
Leak Detection Survey	40,706	2012	2
Hydraulic Model	21,670	2012	3
Master Flow Meters at the WTPs	24,460	2012	4
20-inch Valves	69,700	2012	5
New Raw Water from the Muldraugh WTP to 16-inch Raw Water Line Between Otter Creek PS & Central WTP	1,869,210	2012	6
Otter Creek PS	102,500	2012	7
Muldraugh HLPS	68,000	2012	8
Central WTP	68,500	2012	9
Central WTP Cleanwell	1,370,000	2012	10
Fire Hydrants	1,923,900	2012	11
Water Storage No. 3	Deleted ISDC	2012	12
Water Storage No. 5	316,250	2012	13
Automatic Transfer Switches	22,500	2013	14
Line Between Otter Creek PS & Central WTP	1,743,268	2013	15
Water Storage Tank No. 6	299,000	2013	16
Water Storage Tank No. 8	310,500	2013	17
Water Storage Tank No. 7	316,250	2014	18
SCADA System	330,000	2014	19
Distribution Pipe & Valves - Transite	1,094,155	2014	20
Distribution Pipe & Valves - DIP	2,981,864	2014	21
Distribution Pipe & Valves - CIP HR Center	185,157	2014	22
Distribution Pipe & Valves - CIP	6,503,896	2015	23

* Note: Contract Year Start Date = 2012

Total \$ 19,811,041

Special Added Inventory						
Item	Year Installed/Upgraded	Quantity	Unit Cost	Design Life	Replacement Year	Other Notes
Operation & Maintenance Building	2012	1 ea	\$ 425,000	75	2087	Base and Alternate Case

\$25,743,686

J1.12 Government Recognized System Deficiencies - Supplement			
System Component	Cost	Year to be Completed*	HCWD#1 ISDC #
Tanks - Rehab	17,250	2014	24
Tank No. W7001	17,250	2014	25
Tank No. W7002	34,500	2014	26
Tank No. W7004			
West Point Well Platforms	56,000	2012	27
Well Platforms - Rehab (6)			
Van Voorhis Pump House	7,500	2012	28
Pump House - Rehab	340,000	2017	29
Decommission Muldraugh WTP			
Muldraugh operation-Year 1	1,093,053	2012	30
Muldraugh operation-Year 2	1,091,773	2013	31
Muldraugh operation-Year 3	1,091,773	2014	32
Muldraugh operation-Year 4	1,091,773	2015	33
Muldraugh operation-Year 5	1,091,773	2016	34

Total \$ 5,932,645

17250 \$25,743,686

Inflation 1.752678%

Central Plant	5,000		
Pump Rm - Rehab	5,000		
Chemical Rm. - Rehab	3,000		
Main Bldg. - Rehab	3,000		
Sedimentation Basin - Rehab	9,500		
Lime Tank - Rehab	20,500		
Sludge Tank - Rehab	7,500		
Backwash Tank - Rehab	5,000		
Misc. Site Repairs	58,500		ISDC # 9
subtotal			
Clear Well 2.0 MG	1,225,000	Option 1	
Remove & Replace Roof	145,000	Option 2	
Replace Liner & Vents	1,370,000		ISDC # 10
subtotal			
Otter Creek Pump Station	7,500		
Pump Rm - Rehab	95,000		
Build & Pipe	102,500		ISDC # 7
subtotal			
Muldraugh WTP	88,000		
Main Bldg. - Rehab	88,000		ISDC # 8
subtotal			

Inflation Index Inputs	
Year	Index
1940	0.103
1941	0.108
1942	0.116
1943	0.123
1944	0.128
1945	0.131
1946	0.140
1947	0.157
1948	0.170
1949	0.177
1950	0.174
1951	0.184
1952	0.191
1953	0.194
1954	0.196
1955	0.198
1956	0.204
1957	0.211
1958	0.217
1959	0.221
1960	0.223
1961	0.226
1962	0.229
1963	0.232
1964	0.235
1965	0.239
1966	0.244
1967	0.252
1968	0.261
1969	0.272
1970	0.287
1971	0.302
1972	0.317
1973	0.331
1974	0.355
1975	0.390
1976	0.418
1977	0.451
1978	0.481
1979	0.519
1980	0.563
1981	0.617
1982	0.660
1983	0.689
1984	0.715
1985	0.738
1986	0.756

1987	0.776
1988	0.801
1989	0.832
1990	0.863
1991	0.895
1992	0.916
1993	0.939
1994	0.961
1995	0.981
1996	1.000
1997	1.017
1998	1.030
1999	1.043
2000	1.059
2001	1.080
2002	1.102
2003	1.124
2004	1.146
2005	1.169
2006	1.193
2007	1.216
2008	1.241
2009	1.266
2010	1.291
2011	1.317
2012	1.343
2013	1.370
2014	1.397
2015	1.425
2016	1.454
2017	1.483
2018	1.512
2019	1.543
2020	1.574
2021	1.605
2022	1.637
2023	1.670
2024	1.703
2025	1.737
2026	1.772
2027	1.808
2028	1.844
2029	1.881
2030	1.918
2031	1.957
2032	1.996
2033	2.036
2034	2.076
2035	2.118
2036	2.160
2037	2.203
2038	2.247

2039	2.292
2040	2.338
2041	2.385
2042	2.433
2043	2.481
2044	2.531
2045	2.582
2046	2.633
2047	2.686
2048	2.740
2049	2.794
2050	2.850
2051	2.907
2052	2.965
2053	3.025
2054	3.085
2055	3.147

Table IV-2

Renewal and Replacement Schedule (2012\$)

Please do not make any changes in

This table generally follows the format included in RFP Schedule 2--Renewals and Replacement
Notes: For each inventory component/item listed in the applicable J-section inventory, clearly show the

Item and Size	Quant	Unit	Approx Year Installed	Existing Item Service Life
RAW WATER SOURCES				
McCracken Spring Intake	1	Each	1937	77
CI Line to Otter Creek PS - 16"	2,500	LF	1937	77
Otter Creek PS (Facility No. 9213) - Structure	1,701	SF	1936	79
Intake /Mechanical Screen	1	Each	1953	61
Pump Controls	3	Each	1995	25
Pump No. 4 - 1,200 gpm, 150 HP	1	Each	1983	34
Pump No. 9 - 2,100 gpm, 230 HP	1	Each	1983	34
Pump No. 10 - 2,100 gpm, 250 HP	1	Each	2008	25
Emergency Generator - 350 KW	1	Each	1981	35
CI Line to Central WTP - 16-inch	11,963	LF	1937	80
Central WTP (Facility No 1205) - 3.5 MGD				
Central WTP (Facility No. 1205) - Structure	6,799	SF	1937	75
Chemical Feed Systems				
Clarifier - 3.5 MG	1	Each	1937	83
Multi-Media Filters - 1 MG	3	Each	1937	83
Filter Back Wash Tank - 150,000 gallons	1	Each	1978	75
Clear Well No. 1 - 0.5 MG	1	Each	1937	83
Clear Well No. 2 - 2 MG - 1945	1	Each	1945	75
Central WTP High Lift				
Pump No. 1 & Controls - 4,850 gpm, 250 HP	1	Each	1970	43
Pump No. 2 & Controls - 1,000 gpm, 70 HP	1	Each	1984	29
Pump No. 3 & Controls - 1,400 gpm, 60 HP	1	Each	1984	29
Filter Back Wash Pump & Controls - 5,400 gpm	1	Each	1994	25
Emergency Generator - 280 KW	1	Each	2010	35
West Point Well Field				
Well No. 1. Pump/Controls - 750 gpm, 125 HP	1	Each	1998	25
Well No. 2. Pump/Controls - 750 gpm, 125 HP	1	Each	2004	25
Well No. 3. Pump/Controls - 750 gpm, 125 HP	1	Each	2004	25
Well No. 5. Pump/Controls - 750 gpm, 125 HP	1	Each	2002	25
Well No. 6. Pump/Controls - 500 gpm, 75 HP	1	Each	2000	25
Well No. 7. Pump/Controls - 750 gpm, 125 HP	1	Each	1985	27
Well No. 8. Pump/Controls - 750 gpm, 125 HP	1	Each	1998	25
Well No. 9. Pump/Controls - 750 gpm, 125 HP	1	Each	1998	25
Well No. 10. Pump/Controls - 750 gpm, 125 HP	1	Each	1999	25
Well No. 11. Pump/Controls - 750 gpm, 125 HP	1	Each	2000	25
Well No. 12A. Pump/Controls - 750 gpm, 125 HP	1	Each	1985	27
Well No. 12B. Pump/Controls - 750 gpm, 125 HP	1	Each	2003	25
Well No. 13. Pump/Controls - 750 gpm, 125 HP	1	Each	1992	25
Well Field Header - 16-inch	3,960	LF	1937	78
CI Line to Muldraugh WTP - 24 inch	15,840	LF	1937	82

Muldraugh WTP (Facility No. 3009) - 7.0 MGD	1	Each	1941	0
Muldraugh WTP (Facility No. 3009) - Structure	14,860	SF	1941	0
Chemical Feed Systems (value included in WTP cost)	0	0	0	0
Clarifier No. 1 - 5.0 MG	1	Each	1998	0
Clarifier No. 2 - 2.0 MG	1	Each	1998	0
Multi-Media Filters - 1 MGD	7	Each	1997	75
Filter Back Wash Tank - 150,000 gallons	1	Each	1978	0
Clear Well - 1.0 MG	1	Each	1989	75
Sludge Lagoons	4	Each	1978	0

Muldraugh High Lift (Facility No. 3008) - Structure	1,840	SF	1977	75
Pump A & Controls - 3,500 gpm, 250 HP	1	Each	1984	30
Pump B & Controls - 4,850 gpm, 350 HP	1	Each	1970	44
Pump C & Controls - 2,200 gpm, 150 HP	1	Each	1984	30
Filter Backwash Pump & Controls - 5,400 gpm	1	Each	2008	0
Emergency Generator - 600 KW	1	Each	1990	0
CI Line to Cantonment Area - 24 inch	10,449	LF	1941	0

Valves

Valves: Note--Replacement of valves will occur

0.75"	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
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	
Zussman Range (Mt.Eden) - Valves				
1"	4	Each	1997	
1"	2	Each	2002	
1.5"	1	Each	2002	
4"	2	Each	1997	
4"	13	Each	2002	
Yano Range - Valves				
2"	2	Each	1990	
Pressure Reducing Valves	2	Each	1990	
Meters				
Meters	50	ea	1998	25
Basham's Corner - Meters				
Meters	2	ea	2004	25
Basham's Corner - Back Flow Preventers				
Basham's Corner - Back Flow Preventers	2	ea	2004	20
Pressure Reducing Station				
Pressure Reducing Station	1	ea	2003	25
SCADA				
SCADA (Pump Controls)	3	ea	1995	--
New SCADA System	1	ea	ISDC	--
Automatic Transfer Switches				
Install switches at Otter creek PS, Central WTP and Mt.	1	0	2011	25
Well Control System				
Well Control System	1	ea	1995	25
Van Voorhis BPS (Facility No. 5898)				
Van Voorhis BPS - Structure	1,500	SF	1995	75
Pump No. 1 & Pressure Tank - 175 gpm, 10 HP	1	ea	1995	25
Pump No. 2 & Pressure Tank - 175 gpm, 10 HP	1	ea	1995	25
Pump No. 3 & Pressure Tank - 175 gpm, 10 HP	1	ea	1995	25
Fire Protection (Diesel Fueled) - 2,000 gpm, 125 HP	1	ea	1995	30
Elevated Storage Tanks (Steel) Repairs				
Tank No. 1 & cathodic protection - 250,000 gallons	250,000	Gal	1935	94
Tank No. 2 & cathodic protection - 500,000 gallons	500,000	Gal	1937	92
Tank No. 3 & cathodic protection - 500,000 gallons	500,000	Gal	2009	75
Tank No. 4 & cathodic protection - 500,000 gallons	500,000	Gal	1941	86
Tank No. 5 & cathodic protection - 300,000 gallons	300,000	Gal	1958	77
Tank No. 6 & cathodic protection - 500,000 gallons	500,000	Gal	1995	75
Tank No. 7 & cathodic protection - 500,000 gallons	500,000	Gal	1997	75
Tank No. 8 & cathodic protection - 500,000 gallons	500,000	Gal	1997	75
DISTRIBUTION PIPE - CAST IRON (12" and Over Replaced with DIP)				
Unknown Diameter (assume 6")	1,420	LF	1935	79
0.75" (NA - DIP starts at 4" Diameter)	1,155	LF	1935	79
1 " (NA - DIP starts at 4" Diameter)	4,463	LF	1935	79
1.25" (NA - DIP starts at 4" Diameter)	4,207	LF	1935	79
1.5" (NA - DIP starts at 4" Diameter)	12,470	LF	1935	79

2" (NA - DIP starts at 4" Diameter)	28,836	LF	1935	79
2.5" (NA - DIP starts at 4" Diameter)	4,785	LF	1935	79
3" (NA - DIP starts at 4" Diameter)	9,504	LF	1935	79
4"	13,331	LF	1935	79
5" (NA Pipe diameters even numbers - use 6")	410	LF	1935	79
6"	216,645	LF	1935	79
8"	158,064	LF	1935	79
8" - HR Center	4,237	LF	1935	78
10"	46,690	LF	1935	79
12"	30,122	LF	1935	79
14"	16,393	LF	1935	79
16"	3,920	LF	1935	79
24"	10,560	LF	1935	79
DISTRIBUTION PIPE - DUCTILE IRON				
1" (NA - DIP starts at 4" Diameter)	180	LF	1958	55
1.25" (NA - DIP starts at 4" Diameter)	7,076	LF	1958	55
1.5" (NA - DIP starts at 4" Diameter)	4,293	LF	1958	55
2" (NA - DIP starts at 4" Diameter)	11,436	LF	1958	55
3" (NA - DIP starts at 4" Diameter)	1,115	LF	1958	55
6"	25,835	LF	1958	55
8"	18,035	LF	1958	55
8"	4,118	LF	2007	50
10"	4,677	LF	1958	55
12"	897	LF	1958	55
12"	9,183	LF	1994	50
14"	192	LF	1958	55
DISTRIBUTION PIPE - TRANSITE (Replaced with C-900/PVC sch 80)				
1"	834	LF	1935	78
1.5"	1,988	LF	1935	78
2"	3,726	LF	1935	78
3"	284	LF	1935	78
6"	4,231	LF	1935	78
8"	6,472	LF	1935	78
10"	5,927	LF	1935	78
DISTRIBUTION PIPE - PVC (Replaced with C-900/PVC sch 80)				
1.5"	16,608	LF	2005	50
2"	10,698	LF	2008	50
3"	473	LF	2007	50
3"	603	LF	2008	50
4"	24	LF	1997	50
4"	334	LF	2005	50
4"	443	LF	2007	50
4"	6,368	LF	2008	50
6"	9,224	LF	1994	50
6"	7,640	LF	2003	50
6"	2,912	LF	2005	50
6"	6,372	LF	2007	50
6"	5,033	LF	2008	50
8"	10,211	LF	1994	50
8"	14,522	LF	1997	50
8"	18,915	LF	2005	50
8"	2,223	LF	2007	50

8"	4,644	LF	2008	50
10"	1,555	LF	1994	50
10"	106	LF	2005	50
12"	1,996	LF	1994	50
Zussman Range (Mt.Eden) - Pipe Material - PVC				
1"	110	LF	1997	50
1"	383	LF	2002	50
1.5"	60	LF	2002	50
4"	30,177	LF	1997	50
Zussman Range (Mt.Eden) - Pipe Material - PE				
1"	1,111	LF	2002	50
4"	13,668	LF	2002	50
Yano Range - Pipe Material - PVC				
2"	2,500	LF	1990	50
Basham's Corner - Pipe Material - PVC				
1.25"	72	LF	2004	50
2"	60	LF	2004	50
6"	256	LF	2004	50
FIRE HYDRANTS				
Fire Hydrants	600	Each	1935	40
Fire Hydrants	122	Each	1935	40
Fire Hydrants	83	Each	1958	40
Fire Hydrants	14	Each	1997	40
Fire Hydrants	1	Each	1990	40
Fire Hydrants	2	Each	2004	40
Fire Hydrants	54	Each	2005	40
Operation & Maintenance Building	1 ea			75
Vehicles/Equipment				
Water Lab Equipment + Backhoe				
Tools, and Furniture				
Admin Equipment, Power Equipment				

1. Includes contractor overhead and profit, permitting, G&A, and contingency.

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50 YEAR SCHEDULE

\$value of the planned R&R (if any) for each year 1-50

First Expected Replacement Date	Number of Years to Replace if >1	% ISDC	% R&R	New Item	Theoretical New Item Service Life	New Item Service Life
2014				Same as existing	75	75
2014				Ductile Iron Pipe	75	75
2015				Same as existing	75	75
2014				Same as existing	75	75
Part of ISDC				Same as existing	25	25
2017				Same as existing	25	25
2017				Same as existing	25	25
2033				Same as existing	25	25
2016				Same as existing	35	35
2017				Ductile Iron Pipe	50	50
2012				Same as existing	75	75
2020				Same as existing	75	75
2020				Same as existing	75	75
2053				Same as existing	75	75
2020				Same as existing	75	75
2020				Same as existing	75	75
2013				Same as existing	25	25
2013				Same as existing	25	25
2013				Same as existing	25	25
2019				Same as existing	25	25
2045				Same as existing	35	35
2023				Same as existing	25	25
2029				Same as existing	25	25
2029				Same as existing	25	25
2027				Same as existing	25	25
2025				Same as existing	25	25
2012				Same as existing	25	25
2023				Same as existing	25	25
2023				Same as existing	25	25
2024				Same as existing	25	25
2025				Same as existing	25	25
2012				Same as existing	25	25
2028				Same as existing	25	25
2017				Same as existing	25	25
2015				Ductile Iron Pipe	75	75
2019				Ductile Iron Pipe	50	50

				Included with pipe	25	
				Included with pipe	25	
				Included with pipe	25	
				Included with pipe	25	
				Included with pipe	40	
				Included with pipe	40	
				Included with pipe	40	
				Included with pipe	40	
				Included with pipe	40	
				Included with pipe	40	
				Included with pipe	40	
2023				Same as existing	25	25
2029				Same as existing	25	25
2024				Same as existing	20	20
2028				Same as existing	25	25
In New Scada				Same as existing	0	--
2037		100		Same as existing	25	25
2036				Same as existing	25	25
2020				Same as existing	25	25
2070				Same as existing	75	75
2020				Same as existing	25	25
2020				Same as existing	25	25
2020				Same as existing	25	25
2025				Same as existing	30	30
2029				Same as existing	75	75
2029				Same as existing	75	75
2084				Same as existing	75	75
2027				Same as existing	75	75
2035				Same as existing	75	75
2070				Same as existing	75	75
2072				Same as existing	75	75
2072				Same as existing	75	75
2014	15	0%	100%	PVC	50	50
2014	15	0%	100%	PVC	50	50
2014	15	22%	78%	PVC	50	50
2014	15	1%	99%	PVC	50	50
2014	15	6%	94%	PVC	50	50

2014	15	13%	87%	PVC	50	50
2014	15	10%	90%	PVC	50	50
2014	15	45%	55%	PVC	50	50
2014	15	28%	72%	PVC	50	50
2014	15	0%	100%	PVC	50	50
2014	15	28%	72%	PVC	50	50
2014	15	24%	76%	PVC	50	50
2013	15	100%	0%	PVC	50	50
2014	15	37%	63%	PVC	50	50
2014	15	14%	86%	Ductile Iron	50	50
2014	15	10%	90%	Ductile Iron	50	50
2014	15	0%	100%	Ductile Iron	50	50
2014	15	0%	100%	Ductile Iron	50	50
2013	15	100%	0%	PVC	50	50
2013	15	100%	0%	PVC	50	50
2013	15	100%	0%	PVC	50	50
2013	15	100%	0%	PVC	50	50
2013	15	100%	0%	PVC	50	50
2013	15	100%	0%	PVC	50	50
2013	15	100%	0%	PVC	50	50
2057	15	0%	100%	PVC	50	50
2013	15	100%	0%	PVC	50	50
2013	15	100%	0%	Ductile Iron	50	50
2044	15	0%	100%	Ductile Iron	50	50
2013	15	100%	0%	Ductile Iron	50	50
2013	15	100%	0%	PVC	50	50
2013	15	100%	0%	PVC	50	50
2013	15	100.0000%	0.00000%	PVC	50	50
2013	15	100%	0%	PVC	50	50
2013	15	100%	0%	PVC	50	50
2013	15	100%	0%	PVC	50	50
2013	15	100%	0%	PVC	50	50
2055	15	0%	100%	PVC	50	50
2058	15	0%	100%	PVC	50	50
2057	15	0%	100%	PVC	50	50
2058	15	0%	100%	PVC	50	50
2047	15	0%	100%	PVC	50	50
2055	15	0%	100%	PVC	50	50
2057	15	0%	100%	PVC	50	50
2058	15	0%	100%	PVC	50	50
2044	15	0%	100%	PVC	50	50
2053	15	0%	100%	PVC	50	50
2055	15	0%	100%	PVC	50	50
2057	15	0%	100%	PVC	50	50
2058	15	0%	100%	PVC	50	50
2044	15	0%	100%	PVC	50	50
2047	15	0%	100%	PVC	50	50
2055	15	0%	100%	PVC	50	50
2057	15	0%	100%	PVC	50	50

2058	15	0%	100%	PVC	50	50
2044	15	0%	100%	PVC	50	50
2055	15	0%	100%	PVC	50	50
2044	15	0%	100%	Ductile Iron	50	50
2047	15	0%	100%	PVC	50	50
2052	15	0%	100%	PVC	50	50
2052	15	0%	100%	PVC	50	50
2047	15	0%	100%	PVC	50	50
2052	15	0%	100%	PVC	50	50
2052	15	0%	100%	PVC	50	50
2040	15	0%	100%	PVC	50	50
2054	15	0%	100%	PVC	50	50
2054	15	0%	100%	PVC	50	50
2054	15	0%	100%	PVC	50	50
2015	10	100%	0%	Same as existing	25	25
2014	10	0%	100%	Same as existing	25	25
2014	10	0%	100%	Same as existing	25	25
2022	10	0%	100%	Same as existing	25	25
2015	10	0%	100%	Same as existing	25	25
2029	10	0%	100%	Same as existing	25	25
2030	10	0%	100%	Same as existing	25	25
2012		0%	100%	Same as existing	75	75
2012				Same as existing	7	7
2012				Same as existing	10	10
2012				Same as existing	15	15
2012				Same as existing	5	5



New Unit Cost RCN	New Item RCN	Rehab Cost	Rehab Year	Expected Subsequent Replacement Dates		
				Second R&R	Third R&R	Fourth R&R
\$ 23,000	\$23,000					
\$ 105	\$262,500					
\$ 46	\$78,246					
\$ 23,000	\$23,000					
\$ 34,500	\$103,500			0		
\$ 34,500	\$34,500			2042		
\$ 52,900	\$52,900			2042		
\$ 57,500	\$57,500			2058		
\$ 104,545	\$104,545			2051		
\$ 105	\$1,256,115					
\$ 80	\$543,920					
\$ 3,450,000	\$3,450,000					
\$ 376,050	\$1,128,150					
\$ 747,500	\$747,500					
\$ 287,500	\$287,500					
\$ 1,150,000	\$1,150,000					
\$ 57,500	\$57,500			2038		
\$ 16,100	\$16,100			2038		
\$ 13,800	\$13,800			2038		
\$ 72,300	\$72,300			2044		
\$ 100,000	\$100,000					
\$ 66,125	\$66,125			2048		
\$ 66,125	\$66,125			2054		
\$ 66,125	\$66,125			2054		
\$ 66,125	\$66,125			2052		
\$ 46,575	\$46,575			2050		
\$ 66,125	\$66,125			2037		
\$ 66,125	\$66,125			2048		
\$ 66,125	\$66,125			2048		
\$ 66,125	\$66,125			2049		
\$ 66,125	\$66,125			2050		
\$ 66,125	\$66,125			2037		
\$ 66,125	\$66,125			2053		
\$ 66,125	\$66,125			2042		
\$ 105	\$415,800					
\$ 181	\$2,867,040					

\$	-	\$0		
\$	-	\$0		
\$	-	\$0		
\$	-	\$0		
\$	-	\$0		
\$	-	\$0		
\$	-	\$0		
\$	-	\$0		
\$	-	\$0		
\$	2,620	\$131,000		2048
\$	2,620	\$5,240		2054
\$	4,500	\$9,000		2044
\$	4,500	\$4,500		2053
\$	-	\$0		--
\$	330,000	\$330,000		
\$	22,500	\$22,500		
\$	-	\$0		2045
\$	80	\$120,000		
\$	3,943	\$3,943		2045
\$	3,949	\$3,949		2045
\$	3,949	\$3,949		2045
\$	7,550	\$7,550		2055
\$	2.07	\$517,500	\$195,000	2054
\$	2.07	\$1,035,000	\$390,000	2054
--		\$1,035,000	\$390,000	2034
\$	2.07	\$1,035,000	\$390,000	2052
\$	2.07	\$621,000	\$390,000	2060
\$	2.07	\$1,035,000	\$390,000	2036
\$	2.07	\$1,035,000	\$390,000	2037
\$	2.07	\$1,035,000	\$390,000	2036
\$	37	\$52,540		
\$	20	\$23,100		
\$	21	\$93,723		
\$	22	\$92,554		
\$	22	\$274,340		

\$	24	\$692,064
\$	25	\$119,625
\$	25	\$237,600
\$	28	\$366,603
\$	37	\$15,170
\$	37	\$8,015,865
\$	38	\$6,006,432
\$	38	\$161,006
\$	66	\$3,081,540
\$	74	\$2,229,028
\$	84	\$1,377,012
\$	92	\$360,640
\$	181	\$1,911,360
\$	21	\$3,780
\$	22	\$155,672
\$	23	\$98,739
\$	24	\$274,464
\$	25	\$27,875
\$	37	\$955,895
\$	38	\$685,330
\$	38	\$156,484
\$	66	\$308,682
\$	74	\$66,378
\$	74	\$679,542
\$	84	\$16,128
\$	21	\$17,514
\$	22	\$43,736
\$	24	\$89,424
\$	25	\$7,100
\$	37	\$156,547
\$	38	\$245,936
\$	66	\$391,182
\$	23	\$381,984
\$	24	\$256,752
\$	25	\$11,825
\$	25	\$15,075
\$	28	\$660
\$	28	\$9,185
\$	28	\$12,183
\$	28	\$175,120
\$	37	\$341,288
\$	37	\$282,680
\$	37	\$107,744
\$	37	\$235,764
\$	37	\$186,221
\$	38	\$388,018
\$	38	\$551,836
\$	38	\$718,770
\$	38	\$84,474

\$	38	\$176,472			
\$	66	\$102,630			
\$	66	\$6,996			
\$	75	\$149,700			
\$	24	\$2,657			
\$	24	\$9,249			
\$	26	\$1,587			
\$	28	\$829,868			
\$	24	\$26,831			
\$	28	\$375,870			
\$	28	\$69,000			
\$	25	\$1,822			
\$	28	\$1,656			
\$	37	\$9,472			
\$	3,207	\$1,923,900	2040		
\$	2,915	\$355,630	2039		
\$	2,915	\$241,945	2039		
\$	2,915	\$40,810	2047		
\$	2,915	\$2,915	2040		
\$	2,915	\$5,830	2054		
\$	2,915	\$157,410	2055		
\$	425,000	\$425,000			
		\$180,000	2019	2026	2033
		\$117,300	2022	2032	2042
		\$85,600	2027	2042	2057
		\$56,350	2017	2022	2027

\$84,166,221

		266306.54 ERROR
		409091.22 ERROR
		754979.03 ERROR
		35507.538 ERROR
\$103,500	\$103,500	341481.32 ERROR
\$34,500		90544.222 ERROR
\$52,900		138834.47 ERROR
		150907.04 ERROR
\$104,545		230799 ERROR
		1957583.3 ERROR
		13970885 ERROR
		3017696.9 ERROR
		0 OK
		3728291.5 ERROR
		1741644.7 ERROR
		1153995 ERROR
		1242763.8 ERROR
		4971055.3 ERROR
		OK
\$57,500		177537.69 ERROR
\$16,100		68884.624 ERROR
\$13,800		62848.342 ERROR
\$72,300		186414.57 ERROR
\$100,000		301814.07 ERROR
		OK
		102084.17 ERROR
		102084.17 ERROR
		102084.17 ERROR
		102084.17 ERROR
		71902.764 ERROR
		102084.17 ERROR
		102084.17 ERROR
		102084.17 ERROR
		102084.17 ERROR
		102084.17 ERROR
		102084.17 ERROR
		102084.17 ERROR
		102084.17 ERROR
		102084.17 ERROR
		648000.5 ERROR
		6721150.9 ERROR

\$0	OK
\$0	OK
\$0	OK
	OK
	OK
	OK
	OK
	OK
	OK
	OK
	OK
	OK
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	OK
\$131,000	48822.865 ERROR
	1952.9146 ERROR
	ERROR
	OK
	7989.1961 ERROR
	0 OK
	341481.32 ERROR
	OK
	39945.98 ERROR
	OK
	0 ERROR
	OK
\$3,943	665766.34 ERROR
\$3,949	6036.2815 ERROR
\$3,949	6036.2815 ERROR
\$7,550	6036.2815 ERROR
	11539.95 ERROR
	OK
	1331532.7 ERROR
	2663065.4 ERROR
	2663065.4 ERROR
	2663065.4 ERROR
	1597839.2 ERROR
	2663065.4 ERROR
	2663065.4 ERROR
	2663065.4 ERROR
	OK
	82563.903 ERROR
	55365.129 ERROR
	218609.56 ERROR
	209132.3 ERROR
	622325.88 ERROR

1465706.2 ERROR
247634.45 ERROR
500458.58 ERROR
726357.09 ERROR
23089.132 ERROR
12596519 ERROR
10399895 ERROR
278775.4 ERROR
3591725.4 ERROR
2954654.1 ERROR
2145237.7 ERROR
641455.04 ERROR
4480767.2 ERROR
OK
8816.8768 ERROR
351751.87 ERROR
214245.79 ERROR
581280.91 ERROR
58713.312 ERROR
1502139.7 ERROR
1186621.3 ERROR
270945.74 ERROR
359787.96 ERROR
87986.348 ERROR
900756.56 ERROR
25125.702 ERROR
OK
40851.529 ERROR
99212.819 ERROR
189439.83 ERROR
14954.781 ERROR
246005.54 ERROR
425828.27 ERROR
455946.81 ERROR
OK
828836.27 ERROR
543769.08 ERROR
24907.082 ERROR
31752.58 ERROR
1307.6716 ERROR
18198.43 ERROR
24137.438 ERROR
346968.87 ERROR
536316.51 ERROR
444217.05 ERROR
169314.14 ERROR
370490.98 ERROR
292636.71 ERROR
671837.52 ERROR
955481.79 ERROR
1244521.3 ERROR
146263.33 ERROR

305554.15 ERROR
119621.61 ERROR
8154.2706 ERROR
195786.79 ERROR

OK

5388.0914 ERROR
18760.354 ERROR
2994.3507 ERROR
1644233.6 ERROR

OK

54419.723 ERROR
744718.98 ERROR

OK

127072.6 ERROR

OK

3579.1598 ERROR
3049.7424 ERROR
14884.76 ERROR

OK

\$1,923,900
\$355,630
\$241,945

3575964.2 ERROR
727112.71 ERROR
494675.04 ERROR
83439.164 ERROR
5959.9403 ERROR
11919.881 ERROR
321836.77 ERROR

\$123,396

HCWD

Item	Quantity	Each	Total
Admin			
Computers-PC	4	\$1,200	\$4,800
GIS PC	1	\$2,200	\$2,200
Computers-Laptop	4	\$1,500	\$6,000
Plotter	1	\$4,000	\$4,000
GPS & Software	1	\$12,000	\$12,000
		Sub Total	\$29,000
Desks	4	\$700	\$2,800
Misc Furniture	1	\$2,500	\$2,500
Other Misc	1	\$10,000	\$10,000
Copy/FAX Machine	1	\$2,500	\$2,500
Purchase/License CMMS	1	\$25,000	\$25,000
		Sub Total	\$42,800
Tools			
Trash Pumps	3	\$650	\$1,950
Pipe Saws	2	\$1,200	\$2,400
Hydraulic Unit/Tools	1	\$8,000	\$8,000
Muller B101Tapping Machine	1	\$3,000	\$3,000
Hand Tools	3	\$1,333	\$4,000
Shop Tools	1	\$8,000	\$8,000
		Sub Total	\$27,350
Parts Storage Systems	4	\$1,000	\$4,000
Line Locators	2	\$3,200	\$6,400
Metal Detector	2	\$200	\$400
Valve Ex/Vac	1	\$7,700	\$7,700
Backhoe Forks	1	\$1,700	\$1,700
Air Monitor	2	\$1,300	\$2,600
Misc (safety, other)	1	\$20,000	\$20,000
		Sub Total	\$42,800
Water Labs			
Instruments	1	\$ 26,000	\$ 26,000.00
Lab-ware/Glass-ware	1	\$ 12,000	\$ 12,000.00
Safety Supplies/Hardware	1	\$ 8,000	\$ 8,000.00
Work Station (PC, desk, etc)	2	\$ 1,900	\$ 3,800.00
Chemicals	1	\$ 8,000	\$ 8,000.00
		Sub Total	\$49,800
Vehicles/Equipment			
F-750 Dump Truck	1	\$52,000	\$52,000
F-250 Utility Bed 4x4	3	\$28,000	\$84,000
F-250 4x4 Ext. Cab Reg Bed	1	\$23,000	\$23,000
580 4x4 Case Backhoe	1	\$67,500	\$67,500
Equipment trailer	1	\$11,000	\$11,000
Other	1	\$10,000	\$10,000

Sub Total **\$247,500**

	Replacement Cycle (Years)	Amount
Vehicles/Equipment	7	\$180,000
Water Lab Equipment + Backhoe	10	\$117,300
Admin Equipment, Power Equipment	5	\$56,350
Tools, and Furniture	15	\$85,600
		\$439,250
		\$439,250

1 R&R Plan and Schedule

Year New	Replacement Frequency (years)	Notes & BOE
Year 1 of performance period	5	Closet match from HCWD1 is
Year 1 of performance period	5	Closet match from HCWD1 is
Year 1 of performance period	5	Closet match from HCWD1 is
Year 1 of performance period	5	Closet match from HCWD1 is
Year 1 of performance period	5	Closet match from HCWD1 is
Year 1 of performance period	15	Office furniture and equip. at
Year 1 of performance period	15	Office furniture and equip. at
Year 1 of performance period	15	Office furniture and equip. at
Year 1 of performance period	15	Office furniture and equip. at
Year 1 of performance period	15	Office furniture and equip. at
Year 1 of performance period	5	Equipment power operated at
Year 1 of performance period	5	Equipment power operated at
Year 1 of performance period	5	Equipment power operated at
Year 1 of performance period	5	Equipment power operated at
Year 1 of performance period	5	Tool, work & safety equipmer
Year 1 of performance period	5	Tool, work & safety equipmer
Year 1 of performance period	15	Tool, work & safety equipmer
Year 1 of performance period	15	Tool, work & safety equipmer
Year 1 of performance period	15	Tool, work & safety equipmer
Year 1 of performance period	15	Tool, work & safety equipmer
Year 1 of performance period	15	Tool, work & safety equipmer
Year 1 of performance period	15	Tool, work & safety equipmer
Year 1 of performance period	10	Lab equipment at 10-years
Year 1 of performance period	10	Lab equipment at 10-years
Year 1 of performance period	10	Lab equipment at 10-years
Year 1 of performance period	10	Lab equipment at 10-years
Year 1 of performance period	NA	Consumable, not included
Year 1 of performance period	7	Transportation equipment at
Year 1 of performance period	7	Transportation equipment at
Year 1 of performance period	7	Transportation equipment at
Year 1 of performance period	10	Transportation equipment at
Year 1 of performance period	7	Transportation equipment at
Year 1 of performance period	7	Transportation equipment at

Replacement Years

1,8,15,22,29,36,43

1,11,21,31,41

1,6,11,16,21,26,31,36,41,46

1,16,31,46

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- ⋮ Office furniture and equip. at 10-20 years. In my opinion this is too long for computers and related equipment.
- ⋮ Office furniture and equip. at 10-20 years. In my opinion this is too long for computers and related equipment.
- ⋮ Office furniture and equip. at 10-20 years. In my opinion this is too long for computers and related equipment.
- ⋮ Office furniture and equip. at 10-20 years. In my opinion this is too long for computers and related equipment.
- ⋮ Office furniture and equip. at 10-20 years. In my opinion this is too long for computers and related equipment.

10-20 years. Used average at 15-years
10-20 years. Used average at 15-years
10-20 years. Used average at 15-years
10-20 years. Used average at 15-years
10-20 years. Used average at 15-years

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it at 15-years
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it at 15-years
it at 15-years

7-years
7-years
7-years
7-years
7-years
7-years

SCHEDULE B-1 REGULATED TARIFF³
Payment by the Government for Utility Service
(Nominal Dollars)

Fort Knox, Kentucky											
Utility System ² : Ft. Knox Water Utility											
CLINs	Supplies/Services									Tariff/Schedule/Rate	
0001	Applicable Tariff(s) ¹ (See B 5 1)--Monthly Service Charge Component Detailed, Year by Year Charges:										
	Year	1	2	3	4	5	6	7	8	9	10
	O&M/G&A Expenses	\$ 128,484	\$ 128,484	\$ 131,778	\$ 134,088	\$ 136,438	\$ 132,182	\$ 134,499	\$ 136,856	\$ 139,255	\$ 141,695
	Capital Costs	\$ 117,687	\$ 117,687	\$ 119,750	\$ 121,849	\$ 123,984	\$ 126,158	\$ 128,369	\$ 130,619	\$ 132,908	\$ 135,237
	Federal Income Taxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Tariff Rate	\$ 246,172	\$ 246,172	\$ 251,528	\$ 255,936	\$ 260,422	\$ 258,340	\$ 262,867	\$ 267,475	\$ 272,163	\$ 276,933
	Year	11	12	13	14	15	16	17	18	19	20
	O&M/G&A Expenses	\$ 144,179	\$ 146,706	\$ 149,277	\$ 151,893	\$ 154,556	\$ 157,265	\$ 160,021	\$ 162,826	\$ 165,679	\$ 168,583
	Capital Costs	\$ 137,608	\$ 140,019	\$ 142,474	\$ 144,971	\$ 147,511	\$ 150,097	\$ 152,728	\$ 155,404	\$ 158,128	\$ 160,900
	Federal Income Taxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Tariff Rate	\$ 281,786	\$ 286,725	\$ 291,751	\$ 296,864	\$ 302,067	\$ 307,361	\$ 312,748	\$ 318,230	\$ 323,807	\$ 329,483
	Year	21	22	23	24	25	26	27	28	29	30
	O&M/G&A Expenses	\$ 171,538	\$ 174,544	\$ 177,604	\$ 180,716	\$ 183,884	\$ 187,107	\$ 190,386	\$ 193,723	\$ 197,118	\$ 200,573
	Capital Costs	\$ 163,720	\$ 166,589	\$ 169,509	\$ 172,480	\$ 175,503	\$ 178,579	\$ 181,709	\$ 184,894	\$ 188,134	\$ 191,432
	Federal Income Taxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Tariff Rate	\$ 335,258	\$ 341,134	\$ 347,113	\$ 353,196	\$ 359,387	\$ 365,686	\$ 372,095	\$ 378,616	\$ 385,252	\$ 392,005
	Year	31	32	33	34	35	36	37	38	39	40
	O&M/G&A Expenses	\$ 204,088	\$ 207,665	\$ 211,305	\$ 215,009	\$ 218,777	\$ 222,612	\$ 226,513	\$ 230,483	\$ 234,523	\$ 238,633
	Capital Costs	\$ 194,787	\$ 198,201	\$ 201,675	\$ 205,209	\$ 208,806	\$ 212,466	\$ 216,189	\$ 219,979	\$ 223,834	\$ 227,757
	Federal Income Taxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Tariff Rate	\$ 398,875	\$ 405,866	\$ 412,980	\$ 420,218	\$ 427,583	\$ 435,077	\$ 442,703	\$ 450,462	\$ 458,357	\$ 466,390
	Year	41	42	43	44	45	46	47	48	49	50
	O&M/G&A Expenses	\$ 242,816	\$ 247,072	\$ 251,402	\$ 255,808	\$ 260,292	\$ 264,854	\$ 269,496	\$ 274,219	\$ 279,025	\$ 283,916
	Capital Costs	\$ 231,749	\$ 235,811	\$ 239,944	\$ 244,149	\$ 248,428	\$ 252,783	\$ 257,213	\$ 261,721	\$ 266,308	\$ 270,976
	Federal Income Taxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Tariff Rate	\$ 474,565	\$ 482,882	\$ 491,346	\$ 499,957	\$ 508,720	\$ 517,636	\$ 526,709	\$ 535,940	\$ 545,334	\$ 554,892
	Monthly Credit as Payment for Purchase Price (See B 5 2)									Purchase Price: \$ 8,903,000	
	\$ 85,968	Monthly Credit									
	120	# months									
	3.0%	Interest Rate									
0002	Initial System Deficiency Corrections / Connection Charges ^b (See B 5 3 and B 7 4 (Schedule 3). This amount should not be included in the price offered for CLIN 0001.)									(First 60 Months Only) \$ 473,831	
0003	Recoverable Portion of Purchase Price ^b (see B 5 4 and B 7 5 (Schedule 4). This amount should not be included in the price offered for CLIN 0001.)									(First 120 Months Only) \$ 85,968 - See Schedule 4	
0004	Transition Period									(First Month Only) \$ 592,518 - See Schedule 3	
^a Utility system to be filled in by Offeror. A B-1 must be completed for each utility system offered. Utility systems shown in Schedule A paragraph B 3, <i>Systems to be Privatized</i> . Offerors shall provide a comprehensive description of proposed tariffs in their Price Proposals. See B 5 1.											
^b CLINs 0002 and 0003 are required <u>only</u> if tariff provides for <u>separate</u> identification of connection charges and the recoverable portion of the purchase price. If separate identification is not provided, it will be assumed the tariff rate includes these costs.											
NOTES:											
1 The Purchase Price, Recoverable Portion of the Purchase Price, interest rate and amortization period are proposed by the Offeror.											
2 Tariff rates presented in CLIN 0001 are nominal dollar values. Both Nominal and Constant 2011\$ tariffs are presented in the applicable J45 schedule.											

Table IV-1

**Annual O&M Costs for Planned Operational Phases for Water Utility
Service at Ft. Knox**

Dollar Basis, Cost Components	Transition Period	Year 1	Years 2-5	Years 6-50
Constant 2011 Dollars				
Labor and Benefits	\$ 80,296	\$1,054,993	\$1,054,993	\$ 974,152
Purchased Water	-	-	-	-
Other Operating Expenses	487,250	384,767	382,927	382,927
Total Direct Costs	\$ 567,546	\$1,439,760	\$1,437,920	\$1,357,079
General and Administrative Cost	24,972	63,349	63,268	59,711
Total (Annual)	\$ 592,518	\$1,503,109	\$1,501,188	\$1,416,790
Total (Monthly)	\$ 49,377	\$ 125,259	\$ 125,099	\$ 118,066
Constant 2009 Dollars (for Input to RFP Schedule 5)				
Labor and Benefits	\$ 77,554	\$ 1,018,961	\$ 1,018,961	\$ 940,881
Purchased Water	\$ -	\$ -	\$ -	\$ -
Other Operating Expenses	\$ 470,609	\$ 371,626	\$ 369,849	\$ 369,849
Total Direct Costs	\$ 548,163	\$1,390,587	\$1,388,810	\$1,310,730
General and Administrative Cost	24,119	61,186	61,108	57,672
Total (Annual)	\$ 572,282	\$1,451,773	\$1,449,918	\$1,368,402
Total (Monthly)	\$ 47,690	\$ 120,981	\$ 120,826	\$ 114,034
Constant 2012-13 Dollars*				
Labor and Benefits	\$ 80,296	\$ 1,082,850	\$ 1,082,850	\$ 999,874
Purchased Water	\$ -	\$ -	\$ -	\$ -
Other Operating Expenses	\$ 487,250	\$ 394,927	\$ 393,038	\$ 393,038
Total Direct Costs	\$ 567,546	\$1,477,776	\$1,475,888	\$1,392,912
General and Administrative Cost	24,972	65,022	64,939	61,288
Total (Annual)	\$ 592,518	\$1,542,799	\$1,540,827	\$1,454,200
Total (Monthly)	\$ 49,377	\$ 128,567	\$ 128,402	\$ 121,183

Table IV-2

Renewal and Replacement Schedule

(2011\$)

This table generally follows the format included in RFP Schedule

Notes: For each inventory component/item listed in the applicable

Item and Size	New Item RCN	Rehab Cost	Rehab Year	Expected Subsequent Replacement Dates		
				Second R&R	Third R&R	Fourth R&R
24"	\$0					
Zussman Range (Mt.Eden) - Valves						
1"	\$0					
1"	\$0					
1.5"	\$0					
4"	\$0					
4"	\$0					
Yano Range - Valves						
2"	\$0					
Pressure Reducing Valves	\$0					
Meters						
Meters	\$131,000			2048		
Basham's Corner - Meters						
Meters	\$5,240			2054		
Basham's Corner - Back Flow Preventers						
Basham's Corner - Back Flow Preventers	\$9,000			2044		
Pressure Reducing Station						
Pressure Reducing Station	\$4,500			2053		
SCADA						
SCADA (Pump Controls)	\$0			--		
New SCADA System	\$330,000					
Automatic Transfer Switches						
Install switches at Otter creek PS, Central WTP and Muldrau	\$22,500					
Well Control System						
Well Control System	\$0			2045		
Van Voorhis BPS (Facility No. 5898)						
Van Voorhis BPS - Structure	\$120,000					
Pump No. 1 & Pressure Tank - 175 gpm, 10 HP	\$3,943			2045		
Pump No. 2 & Pressure Tank - 175 gpm, 10 HP	\$3,949			2045		
Pump No. 3 & Pressure Tank - 175 gpm, 10 HP	\$3,949			2045		
Fire Protection (Diesel Fueled) - 2,000 gpm, 125 HP	\$7,550			2055		
Elevated Storage Tanks (Steel) Repairs						
Tank No. 1 & cathodic protection - 250,000 gallons	\$517,500	\$195,000	2054			
Tank No. 2 & cathodic protection - 500,000 gallons - 1937	\$1,035,000	\$390,000	2054			
Tank No. 3 & cathodic protection - 500,000 gallons - 1941	\$1,035,000	\$390,000	2034			
Tank No. 4 & cathodic protection - 500,000 gallons - 1947	\$1,035,000	\$390,000	2052			
Tank No. 5 & cathodic protection - 300,000 gallons - 1951	\$621,000	\$390,000	2060			
Tank No. 6 & cathodic protection - 500,000 gallons	\$1,035,000	\$390,000	2036			
Tank No. 7 & cathodic protection - 500,000 gallons	\$1,035,000	\$390,000	2037			
Tank No. 8 & cathodic protection - 500,000 gallons	\$1,035,000	\$390,000	2036			
DISTRIBUTION PIPE - CAST IRON (12" and Over Replaced w						
Unknown Diameter (assume 6")	\$52,540					
0.75" (NA - DIP starts at 4" Diameter)	\$23,100					
1" (NA - DIP starts at 4" Diameter)	\$93,723					
1.25" (NA - DIP starts at 4" Diameter)	\$92,554					

Table IV-2

Renewal and Replacement Schedule

(2011\$)

This table generally follows the format included in RFP Sch

Notes: For each inventory component/item listed in the applicab

Item and Size	New Item RCN	Rehab Cost	Rehab Year	Expected Subsequent Replacement Dates		
				Second R&R	Third R&R	Fourth R&R
RAW WATER SOURCES						
McCracken Spring Intake	\$23,000					
CI Line to Otter Creek PS - 16"	\$262,500					
Otter Creek PS (Facility No. 9213) - Structure	\$78,246					
Intake /Mechanical Screen	\$23,000					
Pump Controls	\$103,500					
Pump No. 4 - 1,200 gpm, 150 HP	\$34,500			2042		
Pump No. 9 - 2,100 gpm, 230 HP	\$52,900			2042		
Pump No. 10 - 2,100 gpm, 250 HP	\$57,500			2058		
Emergency Generator - 350 KW	\$104,545			2051		
CI Line to Central WTP - 16-inch	\$1,256,115					
Central WTP (Facility No 1205) - 3.5 MGD						
Central WTP (Facility No. 1205) - Structure	\$543,920					
Chemical Feed Systems						
Clarifier - 3.5 MG	\$3,450,000					
Multi-Media Filters - 1 MG	\$1,128,150					
Filter Back Wash Tank - 150,000 gallons	\$747,500					
Clear Well No. 1 - 0.5 MG	\$287,500					
Clear Well No. 2 - 2 MG - 1945	\$1,150,000					
Central WTP High Lift						
Pump No. 1 & Controls - 4,850 gpm, 250 HP	\$57,500			2038		
Pump No. 2 & Controls - 1,000 gpm, 70 HP	\$16,100			2038		
Pump No. 3 & Controls - 1,400 gpm, 60 HP	\$13,800			2038		
Filter Back Wash Pump & Controls - 5,400 gpm	\$72,300			2044		
Emergency Generator - 280 KW	\$100,000					
West Point Well Field						
Well No. 1. Pump/Controls - 750 gpm, 125 HP	\$66,125			2048		
Well No. 2. Pump/Controls - 750 gpm, 125 HP	\$66,125			2054		
Well No. 3. Pump/Controls - 750 gpm, 125 HP	\$66,125			2054		
Well No. 5. Pump/Controls - 750 gpm, 125 HP	\$66,125			2052		
Well No. 6. Pump/Controls - 500 gpm, 75 HP	\$46,575			2050		
Well No. 7. Pump/Controls - 750 gpm, 125 HP	\$66,125			2037		
Well No. 8. Pump/Controls - 750 gpm, 125 HP	\$66,125			2048		
Well No. 9. Pump/Controls - 750 gpm, 125 HP	\$66,125			2048		
Well No. 10. Pump/Controls - 750 gpm, 125 HP	\$66,125			2049		
Well No. 11. Pump/Controls - 750 gpm, 125 HP	\$66,125			2050		
Well No. 12A. Pump/Controls - 750 gpm, 125 HP	\$66,125			2037		
Well No. 12B. Pump/Controls - 750 gpm, 125 HP	\$66,125			2053		
Well No. 13. Pump/Controls - 750 gpm, 125 HP	\$66,125			2042		
Well Field Header - 16-inch	\$415,800					
CI Line to Muldraugh WTP - 24 inch	\$2,867,040					
Muldraugh WTP (Facility No. 3009) - 7.0 MGD	\$4,923,380					
Muldraugh WTP (Facility No. 3009) - Structure	\$1,367,120					
Chemical Feed Systems (value included in WTP cost)	\$0					
Clarifier No. 1 - 5.0 MG	\$5,750,000					
Clarifier No. 2 - 2.0 MG	\$2,300,000					
Multi-Media Filters - 1 MGD	\$2,632,350					
Filter Back Wash Tank - 150,000 gallons	\$747,500					

Table IV-2

Renewal and Replacement Schedule

(2011\$)

This table generally follows the format included in RFP Sch

Notes: For each inventory component/item listed in the applicabl

Item and Size	New Item RCN	Rehab Cost	Rehab Year	Expected Subsequent Replacement Dates		
				Second R&R	Third R&R	Fourth R&R
Clear Well - 1.0 MG	\$1,150,000					
Sludge Lagoons	\$69,000					
Muldrough High Lift (Facility No. 3008) - Structure	\$317,400					
Pump A & Controls - 3,500 gpm, 250 HP	\$115,000			2039		
Pump B & Controls - 4,850 gpm, 350 HP	\$154,100			2039		
Pump C & Controls - 2,200 gpm, 150 HP	\$75,900			2039		
Filter Backwash Pump & Controls - 5,400 gpm	\$120,750					
Emergency Generator - 600 KW	\$184,000					
CI Line to Cantonment Area - 24 inch	\$3,977,412					
Valves						
0.75"	\$0					
1"	\$0					
1.25"	\$0					
1.25"	\$0					
1.5"	\$0					
1.5"	\$0					
2"	\$0					
2"	\$0					
2"	\$0					
2"	\$0					
2.5"	\$0					
3"	\$0					
3"	\$0					
4"	\$0					
4"	\$0					
4"	\$0					
4"	\$0					
5"	\$0					
6"	\$0					
6"	\$0					
6"	\$0					
6"	\$0					
6"	\$0					
8"	\$0					
8"	\$0					
8"	\$0					
8"	\$0					
8"	\$0					
10"	\$0					
10"	\$0					
10"	\$0					
12"	\$0					
12"	\$0					
12"	\$0					
14"	\$0					
16"	\$0					
20"	\$0					

Table IV-2

Renewal and Replacement Schedule
(2011\$)

This table generally follows the format included in RFP Schedule 2--Renewals and Replacements--50 YEAR SCHEDULE

Notes: For each inventory component/item listed in the applicable J-section inventory, clearly show the \$value of the planned R&R (if any) for each year 1-50

Item and Size	Quant	Unit	Approx Year Installed	Existing Item Service Life	First Expected Replacement Date	Number of Years to Replace if >1	% ISDC	% R&R	New Item	New Item Service Life	New Unit Cost RCN	New Item RCN	Rehab Cost	Rehab Year	Expected Subsequent Replacement Dates		
															Second R&R	Third R&R	Fourth R&R
1.5" (NA - DIP starts at 4" Diameter)	12470	LF	1935	79	2014	15	6%	94%	PVC	50	\$22	\$274,340					
2" (NA - DIP starts at 4" Diameter)	28836	LF	1935	79	2014	15	13%	87%	PVC	50	\$24	\$692,064					
2.5" (NA - DIP starts at 4" Diameter)	4785	LF	1935	79	2014	15	10%	90%	PVC	50	\$25	\$119,625					
3" (NA - DIP starts at 4" Diameter)	9504	LF	1935	79	2014	15	45%	55%	PVC	50	\$25	\$237,600					
4"	13331	LF	1935	79	2014	15	28%	72%	PVC	50	\$28	\$366,603					
5" (NA Pipe diameters even numbers - use 6")	410	LF	1935	79	2014	15	0%	100%	PVC	50	\$37	\$15,170					
6"	216645	LF	1935	79	2014	15	28%	72%	PVC	50	\$37	\$8,015,865					
8"	158064	LF	1935	79	2014	15	24%	76%	PVC	50	\$38	\$6,006,432					
8" - HR Center	4237	LF	1935	78	2013	15	100%	0%	PVC	50	\$38	\$161,006					
10"	46690	LF	1935	79	2014	15	37%	63%	PVC	50	\$66	\$3,081,540					
12"	30122	LF	1935	79	2014	15	14%	86%	Ductile Iron	50	\$74	\$2,229,028					
14"	16393	LF	1935	79	2014	15	10%	90%	Ductile Iron	50	\$84	\$1,377,012					
16"	3920	LF	1935	79	2014	15	0%	100%	Ductile Iron	50	\$92	\$360,640					
24"	10560	LF	1935	79	2014	15	0%	100%	Ductile Iron	50	\$181	\$1,911,360					
DISTRIBUTION PIPE - DUCTILE IRON																	
1" (NA - DIP starts at 4" Diameter)	180	LF	1958	55	2013	15	100%	0%	PVC	50	\$21	\$3,780					
1.25" (NA - DIP starts at 4" Diameter)	7076	LF	1958	55	2013	15	100%	0%	PVC	50	\$22	\$155,672					
1.5" (NA - DIP starts at 4" Diameter)	4293	LF	1958	55	2013	15	100%	0%	PVC	50	\$23	\$98,739					
2" (NA - DIP starts at 4" Diameter)	11436	LF	1958	55	2013	15	100%	0%	PVC	50	\$24	\$274,464					
3" (NA - DIP starts at 4" Diameter)	1115	LF	1958	55	2013	15	100%	0%	PVC	50	\$25	\$27,875					
6"	25835	LF	1958	55	2013	15	100%	0%	PVC	50	\$37	\$955,895					
8"	18035	LF	1958	55	2013	15	100%	0%	PVC	50	\$38	\$685,330					
8"	4118	LF	2007	50	2057	15	0%	100%	PVC	50	\$38	\$156,484					
10"	4677	LF	1958	55	2013	15	100%	0%	PVC	50	\$66	\$308,682					
12"	897	LF	1958	55	2013	15	100%	0%	Ductile Iron	50	\$74	\$66,378					
12"	9183	LF	1994	50	2044	15	0%	100%	Ductile Iron	50	\$74	\$679,542					
14"	192	LF	1958	55	2013	15	100%	0%	Ductile Iron	50	\$84	\$16,128					
DISTRIBUTION PIPE - TRANSITE (Replaced with C-900/PVC sch 80)																	
1"	834	LF	1935	78	2013	15	100%	0%	PVC	50	\$21	\$17,514					
1.5"	1988	LF	1935	78	2013	15	100%	0%	PVC	50	\$22	\$43,736					
2"	3726	LF	1935	78	2013	15	100%	0%	PVC	50	\$24	\$89,424					
3"	284	LF	1935	78	2013	15	100%	0%	PVC	50	\$25	\$7,100					
6"	4231	LF	1935	78	2013	15	100%	0%	PVC	50	\$37	\$156,547					
8"	6472	LF	1935	78	2013	15	100%	0%	PVC	50	\$38	\$245,936					
10"	5927	LF	1935	78	2013	15	100%	0%	PVC	50	\$66	\$391,182					
DISTRIBUTION PIPE - PVC (Replaced with C-900/PVC sch 80)																	
1.5"	16608	LF	2005	50	2055	15	0%	100%	PVC	50	\$23	\$381,984					
2"	10698	LF	2008	50	2058	15	0%	100%	PVC	50	\$24	\$256,752					
3"	473	LF	2007	50	2057	15	0%	100%	PVC	50	\$25	\$11,825					
3"	603	LF	2008	50	2058	15	0%	100%	PVC	50	\$25	\$15,075					
4"	24	LF	1997	50	2047	15	0%	100%	PVC	50	\$28	\$660					
4"	334	LF	2005	50	2055	15	0%	100%	PVC	50	\$28	\$9,185					
4"	443	LF	2007	50	2057	15	0%	100%	PVC	50	\$28	\$12,183					
4"	6368	LF	2008	50	2058	15	0%	100%	PVC	50	\$28	\$175,120					
6"	9224	LF	1994	50	2044	15	0%	100%	PVC	50	\$37	\$341,288					
6"	7640	LF	2003	50	2053	15	0%	100%	PVC	50	\$37	\$282,680					
6"	2912	LF	2005	50	2055	15	0%	100%	PVC	50	\$37	\$107,744					
6"	6372	LF	2007	50	2057	15	0%	100%	PVC	50	\$37	\$235,764					

Table IV-2

Renewal and Replacement Schedule
 (2011\$)

This table generally follows the format included in RFP Schedule 2--Renewals and Replacements--50 YEAR SCHEDULE

Notes: For each inventory component/item listed in the applicable J-section inventory, clearly show the \$value of the planned R&R (if any) for each year 1-50

Item and Size	Quant	Unit	Approx Year Installed	Existing Item Service Life	First Expected Replacement Date	Number of Years to Replace if >1	% ISDC	% R&R	New Item	New Item Service Life	New Unit Cost RCN	New Item RCN	Rehab Cost	Rehab Year	Expected Subsequent Replacement Dates			
															Second R&R	Third R&R	Fourth R&R	
6"	5033	LF	2008	50	2058	15	0%	100%	PVC	50	\$37	\$186,221						
8"	10211	LF	1994	50	2044	15	0%	100%	PVC	50	\$38	\$388,018						
8"	14522	LF	1997	50	2047	15	0%	100%	PVC	50	\$38	\$551,836						
8"	18915	LF	2005	50	2055	15	0%	100%	PVC	50	\$38	\$718,770						
8"	2223	LF	2007	50	2057	15	0%	100%	PVC	50	\$38	\$84,474						
8"	4644	LF	2008	50	2058	15	0%	100%	PVC	50	\$38	\$176,472						
10"	1555	LF	1994	50	2044	15	0%	100%	PVC	50	\$66	\$102,630						
10"	106	LF	2005	50	2055	15	0%	100%	PVC	50	\$66	\$6,996						
12"	1996	LF	1994	50	2044	15	0%	100%	Ductile Iron	50	\$75	\$149,700						
Zussman Range (Mt.Eden) - Pipe Material - PVC																		
1"	110	LF	1997	50	2047	15	0%	100%	PVC	50	\$24	\$2,657						
1"	383	LF	2002	50	2052	15	0%	100%	PVC	50	\$24	\$9,249						
1.5"	60	LF	2002	50	2052	15	0%	100%	PVC	50	\$26	\$1,587						
4"	30177	LF	1997	50	2047	15	0%	100%	PVC	50	\$28	\$829,868						
Zussman Range (Mt.Eden) - Pipe Material - PE																		
1"	1111	LF	2002	50	2052	15	0%	100%	PVC	50	\$24	\$26,831						
4"	13668	LF	2002	50	2052	15	0%	100%	PVC	50	\$28	\$375,870						
Yano Range - Pipe Material - PVC																		
2"	2500	LF	1990	50	2040	15	0%	100%	PVC	50	\$28	\$69,000						
Basham's Corner - Pipe Material - PVC																		
1.25"	72	LF	2004	50	2054	15	0%	100%	PVC	50	\$25	\$1,822						
2"	60	LF	2004	50	2054	15	0%	100%	PVC	50	\$28	\$1,656						
6"	256	LF	2004	50	2054	15	0%	100%	PVC	50	\$37	\$9,472						
FIRE HYDRANTS																		
Fire Hydrants	600	Each	1935	40	2015	10	100%	0%	Same as existing	25	\$3,207	\$1,923,900				2040		
Fire Hydrants	122	Each	1935	40	2014	10	0%	100%	Same as existing	25	\$2,915	\$355,630				2039		
Fire Hydrants	83	Each	1958	40	2014	10	0%	100%	Same as existing	25	\$2,915	\$241,945				2039		
Fire Hydrants	14	Each	1997	40	2022	10	0%	100%	Same as existing	25	\$2,915	\$40,810				2047		
Fire Hydrants	1	Each	1990	40	2015	10	0%	100%	Same as existing	25	\$2,915	\$2,915				2040		
Fire Hydrants	2	Each	2004	40	2029	10	0%	100%	Same as existing	25	\$2,915	\$5,830				2054		
Fire Hydrants	54	Each	2005	40	2030	10	0%	100%	Same as existing	25	\$2,915	\$157,410				2055		
Operation & Maintenance Building	1	ea		75	2012		0%	100%	Same as existing	75	\$425,000	\$425,000						
Vehicles/Equipment					2012				Same as existing	7		\$180,000				2019	2026	2033
Water Lab Equipment + Backhoe					2012				Same as existing	10		\$117,300				2022	2032	2042
Tools, and Furniture					2012				Same as existing	15		\$85,600				2027	2042	2057
Admin Equipment, Power Equipment					2012				Same as existing	5		\$56,350				2017	2022	2027

Table IV-3

**Renewals and Replacement Costs
and Residual Values**

(2011 Dollars except where noted)

Item and Size	2054 43	2055 44	2056 45	2057 46	2058 47	2059 48	2060 49	2061 50	Residual Value of R&R in 2011 \$	Residual Value of R&R in Nominal \$
16"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
20"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
24"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Zussman Range (Mt.Eden) - Valves										
1"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
1"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
1.5"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
4"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
4"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Yano Range - Valves										
2"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Pressure Reducing Valves	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Meters										
Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$62,880	\$117,534
Basham's Corner - Meters										
Meters	\$5,240	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,773	\$7,827
Basham's Corner - Back Flow Preventers										
Basham's Corner - Back Flow Preventers	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,350	\$2,354
Pressure Reducing Station										
Pressure Reducing Station	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,060	\$6,239
SCADA										
SCADA (Pump Controls)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
New SCADA System	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,200	\$20,381
Automatic Transfer Switches										
Install switches at Otter creek PS, Central WTP ar	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Well Control System										
Well Control System	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Van Voorhis BPS (Facility No. 5898)										
Van Voorhis BPS - Structure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Pump No. 1 & Pressure Tank - 175 gpm, 10 HF	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,419	\$2,519
Pump No. 2 & Pressure Tank - 175 gpm, 10 HF	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,422	\$2,522
Pump No. 3 & Pressure Tank - 175 gpm, 10 HF	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,422	\$2,522
Fire Protection (Diesel Fueled) - 2,000 gpm, 12	\$0	\$7,550	\$0	\$0	\$0	\$0	\$0	\$0	\$6,040	\$12,750
Elevated Storage Tanks (Steel) Repairs										
Tank No. 1 & cathodic protection - 250,000 gall	\$195,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$296,700	\$398,655
Tank No. 2 & cathodic protection - 500,000 gall	\$390,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$593,400	\$797,310
Tank No. 3 & cathodic protection - 500,000 gall	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Tank No. 4 & cathodic protection - 500,000 gall	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$565,800	\$734,261
Tank No. 5 & cathodic protection - 300,000 gall	\$0	\$0	\$0	\$0	\$0	\$0	\$390,000	\$0	\$405,720	\$605,036
Tank No. 6 & cathodic protection - 500,000 gall	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Tank No. 7 & cathodic protection - 500,000 gall	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Tank No. 8 & cathodic protection - 500,000 gall	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
DISTRIBUTION PIPE - CAST IRON (12" and Ove										
Unknown Diameter (assume 6")	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,508	\$12,287

Table IV-3

**Renewals and Replacement Costs
and Residual Values**

(2011 Dollars except where noted)

Item and Size	2054 43	2055 44	2056 45	2057 46	2058 47	2059 48	2060 49	2061 50	Residual Value of R&R in 2011 \$	Residual Value of R&R in Nominal \$
0.75" (NA - DIP starts at 4" Diameter)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,620	\$5,402
1 " (NA - DIP starts at 4" Diameter)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,570	\$17,036
1.25" (NA - DIP starts at 4" Diameter)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$18,383	\$21,495
1.5" (NA - DIP starts at 4" Diameter)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$51,528	\$60,250
2" (NA - DIP starts at 4" Diameter)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$120,557	\$140,963
2.5" (NA - DIP starts at 4" Diameter)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,510	\$25,151
3" (NA - DIP starts at 4" Diameter)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$26,120	\$30,541
4"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$52,674	\$61,589
5" (NA Pipe diameters even numbers - use 6")	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,034	\$3,548
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,147,466	\$1,341,691
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$910,548	\$1,064,672
8" - HR Center	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$391,037	\$457,225
12"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$384,341	\$449,396
14"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$247,430	\$289,311
16"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$72,128	\$84,337
24"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$382,272	\$446,977
DISTRIBUTION PIPE - DUCTILE IRON										
1" (NA - DIP starts at 4" Diameter)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.25" (NA - DIP starts at 4" Diameter)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.5" (NA - DIP starts at 4" Diameter)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2" (NA - DIP starts at 4" Diameter)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3" (NA - DIP starts at 4" Diameter)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$10,432	\$10,432	\$10,432	\$10,432	\$10,432	\$50,075	\$113,312
10"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12"	\$45,303	\$45,303	\$45,303	\$45,303	\$45,303	\$0	\$0	\$0	\$543,634	\$1,070,519
14"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
DISTRIBUTION PIPE - TRANSITE (Replaced wit										
1"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.5"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
DISTRIBUTION PIPE - PVC (Replaced with C-90										
1.5"	\$0	\$25,466	\$25,466	\$25,466	\$25,466	\$25,466	\$25,466	\$25,466	\$167,564	\$372,639
2"	\$0	\$0	\$0	\$0	\$17,117	\$17,117	\$17,117	\$17,117	\$66,413	\$151,594
3"	\$0	\$0	\$0	\$788	\$788	\$788	\$788	\$788	\$3,784	\$8,563
3"	\$0	\$0	\$0	\$0	\$1,005	\$1,005	\$1,005	\$1,005	\$3,899	\$8,901
4"	\$44	\$44	\$44	\$44	\$44	\$44	\$44	\$44	\$568	\$1,178
4"	\$0	\$612	\$612	\$612	\$612	\$612	\$612	\$612	\$4,029	\$8,960
4"	\$0	\$0	\$0	\$812	\$812	\$812	\$812	\$812	\$3,898	\$8,821
4"	\$0	\$0	\$0	\$0	\$11,675	\$11,675	\$11,675	\$11,675	\$45,298	\$103,396

Table IV-3
**Renewals and Replacement Costs
and Residual Values**
(2011 Dollars except where noted)

Item and Size	2012 1	2013 2	2014 3	2015 4	2016 5	2017 6	2018 7	2019 8	2020 9	2021 10	2022 11	2023 12	2024 13	2025 14
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Zussman Range (Mt.Eden) - Pipe Material - PVC														
1"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.5"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Zussman Range (Mt.Eden) - Pipe Material - PE														
1"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Yano Range - Pipe Material - PVC														
2"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Basham's Corner - Pipe Material - PVC														
1.25"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
FIRE HYDRANTS														
Fire Hydrants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Fire Hydrants	\$0	\$0	\$35,563	\$35,563	\$35,563	\$35,563	\$35,563	\$35,563	\$35,563	\$35,563	\$35,563	\$35,563	\$0	\$0
Fire Hydrants	\$0	\$0	\$24,195	\$24,195	\$24,195	\$24,195	\$24,195	\$24,195	\$24,195	\$24,195	\$24,195	\$24,195	\$0	\$0
Fire Hydrants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,081	\$4,081	\$4,081	\$4,081
Fire Hydrants	\$0	\$0	\$0	\$292	\$292	\$292	\$292	\$292	\$292	\$292	\$292	\$292	\$292	\$0
Fire Hydrants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Fire Hydrants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operation & Maintenance Building														
Vehicles/Equipment	\$425,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Water Lab Equipment + Backhoe	\$180,000	\$0	\$0	\$0	\$0	\$0	\$0	\$180,000	\$0	\$0	\$0	\$0	\$0	\$0
Tools, and Furniture	\$117,300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$117,300	\$0	\$0	\$0
Admin Equipment, Power Equipment	\$85,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Admin Equipment, Power Equipment	\$56,350	\$0	\$0	\$0	\$0	\$56,350	\$0	\$0	\$0	\$0	\$56,350	\$0	\$0	\$0
Subtotal--2011\$	\$1,540,420	\$87,400	\$1,999,500	\$1,840,337	\$1,450,836	\$2,812,281	\$1,346,291	\$4,465,631	\$7,373,782	\$1,346,291	\$1,524,022	\$1,679,747	\$1,365,740	\$1,410,573
Subtotal--2012\$	\$1,567,419	\$88,932	\$2,034,545	\$1,872,592	\$1,476,265	\$2,861,571	\$1,369,887	\$4,543,899	\$7,503,021	\$1,369,887	\$1,550,733	\$1,709,188	\$1,389,677	\$1,435,296
General and Administrative Overhead--2012\$	\$68,966	\$3,913	\$89,520	\$82,394	\$64,956	\$125,909	\$60,275	\$199,932	\$330,133	\$60,275	\$68,232	\$75,204	\$61,146	\$63,153
Total Cost--2012\$	\$1,636,385	\$92,845	\$2,124,064	\$1,954,986	\$1,541,220	\$2,987,481	\$1,430,162	\$4,743,831	\$7,833,154	\$1,430,162	\$1,618,966	\$1,784,392	\$1,450,823	\$1,498,449

Table IV-3

**Renewals and Replacement Costs
and Residual Values**

(2011 Dollars except where noted)

Item and Size	2026 15	2027 16	2028 17	2029 18	2030 19	2031 20	2032 21	2033 22	2034 23	2035 24	2036 25	2037 26	2038 27	2039 28
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Zussman Range (Mt.Eden) - Pipe Material - PVC														
1"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.5"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Zussman Range (Mt.Eden) - Pipe Material - PE														
1"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Yano Range - Pipe Material - PVC														
2"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Basham's Corner - Pipe Material - PVC														
1.25"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
FIRE HYDRANTS														
Fire Hydrants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Fire Hydrants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$35,563
Fire Hydrants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$24,195
Fire Hydrants	\$4,081	\$4,081	\$4,081	\$4,081	\$4,081	\$4,081	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Fire Hydrants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Fire Hydrants	\$0	\$0	\$0	\$583	\$583	\$583	\$583	\$583	\$583	\$583	\$583	\$583	\$583	\$0
Fire Hydrants	\$0	\$0	\$0	\$0	\$15,741	\$15,741	\$15,741	\$15,741	\$15,741	\$15,741	\$15,741	\$15,741	\$15,741	\$15,741
Operation & Maintenance Building														
Vehicles/Equipment	\$180,000	\$0	\$0	\$0	\$0	\$0	\$0	\$180,000	\$0	\$0	\$0	\$0	\$0	\$0
Water Lab Equipment + Backhoe														
Tools, and Furniture	\$0	\$85,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Admin Equipment, Power Equipment														
	\$0	\$56,350	\$0	\$0	\$0	\$0	\$56,350	\$0	\$0	\$0	\$0	\$56,350	\$0	\$0
Subtotal--2011\$	\$1,470,323	\$2,533,398	\$1,360,948	\$1,694,654	\$20,405	\$20,405	\$189,974	\$253,824	\$406,324	\$637,324	\$818,824	\$924,924	\$103,724	\$420,499
Subtotal--2012\$	\$1,496,093	\$2,577,801	\$1,384,801	\$1,724,356	\$20,763	\$20,763	\$193,304	\$258,273	\$413,446	\$648,494	\$833,175	\$941,135	\$105,542	\$427,868
General and Administrative Overhead--2012\$	\$65,828	\$113,423	\$60,931	\$75,872	\$914	\$914	\$8,505	\$11,364	\$18,192	\$28,534	\$36,660	\$41,410	\$4,644	\$18,826
Total Cost--2012\$	\$1,561,921	\$2,691,224	\$1,445,733	\$1,800,227	\$21,676	\$21,676	\$201,809	\$269,637	\$431,637	\$677,028	\$869,835	\$982,545	\$110,186	\$446,695

Table IV-3

**Renewals and Replacement Costs
and Residual Values**

(2011 Dollars except where noted)

Item and Size	2040 29	2041 30	2042 31	2043 32	2044 33	2045 34	2046 35	2047 36	2048 37	2049 38	2050 39	2051 40	2052 41	2053 42
6"	\$0	\$0	\$0	\$0	\$22,753	\$22,753	\$22,753	\$22,753	\$22,753	\$22,753	\$22,753	\$22,753	\$22,753	\$22,753
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$18,845
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$0	\$25,868	\$25,868	\$25,868	\$25,868	\$25,868	\$25,868	\$25,868	\$25,868	\$25,868	\$25,868
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$36,789	\$36,789	\$36,789	\$36,789	\$36,789	\$36,789	\$36,789
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10"	\$0	\$0	\$0	\$0	\$6,842	\$6,842	\$6,842	\$6,842	\$6,842	\$6,842	\$6,842	\$6,842	\$6,842	\$6,842
10"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12"	\$0	\$0	\$0	\$0	\$9,980	\$9,980	\$9,980	\$9,980	\$9,980	\$9,980	\$9,980	\$9,980	\$9,980	\$9,980
Zussman Range (Mt.Eden) - Pipe Material - PVC														
1"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$177	\$177	\$177	\$177	\$177	\$177	\$177
1"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$617	\$617
1.5"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$106	\$106
4"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$55,325	\$55,325	\$55,325	\$55,325	\$55,325	\$55,325	\$55,325
Zussman Range (Mt.Eden) - Pipe Material - PE														
1"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,789	\$1,789
4"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25,058	\$25,058
Yano Range - Pipe Material - PVC														
2"	\$4,600	\$4,600	\$4,600	\$4,600	\$4,600	\$4,600	\$4,600	\$4,600	\$4,600	\$4,600	\$4,600	\$4,600	\$4,600	\$4,600
Basham's Corner - Pipe Material - PVC														
1.25"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
FIRE HYDRANTS														
Fire Hydrants	\$192,390	\$192,390	\$192,390	\$192,390	\$192,390	\$192,390	\$192,390	\$192,390	\$192,390	\$192,390	\$192,390	\$0	\$0	\$0
Fire Hydrants	\$35,563	\$35,563	\$35,563	\$35,563	\$35,563	\$35,563	\$35,563	\$35,563	\$35,563	\$35,563	\$0	\$0	\$0	\$0
Fire Hydrants	\$24,195	\$24,195	\$24,195	\$24,195	\$24,195	\$24,195	\$24,195	\$24,195	\$24,195	\$24,195	\$0	\$0	\$0	\$0
Fire Hydrants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,081	\$4,081	\$4,081	\$4,081	\$4,081	\$4,081	\$4,081
Fire Hydrants	\$292	\$292	\$292	\$292	\$292	\$292	\$292	\$292	\$292	\$292	\$292	\$0	\$0	\$0
Fire Hydrants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Fire Hydrants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operation & Maintenance Building														
Vehicles/Equipment	\$180,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Water Lab Equipment + Backhoe	\$0	\$0	\$117,300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Tools, and Furniture	\$0	\$0	\$85,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Admin Equipment, Power Equipment	\$0	\$0	\$56,350	\$0	\$0	\$0	\$0	\$56,350	\$0	\$0	\$0	\$0	\$56,350	\$0
Subtotal--2011\$	\$437,039	\$257,039	\$669,814	\$257,039	\$449,084	\$479,625	\$367,784	\$700,550	\$793,575	\$470,567	\$324,461	\$316,306	\$1,186,505	\$1,076,300
Subtotal--2012\$	\$444,699	\$261,544	\$681,554	\$261,544	\$456,955	\$488,031	\$374,230	\$712,828	\$807,484	\$478,815	\$330,148	\$321,850	\$1,207,301	\$1,095,164
General and Administrative Overhead--2012\$	\$19,567	\$11,508	\$29,988	\$11,508	\$20,106	\$21,473	\$16,466	\$31,364	\$35,529	\$21,068	\$14,526	\$14,161	\$53,121	\$48,187
Total Cost--2012\$	\$464,266	\$273,052	\$711,542	\$273,052	\$477,061	\$509,505	\$390,696	\$744,193	\$843,013	\$499,883	\$344,674	\$336,011	\$1,260,422	\$1,143,352

Table IV-3

**Renewals and Replacement Costs
and Residual Values**

(2011 Dollars except where noted)

Item and Size	2054 43	2055 44	2056 45	2057 46	2058 47	2059 48	2060 49	2061 50	Residual Value of R&R in 2011 \$	Residual Value of R&R in Nominal \$
6"	\$22,753	\$22,753	\$22,753	\$22,753	\$22,753	\$0	\$0	\$0	\$273,030	\$537,649
6"	\$18,845	\$18,845	\$18,845	\$18,845	\$18,845	\$18,845	\$18,845	\$18,845	\$156,039	\$341,034
6"	\$0	\$7,183	\$7,183	\$7,183	\$7,183	\$7,183	\$7,183	\$7,183	\$47,264	\$105,108
6"	\$0	\$0	\$0	\$15,718	\$15,718	\$15,718	\$15,718	\$15,718	\$75,444	\$170,719
6"	\$0	\$0	\$0	\$0	\$12,415	\$12,415	\$12,415	\$12,415	\$48,169	\$109,950
8"	\$25,868	\$25,868	\$25,868	\$25,868	\$25,868	\$0	\$0	\$0	\$310,414	\$611,266
8"	\$36,789	\$36,789	\$36,789	\$36,789	\$36,789	\$36,789	\$36,789	\$36,789	\$474,579	\$984,542
8"	\$0	\$47,918	\$47,918	\$47,918	\$47,918	\$47,918	\$47,918	\$47,918	\$315,300	\$701,187
8"	\$0	\$0	\$0	\$5,632	\$5,632	\$5,632	\$5,632	\$5,632	\$27,032	\$61,169
8"	\$0	\$0	\$0	\$0	\$11,765	\$11,765	\$11,765	\$11,765	\$45,647	\$104,194
10"	\$6,842	\$6,842	\$6,842	\$6,842	\$6,842	\$0	\$0	\$0	\$82,104	\$161,679
10"	\$0	\$466	\$466	\$466	\$466	\$466	\$466	\$466	\$3,069	\$6,825
12"	\$9,980	\$9,980	\$9,980	\$9,980	\$9,980	\$0	\$0	\$0	\$119,760	\$235,830
Zussman Range (Mt.Eden) - Pipe Material - PVC										
1"	\$177	\$177	\$177	\$177	\$177	\$177	\$177	\$177	\$2,285	\$4,740
1"	\$617	\$617	\$617	\$617	\$617	\$617	\$617	\$617	\$5,611	\$12,158
1.5"	\$106	\$106	\$106	\$106	\$106	\$106	\$106	\$106	\$963	\$2,086
4"	\$55,325	\$55,325	\$55,325	\$55,325	\$55,325	\$55,325	\$55,325	\$55,325	\$713,686	\$1,480,583
Zussman Range (Mt.Eden) - Pipe Material - PE										
1"	\$1,789	\$1,789	\$1,789	\$1,789	\$1,789	\$1,789	\$1,789	\$1,789	\$16,277	\$35,267
4"	\$25,058	\$25,058	\$25,058	\$25,058	\$25,058	\$25,058	\$25,058	\$25,058	\$228,028	\$494,058
Yano Range - Pipe Material - PVC										
2"	\$4,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$49,680	\$91,261
Basham's Corner - Pipe Material - PVC										
1.25"	\$121	\$121	\$121	\$121	\$121	\$121	\$121	\$121	\$904	\$1,992
2"	\$110	\$110	\$110	\$110	\$110	\$110	\$110	\$110	\$821	\$1,811
6"	\$631	\$631	\$631	\$631	\$631	\$631	\$631	\$631	\$4,698	\$10,358
FIRE HYDRANTS										
Fire Hydrants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$654,126	\$1,150,539
Fire Hydrants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$106,689	\$184,422
Fire Hydrants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$72,584	\$125,468
Fire Hydrants	\$4,081	\$4,081	\$4,081	\$0	\$0	\$0	\$0	\$0	\$25,302	\$50,260
Fire Hydrants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$991	\$1,743
Fire Hydrants	\$583	\$583	\$583	\$583	\$583	\$583	\$583	\$583	\$4,011	\$8,843
Fire Hydrants	\$0	\$15,741	\$15,741	\$15,741	\$15,741	\$15,741	\$15,741	\$15,741	\$96,965	\$215,636
Operation & Maintenance Building										
Vehicles/Equipment	\$180,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$147,333	\$147,333
Water Lab Equipment + Backhoe	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Water Lab Equipment + Backhoe	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,730	\$23,503
Tools, and Furniture	\$0	\$0	\$0	\$85,600	\$0	\$0	\$0	\$0	\$62,773	\$137,195
Admin Equipment, Power Equipment	\$0	\$0	\$0	\$56,350	\$0	\$0	\$0	\$0	\$11,270	\$24,631
Subtotal--2011\$	\$1,162,112	\$359,958	\$352,408	\$523,659	\$493,185	\$324,940	\$714,940	\$324,940	\$16,345,497	\$24,934,269
Subtotal--2012\$	\$1,182,480	\$366,267	\$358,584	\$532,837	\$501,829	\$330,635	\$727,470	\$330,635		
General and Administrative Overhead--2012\$	\$52,029	\$16,116	\$15,778	\$23,445	\$22,080	\$14,548	\$32,009	\$14,548		
Total Cost--2012\$	\$1,234,509	\$382,383	\$374,362	\$556,282	\$523,909	\$345,183	\$759,479	\$345,183		

Table IV-4

Renewal and Replacement Cash Flow

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Contract Year	Project Costs 2012\$	Cash Flow (Current Year \$)*								R&R Revenues 2009\$
		R&R Revenues	Project Costs	Net Revenues	Beginning Balance	Average Balance	Interest Income	Interest Expense	Ending Balance	
1	1,636,385	1,412,248	1,636,385	(224,137)	-	(112,068)	-	6,164	(230,300)	1,340,521
2	92,845	1,412,248	94,472	1,317,776	(230,300)	428,588	8,572	-	1,096,047	1,317,430
3	2,124,064	1,437,000	2,199,173	(762,173)	1,096,047	714,961	14,299	-	348,174	1,317,430
4	1,954,986	1,462,186	2,059,593	(597,406)	348,174	49,471	989	-	(248,242)	1,317,430
5	1,541,220	1,487,814	1,652,145	(164,331)	(248,242)	(330,408)	-	18,172	(430,746)	1,317,430
6	2,987,481	1,513,890	3,258,625	(1,744,734)	(430,746)	(1,303,113)	-	71,671	(2,247,151)	1,317,430
7	1,430,162	1,540,424	1,587,305	(46,881)	(2,247,151)	(2,270,592)	-	124,883	(2,418,915)	1,317,430
8	4,743,831	1,567,423	5,357,351	(3,789,929)	(2,418,915)	(4,313,879)	-	237,263	(6,446,107)	1,317,430
9	7,833,154	1,594,895	9,001,263	(7,406,368)	(6,446,107)	(10,149,291)	-	558,211	(14,410,686)	1,317,430
10	1,430,162	1,622,848	1,672,238	(49,390)	(14,410,686)	(14,435,381)	-	793,946	(15,254,022)	1,317,430
11	1,618,966	1,651,291	1,926,177	(274,885)	(15,254,022)	(15,391,464)	-	846,531	(16,375,438)	1,317,430
12	1,784,392	1,680,233	2,160,203	(479,970)	(16,375,438)	(16,615,423)	-	913,848	(17,769,256)	1,317,430
13	1,450,823	1,709,682	1,787,164	(77,482)	(17,769,256)	(17,807,997)	-	979,440	(18,826,178)	1,317,430
14	1,498,449	1,739,647	1,878,183	(138,536)	(18,826,178)	(18,895,446)	-	1,039,250	(20,003,963)	1,317,430
15	1,561,921	1,770,138	1,992,054	(221,916)	(20,003,963)	(20,114,921)	-	1,106,321	(21,332,200)	1,317,430
16	2,691,224	1,801,163	3,492,509	(1,691,346)	(21,332,200)	(22,177,873)	-	1,219,783	(24,243,329)	1,317,430
17	1,445,733	1,832,731	1,909,069	(76,337)	(24,243,329)	(24,281,498)	-	1,335,482	(25,655,149)	1,317,430
18	1,800,227	1,864,853	2,418,838	(553,985)	(25,655,149)	(25,932,141)	-	1,426,268	(27,635,401)	1,317,430
19	21,676	1,897,538	29,635	1,867,903	(27,635,401)	(26,701,450)	-	1,468,580	(27,236,078)	1,317,430
20	21,676	1,930,796	30,155	1,900,641	(27,236,078)	(26,285,758)	-	1,445,717	(26,781,154)	1,317,430
21	201,809	1,964,636	285,665	1,678,971	(26,781,154)	(25,941,668)	-	1,426,792	(26,528,975)	1,317,430
22	269,637	1,999,070	388,367	1,610,704	(26,528,975)	(25,723,623)	-	1,414,799	(26,333,070)	1,317,430
23	431,637	2,034,107	632,598	1,401,510	(26,333,070)	(25,632,315)	-	1,409,777	(26,341,338)	1,317,430
24	677,028	2,069,759	1,009,627	1,060,131	(26,341,338)	(25,811,272)	-	1,419,620	(26,700,826)	1,317,430
25	869,835	2,106,035	1,319,889	786,146	(26,700,826)	(26,307,753)	-	1,446,926	(27,361,607)	1,317,430
26	982,545	2,142,947	1,517,045	625,901	(27,361,607)	(27,048,656)	-	1,487,676	(28,223,381)	1,317,430
27	110,186	2,180,506	173,108	2,007,398	(28,223,381)	(27,219,682)	-	1,497,083	(27,713,066)	1,317,430
28	446,695	2,218,723	714,083	1,504,640	(27,713,066)	(26,960,746)	-	1,482,841	(27,691,267)	1,317,430
29	464,266	2,257,610	755,180	1,502,431	(27,691,267)	(26,940,051)	-	1,481,703	(27,670,539)	1,317,430
30	273,052	2,297,179	451,934	1,845,245	(27,670,539)	(26,747,917)	-	1,471,135	(27,296,430)	1,317,430
31	711,542	2,337,441	1,198,329	1,139,112	(27,296,430)	(26,726,873)	-	1,469,978	(27,627,295)	1,317,430
32	273,052	2,378,409	467,915	1,910,494	(27,627,295)	(26,672,048)	-	1,466,963	(27,183,764)	1,317,430
33	477,061	2,420,095	831,843	1,588,252	(27,183,764)	(26,389,638)	-	1,451,430	(27,046,942)	1,317,430
34	509,505	2,462,511	903,985	1,558,526	(27,046,942)	(26,267,679)	-	1,444,722	(26,933,138)	1,317,430
35	390,696	2,505,671	705,340	1,800,331	(26,933,138)	(26,032,973)	-	1,431,814	(26,564,620)	1,317,430
36	744,193	2,549,587	1,367,068	1,182,519	(26,564,620)	(25,973,361)	-	1,428,535	(26,810,636)	1,317,430
37	843,013	2,594,273	1,575,741	1,018,533	(26,810,636)	(26,301,370)	-	1,446,575	(27,238,679)	1,317,430
38	499,883	2,639,743	950,746	1,688,997	(27,238,679)	(26,394,180)	-	1,451,680	(27,001,362)	1,317,430
39	344,674	2,686,009	667,038	2,018,970	(27,001,362)	(25,991,877)	-	1,429,553	(26,411,945)	1,317,430
40	336,011	2,733,086	661,670	2,071,416	(26,411,945)	(25,376,237)	-	1,395,693	(25,736,222)	1,317,430
41	1,260,422	2,780,988	2,525,514	255,474	(25,736,222)	(25,608,485)	-	1,408,467	(26,889,215)	1,317,430
42	1,143,352	2,829,730	2,331,093	498,637	(26,889,215)	(26,639,896)	-	1,465,194	(27,855,772)	1,317,430
43	1,234,509	2,879,326	2,561,060	318,266	(27,855,772)	(27,696,639)	-	1,523,315	(29,060,822)	1,317,430
44	382,383	2,929,791	807,178	2,122,613	(29,060,822)	(27,999,515)	-	1,539,973	(28,478,182)	1,317,430
45	374,362	2,981,141	804,099	2,177,043	(28,478,182)	(27,389,661)	-	1,506,431	(27,807,571)	1,317,430
46	556,282	3,033,391	1,215,788	1,817,603	(27,807,571)	(26,898,770)	-	1,479,432	(27,469,401)	1,317,430
47	523,909	3,086,557	1,165,105	1,921,451	(27,469,401)	(26,508,675)	-	1,457,977	(27,005,927)	1,317,430
48	345,183	3,140,654	781,095	2,359,559	(27,005,927)	(25,826,147)	-	1,420,438	(26,066,806)	1,317,430
49	759,479	3,195,699	1,748,705	1,446,995	(26,066,806)	(25,343,309)	-	1,393,882	(26,013,693)	1,317,430
50	345,183	3,251,710	808,715	2,442,994	(26,013,693)	(24,792,196)	-	1,363,571	(24,934,269)	1,317,430

* Includes projected future inflation of 2.5 percent per year

Table IV-8

B.7.5 Schedule 5--Proposal 50 Year Charges to the Government, Constant 2009 Dollars

Notes:

1. Offerors shall provide for Schedules B-1, B-2, B-3, and B-4
2. Contract year--Fill in for each year (1-50)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Contract Items										
Contract Year	Purchase Price Credit	Purchase Price Recovery	General & Admin	Operations & Maintenance less taxes and G&A	Renewals & Replacements less taxes and G&A	Initial System Deficiency Corrections*	Transition Costs	Other Costs & Credits, net**	Non-Federal Taxes & Fees	Federal Income Tax	
1	\$ 979,221	\$ 979,221	\$ 369,270	\$ 1,390,587	\$ 1,284,024	\$ 5,169,718	\$ 548,163	\$ -	\$ -	\$ -	
2	\$ 962,354	\$ 962,354	\$ 340,181	\$ 1,388,810	\$ 1,261,906	\$ 5,080,671	\$ -	\$ -	\$ -	\$ -	
3	\$ 945,778	\$ 945,778	\$ 340,181	\$ 1,388,810	\$ 1,261,906	\$ 5,080,671	\$ -	\$ -	\$ -	\$ -	
4	\$ 929,487	\$ 929,487	\$ 340,181	\$ 1,388,810	\$ 1,261,906	\$ 5,080,671	\$ -	\$ -	\$ -	\$ -	
5	\$ 913,476	\$ 913,476	\$ 340,181	\$ 1,388,810	\$ 1,261,906	\$ 5,080,671	\$ -	\$ -	\$ -	\$ -	
6	\$ 897,742	\$ 897,742	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
7	\$ 882,278	\$ 882,278	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
8	\$ 867,081	\$ 867,081	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
9	\$ 852,146	\$ 852,146	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
10	\$ 837,468	\$ 837,468	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
11	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
12	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
13	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
14	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
15	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
16	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
17	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
18	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
19	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
20	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
21	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
22	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
23	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
24	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
25	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
26	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
27	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
28	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
29	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
30	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
31	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
32	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
33	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
34	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
35	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
36	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
37	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
38	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
39	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
40	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
41	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
42	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
43	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
44	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
45	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
46	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
47	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
48	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
49	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	
50	\$ -	\$ -	\$ 113,196	\$ 1,310,730	\$ 1,261,906	\$ -	\$ -	\$ -	\$ -	\$ -	

* G&A on ISDCs is excluded from the amounts shown in this column. All G&A costs are included in the General & Admin column.

**Credit for value of assets transferred to Government.

Attachment IV-4

Recapitulation of G&A, R&R, and ISDC Costs Shown in Table IV-8

Year	G&A	R&Rs			ISDCs			Total G&A
	Included in O&M + Trans	Including G&A	G&A	Excluding G&A	Including G&A	G&A	Excluding G&A	
1	85,305	1,340,521	56,497	1,284,024	5,397,186	227,468	5,169,718	369,270
2	61,108	1,317,430	55,524	1,261,906	5,304,220	223,550	5,080,671	340,181
3	61,108	1,317,430	55,524	1,261,906	5,304,220	223,550	5,080,671	340,181
4	61,108	1,317,430	55,524	1,261,906	5,304,220	223,550	5,080,671	340,181
5	61,108	1,317,430	55,524	1,261,906	5,304,220	223,550	5,080,671	340,181
6	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
7	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
8	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
9	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
10	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
11	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
12	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
13	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
14	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
15	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
16	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
17	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
18	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
19	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
20	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
21	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
22	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
23	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
24	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
25	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
26	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
27	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
28	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
29	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
30	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
31	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
32	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
33	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
34	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
35	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
36	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
37	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
38	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
39	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
40	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
41	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
42	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
43	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
44	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
45	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
46	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
47	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
48	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
49	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196
50	57,672	1,317,430	55,524	1,261,906	-	-	-	113,196

B.7.5 Schedule 4--Recoverable Portion of Purchase Price

Item	Interest Rate	Amount	Amortization Period (Months)	Monthly Charge
Recoverable Portion Purchase Price	3.0%	\$ 8,903,000	120	\$85,968

\$1,031,616

Assumptions

Inflation--Long Term	1.752678%
Inflation--Short Term O&M	1.752678%
Interest Rate on Invested Funds	2.0%
Interest Rate on Borrowings	5.5%
G&A Percentage	4.4%

Fort Knox Potable Water Utility System
RFP No. SP0600-08-R-0803

<u>Facility</u>	<u>RCN</u>	<u>RCNLD</u>	<u>OC</u>	<u>OCLD</u>	<u>Market Value</u>
Fort Knox Potable Water Utility System					
Raw Water Sources	6,118,721	461,054	935,715	374,079	374,079
Muldraugh WTP *	23,883,912	10,533,726	10,287,948	7,467,927	550,602
Central WTP	7,566,770	645,830	637,129	279,199	279,199
Valves	Incl. w/ pipe	Incl. w/ pipe	Incl. w/ pipe	Incl. w/ pipe	Incl. w/ pipe
Meters, SCADA, ATS, WCS	172,240	91,083	159,211	86,758	86,758
Van Voorhis BPS	139,391	99,861	117,100	83,891	83,891
Elevated Storage Tanks	7,348,500	3,679,080	3,497,575	2,807,452	2,807,452
Water Distribution Pipe	35,013,997	4,900,099	6,223,941	4,605,886	4,605,886
Fire Hydrants	2,728,440	133,973	234,872	114,635	114,635
Grand Total	82,971,971	20,544,706	22,093,489	15,819,826	8,903,000

Notes

RCN Estimate Base Year 2012

* Muldraugh WTP components that will be decommissioned have been removed from Market Value calculation.

Fort Knox Potable Water Utility System
RFP No. SP0600-08-R-0003

Development, SDC's, engineering, inspections, etc.

15.00%

Contingency 0.00%

Market Adjustment Factor 0.00%

Total Markup 1.15

1.15

Raw Water Sources/Central WTP

Item	Year Installed/Upgraded*	Quantity	Unit Cost	RCN	Original Design Life	Revise Design Life	RCNLD	Historical Inflation Index	OC	OCLD	First Replacement Year	2nd Replacement Year
RAW WATER SOURCES												
McCracken Spring Intake	1937	1 Each	20,000	23,000	50	75	0	1%	230	-	2014	2089
CI Line to Otter Creek PS - 16"	1937	2,500 LF	105	262,500	75	75	0	1%	3,019	-	2014	2089
Otter Creek PS (Facility No. 9213) - Structure	1936	1,701 SF	40	78,246	75	75	0	1%	782	-	2015	2090
Intake /Mechanical Screen	1953	1 Each	20,000	23,000	50	75	4,907	14%	3,324	709	2014	2089
Pump Controls	1995	3 Each	30,000	103,500	20	25	33,120	73%	75,607	24,194	Part of ISDC	
Pump No. 4 - 1,200 gpm, 150 HP	1983	1 Each	34,500	34,500	30	25	0	51%	20,360	-	2017	2042
Pump No. 9 - 2,100 gpm, 230 HP	1983	1 Each	52,900	52,900	30	25	0	51%	31,218	-	2017	2042
Pump No. 10 - 2,100 gpm, 250 HP	2008	1 Each	57,500	57,500	30	25	48,300	92%	61,089	51,315	2033	2058
Emergency Generator - 350 KW	1981	1 Each	104,545	104,545	35	35	11,948	46%	55,269	6,316	2016	2051
CI Line to Central WTP - 16-inch	1937	11,963 LF	105	1,256,115	75	50	0	1%	14,445	-	2017	2067
West Point Well Field												
Well No. 1. Pump/Controls - 750 gpm, 125	1998	1 Each	57,500	66,125	50	25	29,095	77%	50,712	22,313	2023	2048
Well No. 2. Pump/Controls - 750 gpm, 125	2004	1 Each	57,500	66,125	50	25	44,965	85%	56,438	38,378	2029	2054
Well No. 3. Pump/Controls - 750 gpm, 125	2004	1 Each	57,500	66,125	50	25	44,965	85%	56,438	38,378	2029	2054
Well No. 5. Pump/Controls - 750 gpm, 125	2002	1 Each	57,500	66,125	50	25	39,675	82%	54,247	32,548	2027	2052
Well No. 6. Pump/Controls - 500 gpm, 75	2000	1 Each	40,500	46,575	50	25	24,219	79%	36,725	19,097	2025	2050
Well No. 7. Pump/Controls - 750 gpm, 125	1985	1 Each	57,500	66,125	50	25	0	55%	36,345	-	2012	2037
Well No. 8. Pump/Controls - 750 gpm, 125	1998	1 Each	57,500	66,125	50	25	29,095	77%	50,712	22,313	2023	2048
Well No. 9. Pump/Controls - 750 gpm, 125	1998	1 Each	57,500	66,125	50	25	29,095	77%	50,712	22,313	2023	2048
Well No. 10. Pump/Controls - 750 gpm, 125	1999	1 Each	57,500	66,125	50	25	31,740	78%	51,372	24,659	2024	2049
Well No. 11. Pump/Controls - 750 gpm, 125	2000	1 Each	57,500	66,125	50	25	34,385	79%	52,140	27,113	2025	2050
Well No. 12A. Pump/Controls - 750 gpm,	1985	1 Each	57,500	66,125	50	25	0	55%	36,345	-	2012	2037
Well No. 12B. Pump/Controls - 750 gpm,	2003	1 Each	57,500	66,125	50	25	42,320	84%	55,331	35,412	2028	2053
Well No. 13. Pump/Controls - 750 gpm, 125	1992	1 Each	57,500	66,125	50	25	13,225	68%	45,099	9,020	2017	2042
Well Field Header - 16-Inch	1937	3,960 LF	105	415,800	75	75	0	1%	4,782	-	2015	2090
CI Line to Muldraugh WTP - 24 inch	1937	15840 LF	181	2,867,040	75	50	0	1%	32,971	-	2019	2069
				6,118,721			461,054		935,715	374,079		
			Total	6,118,721			461,054		935,715	374,079		
			Annual Depreciation	139,690								

Fort Knox Potable Water Utility System
RFP No. SP0600-08-R-0803

Development, SDC's, engineering, inspections, etc. 15.00%
Contingency 0.00%
Market Adjustment Factor 0.00%
Total Markup 1.15

Raw Water Sources/Central WTP

1.15

Item	Year Installed/ Upgraded*	Quantity	Unit Cost	RCN	Original Design Life	Revise Design Life	RCNLD	Historical Inflation Index	OC	OCLD	First Replacement Year	2nd Replacement Year
RAW WATER SOURCES												
Central WTP (Facility No 1205) - 3.5 MGD												
Central WTP (Facility No. 1205) - Structure	1937	6,799 SF	80	543,920	75	75	0	1%	6,255	-	2012	2087
Chemical Feed Systems			0	0	25	25	0	1%	-	-	0	25
Clarifier - 3.5 MG	1937	1 Each	3,000,000	3,450,000	75	75	0	1%	34,500	-	2020	2095
Multi-Media Filters - 1 MG	1937	3 Each	327,000	1,128,150	75	75	0	1%	11,282	-	2020	2095
Filter Back Wash Tank - 150,000 gallons	1978	1 Each	650,000	747,500	75	75	408,633	36%	267,767	146,379	2053	2128
Clear Well No. 1 - 0.5 MG	1937	1 Each	250,000	287,500	75	75	0	1%	2,875	-	2020	2095
Clear Well No. 2 - 2 MG - 1945	1945	1 Each	1,000,000	1,150,000	75	75	122,667	10%	111,999	11,947	2020	2095
Central WTP High Lift												
Pump No. 1 & Controls - 4,850 gpm, 250 HP	1970	1 Each	57,500	57,500	30	25	0	21%	14,131	-	2013	2038
Pump No. 2 & Controls - 1,000 gpm, 70 HP	1984	1 Each	16,100	16,100	30	25	0	53%	9,857	-	2013	2038
Pump No. 3 & Controls - 1,400 gpm, 60 HP	1984	1 Each	13,800	13,800	30	25	0	53%	8,449	-	2013	2038
Filter Back Wash Pump & Controls - 5,400	1994	1 Each	72,300	72,300	30	25	20,244	72%	59,481	16,655	2019	2044
Emergency Generator - 280 KW	2010	1 Each	100,000	100,000	35	35	94,286	96%	110,534	104,218	2045	2080
				7,566,770			645,830			637,129	279,199	
Total				7,566,770			645,830			637,129	279,199	
Annual Depreciation				106,673								
Initial Capital Repair Expense				-			362,826			645,830		

Fort Knox Potable Water Utility System

Development, SDC's, engineering, inspections, etc.	15.00%	0.00%
Contingency	0.00%	
Meters, SCADA, ATS, WCS	Market Adjustment Factor	0.00%
	Total Markup	1.15

	Year Inst	Quantity	Unit Cost	RCN	Original Design Life	Revised Design Life	RCNLD	Historical Inflation Index	OC	OCLD	First Replacement Year	2nd Replacement Year	
Meters													
Meters	1998	50	ea	2,620	131,000	35	25	57,640.00	77%	115,536	50,836	2023	2048
Basham's Corner - Meters													
Meters	2004	2	ea	2,620	5,240	35	25	3,563.20	85%	5,143	3,497	2029	2054
Basham's Corner - Back Flow Preventers													
Basham's Corner - Back Flow Preventers	2004	2	ea	4,500	9,000	50	20	5,400.00	85%	8,834	5,300	2024	2044
Pressure Reducing Station													
Pressure Reducing Station	2003	1	ea	4,500	4,500	50	25	2,880.00	84%	4,330	2,771	2028	2053
SCADA													
SCADA (Pump Controls)	1995	3	ea	30,000							In New Scada		Deleted because this is replaced with New Scada system ISDC 19
New SCADA System	ISDC	1	ea	220,000	330,000	25	25	220,000.00	0%	220,000	220,000	2037	2062
Automatic Transfer Switches													
Install switches at Otter creek PS, Central WTP and Muldraugh HIPS	2011	1		22,500	22,500	35	25	21,600.00	98%	25,368	24,353	2036	2061
Well Control System													
Well Control System	1995	1	ea	-	0	30	25	-	73%	-	-	2020	2045
					172,240			91,083		159,211	86,758		
				Total	172,240			91,083		159,211	86,758		

Fort Knox Potable Water Utility System

Development, SDC's, engineering

Van Voorhis BPS

Market

Item	Year Inst	Quantity	
Van Voorhis BPS (Facility No. 5898)			
Van Voorhis BPS - Structure	1995	1500	SF
HP Pump No. 1 & Pressure Tank - 175 gpm, 10	1995	1	ea
HP Pump No. 2 & Pressure Tank - 175 gpm, 10	1995	1	ea
HP Pump No. 3 & Pressure Tank - 175 gpm, 10	1995	1	ea
HP Fire Protection (Diesel Fueled) - 2,000 gpm, 125 HP	1995	1	ea

Ani

g, inspections, etc.	15.00%	0.00%
Contingency	0.00%	
Adjustment Factor	0.00%	
Total Markup	1.15	

<u>Unit Cost</u>	<u>RCN</u>	<u>Original Design Life</u>	<u>Revised Design Life</u>	<u>RCNLD</u>
80.00	120,000	75	75	92,800.00
3,943.00	3,943	30	25	1,261.76
3,949.00	3,949	30	25	1,263.68
\$ 3,949.00	3,949	30	25	1,263.68
\$ 7,550.00	7,550	30	30	3,271.67
	139,391			99,861
Total	139,391			99,861
Annual Depreciation	2,325			

-

1.15

Historical Inflation Index	OC	OCLD	First Replacement Year	2nd Replacement Year
73%	100,810	77,960	2070	2145
73%	3,312	1,060	2020	2045
73%	3,317	1,062	2020	2045
73%	3,317	1,062	2020	2045
73%	6,343	2,748	2025	2055
	117,100	83,891		
	117,100	83,891		

Fort Knox Potable Water Utility System

Development, SDC's, engineering

Elevated Storage Tanks

Market

Item	Year Installed/ Upgraded	Quantity
Elevated Storage Tanks (Steel) Repairs		
Tank No. 1 & cathodic protection - 250,000 gallons	1935	250000 Gal
1937 Tank No. 2 & cathodic protection - 500,000 gallons	1937	500000 Gal
1941 Tank No. 3 & cathodic protection - 500,000 gallons	2009	500000 Gal
1941 Tank No. 4 & cathodic protection - 500,000 gallons	1941	500000 Gal
1958 Tank No. 5 & cathodic protection - 300,000 gallons	1958	300000 Gal
Tank No. 6 & cathodic protection - 500,000 gallons	1995	500000 Gal
Tank No. 7 & cathodic protection - 500,000 gallons	1997	500000 Gal
Tank No. 8 & cathodic protection - 500,000 gallons	1997	500000 Gal

g, inspections, etc.	15.00%	0.00%
Contingency	0.00%	
Adjustment Factor	0.00%	
Total Markup	1.15	

<u>Unit Cost</u>	<u>RCN</u>	<u>Original Design Life</u>	<u>Revised Design Life</u>	<u>RCNLD</u>
\$1.80	517,500	75	75	\$0
\$1.80	1,035,000	75	75	\$0
\$1.80	1,035,000	75	75	\$993,600
\$1.80	1,035,000	75	75	\$55,200
\$1.80	621,000	75	75	\$173,880
\$1.80	1,035,000	75	75	\$800,400
\$1.80	1,035,000	75	75	\$828,000
\$1.80	1,035,000	75	75	\$828,000
	7,348,500			3,679,080
Total	7,348,500			3,679,080

1.15

Historical Inflation Index	OC	OCLD	Replacement Year	Tank Rehab. Year
1%	5,175	0	2029	2054
1%	10,350	0	2029	2054
94%	975,304	936,291	2084	2034
8%	82,998	4,427	2027	2052
16%	100,198	28,056	2035	2060
73%	756,073	584,696	2070	2036
76%	783,739	626,991	2072	2037
76%	783,739	626,991	2072	2036
	3,497,575	2,807,452		
	3,497,575	2,807,452		

**Tank Rehab.
Cost**

\$ 195,000

\$ 390,000

\$ 390,000

\$ 390,000

\$ 390,000

\$ 390,000

\$ 390,000

\$ 390,000

Fort Knox Potable Water Utility System

Development, SDC's, engineering, inspections, etc.
Contingency
Market Adjustment Factor
Total Markup

15.00%
0.00%
0.00%
1.15

0.00%

1.15

Item	Year Inst	Quantity	Unit Cost	RCN	% ISDC	Original Design Life	Revised Design Life	RCNLD	Historical Inflation Index	OC	OCLD	Replacement Year	Replacement Year Start	Replacement Year End	Comments	Other Notes	
MAIN POST																	
DISTRIBUTION PIPE - CAST IRON (12" and Over Replaced with DIP)																	
Unknown Diameter (assume 6")	1935	1,420	LF	37.00	52,540	0%	75	50	-	1%	604	-	ISDC	2014	2028	ISDC #23 - partial, then remaining % over 15 years	Replacement in kind refers to PVC
0.75" (NA - DIP starts at 4" Diameter)	1935	1,155	LF	20.00	23,100	0%	75	50	-	1%	266	-	ISDC	2014	2028	ISDC #23 - partial, then remaining % over 15 years	Replacement in kind refers to PVC
1" (NA - DIP starts at 4" Diameter)	1935	4,463	LF	21.00	93,723	22%	75	50	-	1%	1,078	-	ISDC	2014	2028	ISDC #23 - partial, then remaining % over 15 years	Replacement in kind refers to PVC
1.25" (NA - DIP starts at 4" Diameter)	1935	4,207	LF	22.00	92,554	1%	75	50	-	1%	1,064	-	ISDC	2014	2028	ISDC #23 - partial, then remaining % over 15 years	Replacement in kind refers to PVC
1.5" (NA - DIP starts at 4" Diameter)	1935	12,470	LF	22.00	274,340	6%	75	50	-	1%	3,155	-	ISDC	2014	2028	ISDC #23 - partial, then remaining % over 15 years	Replacement in kind refers to PVC
2" (NA - DIP starts at 4" Diameter)	1935	28,936	LF	24.00	692,064	13%	75	50	-	1%	7,959	-	ISDC	2014	2028	ISDC #23 - partial, then remaining % over 15 years	Replacement in kind refers to PVC
2.5" (NA - DIP starts at 4" Diameter)	1935	4,785	LF	25.00	119,625	10%	75	50	-	1%	1,376	-	ISDC	2014	2028	ISDC #23 - partial, then remaining % over 15 years	Replacement in kind refers to PVC
3" (NA - DIP starts at 4" Diameter)	1935	9,504	LF	25.00	237,600	45%	75	50	-	1%	2,732	-	ISDC	2014	2028	ISDC #23 - partial, then remaining % over 15 years	Replacement in kind refers to PVC
4"	1935	13,331	LF	27.50	366,603	28%	75	50	-	1%	4,216	-	ISDC	2014	2028	ISDC #23 - partial, then remaining % over 15 years	Replacement in kind refers to PVC
5" (NA Pipe diameters even numbers - use 6")	1935	410	LF	37.00	15,170	0%	75	50	-	1%	174	-	ISDC	2014	2028	ISDC #23 - partial, then remaining % over 15 years	Replacement in kind refers to PVC
6"	1935	216,645	LF	37.00	8,015,965	28%	75	50	-	1%	92,182	-	ISDC	2014	2028	ISDC #23 - partial, then remaining % over 15 years	Replacement in kind refers to PVC
8"	1935	158,064	LF	38.00	6,008,432	24%	75	50	-	1%	69,074	-	ISDC	2014	2028	ISDC #23 - partial, then remaining % over 15 years	Replacement in kind refers to PVC
8" - HR Center	1935	4,237	LF	38.00	161,006	100%	75	50	-	1%	1,852	-	ISDC	2013	2057	ISDC #22	Replacement in kind refers to PVC
10"	1935	46,690	LF	66.00	3,081,540	37%	75	50	-	1%	35,438	-	ISDC	2014	2028	ISDC #23 - partial, then remaining % over 15 years	Replacement in kind refers to PVC
12"	1935	30,122	LF	74.00	2,229,028	14%	75	50	-	1%	25,634	-	ISDC	2014	2028	ISDC #23 - partial, then remaining % over 15 years	Replacement in kind refers to Ductile Iron
14"	1935	16,393	LF	84.00	1,377,012	10%	75	50	-	1%	15,836	-	ISDC	2014	2028	ISDC #23 - partial, then remaining % over 15 years	Replacement in kind refers to Ductile Iron
16"	1935	3,920	LF	82.00	360,640	0%	75	50	-	1%	4,147	-	ISDC	2014	2028	ISDC #23 - partial, then remaining % over 15 years	Replacement in kind refers to Ductile Iron
24"	1935	10,560	LF	181.00	1,911,360	0%	75	50	-	1%	21,881	-	ISDC	2014	2028	ISDC #23 - partial, then remaining % over 15 years	Replacement in kind refers to Ductile Iron
DISTRIBUTION PIPE - DUCTILE IRON																	
1.5" (NA - DIP starts at 4" Diameter)	1958	180	LF	21.00	3,780	100%	75	50	-	1%	43	-	ISDC	2013	ISDC #21		Replacement in kind refers to PVC
1.25" (NA - DIP starts at 4" Diameter)	1958	7,076	LF	22.00	155,672	100%	75	50	-	1%	1,790	-	ISDC	2013	ISDC #21		Replacement in kind refers to PVC
1.5" (NA - DIP starts at 4" Diameter)	1958	4,293	LF	23.00	98,739	100%	75	50	-	1%	1,135	-	ISDC	2013	ISDC #21		Replacement in kind refers to PVC
2" (NA - DIP starts at 4" Diameter)	1958	11,436	LF	24.00	274,464	100%	75	50	-	1%	3,156	-	ISDC	2013	ISDC #21		Replacement in kind refers to PVC
3" (NA - DIP starts at 4" Diameter)	1958	1,115	LF	25.00	27,875	100%	75	50	-	1%	321	-	ISDC	2013	ISDC #21		Replacement in kind refers to PVC
4"	1958	25,815	LF	37.00	955,955	100%	75	50	-	1%	10,953	-	ISDC	2013	ISDC #21		Replacement in kind refers to PVC
6"	1958	18,035	LF	38.00	685,330	100%	75	50	-	1%	7,881	-	ISDC	2013	ISDC #21		Replacement in kind refers to PVC
8"	2007	4,118	LF	38.00	156,484	0%	75	50	140,835.60	91%	162,992	146,693	2057	2057	ISDC #21		Replacement in kind refers to PVC
10"	1994	4,677	LF	58.00	308,692	100%	75	50	-	1%	3,550	-	ISDC	2013	ISDC #21		Replacement in kind refers to PVC
12"	1958	897	LF	74.00	66,378	100%	75	50	-	1%	763	-	ISDC	2013	ISDC #21		Replacement in kind refers to Ductile Iron
14"	1994	9,183	LF	74.00	678,642	0%	75	50	434,906.68	72%	550,068	357,787	2044	2044	ISDC #21		Replacement in kind refers to Ductile Iron
14"	1958	192	LF	84.00	16,128	100%	75	50	-	1%	185	-	ISDC	2013	ISDC #21		Replacement in kind refers to Ductile Iron
DISTRIBUTION PIPE - TRANSITE (Replaced with C-900PVC sch 80)																	
1"	1935	831	LF	21.00	17,514	100%	75	50	-	1%	201	-	ISDC	2013	ISDC #20		Replacement in kind refers to PVC
1.5"	1935	1,988	LF	22.00	43,736	100%	75	50	-	1%	503	-	ISDC	2013	ISDC #20		Replacement in kind refers to PVC
2"	1935	3,726	LF	24.00	89,424	100%	75	50	-	1%	1,028	-	ISDC	2013	ISDC #20		Replacement in kind refers to PVC
3"	1935	284	LF	25.00	7,100	100%	75	50	-	1%	82	-	ISDC	2013	ISDC #20		Replacement in kind refers to PVC
6"	1935	4,231	LF	37.00	156,647	100%	75	50	-	1%	1,800	-	ISDC	2013	ISDC #20		Replacement in kind refers to PVC
8"	1935	6,472	LF	38.00	245,336	100%	75	50	-	1%	2,628	-	ISDC	2013	ISDC #20		Replacement in kind refers to PVC
10"	1935	9,927	LF	66.00	391,182	100%	75	50	-	1%	4,468	-	ISDC	2013	ISDC #20		Replacement in kind refers to PVC
DISTRIBUTION PIPE - PVC (Replaced with C-900PVC sch 80)																	
1.5"	2005	16,688	LF	23.00	381,984	0%	75	50	328,509.24	87%	382,421	328,882	2065	2065			
2"	2008	10,659	LF	24.00	256,152	0%	75	50	230,211.84	92%	272,779	250,957	2058	2058			
3"	2007	473	LF	25.00	11,825	0%	75	50	10,642.50	91%	12,317	11,085	2057	2057			
3"	2008	603	LF	25.00	15,075	0%	75	50	13,869.00	92%	16,016	14,735	2058	2058			
4"	1997	24	LF	27.50	660	0%	75	50	462.00	76%	575	402	2047	2047			
4"	2005	334	LF	27.50	9,185	0%	75	50	7,699.10	87%	9,199	7,908	2055	2055			
4"	2007	443	LF	27.50	12,183	0%	75	50	10,964.35	91%	12,689	11,420	2057	2057			
4"	2008	6,368	LF	27.50	175,120	0%	75	50	161,110.40	92%	186,051	171,167	2058	2058			
6"	1994	9,224	LF	37.00	341,288	0%	75	50	218,424.32	72%	280,777	179,697	2044	2044			
6"	2003	7,640	LF	37.00	282,680	0%	75	50	231,797.60	84%	272,014	223,052	2053	2053			
6"	2005	2,912	LF	37.00	107,744	0%	75	50	92,659.84	87%	107,667	92,706	2055	2055			
6"	2007	6,372	LF	37.00	235,784	0%	75	50	212,187.60	91%	245,570	221,013	2057	2057			
6"	2008	5,033	LF	37.00	186,221	0%	75	50	171,323.32	92%	197,845	182,018	2058	2058			
8"	1994	10,211	LF	38.00	388,018	0%	75	50	248,331.52	72%	319,222	204,302	2044	2044			
8"	1997	14,572	LF	38.00	551,836	0%	75	50	386,285.20	76%	480,550	336,385	2047	2047			
8"	2005	18,915	LF	38.00	718,770	0%	75	50	618,142.20	87%	719,592	618,849	2055	2055			
8"	2007	2,223	LF	38.00	84,474	0%	75	50	76,026.60	91%	87,897	79,189	2057	2057			
8"	2008	4,644	LF	38.00	176,472	0%	75	50	162,354.24	92%	197,488	172,489	2058	2058			
10"	1994	1,555	LF	66.00	102,630	0%	75	50	65,683.20	72%	84,434	54,037	2044	2044			
10"	2005	106	LF	66.00	6,996	0%	75	50	6,016.56	87%	7,004	6,023	2055	2055			
12"	1994	1,996	LF	75.00	149,700	0%	75	50	101,796.00	72%	123,158	83,747	2044	2044		Replacement in kind refers to Ductile Iron	
Zussman Range (MLEden) - Pipe Material - PVC																	
1"	1997	110	LF	21.00	2,657	0%	75	50	1,965.81	76%	2,012	1,469	2047	2047			
1"	2002	383	LF	21.00	9,249	0%	75	50	7,769.54	82%	7,588	6,374	2052	2052			
1.5"	2002	60	LF	23.00	1,587	0%	75	50	1,289.60	82%	1,302	1,042	2052	2052			
4"	1997	30,177	LF	27.50	829,868	0%	75	50	580,907.25	76%	722,666	505,866	2047	2047			
Zussman Range (MLEden) - Pipe Material - PE																	
1"	2002	1,111	LF	21.00	26,831	0%	75	50	21,464.52	82%	22,011	17,609	2052	2052		Replacement in kind refers to PVC	
4"	2002	13,668	LF	27.50	375,870	0%	75	50	300,696.00	82%	354,608	283,686	2052	2052		Replacement in kind refers to PVC	
Yano Range - Pipe Material - PVC																	
12"	1990	2,500	LF	24.00	60,000	0%	75	50	38,640.00	64%	44,358	24,840	2040	2040			
Basham's Corner - Pipe Material - PVC																	
1.25"	2004	72	LF	22.00	1,822	0%	75	50	1,603.01	85%	1,556	1,368	2054	2054			
2"	2004	60	LF	24.00	1,656	0%											

Fort Knox Potable Water Utility System

Development, SDC's, engineering, inspections, etc.	15.00%	0.00%
Contingency	0.00%	0.00%
Market Adjustment Factor	0.00%	0.00%
Total Markup	1.15	

Water Distribution Pipe 1.15

Item	Year Inst	Quantity	Unit Cost	RCN	% ISDC	Original Design Life	Revised Design Life	RCNLD	Historical Inflation Index	OC	OCLD	Replacement Year	Replacement Year Start	Replacement Year End	Comments	Other Notes
	2004	256 LF	37.00	9,472	0%	75	50	7,556.48	85%	9,297	7,810	2054				
		847,012		35,013.997				4,900.099		6,223.941	4,605.886					
				Total	35,013.997			4,900.099		6,223.941	4,605.886					

Fort Knox Potable Water Utility System

Development, SDC's, engineering, inspections, etc.
 Contingency
 Market Adjustment Factor
 Total Markup

Fire Hydrants

<u>Item</u>	<u>Year Inst</u>	<u>Quantity</u>		<u>Unit Cost</u>
FIRE HYDRANTS				
Fire Hydrants	1935	600	Each	2,915.00
Fire Hydrants	1935	122	Each	2,915.00
Fire Hydrants	1958	83	Each	2,915.00
Fire Hydrants	1997	14	Each	2,915.00
Fire Hydrants	1990	1	Each	2,915.00
Fire Hydrants	2004	2	Each	2,915.00
Fire Hydrants	2005	54	Each	2,915.00

Total

0.00% 0.00%
0.00%
0.00%
100.00%

<u>% ISDC</u>	<u>RCN</u>	<u>Original Design Life</u>	<u>Revised Design Life</u>	<u>RCNLD</u>
100%	1,923,900	40	25	-
0%	355,630	40	25	-
0%	241,945	40	25	-
0%	40,810	40	25	16,324.00
0%	2,915	40	25	349.80
0%	5,830	40	25	3,964.40
0%	157,410	40	25	113,335.20
	2,728,440			133,973
	2,728,440			133,973

-

1.00

Historical Inflation Index	OC	OCLD	Replacement Year	2nd Replacement
1%	17,490	-	ISDC	2040
1%	3,556	-	2014	2039
16%	39,038	-	2014	2039
76%	30,903	12,361	2022	2047
64%	1,874	225	2015	2040
85%	4,976	3,384	2029	2054
87%	137,035	98,665	2030	2055
	234,872	114,635		
	234,872	114,635		

Replacement Year Start	Replacement Year End
2014	2023
2014	2023

LABOR & EXPENSES - TRANSITION					Start Up			
					HRS	\$		
LABOR								
Labor Category	Staff	# of Emps	U/M	Hourly Cost				
General Manager	Jim Bruce	1	Hr	\$ 70.55	138	\$ 9,735.23		
Project Manager	Preston Pendley, PE	1	Hr	\$ 39.40	276	\$ 10,875.72		
Operations Manager	Brett Pyles	1	Hr	\$ 42.97	275	\$ 11,816.20		
Water Treatment Manager	Jim Smith	1	Hr	\$ 93.97	73	\$ 6,859.99		
Water Treatment Supervisor	Kent Horrel	1	Hr	\$ 85.48	54	\$ 4,615.92		
Water Distribution Supervisor	Richard Stranahan	1	Hr	\$ 35.44	34	\$ 1,204.81		
Maintenance Supervisor	John Azzura	1	Hr	\$ 72.74	110	\$ 8,001.56		
HCWD Board		1	Hr	\$ 411.34	4	\$ 1,645.36		
Legal		1	Hr	\$ 150.00	100	\$ 15,000.00		
Accountant	Stephanie Brown	1	Hr	\$ 27.23	86	\$ 2,342.20		
Safety and Security	David Simmons	1	Hr	\$ 68.33	120	\$ 8,199.21		
TOTAL LABOR (Raw + Fringe)		11			1,270	\$ 80,296.21		
Fringe				HCWD1 Bene Rate for 2011 31.0%				
				LWC Bene Rate for 2011 68.5%				
EXPENSES					U/M	Unit Rate	QTY	\$
OPERATING EXPENSES								
Computers			Lot	\$ 35,300.00	1	\$ 35,300.00		
Office Furnishings			Lot	\$ 15,300.00	1	\$ 15,300.00		
Equipment			Lot	\$ 70,150.00	1	\$ 70,150.00		
Vehicles			Lot	\$ 159,000.00	1	\$ 159,000.00		
Backhoe			Each	\$ 67,500.00	1	\$ 67,500.00		
Water Labs			Lot	\$ 54,000.00	1	\$ 54,000.00		
Purchase/License CMMS			Lot	\$ 25,000.00	1	\$ 25,000.00		
Other Equipment			Lot	\$ 21,000.00	1	\$ 21,000.00		
Subtotal						\$ 447,250.00		
OUTSIDE SERVICES / SUBCONTRACTS / PURCHASES								
Transition Support - CH2M HILL			Lot	\$ 40,000.00	1	\$ 40,000.00		
Subtotal						\$ -		
TOTAL EXPENSES						\$ 487,250.00		
TOTAL LABOR AND EXPENSES						\$ 567,546.21		
SUBTOTAL						\$ 567,546.21		
OVERHEAD AND SERVICE CENTER				4.4%		\$ 24,972.03		
GRAND TOTAL						\$ 592,518.24		

Exhibit 12

Use or disclosure of data contained in this sheet
subject to the restriction on the title page of this pro

Task	Hours	Staff	Rate
On-Site Familiarization			
Meetings with Army	32	GM/PM/OM	
Legal Due Diligence	100	Legal	150
Legal Due Diligence - Admin	32	GM/PM/OM	
Contact Regulatory Agencies	4	PM/OM/WPM	
Joint Inventory of facilities & fixed equipment	24	PM/OM	
Joint Inventory of non-fixed	16	PM/OM	
Verify System Inventory Maps	24	PM/OM/DS	
Inventory of manuals and records	8	WTS/WPM/MS	
Initial joint meter reading	8	WTS	
Develop Purchase Order for Replacement Meters	2	Acct	
HR Transition			
Clearances, special access, badges	24	GM/Acct	
Develop Policy Procedures Manual	40	PM/OM	
Employee Handbook	24	PM/OM	
Evaluate Existing Employees for Employment	16	GM/PM/OM/Acct/WPM	
Initial meetings with all interested employees	16	GM/PM/OM	
Interviews	32	PM/OM	
Conduct New Employee Training & Orientation	24	PM/OM	
Employee Start Date	0		
Administrative Transition			
Install and startup accounting/financial system	4	GM/Acct	
Set up monthly billing	2	Acct	
Set up monthly reporting (Service interruptions, meter reading, etc.)	8	GM/PM/OM/WPM	
Board Time to Review Final Costs	4	HCWD Board	234
Board Time to Review Final Costs - Admin	6	GM/PM/OM	
Purchasing			
Establish Procedure	4	Acct	
Compile List of Vendors	4	Acct	
Compile List of Subcontractors	4	Acct	
Open Vendor Accounts & Establish Credit	2	Acct	
Purchase Required Equipment and Material	24	Acct	
Safety and Security			
Update Emergency Response Plan	40	SS	
Update Safety and Health Plan	40	SS	
Prepare Right-to-Know and HAZMAT	20	SS	

Task	Hours	Staff	Rate
Safety Procedures and Briefing with Employees	18	SS	
Transition of System Operations			
Review MSDSs	2	SS	
Review Existing O&M Manuals, Plans, Specifications	10	PM/OM/WTS/DS/WPM	
Develop/Implement Process Control Strategies	16	PM/OM/WPM	
Review/Develop QA/QC Procedures	3	WPM	
Revise/Create SOPs	28	WTS	
Arrange for Transfer of All Files, Logs, Records	1	PM	
Final Joint Meter reading	4	PM/OM	
Assume Operational Responsibility	59	PM/OM	
Transition of System Maintenance			
Implement Maintenance Management System	74	MS	
Develop Preventive Maintenance Tasks and Activities	16	MS	
Identify Equipment Repair and Replacement Requirements	8	PM/OM/MS/WPM	
Establish Inventory Control System	4	MS	
Assume Maintenance Responsibility	0		
Transfer Ownership			
Water	0		

Key	Total Hours
GM - General Manager	138
PM- Project Manager	276
OM - Operations Manager	275
WPM - Water Treatment Project Manager	73
MS - Maintenance Supervisor	110
DS - Distribution Supervisor	34
SS - Safety and Security	120
Acct - Accounting Specialist	86
WTS - Water Treatment Supervisor	54
Legal	100
HCWD No. 1 Board	4
Total Labor Hours Transition	1270
Notes	
Tasks with zero hours (0) will be included in associated tasks	

Task	Hours	Staff	Rate
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Ft. Knox Water Transition Cost

TREATMENT/DISTRBUTION

Item	Quantity	Each	Total	
Admin				
Computers-PC	4	\$1,200	\$4,800	
GIS PC	1	\$2,200	\$2,200	Updated May, 2011
Computers-Laptop	4	\$1,500	\$6,000	
Plotter	1	\$4,000	\$4,000	Updated May, 2011
GPS & Software	1	\$12,000	\$12,000	Updated May, 2011, re
Desks	4	\$700	\$2,800	
Misc Furniture	1	\$2,500	\$2,500	
Other Misc	1	\$10,000	\$10,000	
Copy/FAX Machine	1	\$2,500	\$2,500	
Purchase/License CMMS	1	\$25,000	\$25,000	
		Sub Total	\$71,800	
Tools				
Trash Pumps	3	\$650	\$1,950	
Pipe Saws	2	\$1,200	\$2,400	Updated May, 2011
Hydraulic Unit/Tools	1	\$8,000	\$8,000	Updated May, 2011
Hand Tools	3	\$1,333	\$4,000	
Shop Tools	1	\$8,000	\$8,000	
Parts Storage Systems	4	\$1,000	\$4,000	
Line Locators	2	\$3,200	\$6,400	Updated May, 2011
Muller B101 Tapping Machine	1	\$3,000	\$3,000	
Metal Detector	2	\$200	\$400	Updated May, 2011
Valve Ex/Vac	1	\$7,700	\$7,700	Updated May, 2011
Backhoe Forks	1	\$1,700	\$1,700	
Air Monitor	2	\$1,300	\$2,600	
Misc (safety, other)	1	\$20,000	\$20,000	
		Sub Total	\$70,150	
Water Labs				
Instruments	1	\$ 26,000	\$ 26,000.00	
Lab-ware/Glass-ware	1	\$ 12,000	\$ 12,000.00	
Safety Supplies/Hardware	1	\$ 8,000	\$ 8,000.00	
Work Station (PC, desk, etc)	2	\$ 1,900	\$ 3,800.00	
Chemicals	1	\$ 8,000	\$ 8,000.00	
		Sub Total	\$57,800	
Vehicles/Equipment				
F-750 Dump Truck	1	\$52,000	\$52,000	Updated May, 2011, re
F-250 Utility Bed 4x4	3	\$28,000	\$84,000	Updated May, 2011, re
F-250 4x4 Ext. Cab Reg Bed	1	\$23,000	\$23,000	Updated May, 2011, re
580 4x4 Case Backhoe	1	\$67,500	\$67,500	Updated May, 2011, re
Equipment trailer	1	\$11,000	\$11,000	Updated May, 2011, re
Other	1	\$10,000	\$10,000	
		Sub Total	\$247,500	

TOTAL:

\$447,250 Updated May, 2011

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Initial System Deficiency Corrections
Summary Table

ISDC No.		Labor and Materials	HCWD1 Supervision 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	\$ 96,700	\$ 9,670		\$ 106,370	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	Decommission 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		\$ 23,530,859	\$ 303,157	\$ 2,428,502	\$ 26,262,518	

Exhibit 13

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

Central Plant

Pump Rm - 5,000
Chemical R 5,000
Main Bldg. 3,000
Sedimentat 3,000
Lime Tank 9,500
Sludge Tan 20,500
Backwash 7,500
Misc. Site F 5,000
subtotal 58,500

ISDC # 9

Clear Well 2.0 MG

Remove & 1,225,000 Option 1
Replace Lin 145,000 Option 2
subtotal 1,370,000

ISDC # 10

Otter Creek Pump Station

Pump Rm. 7,500
Bridge & Pi 95,000
subtotal 102,500

ISDC # 7

Muldraugh WTP

Main Bldg. 88,000

subtotal 88,000

ISDC # 8

Table IV-5

Initial System Deficiency Correction Schedule

This table generally follows the format included in RFP Schedule 3--Initial System Deficiency Corrections/
Connection Charges/Transition Period

Project Name	Volume I Reference Number	Year to Be Constructed	Project Cost 2011 \$	Project Cost 2012 \$
System Survey/Assessment and Re-Map the Utility Systems	1	1	\$ 119,515	\$121,610
Leak Detection Survey	2	1	\$ 48,677	\$49,530
Hydraulic Model	3	1	\$ 21,670	\$22,050
Master Flow Meters at the WTPs	4	1	\$ 24,480	\$24,909
20-inch Valves	5	1	\$ 87,780	\$89,319
New Raw Water from the Muldraugh WTP to 16-inch Raw Water Line Between Otter Creek PS & Central WTP	6	1	\$ 1,912,680	\$1,946,203
Otter Creek PS	7	1	\$ 115,426	\$117,449
Muldraugh HLPS	8	1	\$ 106,370	\$108,234
Central WTP	9	1	\$ 63,096	\$64,202
Central WTP Clearwell	10	1	\$ 1,794,000	\$1,825,443
Fire Hydrants	11	4	\$ 1,923,900	\$1,957,620
Water Storage No. 3	12	1	\$ -	\$0
Water Storage No. 5	13	1	\$ 431,929	\$439,499
Automatic Transfer Switches	14	2	\$ 244,375	\$248,658
Line Between Otter Creek PS & Central WTP	15	2	\$ 1,743,268	\$1,773,822
Water Storage Tank No. 6	16	2	\$ 389,160	\$395,981
Water Storage Tank No. 8	17	2	\$ 389,160	\$395,981
Water Storage Tank No. 7	18	3	\$ 196,535	\$199,980
SCADA System	19	3	\$ 330,000	\$335,784
Distribution Pipe & Valves - Transite	20	3	\$ 1,094,155	\$1,113,332
Distribution Pipe & Valves - DIP	21	3	\$ 2,981,841	\$3,034,103
Distribution Pipe & Valves - CIP HR Center	22	3	\$ 185,157	\$188,402
Distribution Pipe & Valves - CIP	23	4	\$ 6,504,769	\$6,618,777
Tanks - Rehab				
Tank No. WT001	24	3	\$ 23,978	\$24,398
Tank No. WT002	25	3	\$ 23,978	\$24,398
Tank No. WT004	26	3	\$ 44,850	\$45,636
West Point Well Platforms				
Well Platforms - Rehab (6)	27	1	\$ 62,790	\$63,891
Van Voorhis Pump House				
Pump House - Rehab	28	1	\$ 8,625	\$8,776
Decommission Muldraugh WTP	29	5	\$ 487,600	\$496,146
Muldraugh operation--Year 1	30	1	\$ 982,279	\$999,495
Muldraugh operation--Year 2	31	2	\$ 980,119	\$997,297
Muldraugh operation--Year 3	32	3	\$ 980,119	\$997,297
Muldraugh operation--Year 4	33	4	\$ 980,119	\$997,297
Muldraugh operation--Year 5	34	5	\$ 980,119	\$997,297

Table IV-6

Initial System Deficiency Correction Costs and Residual Value

(2012 Dollars)

Project Name	Reference Number	Cost				
		1	2	3	4	5
System Survey/Assessment and Re-Map the Utility Systems	1	\$121,610	\$0	\$0	\$0	\$0
Leak Detection Survey	2	\$49,530	\$0	\$0	\$0	\$0
Hydraulic Model	3	\$22,050	\$0	\$0	\$0	\$0
Master Flow Meters at the WTPs	4	\$24,909	\$0	\$0	\$0	\$0
20-inch Valves	5	\$89,319	\$0	\$0	\$0	\$0
New Raw Water from the Muldraugh WTP to 16-inch Raw Water Line Between Otter Creek PS & Central WTP	6	\$1,946,203	\$0	\$0	\$0	\$0
Otter Creek PS	7	\$117,449	\$0	\$0	\$0	\$0
Muldraugh HLPS	8	\$108,234	\$0	\$0	\$0	\$0
Central WTP	9	\$64,202	\$0	\$0	\$0	\$0
Central WTP Clearwell	10	\$1,825,443	\$0	\$0	\$0	\$0
Fire Hydrants	11	\$0	\$0	\$0	\$1,957,620	\$0
Water Storage No. 3	12	\$0	\$0	\$0	\$0	\$0
Water Storage No. 5	13	\$439,499	\$0	\$0	\$0	\$0
Automatic Transfer Switches	14	\$0	\$248,658	\$0	\$0	\$0
Line Between Otter Creek PS & Central WTP	15	\$0	\$1,773,822	\$0	\$0	\$0
Water Storage Tank No. 6	16	\$0	\$395,981	\$0	\$0	\$0
Water Storage Tank No. 8	17	\$0	\$395,981	\$0	\$0	\$0
Water Storage Tank No. 7	18	\$0	\$0	\$199,980	\$0	\$0
SCADA System	19	\$0	\$0	\$335,784	\$0	\$0
Distribution Pipe & Valves - Transite	20	\$0	\$0	\$1,113,332	\$0	\$0
Distribution Pipe & Valves - DIP	21	\$0	\$0	\$3,034,103	\$0	\$0
Distribution Pipe & Valves - CIP HR Center	22	\$0	\$0	\$188,402	\$0	\$0
Distribution Pipe & Valves - CIP	23	\$0	\$0	\$0	\$6,618,777	\$0
Tanks - Rehab		\$0	\$0	\$0	\$0	\$0
Tank No. WT001	24	\$0	\$0	\$24,398	\$0	\$0
Tank No. WT002	25	\$0	\$0	\$24,398	\$0	\$0
Tank No. WT004	26	\$0	\$0	\$45,636	\$0	\$0
West Point Well Platforms		\$0	\$0	\$0	\$0	\$0
Well Platforms - Rehab (6)	27	\$63,891	\$0	\$0	\$0	\$0
Van Voorhis Pump House		\$0	\$0	\$0	\$0	\$0
Pump House - Rehab	28	\$8,776	\$0	\$0	\$0	\$0
Decommission Muldraugh WTP	29	\$0	\$0	\$0	\$0	\$496,146
Muldraugh operation--Year 1	30	\$999,495	\$0	\$0	\$0	\$0
Muldraugh operation--Year 2	31	\$0	\$997,297	\$0	\$0	\$0
Muldraugh operation--Year 3	32	\$0	\$0	\$997,297	\$0	\$0
Muldraugh operation--Year 4	33	\$0	\$0	\$0	\$997,297	\$0
Muldraugh operation--Year 5	34	\$0	\$0	\$0	\$0	\$997,297
Subtotal		\$5,880,610	\$3,811,739	\$5,963,329	\$9,573,694	\$1,493,443
General & Administrative Overhead		\$258,747	\$167,716	\$262,386	\$421,243	\$65,712
Total		\$6,139,357	\$3,979,455	\$6,225,716	\$9,994,937	\$1,559,155

Table IV-7

Initial System Deficiency Correction Cash Flow

Contract Year	Project Costs 2012\$	Current Year \$*								ISDC Revenues 2009\$
		ISDC Revenues	Project Costs	Net Revenues	Beginning Balance	Average Balance	Interest Income	Interest Expense	Ending Balance	
1	6,139,357	5,685,975	6,139,357	(453,382)	-	(226,691)	-	12,468	(465,850)	5,397,186
2	3,979,455	5,685,975	4,049,202	1,636,773	(465,850)	352,536	7,051	-	1,177,973	5,304,220
3	6,225,716	5,785,632	6,445,862	(660,230)	1,177,973	847,858	16,957	-	534,700	5,304,220
4	9,994,937	5,887,035	10,529,738	(4,642,703)	534,700	(1,786,651)	-	98,266	(4,206,269)	5,304,220
5	1,559,155	5,990,216	1,671,370	4,318,846	(4,206,269)	(2,046,846)	-	112,577	0	5,304,220

* Includes projected future inflation of 1.752678 percent per year

27. Refer to Utility Service Contract, Section B.4. Explain why the Monthly Service Charge increases after Year 2. State all assumptions used to determine the change in the Monthly Service Charge after Year 2.

ANSWER 27:

Form B-4 was requested by the USG to evaluate all 50 years of the HCWD1 proposed pricing, including a total 50 year contract period total cost. As part of the proposal evaluation, the USG and its consultant require this format in order to carry out its due diligence and complete what they call a "should cost" computer model ("UPEAST", Utility Privatization Economic Analysis Support Tool, see USG memo attached as **Exhibit 14**) which helps the USG determine if the proposal meets USG requirements of cost savings to proceed with a military utility system privatization.

The B-4 form and annual prices are not the actual annual charge that will be charged, nor were included in the proposed charges and tariff with this filing. Any future charge changes would be as HCWD1 explained in its proposal to the USG (see enclosed excerpt from proposal attached as **Exhibit 15**). The individual year changes on the B-4 schedule are an economic calculation which uses estimated annual operating costs, repair and replacement project costs, inflation assumption and other assumptions.

WITNESS: Mr. Jim Bruce, General Manager, HCWD1



ACQUISITION,
TECHNOLOGY
AND LOGISTICS

OFFICE OF THE UNDER SECRETARY OF DEFENSE

3000 DEFENSE PENTAGON
WASHINGTON, DC 20301-3000

MAR. 11 2002

MEMORANDUM FOR ASSISTANT SECRETARY OF THE ARMY (INSTALLATIONS
AND ENVIRONMENT)
ASSISTANT SECRETARY OF THE NAVY (INSTALLATIONS
AND ENVIRONMENT)
ASSISTANT SECRETARY OF THE AIR FORCE
(INSTALLATIONS, ENVIRONMENT AND LOGISTICS)
DIRECTOR, DEFENSE ENERGY SUPPORT CENTER

SUBJECT: Utilities Privatization Economic Analysis Support Tool (UPEAST)

The Department has developed Utilities Privatization Economic Analysis Support Tool (UPEAST), a software model to assist in the economic analysis of utilities privatization proposals. This model has been tested extensively and reviewed by applicable DoD officials. UPEAST has been determined to meet the requirements of 10 U.S.C. §2688, OMB Circular A-94 and DoD Instruction 7041.3, and may be used as part of the source selection process to determine whether it is economical to privatize a utility system.

UPEAST is available at <http://www.acq.osd.mil/installation/utilities/privatization.htm>. It is written in Microsoft Excel 2000 and will not work with earlier versions of the program. If you have any questions regarding UPEAST please contact Dr. Get Moy at 703-697-6195.

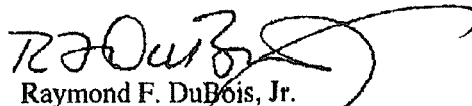
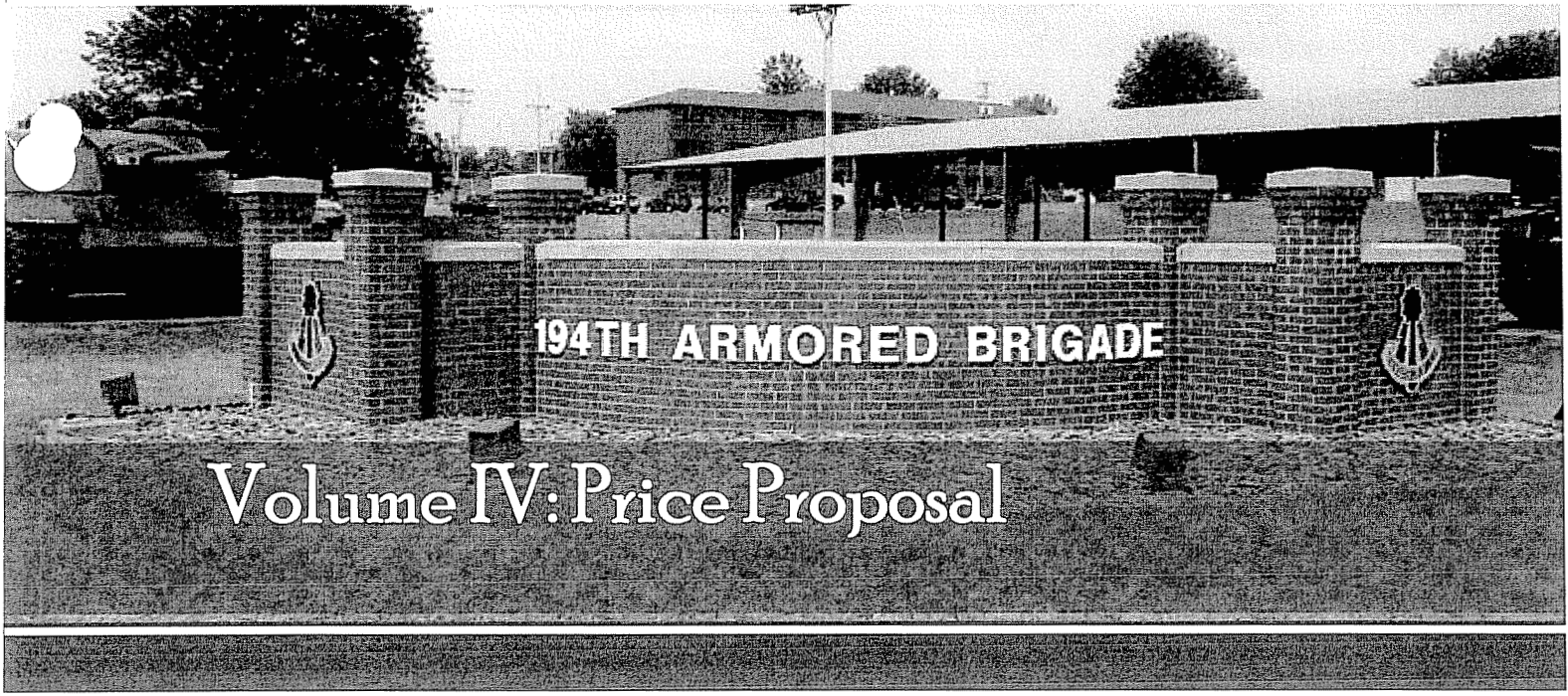

Raymond F. DuBois, Jr.
Deputy Under Secretary of Defense
(Installations and Environment)



Exhibit 14



Volume IV: Price Proposal

Section 1 – Price Schedule B-1

Introduction

Hardin County Water District No. 1 (HCWD1) proposes to provide water utility service to Fort Knox under a tariff regulated by the Kentucky Public Service Commission (PSC). As a water and wastewater utility within the Commonwealth of Kentucky, all of HCWD1's operations are regulated by the PSC. In this role, the PSC also regulates all tariffs charged for utility service by HCWD1. Accordingly, HCWD1 proposes to provide water utility service to Fort Knox, as outlined in DESC RFP SP0600-08-R-0803, under the regulated tariff option provided in the RFP. Consistent with the RFP requirements, HCWD1 is therefore submitting its proposed pricing through Price Schedule B-1.

HCWD1 proposes to charge the Government under Rate Schedule FKW, which will exclusively be for water utility service at Ft. Knox. The rate schedule will have 4 separate charges and one credit. The charges will include: a Monthly Service Charge, an Initial System Deficiency Correction (ISDC) Surcharge, a Transition Surcharge, and a Purchase Price Recovery Surcharge. The credit consists of a monthly payment for amortization of the purchase price HCWD is paying the Government for the Ft. Knox water system. Each charge and credit is

discussed below and will be subject to approval by the PSC. During the 50-year contract period, any of the charges can be changed at any time with approval from the PSC. It is anticipated that rate increases may occur every few years but not more often than once per year. HCWD1 will notify the Contracting Officer of anticipated rate adjustments (increases or decreases) in conjunction with submittal of the Annual System Deficiency Corrections/Upgrades and Renewals and Replacement Plan.

The Government revised Schedule B-1 to include projected Monthly Service Charges for all 50 years of the proposed contract. Those projections are in nominal dollars and include projected changes based on future inflation. Initial charges shown in Schedule B-1 match those shown in proposed Rate Schedule FKW. However, future year prices to the Government will be established through Rate Schedule FKW as approved by the PSC. Changes shown in Schedule B-1 are projections and do not reflect programmed year to year changes in prices.

As allowed by the RFP, the tariff is being offered subject to PSC approval. That approval is expected within 90 days of contract award.

Use of this sheet is subject to the restriction on the title page of this proposal.

Schedule B-1 and Rate Schedule FKW

Schedule B-1 for this proposal includes 4 CLINs specified by the Government.

The PSC requires that charges for the service it regulates be established through a public process and that charges approved by the PSC be published in a tariff sheet. HCWD1's proposed tariff sheet for water service to Fort Knox is provided on the page following Schedule B-1. That tariff sheet contains HCWD1's Rate Schedule FKW—Fort Knox Water. This is the "applicable tariff" that would apply to water utility service within Fort Knox.

The FKW rate schedule includes a Monthly Service Charge, an ISDC Surcharge, a Transition Surcharge, a Purchase Price Recovery Surcharge, and a Credit as Payment of Purchase Price. Together, these constitute the utility service charges specified for CLINs 0001, 0002, 0003, and 0004 in Schedule B-1 plus a credit as payment of the purchase price.

CLIN 0001 – Applicable Tariff

CLIN 0001 includes a provision for a Utility Service Charge and a Monthly Credit as Payment for the Purchase Price. Each of these provisions is discussed below.

The Monthly Service charge covers all normal operations and maintenance (O&M) expenses, as well as the cost of normal renewals and replacements (R&R) of plant and equipment for the Fort Knox water utility system. As shown in Schedule B-1, no federal income taxes are included in the Monthly Service Charge. Federal income taxes are also not included in any other charges proposed by HCWD1. That is because the District is exempt from any federal or state income taxes. A letter from the law firm of Skeeters, Bennett, Wilson & Pike (SBW&P), included in Attachment IV-1, affirms that exemption. That affirmation is confirmed by a letter from the accounting firm of Ray, Foley, Hensley & Company, also included in Attachment IV-1.

As shown in the FKW rate schedule, the charge will initially be \$246,172 per month. This rate may vary in the future to compensate for the effect of general price inflation as well as other conditions that may differ from those projected in Schedule B-1 for the 50 year contract period.

The methods used to estimate O&M costs and capital costs, including costs for R&R and ISDCs, are described in Section 3.

Each of the rates included in CLIN 0001 is based on the direct cost of service for providing water utility service to Fort Knox, plus a 4.4 percent markup to cover an apportionment of HCWD1' general and administrative (G&A) overhead costs. As such, the rates are no less favorable to Fort Knox than any other HCWD1 rate is to any other HCWD1's customer. Details regarding this tariff are provided in Section 2 of this price proposal.

The PSC recently approved a similar fixed monthly service charge associated with the special contract for sanitary and storm sewer utility service at Ft. Knox. KAR 5:011 § 13 provides more guidance for special contracts. More detail on this subject is provided in Attachment IV-1.

Credit as Payment for Purchase Price

HCWD proposes to pay \$8,903,000 for the Ft. Knox potable water system. HCWD1 bases its rates on the net book value of its plant in service. Accordingly, net book value is the market value for the Ft. Knox potable water system that will be used to provide water utility service to the base for the long term. Because the Government does not keep accounting records regarding the book value of its utility assets, HCWD1 estimated the net book value. This consisted of estimating the Original Cost New Less Depreciation value of the potable water system assets that will not be demolished as part of HCWD's contract with the Government.

HCWD proposes to pay the Government over a 10 year (120 month) period at an annual interest rate of 3.0 percent (0.25 percent per month). This rate is equal to the Government's Nominal Interest Rate on Treasury Securities and Bonds for a 10-year

term as specified in OMB Circular A-94, Appendix C (December 2010). As indicated in CLIN 0001, this will translate into a fixed credit to the Government of \$85,968 per month for 120 months. Details of the calculation are provided in Section 2.

CLIN 0002 – Initial System Deficiency Corrections/Connection Charges

As mentioned above, Rate Schedule FKW includes a surcharge that is designed to recover the cost of ISDCs over a 60-month period.

The ISDC Surcharge will recover all ISDC costs based on a uniform monthly charge (in constant dollars) during the 5-year period when the ISDC projects are to be completed. This surcharge will be in effect for 60 months.

The ISDC will be subject to change based on changes from conditions projected in this proposal. Such changes could include variation from the 1.752628 percent inflation rate that the Government specified for use in this proposal and changes in site conditions from those reasonably anticipated from inventory information and site visits. During the first 2 years, the surcharge is projected to be \$473,841 per month (\$5,686,097 per year).

HCWD1 is authorized by the State of Kentucky (KRS 74.395) to impose surcharges. That regulation and a legal opinion from SBW&P stating that HCWD1 has the authority to impose a surcharge for capital improvements are included in Attachment IV-1. The attachment also includes a statement from SBW&P that KPSC legal counsel affirms the willingness of the PSC to approve surcharges where appropriate for capital funding.

The bases for the ISDC Surcharge are further discussed in Section 2.

CLIN 0003 – Recoverable Portion of Purchase Price

Because Ft. Knox will be the only beneficiary of water utility service supplied by HCWD1, all costs incurred to provide this service must be recovered from the Government. Accordingly, HCWD1 plans to assess a CLIN0003 charge for recovery of the full purchase price. The charge will be equal to the

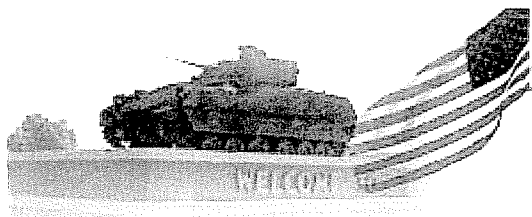
credit provided to the Government in CLIN0001. Specifically, the charge will be \$85,968 per month and will only be assessed during the first 120 months of the contract. Details of the calculation are provided below.

Item	Interest Rate	Amount	Amortization Period (Months)	Monthly Charge
Recoverable Portion Purchase Price	3.0%	\$ 8,903,000	120	\$85,968

CLIN 0004 – Transition Period

As mentioned above, Rate Schedule FKW also includes a 1-month surcharge for HCWD1 to recover costs it incurs during the transition period prior to the initial day of full HCWD1 operations.

The Transition Surcharge will last 1 month and then no longer be charged. In effect, this will simply be a single payment of \$592,518.



Our team members are recognized as industry leaders in asset management, which will ensure that the Government will receive the maximum lives from its assets. Based on our preliminary evaluation of the Fort Knox Water System, we believe that it is possible for many of the ISDCs to be deferred into the future. Our proposal includes the cost for these improvements to be responsive to the RFP. We would welcome the opportunity to discuss additional cost saving measures associated with deferring some of the ISDC projects during the negotiation process or as part of a negotiated change in the future during contract performance, which HCWD1 and the Government would agree to in advance.

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Section 3 – Standard Estimating Methodology

This section provides a description of HCWD1's accounting system and CAS exemption, the regulatory process for future price changes, and HCWD1's cost estimating approaches that underpin its price proposal.

HCWD1 Accounting System

HCWD1 proposes to incorporate accounting for Fort Knox water utility service into its existing accounting system. That system is described below, followed by a statement of HCWD1's exemption from Federal Cost Accounting Standards (CAS).

Existing System

HCWD1's accounting system complies with standards established by the National Association of Regulatory Utility Commissioners (NARUC) and the American Water Works Association (AWWA). HCWD1's chart of accounts conforms to the Uniform System of Accounts prescribed by NARUC. A comprehensive accounting and financial audit is completed annually by a Certified Public Accountant, with results presented to HCWD1's Board of Commissioners and the PSC. All year end account balances are classified and reported to the PSC in prescribed account numbers, using the PSC annual financial report templates. Record retention also complies with NARUC record retention schedules.

The accounting system maintains four separate funds: Water, Radcliff Sewer, Ft. Knox Sewer, and Ft. Knox Storm Sewer. A fifth fund will be added for the Fort Knox water system. This system allows HCWD1 to separate costs among different customer classes and design rates that better reflect cost of service characteristics.

CAS Exemption

According to 48 CFR 9903.210-1(b), Federal contracts "in which the price is set by law or regulation" are "exempt from all CAS requirements," where "CAS" refers to Federal Cost Accounting

Standards. As a public utility with its prices regulated under the laws of the Commonwealth of Kentucky by the PSC, HCWD1 is exempt from CAS. It is therefore also exempt from submitting a CAS Disclosure Statement.

Regulatory Process for Future Price Changes

As noted in the previous section, HCWD1 will notify the Contracting Officer of anticipated rate adjustments (increases or decreases) in conjunction with submittal of the Annual System Deficiency Corrections/Upgrades and Renewals and Replacement Plan.

HCWD1's primary criteria for setting water utility service rates at Ft. Knox are to be sure that:

- Funding is adequate to provide quality service to the Post
- There are no cross subsidies where HCWD1's other water or sewer service customers subsidize service to the post or where the post subsidizes service to HCWD1's other customers
- HCWD1 continues its performance as a quality service provider with and appropriately strong financial condition.

HCWD1 proposes to negotiate rate adjustments with the Government prior to approaching the PSC to seek formal approval of the rate change. Such a process will minimize time and expense the Government and HCWD1 will need to invest in the regulatory process. The proposed process for negotiating rate adjustments is described below followed by a brief description of the formal PSC ratemaking process that would serve as a fall-back process if the Government and HCWD1 could not agree on needed rate adjustments.

Negotiation Process

After receiving PSC approval of the overall utility service contract between the Government and HCWD1, we propose that the process for making rate changes be negotiated using guidelines for the

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Monthly Service Charge and the ISDC Surcharge described below.

Monthly Service Charge: O&M Component

HCWD1 will maintain separate funds for its O&M expenditures at Ft. Knox. This is a requirement of GASB 34 accounting standards as well as required by PSC for ratemaking that avoids subsidies between customer classes. HCWD1 will routinely compare the accumulation of those costs plus its G&A overhead rate (currently 4.4 percent) against revenues being received from the O&M component of the Monthly Service Charge. If they are out of alignment, we will propose a rate adjustment.

Monthly Service Charge: R&R Component

The basis for making a rate adjustment in the R&R component of the Monthly Service Charge is presented in Section 2, under "Future Changes to the R&R Charge". HCWD1 will monitor key inputs to the R&R Charge (as calculated in Col. 3 of Table IV-4) and propose rate adjustments when it appears necessary in order to keep the charge stable in constant dollar terms over the 50-year contract period.

ISDC Surcharge

The ISDC Surcharge will remain in effect for the first 60 months of the contract period. It will be removed from Rate Schedule FKW in the 61st month of the contract and will not be assessed again during the contract period.

The ISDC Surcharge will be subject to adjustment based on conditions that may differ from those reasonably projected for the various ISDC projects. ISDC adjustments would be made on the same basis as described for R&R projects.

The PSC has an administrative regulation for temporary surcharges, which HCWD1 will be required to follow. This includes accounting for all revenues received from the surcharge, and all expenditures paid from the revenues, as well as a specific list of projects that the surcharge will fund.

PSC Ratemaking Process

Once a rate revision is negotiated between the Government and HCWD1, HCWD1 would file it with the PSC. The normal process for negotiated rate adjustments between a utility and a single contract customer is for the PSC to approve the adjustment without a hearing.

However, in the unlikely event that the Government and HCWD1 could not agree on an adjustment, both parties can rely on the PSC to effectively arbitrate the rate change through a normal hearing process.

Cost Estimating Methods

Methods employed to estimate costs that underpin prices included in this price proposal are described below. This includes O&M cost estimating procedures and capital cost estimating procedures used to estimate R&R and ISDC costs.

O&M Costs

The O&M cost estimates were prepared based on standard operational practices at similar facilities within the water utility industry, along with reference material from O&M manuals for equipment similar to that at Fort Knox. The estimates also consider facility condition assessment data and the facility replacement schedule prepared by the Government. Additionally, information provided by the Army and obtained during the site visit was used to determine normal operating conditions, such as staffing levels, hours of operations, pump run time, operations tasks, sampling and analytical requirements, and maintenance tasks.

The operating costs were developed separately for the water treatment and distribution systems. Costs for the water treatment system cover the actual production of water from the source water supply through the first reservoir storage point in the system. Costs for the distribution system cover other storage reservoirs and the distribution pipelines.

Costs were estimated for individual direct cost categories, including labor and benefits, equipment

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and repairs, travel and administration, materials and supplies, insurance, and other direct costs. These cost estimates cover all the tasks described in the O&M Plan. HCWD1 is aware of the security and access requirements at Fort Knox and has a process in place for it and its subcontractors. The costs associated with security and access requirements are included in the cost estimates.

The transition-phase costs cover several essential tasks, such as coordinating meetings with Fort Knox stakeholders, hiring necessary employees, establishing on-site administrative facilities, conducting inventories, procuring O&M materials and stock, transferring manuals and records, reading meters, implementing standard operating procedures, and training new employees .

For water treatment operations, costs were estimated with reliance on information provided by the Government, such as chemical dosages needed to meet regulatory requirements and staffing levels and schedules. Since Fort Knox distribution system operational data were limited, costs were estimated based on operating experience at similar water distribution facilities and HCWD1's process knowledge as the current wastewater privatization contractor at Fort Knox.

The estimating methods used for each cost category are described in the following paragraphs. In some cases, it was necessary to estimate the combined cost of production and distribution operations and then prorate the costs between the two functions.

Labor and Benefits

Labor time and costs were identified for each task required for operations, routine inspection, travel to remote facilities, and estimated maintenance (preventive, predictive, and corrective) for similar facilities with similar equipment. HCWD1's standard labor rates were used, including benefits and overhead cost. Because no historical information was provided on past corrective or preventive maintenance, the maintenance labor requirements were estimated based in part on assessment of the current equipment condition during the site visit.

Electricity

No costs were included in the proposal for energy or other on-post utilities. It is assumed that the Government will provide electricity for water utility operations without charge.

Equipment and Repairs

Maintenance costs were determined based on the Government Recognized Deficiencies outlined in Section J1 of the RFP and on experience with similar equipment at existing facilities. Costs were developed for predictive, preventive, and corrective maintenance based on HCWD1's standard maintenance practices, as described in the Maintenance Plan.

Travel and Administration

These costs were estimated from standard HCWD1 costs for meetings and administration associated with the O&M personnel at equivalent-sized facilities.

Materials and Supplies

Materials and supplies include safety materials and equipment to perform each required task; laboratory supplies for sample collection, preservation, and analysis; employee uniforms; equipment manuals and reference materials; repair and maintenance materials; and materials for record keeping. These costs were estimated based on requirements for the O&M of equivalent-sized facilities.

Insurance

HCWD1 asked an independent insurance broker to provide an estimate for HCWD1 acquiring a second water utility, similar in size to its existing system and to provide an estimate of the cost of insurance required by the RFP. Insurance cost estimates were provided for the following types of coverage with the minimums specified in the RFP:

- Commercial/General Liability—\$1,000,000 per occurrence and \$2,000,000 aggregate for all premises and operations.
- Automobile Liability—\$1,000,000 combined single limit per occurrence. This includes owned and leased vehicles.

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- Workers' Compensation and Employers' Liability—\$500,000
- Property--\$28,000,000
- Umbrella/Excess Liability Coverage—\$1,000,000 per occurrence and \$1,000,000 in aggregate. This is in excess of general, automobile, and employers' liability coverage types shown above.

Other Direct Costs

Operational supplies, training, and support activities were based on standard costs for the number of personnel required for equivalent-sized facilities.

R&R and ISDC Costs

All estimates used to develop the ISDC and R&R project costs are based on various estimating methods. In preparing the cost estimates, HCWD1 reviewed actual, recent local bids for various types of construction. These included review of actual bids received by HCWD1, LWC and other local engineers. These actual bids were then applied as parametric units by size for estimating various future ISDC and R&R projects.

All capital costs were estimated in 2011 dollars. Pricing includes fully loaded contractor costs for labor, materials and systems to be in place and ready for use and reflects local area conditions. Construction cost estimates were prepared using the following resources and general methods:

- Data available on the system inventory identified in the RFP (Attachment J1)
- Comparison with bid tabulations from recent similar projects in the Kentucky area available in HCWD1, LWC, and CH2M HILL databases
- Consideration of estimating procedures included in R.S. Means Co. *Building Construction Cost Data*. Kingston, Massachusetts.

The estimating process was simplified to an approach that assumed all facilities have much in common, and the approach took into account only limited site-specific features. These estimates are generally Class 5 estimates with a level of accuracy in accordance with the Association for the Advancement of Cost Engineering (AACE) guidelines. Following contract award and increasing

levels of project definition, the cost estimates can be further refined.

Unit costs were developed for system inventory in which replacement-in-kind upgrades are anticipated. In cases where existing materials are no longer available or are not permitted to be installed, the unit costs were developed based on materials that would be used to replace the existing materials when necessary. For example, transite pipe upgrades are programmed to be replaced with PVC pipe. Unit costs were then multiplied by the number of units. Depending on the basis for the estimate for specific inventory items, allowances for costs associated with the installment were added. In those cases, the allowances were consistent with typically those used in standard cost estimating procedures.

Our estimates include typical allowance costs for planning, engineering, permitting, construction management, and state sales tax.

A frequent detailed analysis of local market conditions will be made throughout the contract period to confirm cost estimates are aligned with actual conditions. This will include consideration of the following:

- Number of qualified contractors
- Current workload of contractors
- Contractors selectively bidding projects
- Premium wage requirements to retain skilled workers and management staff
- Availability of crafts/trades
- Abnormal fuel impacts and uncertainty (Oil > \$100 barrel, Diesel > \$4.00/gal)
- Abnormal material impacts of the last 2 years
- Impact of recent natural disasters

The summary approach for key components is described below. More detail on the estimating approach is provided in Attachment IV-5.

Water Facilities

Water facility construction capital costs were developed for raw water supplies, treatment facilities, and pumping stations by use of the following general approaches. New facility cost

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estimates represent the construction cost to construct on a near-virgin site, which is free from utility obstruction and interferences. The new facilities would be located in close proximity to the existing facilities to minimize additional site/civil improvements and to maintain continued operation of existing facilities during construction. Only necessary selective demolition is included. Building costs are based on square footage of the floor area. Materials of construction would be equal to or better than existing.

Pipelines

Pipeline construction capital costs were developed based on typical unit prices for pipe installation in Kentucky. Pipeline lengths and diameters were based on the asset inventory provided by the Government in the J1 Attachment. Materials of construction for pipeline replacement are based on current HCWD1's design standard in which PVC pipe is used for pipes that are 10 inches or smaller in diameter, and ductile iron pipe is used for pipes that are 12 inches or larger in diameter. The estimate also assumes that the number of existing hydrants and mainline valves are appropriate for fire protection and line isolation, and that pipe installation will predominantly occur in soil adjacent to roadways.

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by the parties hereto for the installation, operation, maintenance, and repair of the facilities of the Contractor required to be located upon Government premises. All applicable taxes and other charges in connection therewith, together with all liability of the Contractor in construction, operation, maintenance and repair of such facilities, shall be the obligation of the Contractor.

(c) Authorized representatives of the Contractor will be allowed access to the facilities on Government premises at reasonable times to perform the obligations of the Contractor regarding such facilities. It is expressly understood that the Government may limit or restrict the right of access herein granted in any manner considered necessary (e.g., national security, public safety).

(d) Unless otherwise specified in this contract, the Contractor shall, at its expense, remove such facilities and restore Government premises to their original condition as near as practicable within a reasonable time after the Government terminates this contract. In the event such termination of this contract is due to the fault of the Contractor, such facilities may be retained in place at the option of the Government for a reasonable time while the Government attempts to obtain service elsewhere comparable to that provided for hereunder.

(End of clause)

52.241-6 Service Provisions.

As prescribed in 41.501(c)(5), insert a clause substantially the same as the following:

SERVICE PROVISIONS (FEB 1995)

(a) *Measurement of service.* (1) All service furnished by the Contractor shall be measured by suitable metering equipment of standard manufacture, to be furnished, installed, maintained, repaired, calibrated, and read by the Contractor at its expense. When more than a single meter is installed at a service location, the readings thereof may be billed conjunctively, if appropriate. In the event any meter fails to register (or registers incorrectly) the service furnished, the parties shall agree upon the length of time of meter malfunction and the quantity of service delivered during such period of time. An appropriate adjustment shall be made to the next invoice for the purpose of correcting such errors. However, any meter which registers not more than ___ percent slow or fast shall be deemed correct.

(2) The Contractor shall read all meters at periodic intervals of approximately 30 days or in accordance with the policy of the cognizant regulatory body or applicable bylaws. All billings based on meter readings of less than ___ days shall be prorated accordingly.

(b) *Meter test.* (1) The Contractor, at its expense, shall periodically inspect and test Contractor-installed meters at intervals not exceeding _____ year(s). The Government has the right to have representation during the inspection and test.

(2) At the written request of the Contracting Officer, the Contractor shall make additional tests of any or all such meters in the presence of Government representatives. The cost of such additional tests shall be borne by the Government if the percentage of errors is found to be not more than ___ percent slow or fast.

(3) No meter shall be placed in service or allowed to remain in service which has an error in registration in excess of ___ percent under normal operating conditions.

(c) *Change in volume or character.* Reasonable notice shall be given by the Contracting Officer to the Contractor regarding any material changes anticipated in the volume or characteristics of the utility service required at each location.

(d) *Continuity of service and consumption.* The Contractor shall use reasonable diligence to provide a regular and uninterrupted supply of service at each service location, but shall not be liable for damages, breach of contract or otherwise, to the Government for failure, suspension, diminution, or other variations of service occasioned by or in consequence of any cause beyond the control of the Contractor, including but not limited to acts of God or of the public enemy, fires, floods, earthquakes, or other catastrophe, strikes, or failure or breakdown of transmission or other facilities. If any such failure, suspension, diminution, or other variation of service shall aggregate more than _____ hour(s) during any billing period hereunder, an equitable adjustment shall be made in the monthly billing specified in this contract (including the minimum monthly charge).

(End of clause)

52.241-7 Change in Rates or Terms and Conditions of Service for Regulated Services.

As prescribed in 41.501(d)(1), insert a clause substantially the same as the following:

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 * _____ 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)

* NOTE: Insert language prescribed in 41.501(d)(1).

52.241-8 Change in Rates or Terms and Conditions of Service for Unregulated Services.

As prescribed in 41.501(d)(2), insert a clause substantially the same as the following:

CHANGE IN RATES OR TERMS AND CONDITIONS OF SERVICE FOR UNREGULATED SERVICES (FEB 1995)

(a) This clause applies to the extent that services furnished hereunder are not subject to regulation by a regulatory body.

(b) After _____ [insert date], either party may request a change in rates or terms and conditions of service, unless otherwise provided in this contract. Both parties agree to enter in negotiations concerning such changes upon receipt of a written request detailing the proposed changes and specifying the reasons for the proposed changes.

(c) The effective date of any change shall be as agreed to by the parties. The Contractor agrees that throughout the life of this contract the rates so negotiated will not be in excess of published and unpublished rates charged to any other customer of the same class under similar terms and conditions of use and service.

(d) 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.

(e) Any changes to rates, terms, or conditions as a result of such negotiations shall be made a part of this contract by the issuance of a contract modification.

(End of clause)

52.241-9 Connection Charge.

As prescribed in 41.501(d)(3), insert a clause substantially the same as the following:

CONNECTION CHARGE (FEB 1995)

(a) *Charge.* In consideration of the Contractor furnishing and installing at its expense the new connection facilities described herein, the Government shall pay the Contractor a connection charge. The payment shall be in the form of progress payments, advance payments or as a lump sum, as agreed to by the parties and as permitted by applicable law. The total amount payable shall be either the estimated cost of \$_____ less the agreed to salvage value of \$_____, or the actual cost less the salvage value, whichever is less. 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.

(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) The Contractor agrees to allow the Government, on each monthly bill for service furnished under this contract to the service location, a credit of _____ percent of the amount of each such bill as rendered until the accumulation of credits shall equal the amount of such connection charge, 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, before any termination of this contract but after completion of the facilities provided for in this clause, 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 accelerate the credits provided for under paragraph (c)(1) of this clause, 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.

(3) In the event the Contractor terminates this contract, or defaults in performance, prior to full credit of any connection charge paid by the Government, the Contractor shall pay to the Government an amount equal to the uncredited balance of the connection charge as of the date of the termination or default.

SECTION 6

Alternate Pricing Structures

6.1 Alternate Pricing Overview

The Army and Air Force versions of the utilities privatization service contract allow for alternate proposals or pricing structures. The most commonly used contract types for both services is Fixed Price with Prospective Price Redetermination (FP-PPR) and Regulated Tariff. The previous section addressed the FP-PPR contract type; this section addresses the other possible pricing structures, with emphasis on the Regulated Tariff.

6.1.1 Army Pricing Structures

The Army version of utilities privatization service contract lists four contract types, each requiring a different bid schedule.

- Schedule B-1, Regulated Tariff
- Schedule B-2, Firm Fixed Price
- Schedule B-3, Fixed-Price with Economic Price Adjustment (FP-EPA)
- Schedule B-4, Fixed Price with Prospective Price Redetermination (FP-PPR)

6.1.1 Air Force Pricing Structures

The Air Force version of utilities privatization service contract lists two contract types, each requiring a different bid schedule.

- Schedule B-2, Fixed Price with Prospective Price Redetermination (FP-PPR)
- Schedule B-3, Regulated Tariff

6.2 Regulated Tariff Price Schedules

When a Contractor and the Government agree to tariff-based cost proposal, charges to the Government will be based on a rate that is developed following the utility's standard rate-making approach - the same one used for developing rates and charges for the utility's other customers. The rate or rates will be set by an appropriate regulatory oversight such as a state public service commission or other such body created to regulate the utility and chartered with setting utility rates.

6.2.1 Army Tariff Price Schedule

Schedule B-1 is available for public utilities proposing regulated rates. Schedule B-1, shown in Exhibit 6-1, is comprised of four sub-CLINs. For sub-CLINs AA (applicable tariff(s)) and AB (monthly credit as payment for purchase price), the schedule shows the tariff/schedule/rate. Sub-CLINs AC (initial capital upgrades) and AD (recoverable portion of the purchase price) represent additions to the fixed monthly charge that vary depending on the amortization schedules proposed for each initial capital upgrade project and recovery

of the purchase price; therefore, schedule B-4 does not show a specific monthly service credit/charge for these items. Sub-CLINs AC and AD are only required if the tariff rate proposed by the Offeror provides for separate pricing of connection charges and the recoverable portion of the purchase price. If not proposed separately, the costs for these charges may be included in the proposed tariff/schedule/rate under sub-CLIN AA.

EXHIBIT 6-1

Tariff Bid Schedule (Army)

Utilities Privatization Service Contract Price Redetermination Guidance Manual

Schedule B-1		
CLIN^a: _____	Utility System: _____	
Sub-CLINs	Supplies/Services	Tariff/Schedule/Rate
AA	Applicable Tariff(s) ^a (See B.5.1)	\$ _____
AB	Monthly Credit as Payment for Purchase Price (see B.5.2). \$ _____ Monthly Credit _____ # months _____ Interest Rate	\$ _____
AC	Initial Capital Upgrades / Connection Charges ^b (see B.5.3 and B.7.4 (Schedule 3). This amount should not be included in the price offered for Sub-CLIN AA.)	\$ <u>Varies</u> – See Schedule 3
AD	Recoverable Portion of Purchase Price ^b (see B.5.4 and B.7.5 (Schedule 4). This amount should not be included in the price offered for Sub-CLIN AA.)	\$ <u>Varies</u> – See Schedule 4
<p>^a CLIN number to be filled in by the Offeror. CLIN numbers are shown in Schedule A paragraph B.3, <i>Systems to be Privatized</i>. Offerors shall provide a comprehensive description of proposed tariffs in their Price Proposals. See B.5.1.</p> <p>^b SUBCLINs AC and AD are required <u>only</u> if the tariff provides for <u>separate</u> identification of connection charges and the recoverable portion of the purchase price. If separate identification is not provided, it will be assumed the tariff rate includes these costs.</p> <p>NOTE: The Purchase Price, Recoverable Portion of the Purchase Price, interest rate and amortization period are proposed by the Offeror.</p>		

6.2.2 Air Force Tariff Price Schedule

Schedule B-3 is available for public utilities proposing regulated rates. Schedule B-3, shown in Exhibit 6-2, is comprised of three sub-CLINs. For sub-CLINs AA (purchase price and purchase price recovery), AB (applicable tariff(s)) and AC (transition period), the schedule shows the tariff/schedule/rate. There is no separate sub-CLIN for initial capital upgrades/connection charges.

EXHIBIT 6-2

Schedule B-3		
_____ (Installation Name)		
CLIN: _____	Utility System: _____	
Sub-CLINs	Supplies/Services	Tariff/Schedule/Rate
AA	Purchase Price. \$ _____ LESS Recoverable Portion of the Purchase Price. \$ _____ The Monthly Credit as Payment for Purchase Price and Recoverable Portion of the Purchase Price will be amortized over the first _____ months of service at an interest rate that is (specify either of the following) _____ percentage points above or _____ percentage points below the annual interest rate on U.S. Treasury Bonds in effect at the time of award.	\$ _____
AB	Applicable Tariff(s) or Special Contract Rate(s) filed with and under the jurisdiction of the State Public Utility Commission	\$ _____
AC	Transition Period (Contract Award through Contract Start) Contractor proposed days _____. Fixed charge.	\$ _____

6.2.3 Supporting Schedules for Tariff Price Schedule

Offerors proposing a tariff bid schedule are not required to submit Schedule 1 (or L-3 for Air Force contracts) for the fixed monthly charge or Schedule 2 (or L-2 for Air Force contracts) for the Renewals and Replacements - 50 year schedule. If the Offeror proposes initial capital upgrades/connection charges and/or the recoverable portion of the purchase price separately, they must include the respective supporting Schedules 3 and 4 for Army contracts. There is no specific requirement to submit Schedule 3 for initial capital upgrade(s)/connection charge(s) for Air Force contracts, and the recoverable portion of the purchase price is already accounted for in sub-CLIN AA (if applicable).

6.2.4 Exclusion of the Commodity

Standard utility tariff rates generally include charges for generating the commodity, transmitting it to the installation, and distributing it to each end user. However, the purchase of electricity, water, and natural gas commodities are not included under the utility privatization service contract. Paragraph C.3.5, *Energy/Water Commodity Supply*, states that the Government retains the right to procure or supply electricity, water, and natural gas that will be transported by the utility systems conveyed under the privatization

action. Thus, applicable tariff rates proposed under the utility privatization service contract, must be de-coupled rates. Under the utilities privatization service contract, the tariff rate must reflect only the costs of owning, operating, and maintaining the utility infrastructure.

6.2.5 Alternate Pricing Changes

When the Government agrees to an alternate cost proposal based on the use of regulated utility rates, changes will not be governed by either FAR 52.216-5, Price Redetermination, Prospective, or FAR 52.243-1, Changes Fixed Price - Alternate 1. Under tariff based alternate pricing, changes to the service contract rates will be governed by FAR 52.241-7, Change in Rates or Terms and Conditions of Service for Regulated Services.

6.2.5.1 Frequency of Rate Changes

There are no legal requirements governing how frequently a utility revises its rates. A Contractor may follow a policy of reviewing rates on a periodic schedule (annually, bi-annually, etc.) or it may revise its rates when current rates are not generating sufficient revenue to cover the system's costs. Political and other factors may also influence the timing of pursuing a rate adjustment. The Government involvement in regulated rate setting will be limited to that similar to all other customers served by the utility (Contractor). The following sections discuss the process of rate setting for publicly and privately owned utilities.

6.2.5.2 Rate Change Process for Publicly Owned Utilities

The process for revising a publicly owned utility's rates is set by state law and by the legislation or governing documents that created the entity that owns or created the utility. Most publicly owned utilities rates are set by its board of directors or council following a public hearing(s) regarding proposed rates. In a few states, rates and adjustment to rates may be subject to review by the state's public utility commission or similar body.

The rate revision process for public utilities generally involves the following steps:

- The utility's staff or consultants prepare an analysis proposing a revision in rates and other charges.
- At a public hearing, the proposal is then brought before the board of directors or council of the city, county, district, or other entity that owns the utility. Frequently, the proposed rates will have two readings at separate hearings.
- At the hearings, public comment is taken prior to the council or board deciding to adopt or modify the proposed rates.
- Two to 4 weeks before the first public hearing, a notice regarding the utility's proposed rate revisions should be posted in the local newspaper and may be included in other public notices from the utility. The public notice may include proposed rate changes or provide directions to help users obtain a copy of the proposed changes.

6.2.5.3 Rate Change Process for Privately Owned Utilities

The state Public Service Commission (PSC), Public Utilities Commission (PUC), or similar body regulates most privately owned utilities. However, smaller utilities operating in only one political jurisdiction (such as a county or city) may be subject to regulation by the

county or city under the operating franchise. The process by which rates are adjusted under PSC regulation is more adversarial in nature than for publicly owned utilities. The general process is as follows:

- The utility files a rate case with the PSC requesting the rate adjustment, including documentation justifying the adjustment.
- PSC staff is then assigned to review and evaluate the requested change.
- If the PSC staff review finds the proposed rate increase to be too high, as it frequently does, then a process is implemented to try to resolve the conflict. This ultimately ends in a public hearing before PSC commissioners, who decide on the allowable rate increase.

6.2.5.4 Government Involvement in the Public Utility Rate-Making Process

As shown, the rate-making process for public utilities is a structured process in which the Government would have limited control. However, there are mechanisms through which customers can participate in the processes in an attempt to protect their interests. Upon learning of a potential rate adjustment, the Government should seek to obtain supporting documentation for the proposed rate change. Should there be questions or concerns, the Government could then take the following actions:

- Contact utility staff to ask questions and express concerns.
- Document questions and concerns in written correspondence to the utility.
- Attend the public hearing to express concerns and opinions.
- Challenge the rates in court.

6.2.5.5 Government Involvement in the Private Utility Rate-Making Process

Like the public utility rate-making process, the Government has a limited ability to control or influence the rate-making process for privately owned utilities. The Government may participate in the rate-making process for privately owned utilities in the following ways:

1. Provide comments to the PSC staff during their review.
2. Submit correspondence to pose questions and concerns during the public hearing.
3. Testify during the public hearing.
4. Participate through an ombudsman, who represents the public and customers of some states during these proceedings.

6.3 Firm Fixed Price Schedule

The Army version of the utilities privatization service contract includes a firm fixed price schedule (B-2) available to offerors interested in proposing a firm fixed price.¹¹ The requirements for submitting a firm fixed price bid are the same as for submitting a bid under the FP-PPR type contract, see requirements detailed in Section 5, Fixed Price with

¹¹ The Air Force version of the utility privatization service contract allows offerors to propose "alternate" proposals. Thus, it is conceivable that an Offeror interested in proposing a firm fixed price proposal for the Air Force could propose a fixed price contract as an alternate proposal.

28. Refer to Utility Service Contract, Section C.11.3.2(a).
- a. State whether Hardin District and the United States Government have agreed upon a connection charge for new connections. If yes, state the amount of the charge and describe how the charge was developed. Show all calculations, state all assumptions, and provide all work papers used to derive the charge.
 - b. If Hardin District and the United States Government have yet to agree upon a connection charge for new connections, state whether the charge for each new connection will be subject to negotiation.

ANSWER 28:

- a. Hardin District and the United States Government have not agreed on a predetermined connection charge, as it is part of the service contract fee and all costs can be recovered in accordance with FAR 52.241-7. Per the District's contract with the United States Government, section C.3.3.1, states;

"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 in accordance with FAR 52.241-7, Changes in Rates or Terms and Conditions of Service for Regulated Services."

It has been the District's experience, during the last 6 years, as the owner of the sewer utility, that new taps, connections and meters (water & sewer) are considered part of each construction project initiated by the USG and are paid for as part of the building construction contract and installed by a third party contractor. The design of the tap and any required metering is specified in accordance with HCWD1 construction specifications, inserted in the construction contract by the USG for each new project.

- b. All costs are part of the service contract. In accordance with FAR 52.241-7 rates can be changed as needed. Costs of installing new connections or taps are not paid from HCWD1 current charges, but are included with a USG construction contract as described above. If however the USG asked HCWD1 to install a new service connection, the FAR and Contract would allow HCWD1 to bill the customer for all costs related to that new connection and service. In only one instance since 2005 when HCWD1 took over the FK sewer system, has the USG asked HCWD1 to install a new connection for a new building on post. In that instance, HCWD1 billed the USG for all actual costs (labor, equipment, materials/ supplies and overhead) related to the new connection, and the USG paid that added cost along with its normal monthly charges.

WITNESS: Mr. Brett Pyles, Operations Manager, HCWD1

29. Describe the penalties that will be assessed against the United States Government for late payment of any of the charges set forth in the Utility Service Contract. This description should compare these penalties with those set forth in Hardin District's rate schedules currently on file with the Commission.

ANSWER 29:

Per FAR Subpart 32.904 (incorporated by reference into the Contract between the USG and HCWD1) "payment due dates are the later of the 30th day after the designated billing office receives a proper invoice from the contractor or the 30th day after Government acceptance of supplies delivered or services performed." A copy of FAR Subpart 32.904 is attached as **Exhibit 17**.

According to the Prompt Payment Act (5 CFR 1315 – Final Rule), " the time period during which interest will accrue begins on the day after the payment due date and ends on the payment date, and interest will accrue at the rate in effect on the day after the payment due date." Currently, the interest rate paid by the Government is 2.5347%. A copy of the Federal Register, Part II, Office of Management and Budget, 5 CFR Part 1315 – Prompt Payment; Final Rule is attached as **Exhibit 18**.

The current HCWD1 tariff and customer policies provide customers be charged a 10% Late Penalty; *"All customers who do not pay the amount due by the due date will be assessed an additional ten (10) percent as a late charge to the previous outstanding balance. Said late charge shall apply to all charges, fees or prior penalties included in the outstanding balance on the due date."* HCWD1 has not proposed that the existing tariff, nor those rate schedules, apply to the USG and instead the terms of service for the new USG customer would be as required and set forth in the Contract.

As the USG would be paying HCWD1 about \$773,000 per month (during 2012), applying the existing penalty rate for existing customers, to the USG, would result in a \$77,300 penalty if payment were not received by about 15 days after the billing date. This would not be in compliance with the Special Contract terms agreed to by HCWD1 and the USG. With the current sewer billing from HCWD1 to the USG, the USG has paid HCWD1 late penalties, in accordance with the FAR terms and calculations explained herein. This process is also consistent with the current sewer tariff, as it applies to the USG, as the terms of the Special Contract are also incorporated into that HCWD1 tariff, for that specific customer.

WITNESS: Mr. Scott Schmuck, Finance Manager, HCWD1

< PREVIOUS

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Subpart 32.9—Prompt Payment

32.900 Scope of subpart.

This subpart prescribes policies, procedures, and clauses for implementing Office of Management and Budget (OMB) prompt payment regulations at 5 CFR Part 1315.

32.901 Applicability.

(a) This subpart applies to invoice payments on all contracts, except contracts with payment terms and late payment penalties established by other governmental authority (e.g., tariffs)

(b) This subpart does not apply to contract financing payments (see definition at [32.001](#)).

32.902 Definitions.

As used in this subpart—

"Discount for prompt payment" means an invoice payment reduction offered by the contractor for payment prior to the due date.

"Mixed invoice" means an invoice that contains items with different payment due dates.

"Payment date" means the date on which a check for payment is dated or, for an electronic funds transfer (EFT), the settlement date

"Settlement date," as it applies to electronic funds transfer, means the date on which an electronic funds transfer payment is credited to the contractor's financial institution.

32.903 Responsibilities.

(a) Agency heads—

(1) Must establish the policies and procedures necessary to implement this subpart;

(2) May prescribe additional standards for establishing invoice payment due dates (see [32.904](#)) necessary to support agency programs and foster prompt payment to contractors;

(3) May adopt different payment procedures in order to accommodate unique circumstances, provided that such procedures are consistent with the policies in this subpart;

(4) Must inform contractors of points of contact within their cognizant payment offices to enable contractors to obtain status of invoices; and

(5) May authorize the use of the accelerated payment methods specified at 5 CFR 1315.5.

(b) When drafting solicitations and contracts, contracting officers must identify for each contract line item number, subline item number, or exhibit line item number—

(1) The applicable Prompt Payment clauses that apply to each item when the solicitation or contract contains items that will be subject to different payment terms; and

(2) The applicable Prompt Payment food category (e.g., which item numbers are meat or meat food products, which are perishable agricultural commodities), when the solicitation or contract contains multiple payment terms for various classes of foods and edible products.

32.904 Determining payment due dates.

(a) *General* Agency procedures must ensure that, when specifying due dates, contracting officers give full consideration to the time reasonably required by Government officials to fulfill their administrative responsibilities under the contract.

(b) *Payment due dates.* Except as prescribed in paragraphs (c) through (f) of this section, or as authorized in [32.903\(a\)\(2\)](#) or (c)(2), the due date for making an invoice payment is as follows:

(1) The later of the following two events:

(i) The 30th day after the designated billing office receives a proper invoice from the contractor (except as provided in paragraph (b)(3) of this section).

(ii) The 30th day after Government acceptance of supplies delivered or services performed.

(A) For a final invoice, when the payment amount is subject to contract settlement actions, acceptance is deemed to occur on the effective date of the contract settlement.

(B) For the sole purpose of computing an interest penalty that might be due the contractor—

(1) Government acceptance is deemed to occur constructively on the 7th day after the contractor delivers supplies or performs services in accordance with the terms and conditions of the contract, unless there is a disagreement over quantity, quality, or contractor compliance with a contract requirement;

(2) If actual acceptance occurs within the constructive acceptance period, the Government must base the determination of an interest penalty on the actual date of acceptance;

(3) The constructive acceptance requirement does not compel Government officials to accept supplies or services, perform contract administration functions, or make payment prior to fulfilling their responsibilities; and

(4) Except for a contract for the purchase of a commercial item, including a brand-name commercial item for authorized resale (e.g., commissary items), the contracting officer may specify a longer period for constructive acceptance in the solicitation and resulting contract, if required to afford the Government a reasonable opportunity to inspect and test the supplies furnished or to evaluate the services performed. The contracting officer must document in the contract file the justification for extending the constructive acceptance period beyond 7 days. Extended acceptance periods must not be a routine agency practice and must be used only when necessary to permit proper Government inspection and testing of the supplies delivered or services performed.

(2) If the contract does not require submission of an invoice for payment (e.g., periodic lease payments), the contracting officer must specify the due date in the contract.

(3) If the designated billing office fails to annotate the invoice with the actual date of receipt at the time of receipt, the invoice payment due date is the 30th day after the date of the contractor's invoice, provided the designated billing office receives a proper invoice and there is no disagreement over quantity, quality, or contractor compliance with contract requirements.

(c) Architect-engineer contracts.

(1) The due date for making payments on contracts that contain the clause at [52.232-10](#), Payments Under Fixed-Price Architect-Engineer Contracts, is as follows:

(i) The due date for work or services completed by the contractor is the later of the following two events:

(A) The 30th day after the designated billing office receives a proper invoice from the contractor.

(B) The 30th day after Government acceptance of the work or services completed by the contractor.

(1) For a final invoice, when the payment amount is subject to contract settlement actions (e.g., release of claims), acceptance is deemed to occur on the effective date of the settlement

(2) For the sole purpose of computing an interest penalty that might be due the contractor, Government acceptance is deemed to occur constructively on the 7th day after the contractor completes the work or services in accordance with the terms and conditions of the contract (see also paragraph (c)(2) of this section). If actual acceptance occurs within the constructive acceptance period, the Government must base the determination of an interest penalty on the actual date of acceptance.

(ii) The due date for progress payments is the 30th day after Government approval of contractor estimates of work or services accomplished. For the sole purpose of computing an interest penalty that might be due the contractor—

(A) Government approval is deemed to occur constructively on the 7th day after the designated billing office receives the contractor estimates (see also paragraph (c)(2) of this section).

(B) If actual approval occurs within the constructive approval period, the Government must base the determination of an interest penalty on the actual date of approval.

(iii) If the designated billing office fails to annotate the invoice or payment request with the actual date of receipt at the time of receipt, the payment due date is the 30th day after the date of the contractor's invoice or payment request, provided the designated billing office receives a proper invoice or payment request and there is no disagreement over quantity, quality, or contractor compliance with contract requirements.

(2) The constructive acceptance and constructive approval requirements described in paragraphs (c)(1)(i) and (ii) of this section are conditioned upon receipt of a proper payment request and no disagreement over quantity, quality, contractor compliance with contract requirements, or the requested progress payment amount. These requirements do not compel Government officials to accept work or services, approve contractor estimates, perform contract administration functions, or make payment prior to fulfilling their responsibilities. The contracting officer may specify a longer period for constructive acceptance or constructive approval, if required to afford the Government a reasonable opportunity to inspect and test the supplies furnished or to evaluate the services performed. The contracting officer must document in the contract file the justification for extending the constructive acceptance or approval period beyond 7 days.

(d) Construction contracts.

(1) The due date for making payments on construction contracts is as follows:

(i) The due date for making progress payments based on contracting officer approval of the estimated amount and value of work or services performed, including payments for reaching milestones in any project, is 14 days after the designated billing office receives a proper payment request.

(A) If the designated billing office fails to annotate the payment request with the actual date of receipt at the time of receipt, the payment due date is the 14th day after the date of the contractor's payment request, provided the designated billing office receives a proper payment request and there is no disagreement over quantity, quality, or contractor compliance with contract requirements.

(B) The contracting officer may specify a longer period in the solicitation and resulting contract if required to afford the Government a reasonable opportunity to adequately inspect the work and to determine the adequacy of the contractor's performance under the contract. The contracting officer must document in the contract file the justification for extending the due date beyond 14 days.

(C) The contracting officer must not approve progress payment requests unless the certification and substantiation of amounts requested are provided as required by the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts.

(ii) The due date for payment of any amounts retained by the contracting officer in accordance with the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts, will be as specified in the contract or, if not specified, 30 days after approval by the contracting officer for release to the contractor. The contracting officer must base the release of retained amounts on the contracting officer's determination that satisfactory progress has been made.

(iii) The due date for final payments based on completion and acceptance of all work (including any retained amounts), and payments for partial deliveries that have been accepted by the Government (e.g., each separate building, public work, or other division of the contract for which the price is stated separately in the contract) is as follows:

(A) The later of the following two events:

(1) The 30th day after the designated billing office receives a proper invoice from the contractor.

(2) The 30th day after Government acceptance of the work or services completed by the contractor. For a final invoice, when the payment amount is subject to contract settlement actions (e.g., release of contractor claims), acceptance is deemed to occur on the effective date of the contract settlement

(B) If the designated billing office fails to annotate the invoice with the actual date of receipt at the time of receipt, the invoice payment due date is the 30th day after the date of the contractor's invoice, provided the designated billing office receives a proper invoice and there is no disagreement over quantity, quality, or contractor compliance with contract requirements

(2) For the sole purpose of computing an interest penalty that might be due the contractor for payments described in paragraph (d)(1)(iii) of this section—

(i) Government acceptance or approval is deemed to occur constructively on the 7th day after the contractor completes the work or services in accordance with the terms and conditions of the contract, unless there is a disagreement over quantity, quality, contractor compliance with a contract requirement, or the requested amount;

(ii) If actual acceptance occurs within the constructive acceptance period, the Government must base the determination of an interest penalty on the actual date of acceptance;

(iii) The constructive acceptance requirement does not compel Government officials to accept work or services, approve contractor estimates, perform contract administration functions, or make payment prior to fulfilling their responsibilities, and

(iv) The contracting officer may specify a longer period for constructive acceptance or constructive approval in the solicitation and resulting contract, if required to afford the Government a reasonable opportunity to adequately inspect the work and to determine the adequacy of the contractor's performance under the contract. The contracting officer must document in the contract file the justification for extending the constructive acceptance or approval beyond 7 days

(3) Construction contracts contain special provisions concerning contractor payments to subcontractors, along with special contractor certification requirements. The Office of Management and Budget has determined that these certifications must not be construed as final acceptance of the subcontractor's performance. The certification in 52.232-5(c) implements this determination; however, certificates are still acceptable if the contractor deletes paragraph (c)(4) of 52.232-5 from the certificate

(4)(i) Paragraph (d) of the clause at 52.232-5, Payments under Fixed-Price Construction Contracts, and paragraph (e)(6) of the clause at 52.232-27, Prompt Payment for Construction Contracts, provide for the contractor to pay interest on unearned amounts in certain circumstances. The Government must recover this interest from subsequent payments to the contractor. Therefore, contracting officers normally must make no demand for payment. Contracting officers must—

(A) Compute the amount in accordance with the clause,

(B) Provide the contractor with a final decision; and

(C) Notify the payment office of the amount to be withheld.

(ii) The payment office is responsible for making the deduction of interest. Amounts collected in accordance with these provisions revert to the United States Treasury.

(e) *Cost-reimbursement contracts for services.* For purposes of computing late payment interest penalties that may apply, the due date for making interim payments on cost-reimbursement contracts for services is 30 days after the date of receipt of a proper invoice

(f) *Food and specified items.*

If the items delivered are:	Payment must be made as close as possible to, but not later than:
(1) <i>Meat or meat food products.</i> As defined in section 2(a)(3) of the Packers and Stockyard Act of 1921 (<u>7 U.S.C. 182(3)</u>), and as further defined in Public Law 98-181, including any edible fresh or frozen poultry meat, any perishable poultry meat food product, fresh eggs, and any perishable egg product	7th day after product delivery.
(2) <i>Fresh or frozen fish.</i> As defined in section 204(3) of the Fish and Seafood Promotion Act of 1986 (<u>16 U.S.C. 4003(3)</u>).	7th day after product delivery
(3) <i>Perishable agricultural commodities.</i> As defined in section 1(4) of the Perishable Agricultural Commodities Act of 1930 (<u>7 U.S.C. 499a(4)</u>).	10th day after product delivery, unless another date is specified in the contract.
(4) <i>Dairy products.</i> As defined in section 111(e) of the Dairy Production Stabilization Act of 1983 (<u>7 U.S.C. 4502(e)</u>), edible fats or oils, and food products prepared from edible fats or oils. Liquid milk, cheese, certain processed cheese products, butter, yogurt, ice cream, mayonnaise, salad dressings, and other similar products fall within this classification. Nothing in the Act limits this classification to refrigerated products. If questions arise regarding the proper classification of a specific product, the contracting officer must follow prevailing industry practices in specifying a contract payment due date. The burden of proof that a classification of a specific product is, in fact, prevailing industry practice is upon the contractor making the representation.	10th day after a proper invoice has been received.

(g) *Multiple payment due dates.* Contracting officers may encourage, but not require, contractors to submit separate invoices for products with different payment due dates under the same contract or order. When an invoice contains items with different payment due dates (*i.e.*, a mixed invoice), the payment office will, subject to agency policy—

- (1) Pay the entire invoice on the earliest due date; or
- (2) Split invoice payments, making payments by the applicable due dates.

32.905 Payment documentation and process.

(a) *General.* Payment will be based on receipt of a proper invoice and satisfactory contract performance.

(b) *Content of invoices.*

(1) A proper invoice must include the following items (except for interim payments on cost reimbursement contracts for services):

- (i) Name and address of the contractor.
- (ii) Invoice date and invoice number. (Contractors should date invoices as close as possible to the date of mailing or transmission.)
- (iii) Contract number or other authorization for supplies delivered or services performed (including order number and contract line item number).
- (iv) Description, quantity, unit of measure, unit price, and extended price of supplies delivered or services performed.
- (v) Shipping and payment terms (*e.g.*, shipment number and date of shipment, discount for prompt payment terms). Bill of lading number and weight of shipment will be shown for shipments on Government bills of lading
- (vi) Name and address of contractor official to whom payment is to be sent (must be the same as that in the contract or in a proper notice of assignment).
- (vii) Name (where practicable), title, phone number, and mailing address of person to notify in the event of a defective invoice
- (viii) Taxpayer Identification Number (TIN). The contractor must include its TIN on the invoice only if required by agency procedures. (See 4.9 TIN requirements)
- (ix) Electronic funds transfer (EFT) banking information.

(A) The contractor must include EFT banking information on the invoice only if required by agency procedures

(B) If EFT banking information is not required to be on the invoice, in order for the invoice to be a proper invoice, the contractor must have submitted correct EFT banking information in accordance with the applicable solicitation provision (*e.g.*, 52.232-38, Submission of Electronic Funds Transfer Information with Offer), contract clause (*e.g.*, 52.232-33, Payment by Electronic Funds Transfer-Central Contractor Registration, or 52.232-34, Payment by Electronic Funds Transfer-Other Than Central Contractor Registration), or applicable agency procedures.

(C) EFT banking information is not required if the Government waived the requirement to pay by EFT.

(x) Any other information or documentation required by the contract (*e.g.*, evidence of shipment).

(2) An interim payment request under a cost-reimbursement contract for services constitutes a proper invoice for purposes of this subsection if it includes all of the information required by the contract.

(3) If the invoice does not comply with these requirements, the designated billing office must return it within 7 days after receipt (3 days on contracts for meat, meat food products, or fish; 5 days on contracts for perishable agricultural commodities, dairy products, edible fats or oils, and food products prepared from edible fats or oils), with the reasons why it is not a proper invoice. If such notice is not timely, then the designated billing office must adjust the due date for the purpose of determining an interest penalty, if any.

(c) *Authorization to pay.* All invoice payments, with the exception of interim payments on cost-reimbursement contracts for services, must be supported by a receiving report or other Government documentation authorizing payment (*e.g.*, Government certified voucher). The agency receiving official should forward the receiving report or other Government documentation to the designated payment office by the 5th working day after Government acceptance or approval, unless other arrangements have been made. This period of time does not extend the due dates prescribed in this section. Acceptance should be completed as expeditiously as possible. The receiving report or other Government documentation authorizing payment must, as a minimum, include the following:

- (1) Contract number or other authorization for supplies delivered or services performed.
- (2) Description of supplies delivered or services performed
- (3) Quantities of supplies received and accepted or services performed, if applicable
- (4) Date supplies delivered or services performed.
- (5) Date that the designated Government official—
 - (i) Accepted the supplies or services; or

(ii) Approved the progress payment request, if the request is being made under the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts, or the clause at 52.232-10, Payments Under Fixed-Price Architect-Engineer Contracts.

(6) Signature, printed name, title, mailing address, and telephone number of the designated Government official responsible for acceptance or approval functions.

(d) *Billing office*. The designated billing office must immediately annotate each invoice with the actual date it receives the invoice.

(e) *Payment office*. The designated payment office will annotate each invoice and receiving report with the actual date it receives the invoice.

32.906 Making payments.

(a) *General*. The Government will not make invoice payments earlier than 7 days prior to the due dates specified in the contract unless the agency head determines—

(1) To make earlier payment on a case-by-case basis, or

(2) That the use of accelerated payment methods are necessary (see 32.903(a)(5)).

(b) *Payment office*. The designated payment office—

(1) Will mail checks on the same day they are dated,

(2) For payments made by EFT, will specify a date on or before the established due date for settlement of the payment at a Federal Reserve Bank;

(3) When the due date falls on a Saturday, Sunday, or legal holiday when Government offices are closed, may make payment on the following working day without incurring a late payment interest penalty.

(4) When it is determined that the designated billing office erroneously rejected a proper invoice and upon resubmission of the invoice, will enter in the payment system the original date the invoice was received by the designated billing office for the purpose of calculating the correct payment due date and any interest penalties that may be due.

(c) *Partial deliveries*.

(1) Contracting officers must, where the nature of the work permits, write contract statements of work and pricing arrangements that allow contractors to deliver and receive invoice payments for discrete portions of the work as soon as completed and found acceptable by the Government (see 32.102(d)).

(2) Unless specifically prohibited by the contract, the clause at 52.232-1, Payments, provides that the contractor is entitled to payment for accepted partial deliveries of supplies or partial performance of services that comply with all applicable contract requirements and for which prices can be calculated from the contract terms.

(d) *Contractor identifier*. Each payment or remittance advice will use the contractor invoice number in addition to any Government or contract information in describing any payment made.

(e) *Discounts*. When a discount for prompt payment is taken, the designated payment office will make payment to the contractor as close as possible to, but not later than, the end of the discount period. The discount period is specified by the contractor and is calculated from the date of the contractor's proper invoice. If the contractor has not placed a date on the invoice, the due date is calculated from the date the designated billing office receives a proper invoice, provided the agency annotates such invoice with the date of receipt at the time of receipt. When the discount date falls on a Saturday, Sunday, or legal holiday when Government offices are closed, the designated payment office may make payment on the following working day and take a discount. Payment terms are specified in the clause at 52.232-8, Discounts for Prompt Payment.

32.907 Interest penalties.

(a) *Late payment*. The designated payment office will pay an interest penalty automatically, without request from the contractor, when all of the following conditions, if applicable, have been met:

(1) The designated billing office received a proper invoice.

(2) The Government processed a receiving report or other Government documentation authorizing payment, and there was no disagreement over quantity, quality, or contractor compliance with any contract requirement.

(3) In the case of a final invoice, the payment amount is not subject to further contract settlement actions between the Government and the contractor.

(4) The designated payment office paid the contractor after the due date.

(5) In the case of interim payments on cost-reimbursement contracts for services, when payment is made more than 30 days after the designated billing office receives a proper invoice.

(b) *Improperly taken discount*. The designated payment office will pay an interest penalty automatically, without request from the contractor, if the Government takes a discount for prompt payment improperly. The interest penalty is calculated on the amount of discount taken for the period beginning with the first day after the end of the discount period through the date when the contractor is paid.

(c) *Failure to pay interest*.

(1) The designated payment office will pay a penalty amount, in addition to the interest penalty amount, only if—

(i) The Government owes an interest penalty of \$1 or more;

(ii) The designated payment office does not pay the interest penalty within 10 days after the date the invoice amount is paid; and

(iii) The contractor makes a written demand to the designated payment office for additional penalty payment in accordance with paragraph (c)(2) of this section, postmarked not later than 40 days after the date the invoice amount is paid.

(2)(i) Contractors must support written demands for additional penalty payments with the following data. The Government must not request additional data. Contractors must—

(A) Specifically assert that late payment interest is due under a specific invoice, and request payment of all overdue late payment interest penalty and such additional penalty as may be required;

(B) Attach a copy of the invoice on which the unpaid late payment interest is due; and

(C) State that payment of the principal has been received, including the date of receipt.

(ii) If there is no postmark or the postmark is illegible—

(A) The designated payment office that receives the demand will annotate it with the date of receipt, provided the demand is received on or before the 40th day after payment was made; or

(B) If the designated payment office fails to make the required annotation, the Government will determine the demand's validity based on the date the contractor has placed on the demand; provided such date is no later than the 40th day after payment was made.

(d) *Disagreements*.

(1) The payment office will not pay interest penalties if payment delays are due to disagreement between the Government and contractor concerning—

(i) The payment amount;

(ii) Contract compliance; or

(iii) Amounts temporarily withheld or retained in accordance with the terms of the contract.

(2) The Government and the contractor must resolve claims involving disputes, and any interest that may be payable in accordance with the Disputes clause.

(e) *Computation of interest penalties.* The Government will compute interest penalties in accordance with OMB prompt payment regulations at 5 CFR Part 1315. These regulations are available via the Internet at <http://www.fms.treas.gov/prompt/>.

(f) *Unavailability of funds.* The temporary unavailability of funds to make a timely payment does not relieve an agency from the obligation to pay interest penalties.

32.908 Contract clauses.

(a) Insert the clause at [52.232-26](#), Prompt Payment for Fixed-Price Architect-Engineer Contracts, in solicitations and contracts that contain the clause at [52.232-10](#), Payments Under Fixed-Price Architect-Engineer Contracts.

(1) As authorized in [32.904\(c\)\(2\)](#), the contracting officer may modify the date in paragraph (a)(4)(i) of the clause to specify a period longer than 7 days for constructive acceptance or constructive approval, if required to afford the Government a practicable opportunity to inspect and test the supplies furnished or evaluate the services performed.

(2) As provided in [32.903](#), agency policies and procedures may authorize amendment of paragraphs (a)(1)(i) and (ii) of the clause to insert a period shorter than 30 days (but not less than 7 days) for making contract invoice payments.

(b) Insert the clause at [52.232-27](#), Prompt Payment for Construction Contracts, in all solicitations and contracts for construction (see [Part 36](#)).

(1) As authorized in [32.904\(d\)\(1\)\(i\)\(B\)](#), the contracting officer may modify the date in paragraph (a)(1)(i)(A) of the clause to specify a period longer than 14 days if required to afford the Government a reasonable opportunity to adequately inspect the work and to determine the adequacy of the Contractor's performance under the contract.

(2) As authorized in [32.904\(d\)\(2\)\(iv\)](#), the contracting officer may modify the date in paragraph (a)(4)(i) of the clause to specify a period longer than 7 days for constructive acceptance or constructive approval if required to afford the Government a reasonable opportunity to inspect and test the supplies furnished or evaluate the services performed.

(c) Insert the clause at [52.232-25](#), Prompt Payment, in all other solicitations and contracts, except when the clause at [52.212-4](#), Contract Terms and Conditions-Commercial Items, applies, or when payment terms and late payment penalties are established by other governmental authority (e.g., tariffs).

(1) As authorized in [32.904\(b\)\(1\)\(ii\)\(B\)\(4\)](#), the contracting officer may modify the date in paragraph (a)(5)(i) of the clause to specify a period longer than 7 days for constructive acceptance, if required to afford the Government a reasonable opportunity to inspect and test the supplies furnished or to evaluate the services performed, except in the case of a contract for the purchase of a commercial item, including a brand-name commercial item for authorized resale (e.g., commissary items).

(2) As provided in [32.903](#), agency policies and procedures may authorize amendment of paragraphs (a)(1)(i) and (ii) of the clause to insert a period shorter than 30 days (but not less than 7 days) for making contract invoice payments.

(3) If the contract is a cost-reimbursement contract for services, use the clause with its Alternate I.

32.909 Contractor inquiries.

(a) Direct questions involving—

(1) Delinquent payments to the designated billing office or designated payment office; and

(2) Disagreements in payment amount or timing to the contracting officer for resolution. The contracting officer must coordinate within appropriate contracting channels and seek the advice of other offices as necessary to resolve disagreements.

(b) Small business concerns may contact the agency's local small business specialist or representative from the Office of Small and Disadvantaged Business Utilization to obtain additional assistance related to payment issues, late payment interest penalties, and information on the Prompt Payment Act.

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Federal Register

Wednesday
September 29, 1999

Part II

**Office of
Management and
Budget**

5 CFR Part 1315
Prompt Payment; Final Rule

Exhibit 18

OFFICE OF MANAGEMENT AND BUDGET**5 CFR Part 1315**

RIN 0348-AB47

Prompt Payment

AGENCY: Office of Management and Budget, Executive Office of the President.

ACTION: Final rule on, and codification of, Prompt Payment Act regulations.

SUMMARY: OMB is issuing final revisions to its rules on the Prompt Payment Act, which have been found in Circular A-125. The revisions address the increased use of electronic commercial financial systems; promote the use of government credit cards and accelerated payment methods; reflect new requirements of the Debt Collection Improvement Act of 1996 and the recent repeal of the annual agency Prompt Payment reporting requirement; clarify and simplify language; and announce a toll-free number and internet website for Prompt Payment Act information. Finally, in addition to revising the Prompt Payment rules, OMB is also adopting them as codified regulations in the Code of Federal Regulations. OMB's issuance of codified regulations has the effect of superceding and rescinding Circular A-125 ("Prompt Payment").

DATES: *Effective Date:* The regulations are effective October 29, 1999.

ADDRESSES: Copies of the regulation and other information are available from the Prompt Payment web site at <http://www.fms.treas.gov/prompt/index.html>. Copies are also available from the Financial Management Service, Cash Management Policy and Planning Division, 401 14th Street, SW., Washington, DC 20227.

FOR FURTHER INFORMATION CONTACT: Sally Phillips, Senior Financial Program Specialist on (202) 874-7106; Matthew Helfrich, Financial Program Specialist, (202) 874-6749; Martha Thomas-Mitchell, Financial Program Specialist on (202) 874-6757; or Cynthia Johnson, Director, Cash Management Policy and Planning Division on (202) 874-6590.

SUPPLEMENTARY INFORMATION:**I. Background**

In 1982, Congress enacted the Prompt Payment Act ("Act"; Pub. L. 97-177) to require Federal agencies to pay their bills on a timely basis, to pay interest penalties when payments are made late, and to take discounts only when payments are made by the discount date. The Act, as amended, is found at 31 U.S.C. Chapter 39.

To implement the Act, and pursuant to 31 U.S.C. 3903(a), OMB issued Circular A-125 ("Prompt Payment") in August 1982 (47 FR 37321, August 25, 1982). In response to changes to the Act that Congress made in the Prompt Payment Act Amendments of 1988 (Pub. L. 100-496), OMB revised Circular A-125 in December 1989 (54 FR 52700, December 21, 1989).

On June 17, 1998, OMB requested public comment on proposed revisions to Circular A-125 (63 FR 33000). As the preamble to that document explained (at 33000), the Circular is being updated to reflect the increased use of electronic commerce in the Federal government and in the private sector, including electronic financial systems and electronic funds transfer. The value of electronic commerce as a means of streamlining government and saving taxpayer dollars was emphasized by President Clinton in his memorandum to agencies of October 26, 1993, and by the National Performance Review, headed by Vice President Al Gore, in its call for an "all electronic Treasury." In addition, the document explained (at 33001) that revisions to the Circular were being proposed to reflect the Debt Collection Improvement Act of 1996 ("DCIA"; Pub. L. 104-134). Finally, the document indicated (at 33003) that, upon the issuance of final revisions, the Circular's provisions would be codified in the Code of Federal Regulations.

The current rule responds to the comments that were received on the proposed revisions, issues final revisions to OMB's Prompt Payment regulations, and codifies these regulations at a new part 1315 of title 5 of the Code of Federal Regulations. With the incorporation of the Prompt Payment rules into 5 CFR part 1315, OMB is rescinding Circular A-125.

As the next part of this preamble explains, OMB has made a number of changes to the Prompt Payment rules in response to public and agency comments on the proposal. In addition, one change has been made in response to subsequent legislative action—the elimination of the requirement for agencies to report annually on their Prompt Payment activities. This requirement (found in Section 14 of the Circular) had implemented the statutory reporting requirement in Section 3906 of the Prompt Payment Act, but Congress repealed Section 3906 last fall, in Section 1301(c) of the Federal Reports Elimination Act of 1998 (Pub. L. 105-362). As a result, agencies are no longer required to submit any Prompt Payment statistics to the Financial Management Service.

Finally, in an effort to further reduce any delays relating to payment, the Department of Treasury is establishing an interagency group, including the Department of Defense and other agencies, to examine any ongoing problems. The group will explore causes of any identified delay and develop options for corrective action as necessary.

As codified at Part 1315, the Prompt Payment rules generally follow the organization of the proposal. However, the section on "Definitions" has been moved from near the end of the proposal (Section 18) to near the beginning of the final rule (Section 1315.2). Also, as noted above, the "Reporting Requirements" section (Section 16 of the proposal) has been deleted.

II. Comments on, and Changes to, the Proposed Rule

Comments were received from 21 entities: 15 Federal agencies, 5 vendors and organizations representing vendors, and one university. Most of the comments addressed particular provisions in the proposed Prompt Payment rules. These are discussed below on a section-by-section basis, along with the changes that have been made to the proposed rule. Other, more general, comments on the proposal are discussed at the end of this part of the preamble.

A. Section 1315.1—Application (Proposed Section 1)

The Commodity Credit Corporation (CCC) commented that CCC payments made to farm producers are not considered to be procurement payments and as such CCC payments should not be covered in proposed Section 1.a., "Application." A separate paragraph at final § 1315.1(d) has been added to indicate the scope of the coverage of the Prompt Payment Act with respect to CCC payments (CCC payments are also addressed in § 1315.13).

In proposed Section 1.c. "Utility payments," an agency commented that the section should be revised to clarify that the referenced "tariffs," which may override the Prompt Payment interest, are utility tariffs only. This was the intent of the proposed section, as with Section 2.b of the Circular, because the section addresses only utility services. The section has been revised to make this point clearer.

One agency, with worldwide operations, recommended that proposed Section 1.c ("Utility payments") should be amended to provide that, when late payment rates for utility services are established by foreign governments,

such rates (in addition to the late payment rates established by state or local governments) will take precedence over the rates that would otherwise apply under this part. OMB agrees that foreign late payment rates for utility services should be treated comparably to state or local rates. In both situations, the Federal government should pay the local rate that is generally charged to utility customers, rather than the Prompt Payment Act rate. Final § 1315.1(c) has been revised accordingly.

Finally, the paragraph at final § 1315.1(b)(2) has been amended to include the word "contingency" when describing payments made during military operations. This parallels the language in the referenced provision at 10 U.S.C. 101(a)(13).

B. Section 1315.2—Definitions (Proposed Section 18)

An agency suggested that the definition of "Acceptance" be revised to clarify that only an authorized government official may accept goods or services. OMB agrees and has made the change at § 1315.2(b).

The definition of "Applicable interest rate," at § 1315.2(d) has been revised to reflect the change in the "Utility Payments" in § 1315.1(c), which clarifies that utility tariffs take precedence over the Prompt Payment interest rate when governmental authorities (including foreign governments) regulate late payment rates.

Based on a comment from an agency, OMB has made a clarifying revision to the definition of "Banking information" at § 1315.2(f), so that it refers to "vendor financial institution's" rather than "their bank's" in connection with the routing number of the vendor's financial institution.

Several comments were received from agencies and from organizations representing Federal vendors regarding the definition of "Contract financing payments," which in the final rule is found at § 1315.2(h). One commenter expressed the view that OMB should revise the rules to expand the application of Prompt Payment Act interest penalties to include contract financing payments. Contract financing payments were not subject to interest penalties under the Circular and the final rule retains this position. Under Circular A-125, the obligation to pay interest penalties for late payments has been conditioned upon the agency's acceptance of the supplies or services. Contract financing payments, by contrast, are the "authorized disbursement of monies prior to

acceptance of supplies or services." Circular A-125, section 1.f (54 FR 52707); see 54 FR 52701 (discussion of contract financing payments). As part of its activities to examine potential ongoing problems with payment delays, the Treasury Department's interagency workgroup (discussed above) will assess the agencies' practices with respect to contract financing payments.

The definition of "Designated Agency Office" at § 1315.2(m) has been revised, based on a comment, to make clear that the office first designated to "receive" an invoice must also "review" it to determine if it is proper.

An agency suggested that the definition of "Electronic Funds Transfer" (EFT) include electronic transmission of payment data. In light of the DCIA and requirement that federal payments be made electronically, the definition of EFT at § 1315.2(s) has been modified to more closely reflect the definition found at 31 CFR part 208, Managing Federal Agency Disbursements. An agency responsible for cleaning hazardous waste sites commented that the definition for "Emergency Payment" should be modified to include the release or threatened release of hazardous substances as defined in Section 106 of the Comprehensive Environmental Response Compensation and Liability Act of 1980. OMB has made this change at § 1315.2(t).

OMB has changed the FAR subpart reference in the definition of "Fast Payment" at § 1315.2(v) to reflect new FAR numbering.

The term "Government Credit Card" has been changed to "Governmentwide Commercial Purchase Cards," and the definition at § 1315.2(x) have been revised to reflect changes (that are discussed below) to § 1315.12, "Payments to Governmentwide Commercial Purchase Card Issuers." The definition was also revised to remove the reference to the current simplified acquisition threshold of \$100,000 (because the threshold may change periodically), and to describe the types of payments for which the card may be used.

Several agencies requested definitions for "rebate" and "settlement date." Definitions for these terms have been added, at § 1315.2(aa), (ee).

An agency suggested that the phrase "contractual or noncontractual" in the definition of "Utilities and Telephones" be removed since the Prompt Payment Act only applies to payments made as the result of a contract. OMB agrees, and the phrase has been removed from the definition at § 1315.2(gg).

C. Section 1315.3—Responsibilities (Proposed Section 2)

The discussion on "Internal control systems" (§ 1315.3(b)) has been modified to clarify that an agency's Quality Control program must include Quality Control validation at least once annually.

D. Section 1315.4—Prompt Payment Standards and Required Notices to Vendors (Proposed Section 3)

We received several comments concerning the use of non-paper documentation. An agency requested that OMB revise the "Required documentation" subsection to state that documentation stored in an imaged format is an example of the electronic documentation that is required. In the same vein, an agency commented that facsimiles should be included among the "computer-related media" that, under the "Receipt of invoice" subsection, may be used in lieu of "written" or "original" paper documents. Finally, an agency, which said it has experienced problems with non-paper media, recommended that OMB delete the provision that allows computer-related media to be used.

OMB agrees that an imaged format would be acceptable for electronic documentation purposes. Similarly, facsimiles are one example of an acceptable substitute for paper documents. OMB, though, does not believe that it is necessary (or advisable, given the evolving nature of electronic technology) for the rule to offer specific examples of acceptable formats for electronic documentation. Any legible electronic format may be used in lieu of paper documentation (to clarify this point, the reference to "computer-related media" in the proposal has been changed to "any media" in the final rule). OMB does not agree with the recommendation to delete the provision on computer-related media. In order to prevent delays in payment and subsequent late payment interest penalties, this provision strongly encourages agencies to use non-paper documentation with adequate internal controls to prevent duplicate payments. Agencies not having internal controls which are adequate for preventing duplication of payments are strongly encouraged to adopt such controls and to use non-paper documentation once those controls are in place.

Several agencies were critical of the proposed subsections on "Receipt of invoice" and "Starting the payment period," which were significantly revised versions of the Circular's provisions on those subjects (Sections

1.n and 4.d of the Circular). The agencies stated that the proposed revisions did not provide useful clarification to the discussion of when an invoice is received for purposes of starting the payment period in accordance with the Prompt Payment Act (31 U.S.C. 3901(a)(4)). Based on these comments, the final rule makes only minor revisions to the Circular's provisions on "Receipt of invoice" and "Starting the payment period"; the final rule's provisions are found at § 1315.4(b), (f). In response to an agency comment, the final rule clarifies that an electronically-received invoice is deemed to be received on the date the invoice is received unless it is received after normal working hours, in which case the invoice is deemed to be received the next business day.

OMB received a number of comments on the proposed subsection on "Review of invoice." With respect to the requirement in Section 3.c(1) of the proposal for the agency to review the invoice to determine if it is improper, an agency commented that the phrase "appropriate office" did not correctly capture the intention of the 1988 amendments to the Act that the office first designated to receive an invoice must review it to determine if it is proper. In the final rule, at § 1315.4(c)(1), OMB has replaced the term "appropriate office" with the term "designated agency office" and (as discussed above) has revised the definition of that term in § 1315.2(m) to reflect the fact that this office is expected to review invoices.

A trade organization commented that the maximum time allowed an agency to review an invoice and return an invoice as improper should be reduced from seven days to three days. The seven-day period is established by the Prompt Payment Act, which provides that (except in the case of certain specified types of contracts, for which a different maximum period is set) "each invoice be reviewed as soon as practicable after receipt" and "any invoice determined not to be such a proper invoice suitable for payment shall be returned as soon as practicable, but not later than 7 days, after receipt, specifying the reasons that the invoice is not a proper invoice." 31 U.S.C. 3903(a)(7)(A), (B). The Circular has reiterated the Act's requirement, by stating in Section 4.b(2), (3) that an invoice "will be reviewed as soon as practicable after receipt" and, if determined to be improper, "shall be returned as soon as practicable, but not later than seven days" after receipt. The proposed rule at Section 3.c(1), (2) also stated that the invoice shall be reviewed and, if determined to be improper, be

returned within seven days after receipt. However, as another trade organization noted, the proposal failed to specify that the invoice shall be reviewed and (if determined to be improper) returned "as soon as practicable" after receipt.

In accordance with the Act, and the pre-existing Circular, the final rule states in § 1315.4(c)(1), (2) that an agency shall review the invoice "as soon as practicable after receipt" and shall return an improper invoice "as soon as practicable after receipt, but no later than 7 days after receipt." In addition, as did the proposal, the final rule provides that the agency "will identify all defects that prevent payment and specify all reasons why the invoice is not proper and why is it being returned." As a result, if it is "practicable" for an agency to review and return an improper invoice in three days, then—under the Act and the final rule—the agency is required to return the invoice in three days. However, if it is not "practicable" for an agency to review and return an improper invoice in three days, then the Act and the final rule provide that the agency has additional time (up to seven days) in which to do so. Given the statutory standard, we do not believe it would be appropriate for the final rule to require an agency to return an improper invoice in less than seven days where it would not be "practicable" for the agency to do so.

An agency commented that the proposed provision at Section 3.c(2), regarding the notification requirement when returning an improper invoice, should be consistent with proposed Section 13.a.(3) which stated that, for construction contracts, an agency need not return an improper invoice if the agency notifies the vendor electronically that the invoice is improper. Another agency, however, noted that the Prompt Payment Act, at 31 U.S.C. 3903(a)(7)(B), provides that improper invoices "shall be returned." In the final rule, at § 1315.4(a)(3), OMB has dropped the language concerning electronic notification of improper invoices for construction contracts. As a result, that provision is consistent with the invoice-return requirement at § 1315.4(c)(2).

A trade organization commented that additional language should be added which says that the number of days available to an agency to make the payment is reduced by the number of days by which an agency exceeds the time period during which it is required to return the improper invoice. OMB does not believe that additional language is necessary. The Circular in Section 4.b(4) has already provided for such a reduction in the payment period.

That language was in the proposed rule at Section 3.g(3), and is found in the final rule at § 1315.4(g)(4).

Two agencies commented on the provision on "Acceptance" in Section 3.e of the proposal. As has the Circular (at Section 4.c), the proposal required agencies to ensure that acceptance is "executed as promptly as possible," and that commercial items and services "should not be subject to extended acceptance periods." One agency commented that a specific time period should be established (e.g., seven days) within which acceptance is required to occur, unless a longer acceptance period is agreed upon. OMB does not believe that a specific time period should be set for acceptance, but rather that acceptance should occur "as promptly as possible." Therefore, the final rule at § 1315.4(e) retains the language from the Circular and the proposal on this point. Another agency commented that the language in the proposal that acceptance reports should be forwarded to the designated agency office "by the fifth working day after delivery" should be amended to say the fifth working day "after acceptance" (which would parallel the language in the Circular at Section 4.c). OMB agrees with the comment and has made the change.

With respect to the "Payment date" provision at Section 3.h of the proposal, an agency commented that there would be no instance where a payment would fall due "after normal working hours." OMB agrees, and the phrase has been deleted in § 1315.4(h). Finally, the text of the provision has been revised for clarity.

E. Section 1315.5—Accelerated Payment Methods (Proposed Section 4)

Two agencies questioned whether the Prompt Payment Act provides the statutory latitude to permit payment by accelerated methods after the matching of documents is completed. OMB believes that accelerated payment methods are consistent with the Prompt Payment Act, and that they further substantial policy interests. The Act, at 31 U.S.C. 3903(a)(8), provides that OMB shall prescribe regulations that "permit an agency to make payment up to 7 days prior to the required payment, or earlier as determined by the agency to be necessary on a case-by-case basis." OMB believes that, as the government moves steadily into the electronic commerce mainstream, agencies are increasingly likely to realize efficiencies and cost savings if agencies are allowed to pay early when it benefits the government to do so. Therefore, agencies may use the accelerated payment methods when they determine that such earlier

payments are necessary (as final § 1315.4(j) provides). When making these decisions, agencies should consider the cost of funds to the government of paying early. Prompt Payment late payment interest penalties apply if the payment is not made by the payment due date.

An agency questioned whether the matching requirements for the accelerated payment methods would apply to payments made by agencies which do not use a 100 percent prepayment examination process but instead rely on statistical sampling in accordance with 31 U.S.C. 3521. This agency was concerned that only those payments chosen for the sample would be eligible for accelerated payments methods. OMB does not intend for the accelerated payment methods to be available only for those payments where 100 percent prepayment examinations are conducted, but may also be used by agencies that rely on statistical sampling, if such sampling reveals no unacceptable levels of problems encountered.

An agency recommended that the proposed provision on "A single invoice under \$2,500" clarify that payments of credit card invoices under \$2,500 may be made without verification that goods have been received (see Treasury Financial Manual 4-4500, Government Purchase Cards). OMB agrees and has made this change.

An agency commented that accelerated payments to small businesses, under the proposed provision on "Small Disadvantaged Business Concern," should be mandated rather than simply authorized. However, under 31 U.S.C. 3903(a)(8), an agency needs to determine that such earlier payments are necessary. Thus, OMB does not agree that the rule should mandate the use of the accelerated payment methods. Another agency commented that accelerated payments should be made to all small businesses rather than (as under the proposal) only to small disadvantaged business concerns "as defined in the FAR Part 19.001." OMB agrees that accelerated payments may be made to any small business (as defined in FAR Part 19.001) if the agency determines that such early payments are necessary. The final rule at Section 1315.b has been revised accordingly.

F. Section 1315.6—Payment Without Evidence That Supplies Have Been Received (Fast Payment) (Proposed Section 5)

Several agencies commented on proposed Section 5, "Fast Payment" (the title of this section has been

changed in the final rule). Several agencies commented that the FAR citation at Part 13 was no longer subpart 13.3, but is now subpart 13.4. This change has been made. An agency commented that proposed sections 5.b and 5.d (on "FAR clause 52.213.1" and "Obligation documents") were not within the scope of this regulation and should be deleted. Based on the comments, OMB has decided to retain much of the language from Section 12 of the existing Circular (54 FR 52712). The conditions under which a fast payment procedure is warranted and the requirements of a fast pay contract remain unchanged.

G. Section 1315.7—Discounts (Proposed Section 6)

With respect to proposed Section 6.a ("Economically justified discounts"), an agency commented that its first two sentences should be combined for clarity. In addition, another agency commented that agencies should be encouraged to include discount terms in the contract at the time of award. This would provide agencies the opportunity to include discount terms in their accounting systems, which could then be automatically evaluated to determine if they are economically justified and will give agencies enough time to evaluate and take the discount, when indicated. This agency also commented that the term "deadline" in proposed 6.b ("Discounts taken after the deadline") should be replaced by the term "discount date" to more accurately reflect the date by which agencies may take a discount. OMB agrees with these comments and has revised the section accordingly.

H. Section 1315.8—Rebates (Proposed Section 7)

An agency commented that a rebate formula would be useful to agencies in implementing this section. OMB agrees and has included a rebate formula in the final rule, at § 1315.17 ("Formulas"). The "Rebates" section has been revised to clarify that the payment due date may be calculated using the rebate formula provided, unless the payment due date has been determined in the contract.

I. Section 1315.9—Required Documentation (Proposed Section 8)

An agency making payments overseas to foreign landlords said that late payment interest penalties should not be required when routine lease contract renewal payments cannot be made because a foreign landlord no longer lives in the area where the leased property is located. OMB agrees that Prompt Payment interest penalties are

not required to be paid if the vendor does not submit a corrected remittance address as required by final § 1315.9(a)(6).

The language in § 1315.9(a)(8), regarding banking information required by the Debt Collection Improvement Act, has been reworded to parallel the language in § 1315.9(a)(7), regarding interest penalties under the Prompt Payment Act. The requirements of these subsections are unchanged.

Two agencies commented that proposed Section 8.a(8), requiring that banking information be submitted no later than the first request for payment, is inconsistent with the proposed Federal Acquisition Regulation (FAR Case 91-118) which required the submission of banking information no later than 15 days before the submission of the first request for payment. One of the agencies commented that coordination on this point was required to ensure consistency. This issue has been resolved by the publication of the final FAR rule on March 4, 1999 (64 FR 10530, 10538). Unlike the proposed FAR rule, the final FAR rule does not require receipt of EFT information 15 days prior to the invoice.

An agency requested clarification on whether purchase orders used as invoices would be in compliance with proposed Section 8.b(4) if an invoice number was not provided on the purchase order. An agency commenting on proposed Section 8.b(6) stated that the rule should not require payment and shipping terms on an invoice, but rather these terms should be specified either by agency policy or on individual orders or contracts. The requirements of this section are intended to allow an agency to require the information it needs to make a timely payment. The final rule at § 1315.9(b)(4), (6) provides agencies with discretion as to whether to require this information; as these provisions state, the contract may specify which information is required.

Several comments were received concerning the proposed rule's treatment in Section 8.b(7)-(8) of the collection of banking information and Taxpayer Identifying Numbers (TINs). Subsequent to the issuance of the proposal, the Treasury Department issued regulations on the Debt Collection Improvement Act of 1996 (DCIA) that are found in 31 CFR Part 208 (63 FR 51490, September 25, 1998). The DCIA regulations require the collection of banking information in order to make an electronic funds transfer (EFT) payment as required by the DCIA unless the payment is waived under 31 CFR Part 208. The regulations also require the collection of the TIN,

which the DCIA requires for debt collection and under the Internal Revenue Code for vendor income reporting. See 31 U.S.C. 7701(c); 26 U.S.C. 6109. The Treasury Department requires each agency to prepare a TIN implementation plan to document agency strategies for achieving compliance with the TIN provisions of the DCIA, and to identify barriers to collecting and providing TINs. See Treasury Financial Manual, TFM Bulletin 99-02.

The proposed rule in Section 8.b(7)-(8) required the collection of banking information and TINs on the invoice unless previously collected by the agency. Several agencies interpreted these provisions to mean that an agency could not require that this information be on the invoice if the information had already been provided. These agencies commented that they would need to require the information on the invoice even if it had been previously provided. One agency commented that payment offices are not always notified in a timely manner when financial institutions merge and when vendors change financial institutions. Another agency commented that it requires the flexibility to require TINs on every invoice because many companies have multiple branches or subsidiaries, which often have their own individual TINs. According to the agency, if the vendor is not required to provide the TIN on each invoice, then the agency is forced to make a determination as to which TIN is associated with the invoice. OMB recognizes that some agencies need the flexibility to require banking information and TINs on invoices in addition to collecting the information sooner in the payment process. The final rule has been revised at § 1315.9(b)(7)-(8) to state that banking information and TINs are required on the invoice unless agency procedures provide otherwise.

An agency requested clarification that payments to vendors may be withheld pending submission of a proper invoice that includes banking information. The agency requested the clarification because a June 25, 1998 press release issued by Treasury stated that no payments would be withheld as a result of the DCIA EFT requirement. OMB has been informed by Treasury that the payments referred to in the press release are payments to individuals (such as recipients of Federal salary, wage, benefit or retirement payments), not payments to vendors. The final rule at § 1315.9(b)(8) requires a vendor to provide banking information, as part of a proper invoice, so that an electronic payment can be made. The invoice is

not deemed proper unless the banking information is provided to the agency by the time the invoice is submitted. The payment period does not begin, and thus agencies are not required to pay late payment interest penalties, until after the banking information has been received.

Two agencies that make payments overseas commented that proposed Section 8.b(7) should be amended to specifically exclude the requirement that TINs be provided for overseas payments, in the case of overseas vendors who do not have a TIN. The DCIA does not provide agencies the authority to waive the requirements to collect the TIN for purposes of offsetting Federal payments to collect debt owed the government. However, the Treasury Department acknowledges that there are some situations where it may not be possible to collect a TIN. Treasury has proposed a TIN implementation report from each agency to identify those situations where the TIN cannot be collected. (See Treasury Financial Manual, TFM Bulletin 99-02.)

One agency suggested that the regulation emphasize that the collection of TINs is required for 1099 tax reporting purposes and that agencies must have systems which can distinguish between payments for services and payment for products because only payments for services are required to be reported to the Internal Revenue Service (IRS). OMB believes this discussion is beyond the scope of the regulation and defers such discussion to IRS regulations.

An agency commented that proposed Sections 8.c.(3), (5), and (6) should include references to services, since receiving reports can apply to services as well as goods. OMB agrees and has made the change at § 1315.9(c)(3), (5), and (6) of the final rule. The same agency commented that proposed language at 8.c.(8) incorrectly referenced Section 8.c(1)-(7) rather than Section 8.b. OMB agrees, and has corrected the reference in § 1315.9(c)(8) so that it refers to § 1315.9(b). Also, this provision has been revised so that the additional information required for a delivery ticket (when it is used as an invoice) will be set forth in agency procedures, which may (but are not required to) include the information in § 1315.9(b).

J. Section 1315.10—Late Payment Interest Penalties (Proposed Section 9)

A trade organization commented that language should be included in this section, which would state that the number of days available to an agency to make a payment is reduced by the number of days that the notification of

an improper invoice is late. As explained above, this language is already found in § 1315.4(g)(4) ("Notification of Improper Invoice"), which discusses how to calculate the payment due dates when a notification of an improper invoice is late.

The language in final § 1315.10(a)(1) has been revised to clarify that the time period during which interest will accrue begins on the day after the payment due date and ends on the payment date, and interest will accrue at the rate in effect on the day after the payment due date.

An agency commented that proposed Section 9.a.(3) should be amended to say that interest will accrue on the "unpaid amount" instead of "the unpaid principle and accrued interest" because the latter language assumes that the principal amount has not been paid and such is not necessarily the case. The agency also commented that this paragraph be placed after proposed 9.a.(4). Two agencies commented that the word "capitalized" in proposed 9.a.(4) should be replaced with "compounded" because compounded is a more easily understood term and reflects the same meaning. OMB agrees with these comments and the changes are made in § 1315.10(a).

Several agencies requested clarification on proposed Section 9.a(6) regarding the date through which interest accrues on discounts improperly taken. The final rule at § 1315.10(a)(6) has been revised to clarify that interest is calculated beginning on the date after the discount date through the date of payment of the discount erroneously taken.

An agency commented that the one dollar threshold in proposed 9.a.(7) should be increased. The one dollar threshold is specified in the Prompt Payment Act, 31 U.S.C. 3902(c)(1), and is therefore retained in the final rule at § 1315.10(a)(7).

Proposed 9.a(8) addressed when interest penalties would begin to accrue when a vendor has supplied the agency with incorrect banking information. Several agencies expressed the concern that an agency would not know that the vendor had supplied incorrect banking information until the agency's payment is rejected. As a result, it would be very difficult and in some cases impossible for the agency to return the invoice as improper (due to the incorrect banking information) within the seven days that is allowed for returning an improper invoice. In response to these comments, the final rule at § 1315.10(a)(8) provides that, if the vendor has supplied incorrect banking information, interest will not accrue until seven days after the agency receives correct information.

This is intended to give agencies adequate time to prepare and initiate a payment using the correct information, and is similar to the provision at Section 7.a(10) of the Circular.

An agency commented that interest should be calculated based on a 365-day year, rather than the 360-day year in proposed Section 9.a(9). The 360-day year, which has been used in Section 7.a(11) of the Circular, is a standard business practice, and it is used in other calculations such as the calculation for the rebate formula and the discount formula used to determine when to take discounts. Accordingly, the final rule at § 1315.10(a)(9) retains the 360-day year.

Two agencies commented that the phrase "except when title of the goods passes to the government" in proposed Section 9.b(1) should be deleted because its purpose was unclear. The exception was intended to address the situation where, under the Fast Payment procedure, the passing of title substitutes for acceptance for purposes of determining whether late payment interest penalties may be paid. Language has been added in final § 1315.10(b)(1) to clarify that, in these circumstances, interest may be paid only after the government receives title for goods.

An agency requested clarification on whether the delay of the passage of an appropriations bill is an example of "the temporary unavailability of funds" under proposed Section 9.b(4). That is indeed the situation addressed by this provision, which has been found in Section 7.b(3) of the Circular. The provision is taken from the Prompt Payment Act, at 31 U.S.C. 3902(d). Under the Act, the fact that an appropriation has not yet been enacted from which payments to vendors can be made does not relieve the agency of the obligation to pay interest for late payments.

K. Section 1315.11—Additional Penalties (Proposed Section 10)

An agency commented that proposed Section 10.a should be amended to say that a vendor shall be entitled to interest "of \$1.00 or more," so as to clarify that interest under \$1.00 need not be paid. The agency commented that proposed Section 10.c should be similarly amended by adding that no additional penalty is owed if the amount of the interest penalty is less than \$1.00. An agency recommended that proposed Section 10.a(3)B be amended to include the situation where a postmark is illegible (in addition to where there is no postmark), while another agency commented that the proposed language on confirmation of postmark should be moved to the beginning of Section

10.a(3). This agency commented that proposed Section 10.a(3)B should clarify that the "date of receipt" refers to receipt of the principal amount. The agency also commented that the proposed Section 10.d was confusing and would be clarified by replacing "if paid separately" with language that states that penalty determinations are made separately for each invoice when payments are consolidated. OMB agrees with these comments, and the changes are made in § 1315.11.

L. Section 1315.12—Payments to Governmentwide Commercial Purchase Card Issuers (Proposed Section 11)

Two agencies commented that the requirements of proposed Section 11 ("Payments Under Government Credit Card.") were inconsistent with the requirements of proposed Section 7 ("Rebates"). OMB agrees that the requirements for determining credit card invoice payment dates in these proposed sections were not consistent. In the final rule, § 1315.12 has been revised to instruct agencies to determine payment due dates in accordance with § 1315.8.

Two agencies commented that this section should reference the rebate formula and should replace the reference to the discount formula. A reference to the rebate formula has been added to this section. Several agencies commented that the terms used in the regulation for the credit card program should be the same as those used in the FAR. OMB has changed the reference to Governmentwide Commercial Purchase Card which is the term used in the FAR and has changed the title of the section to "Payments to Governmentwide Commercial Purchase Card Issuers" to reflect the new term and to reflect the new program's use of multiple card issuers.

Two agencies requested clarification on whether the accelerated payment due dates for purchase card invoices under \$2500 applied to individual invoices or to consolidated invoices. One of the agencies also requested clarification on whether purchase card invoices referred to invoices from vendors which would be paid by purchase card or invoices from purchase card issuers. A purchase card invoice means a single invoice submitted by a purchase card issuer for reimbursement of funds already paid to the vendor by the card issuer. Any single invoice under \$2500 may be paid in accordance with this section, however a consolidated invoice may only be paid in accordance with this section and § 1315.5, "Accelerated Payment Methods" if the total amount

of the consolidated invoice is under \$2500.

Two agencies sought clarification on whether matching documents was required for purchase card invoice payments under \$2500. OMB has added language to clarify that matching documentation under this payment method is not required to be performed before payment.

M. Section 1315.13—Commodity Credit Corporation Payments (Proposed Section 12)

Based on comments from the Commodity Credit Corporation (CCC), proposed Section 12 ("Payments to Farm Producers") has been modified to clarify payment standards and to include language which insures that the CCC may still exercise or implement, under authorities applicable directly to the Corporation, whatever discretion or obligation it may possess to deal with lawful claims, including, if appropriate, payment of interest penalties beyond the time provided elsewhere in the regulation. The title of the section has been modified to more accurately reflect the scope of CCC payments covered by the Prompt Payment Act.

N. Section 1315.14—Payments Under Construction Contracts (Proposed Section 13)

As discussed above, OMB agrees with the agency comment that the language in proposed Section 13.a.(3), which stated that it is not necessary for an agency to return an improper invoice when it notifies the vendor electronically that the invoice is improper, was inconsistent with the return requirement in proposed Section 3.c(2) and in the Prompt Payment Act at 31 U.S.C. 3903(a)(7)(B). The language has therefore been deleted.

O. Section 1315.15—Grant Recipients (Proposed Section 14)

No comments were received on this section. The final rule contains the proposed text.

P. Section 1315.16—Relationship to Other Laws (Proposed Section 15)

An agency commented that proposed Section 15.a.(2) "Relationship to Other Laws" should include language which clarifies that once a claim is filed under the Contract Disputes Act, Prompt Payment interest penalties will never accrue on the disputed amount after the date the claim was filed. OMB agrees and has added clarifying language.

Q. Proposed Section 16—Reporting Requirements

As explained above, Congress in Section 1301(c) of the Federal Reports Elimination Act of 1998 repealed the Prompt Payment Act's reporting requirements at 31 U.S.C. 3906. Accordingly, the final rule does not adopt the reporting requirements in proposed Section 16.

R. Section 1315.17—Formulas

As explained above, an agency suggested that a formula be provided for calculating rebates, and one is provided in this section. An agency also commented that the Prompt Payment internet website should include formulas for computing interest penalties. Formulas for computing monthly compounded interest and daily simple interest have been added to this section and to the website. In addition, the website now includes a spreadsheet which can be used to determine when to pay a purchase card invoice. This section also includes a formula for manually calculating when to pay a credit card invoice so as to either maximize savings or minimize costs.

S. Section 1315.18—Inquiries (Proposed Section 17)

A trade association representing construction subcontractors commented that the Prompt Payment website should include a link to the Prompt Payment Act of 1988 and to the Federal Acquisition Regulation Prompt Payment clause. The Financial Management Service has added both links to the Prompt Payment website. The address for the website is www.fms.treas.gov/prompt/index.html.

T. Section 1315.19—Regulatory References to OMB Circular A-125 (New Section)

This section was added to make clear that regulatory references to OMB Circular A-125 shall be construed as referring to the Part until revised to reflect this codification. This would include references to A-125 contained in the FAR. (During the coming months, additional technical conforming changes will be made to FAR provisions and clauses as necessary.)

U. Interagency Payments

At the end of Part II of the Supplementary Information section of the proposed rule's preamble, OMB sought comment on how the Federal government should address the problem of Federal agencies making late payments to other Federal agencies. Six agencies commented that Treasury's Online Payments and Collections

system (OPAC) or Treasury's Electronic Data Interchange Payments and Collections system (EDIPAC) should be required to be used by all Federal agencies for interagency payments. One agency commented that the availability of interagency payment mechanisms such as OPAC/EDIPAC, credit cards and other programs would assist agencies in improving interagency payment efficiency. Another agency commented that Interagency Agreements could include terms which provide for billing in advance. This agency commented further that agencies should have a limit of one year to bill, because some agencies have taken much longer than a year to bill. Two agencies commented that Prompt Payment late payment interest penalties should be applied to interagency payments. Three agencies commented that there should be no application of Prompt Payment penalties for interagency payments. One agency commented that Prompt Payment was not the appropriate context for discussing interagency payments.

The Prompt Payment Act does not provide for the application to interagency payments of the Prompt Payment rules, in particular the interest penalties. However, in light of the electronic fund transfer (EFT) requirements of the Debt Collection Improvement Act and the costs that agencies incur to collect overdue amounts from other agencies, OMB strongly encourages agencies to choose an electronic payment method for making interagency payments. OMB also strongly encourages agencies to include advance billing and other payment terms in Interagency Agreements to facilitate timely payments. Agencies wishing to know more about available electronic payment methods for interagency payments should contact the Department of Treasury, Financial Management Service, Card Technology Division, (202) 874-6550.

III. Regulatory Flexibility Act, Unfunded Mandates Reform Act, Congressional Review Act, and Executive Orders 12866 and 12875

This final rule will not have a significant economic effect on a substantial number of small entities; the regulations implement the Prompt Payment Act, which requires Federal agencies to pay their bills on a timely basis, to pay interest penalties when payments are made late, and to take discounts only when payments are made by the discount date. For purposes of the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4), as well as

Executive Orders 12866 and 12875, the final rule will not significantly or uniquely affect small governments, and will not result in increased expenditures by State, local, and tribal governments, or by the private sector, of \$100 million or more. Finally, the final rule is not a "major rule" under 5 U.S.C. Chapter 8; the rule will not have any of the effects set forth in 5 U.S.C. 804(2).

IV. Paperwork Reduction Act

The collections of information necessary for carrying out the Prompt Pay Act have previously been reviewed and approved by the Office of Management and Budget (OMB) under section 3507(d) of the Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35) as follows: The collection of banking information required to make payments electronically has been approved by OMB under Control Number 1510-0066. The collection of Taxpayer Identification Numbers (TINs) for contracts governed by the Federal Acquisition Regulation for commercial and non-commercial contracts has been approved by OMB under Control Numbers 9000-0097 and 9000-0136, respectively. Collections covered under these three control numbers are part of the implementation of the Debt Collection Improvement Act of 1996 (the DCIA). The DCIA requires that all Federal payments be made electronically after January 1, 1999 and that TINs be collected for the purposes of collecting debt owed the Federal government. Collections in this rule relating to the submission and payment of invoices are approved under OMB Control Numbers 9000-0070 and 0102, which govern the submission of adequate documentation to support contractor requests for payment.

List of Subjects in 5 CFR Part 1315

Administrative practice and procedure, Government contracts, Penalties, Reporting and recordkeeping requirements.

Dated: September 15, 1999

Jacob J. Lew,
Director.

Authority and Issuance

For reasons set out in the preamble, OMB adds part 1315 to 5 CFR chapter III to read as follows:

PART 1315—PROMPT PAYMENT

Sec	
1315.1	Application
1315.2	Definitions.
1315.3	Responsibilities
1315.4	Prompt payment standards and required notices to vendors.
1315.5	Accelerated payment methods.

- 1315.6 Payment without evidence that supplies have been received (Fast Payment).
 1315.7 Discounts
 1315.8 Rebates
 1315.9 Required documentation.
 1315.10 Late payment interest penalties
 1315.11 Additional penalties.
 1315.12 Payments to governmentwide commercial purchase card issuers
 1315.13 Commodity Credit Corporation payments.
 1315.14 Payments under construction contracts.
 1315.15 Grant recipients.
 1315.16 Relationship to other laws.
 1315.17 Formulas
 1315.18 Inquiries
 1315.19 Regulatory references to OMB Circular A-125

Authority: 31 U.S.C. chapter 39.

§ 1315.1 Application.

(a) *Procurement contracts.* This part applies to contracts for the procurement of goods or services awarded by:

(1) All Executive branch agencies except:

(i) The Tennessee Valley Authority, which is subject to the Prompt Payment Act (31 U.S.C. chapter 39), but is not covered by this part; and

(ii) Agencies specifically exempted under 5 U.S.C. 551(1); and

(2) The United States Postal Service. The Postmaster General is responsible for issuing implementing procurement regulations, solicitation provisions, and contract clauses for the United States Postal Service.

(b) *Vendor payments.* All Executive branch vendor payments and payments to those defined as contractors or vendors (see § 1315.2(hh)) are subject to the Prompt Payment Act with the following exceptions:

(1) Contract Financing Payments, as defined in § 1315.2(h); and

(2) Payments related to emergencies (as defined in the Disaster Relief Act of 1974, Public Law 93-288, as amended (42 U.S.C. 5121 *et seq.*)); military contingency operations (as defined in 10 U.S.C. 101 (a)(13)); and the release or threatened release of hazardous substances (as defined in 4 U.S.C. 9606, Section 106).

(c) *Utility payments.* All utility payments, including payments for telephone service, are subject to the Act except those under paragraph (b)(2) of this section. Where state, local or foreign authorities impose generally-applicable late payment rates for utility payments, those rates shall take precedence. In the absence of such rates, this part will apply.

(d) *Commodity Credit Corporation payments.* Payments made pursuant to Section 4(h) of the Act of June 29, 1948 (15 U.S.C. 714b(h)) ("CCC Charter Act")

relating to the procurement of property and services, and payments to which producers on a farm are entitled under the terms of an agreement entered into under the Agricultural Act of 1949 (7 U.S.C. 1421 *et seq.*) are subject to this part.

§ 1315.2 Definitions.

(a) *Accelerated Payment* means a payment made prior to the due date (see discussion in § 1315.5).

(b) *Acceptance* means an acknowledgment by an authorized Government official that goods received and services rendered conform with the contract requirements. Acceptance also applies to partial deliveries.

(c) *Agency* includes, as defined in 5 U.S.C. 551(1), each authority of the United States Government, whether or not it is within or subject to review by another agency, excluding the Congress, the United States courts, governments of territories or possessions, the District of Columbia government, courts martial, military commissions, and military authority exercised in the field in time of war or in occupied territory. *Agency* also includes any entity that is operated exclusively as an instrumentality of such an agency for the purpose of administering one or more programs of that agency, and that is so identified for this purpose by the head of such agency. The term *agency* includes military post and base exchanges and commissaries.

(d) *Applicable interest rate* means the interest rate established by the Secretary of the Treasury for interest payments under Section 12 of the Contract Disputes Act of 1978 (41 U.S.C. 611) which is in effect on the day after the due date, except where the interest penalty is prescribed by other governmental authority (e.g., utility tariffs). The rate established under the Contract Disputes Act is referred to as the "Renegotiation Board Interest Rate," the "Contract Disputes Act Interest Rate," and the "Prompt Payment Act Interest Rate," and is published semiannually by the Fiscal Service, Department of Treasury, in the **Federal Register** on or about January 1 and July 1.

(e) *Automated Clearing House (ACH)* means a network that performs interbank clearing of electronic debit and credit entries for participating financial institutions.

(f) *Banking Information* means information necessary to facilitate an EFT payment, including the vendor's bank account number, and the vendor financial institution's routing number.

(g) *Contract* means any enforceable agreement, including rental and lease agreements, purchase orders, delivery

orders (including obligations under Federal Supply Schedule contracts), requirements-type (open-ended) service contracts, and blanket purchases agreements between an agency and a vendor for the acquisition of goods or services and agreements entered into under the Agricultural Act of 1949 (7 U.S.C. 1421 *et seq.*). Contracts must meet the requirements of § 1315.9(a).

(h) *Contract Financing Payments* means an authorized disbursement of monies prior to acceptance of goods or services including advance payments, progress payments based on cost, progress payments (other than under construction contracts) based on a percentage or stage of completion, payments on performance-based contracts and interim payments on cost-type contracts. Contract financing payments do not include invoice payments, payments for partial deliveries, or lease and rental payments.

(i) *Contracting Office* means any entity issuing a contract or purchase order or issuing a contract modification or termination.

(j) *Contractor* (see *Vendor*).

(k) *Day* means a calendar day including weekend and holiday, unless otherwise indicated.

(l) *Delivery Ticket* means a vendor document supplied at the time of delivery which indicates the items delivered, can serve as a proper invoice based on contractual agreement.

(m) *Designated Agency Office* means the office designated by the purchase order, agreement, or contract to first receive and review invoices. This office can be contractually designated as the receiving entity. This office may be different from the office issuing the payment.

(n) *Discount* means an invoice payment reduction offered by the vendor for early payment.

(o) *Discount date* means the date by which a specified invoice payment reduction, or a discount, can be taken.

(p) *Due date* means the date on which Federal payment should be made. Determination of such dates is discussed in § 1315.4(g).

(q) *Electronic Commerce* means the end to end electronic exchange of business information using electronic data interchange, electronic mail, electronic bulletin boards, electronic funds transfer (EFT) and similar technologies.

(r) *Electronic Data Interchange* means the computer to computer exchange of routine business information in a standard format. The standard formats are developed and maintained by the Accredited Standards Committee of the American National Standards Institute,

11 West 42d Street, New York, NY 10036.

(s) *Electronic Funds Transfer (EFT)* means any transfer of funds, other than a transaction originated by cash, check, or similar paper instrument, that is initiated through an electronic terminal, telephone, computer, or magnetic tape, for the purpose of ordering, instructing, or authorizing a financial institution to debit or credit an account. The term includes, but is not limited to, Automated Clearing House and Fedwire transfers.

(t) *Emergency Payment* means a payment made under an emergency defined as a hurricane, tornado, storm, flood, high water, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mud slide, snowstorm, drought, fire, explosion, or other catastrophe which requires Federal emergency assistance to supplement State and local efforts to save lives and property, and ensure public health and safety; and the release or threatened release of hazardous substances.

(u) *Evaluated Receipts* means contractually designated use of the acceptance document and the contract as the basis for payment without requiring a separate invoice.

(v) *Fast Payment* means a payment procedure under the Federal Acquisition Regulation at Part 13.4 which allows payment under limited conditions to a vendor prior to the Government's verification that supplies have been received and accepted.

(w) *Federal Acquisition Regulation (FAR)* means the regulation (48 CFR chapter 1) that governs most Federal acquisition and related payment issues. Agencies may also have supplements prescribing unique agency policies.

(x) *Governmentwide Commercial Purchase Cards* means internationally-accepted purchase cards available to all Federal agencies under a General Services Administration contract for the purpose of making simplified acquisitions of up to the threshold set by the Federal Acquisition Regulation or for travel expenses or payment, for purchases of fuel, or other purposes as authorized by the contract.

(y) *Invoice* means a bill, written document or electronic transmission, provided by a vendor requesting payment for property received or services rendered. A proper invoice must meet the requirements of § 1315.9(b). The term invoice can include receiving reports and delivery tickets when contractually designated as invoices.

(z) *Payment Date* means the date on which a check for payment is dated or

the date of an electronic fund transfer (EFT) payment (settlement date).

(aa) *Rebate* means a monetary incentive offered to the Government by Governmentwide commercial purchase card issuers to pay purchase card invoices early.

(bb) *Receiving Office* means the entity which physically receives the goods or services, and may be separate from the accepting entity.

(cc) *Receiving Report* means written or electronic evidence of receipt of goods or services by a Government official. Receiving reports must meet the requirements of § 1315.9(c).

(dd) *Recurring Payments* means payments for services of a recurring nature, such as rents, building maintenance, transportation services, parking, leases, and maintenance for equipment, pagers and cellular phones, etc., which are performed under agency-vendor agreements providing for payments of definite amounts at fixed periodic intervals.

(ee) *Settlement Date* means the date on which an EFT payment is credited to the vendor's financial institution.

(ff) *Taxpayer Identifying Number (TIN)* means the nine digit Employer Identifying Number or Social Security Number as defined in Section 6109 of the Internal Revenue Code of 1986 (26 U.S.C. 6109).

(gg) *Utilities and Telephones* means electricity, water, sewage services, telephone services, and natural gas. Utilities can be regulated, unregulated, or under contract.

(hh) *Vendor* means any person, organization, or business concern engaged in a profession, trade, or business and any not-for-profit entity operating as a vendor (including State and local governments and foreign entities and foreign governments, but excluding Federal entities).

§ 1315.3 Responsibilities.

Each agency head is responsible for the following:

(a) *Issuing internal procedures.* Ensuring that internal procedures will include provisions for monitoring the causes of late payments and any interest penalties incurred, taking necessary corrective action, and handling inquiries.

(b) *Internal control systems.* Ensuring that effective internal control systems are established and maintained as required by OMB Circular A-123, "Management Accountability and Control."¹ Administrative activities required for payments to vendors under

this part are subject to periodic quality control validation to be conducted no less frequently than once annually. Quality control processes will be used to confirm that controls are effective and that processes are efficient. Each agency head is responsible for establishing a quality control program in order to quantify payment performance and qualify corrective actions, aid cash management decision making, and estimate payment performance if actual data is unavailable.

(c) *Financial management systems.* Ensuring that financial management systems comply with OMB Circular A-127, "Financial Management Systems."² Agency financial systems shall provide standardized information and electronic data exchange to the central management agency. Systems shall provide complete, timely, reliable, useful and consistent financial management information. Payment capabilities should provide accurate and useful management reports on payments.

(d) *Reviews.* Ensuring that Inspectors General and internal auditors review payments performance and systems accuracy, consistent with the Chief Financial Officers (CFO) Act requirements.

(e) *Timely payments and interest penalties.* Ensuring timely payments and payment of interest penalties where required.

§ 1315.4 Prompt payment standards and required notices to vendors.

Agency business practices shall conform to the following standards:

(a) *Required documentation.* Agencies will maintain paper or electronic documentation as required in § 1315.9.

(b) *Receipt of invoice.* For the purposes of determining a payment due date and the date on which interest will begin to accrue if a payment is late, an invoice shall be deemed to be received:

(1) On the later of:

(i) For invoices that are mailed, the date a proper invoice is actually received by the designated agency office if the agency annotates the invoice with date of receipt at the time of receipt. For invoices electronically transmitted, the date a readable transmission is received by the designated agency office, or the next business day if received after normal working hours; or

(ii) The seventh day after the date on which the property is actually delivered or performance of the services is actually completed; unless—

(A) The agency has actually accepted the property or services before the

¹ For availability of OMB circulars, see 5 CFR 1310.3

² See footnote 1 in § 1315.3(b)

seventh day in which case the acceptance date shall substitute for the seventh day after the delivery date; or

(B) A longer acceptance period is specified in the contract, in which case the date of actual acceptance or the date on which such longer acceptance period ends shall substitute for the seventh day after the delivery date;

(2) On the date placed on the invoice by the contractor, when the agency fails to annotate the invoice with date of receipt of the invoice at the time of receipt (such invoice must be a proper invoice); or

(3) On the date of delivery, when the contract specifies that the delivery ticket may serve as an invoice.

(c) *Review of invoice.* Agencies will use the following procedures in reviewing invoices:

(1) Each invoice will be reviewed by the designated agency office as soon as practicable after receipt to determine whether the invoice is a proper invoice as defined in § 1315.9(b);

(2) When an invoice is determined to be improper, the agency shall return the invoice to the vendor as soon as practicable after receipt, but no later than 7 days after receipt (refer also to paragraph (g)(4) of this section regarding vendor notification and determining the payment due date.) The agency will identify all defects that prevent payment and specify all reasons why the invoice is not proper and why it is being returned. This notification to the vendor shall include a request for a corrected invoice, to be clearly marked as such;

(3) Any media which produce tangible recordings of information in lieu of "written" or "original" paper document equivalents should be used by agencies to expedite the payment process, rather than delaying the process by requiring "original" paper documents. Agencies should ensure adequate safeguards and controls to ensure the integrity of the data and to prevent duplicate processing.

(d) *Receipt of goods and services.* Agencies will ensure that receipt is properly recorded at the time of delivery of goods or completion of services.

(e) *Acceptance.* Agencies will ensure that acceptance is executed as promptly as possible. Commercial items and services should not be subject to extended acceptance periods. Acceptance reports will be forwarded to the designated agency office by the fifth working day after acceptance. Unless other arrangements are made, acceptance reports will be stamped or otherwise annotated with the receipt date in the designated agency office

(f) *Starting the payment period.* The period available to an agency to make

timely payment of an invoice without incurring an interest penalty shall begin on the date of receipt of a proper invoice (see paragraph (b) of this section) except where no invoice is required (e.g., for some recurring payments as defined in § 1315.2(dd)).

(g) *Determining the payment due date.* (1) Unless otherwise specified, the payment is due either:

(i) On the date(s) specified in the contract;

(ii) In accordance with discount terms when discounts are offered and taken (see § 1315.7);

(iii) In accordance with Accelerated Payment Methods (see § 1315.5); or

(iv) 30 days after the start of the payment period as specified in paragraph (f) of this section, if not specified in the contract, if discounts are not taken, and if accelerated payment methods are not used.

(2) *Certain commodity payments.* (i) For meat, meat food products, as defined in Section 2(a)(3) of the Packers and Stockyard Act of 1921 (7 U.S.C. 182(3)), including any edible fresh or frozen poultry meat, any perishable poultry meat food product, fresh eggs, any perishable egg product, fresh or frozen fish as defined in the Fish and Seafood Promotion Act of 1986 (16 U.S.C. 4003(3)), payment will be made no later than the seventh day after delivery.

(ii) For perishable agricultural commodities, as defined in Section 1(4) of the Perishable Agricultural Commodities Act of 1930 (7 U.S.C. 499 a(4)), payment will be made no later than the 10th day after delivery, unless another payment date is specified in the contract.

(iii) For dairy products (as defined in Section 111(e) of the Dairy Production Stabilization Act of 1983, 7 U.S.C. 4502(e)), and including, at a minimum, liquid milk, cheese, certain processed cheese products, butter, yogurt, and ice cream, edible fats or oils, and food products prepared from edible fats or oils (including, at a minimum, mayonnaise, salad dressings and other similar products), payment will be made no later than 10 days after the date on which a proper invoice, for the amount due, has been received by the agency acquiring the above listed products. Nothing in the Act permits limitation to refrigerated products. When questions arise about the coverage of a specific product, prevailing industry practices should be followed in specifying a contractual payment due date.

(3) *Mixed invoices for commodities.* When an invoice is received for items with different payment periods, agencies:

(i) May pay the entire invoice on the due date for the commodity with the earliest due date, if it is considered in the best interests of the agency;

(ii) May make split payments by the due date applicable to each category;

(iii) Shall pay in accordance with the contractual payment provisions (which may not exceed the statutory mandated periods specified in paragraph (g)(2) of this section); and

(iv) Shall not require vendors to submit multiple invoices for payment of individual orders by the agency.

(4) *Notification of improper invoice.*

When an agency fails to make notification of an improper invoice within seven days according to paragraph (c)(2) of this section (three days for meat and meat food, fish and seafood products; and five days for perishable agricultural commodities, dairy products, edible fats or oils and food products prepared from edible fats or oils), the number of days allowed for payment of the corrected proper invoice will be reduced by the number of days between the seventh day (or the third or fifth day, as otherwise specified in this paragraph (g)(4)) and the day notification was transmitted to the vendor. Calculation of interest penalties, if any, will be based on an adjusted due date reflecting the reduced number of days allowable for payment;

(h) *Payment date.* Payment will be considered to be made on the settlement date for an electronic funds transfer (EFT) payment or the date of the check for a check payment. Payments falling due on a weekend or federal holiday may be made on the following business day without incurring late payment interest penalties.

(i) *Late payment.* When payments are made after the due date, interest will be paid automatically in accordance with the procedures provided in this part.

(j) *Timely payment.* An agency shall make payments no more than seven days prior to the payment due date, but as close to the due date as possible, unless the agency head or designee has determined, on a case-by-case basis for specific payments, that earlier payment is necessary. This authority must be used cautiously, weighing the benefits of making a payment early against the good stewardship inherent in effective cash management practices. An agency may use the "accelerated payment methods" in § 1315.5 when it determines that such earlier payment is necessary.

(k) *Payments for partial deliveries.* Agencies shall pay for partial delivery of supplies or partial performance of services after acceptance, unless specifically prohibited by the contract.

Payment is contingent upon submission of a proper invoice if required by the contract.

§ 1315.5 Accelerated payment methods.

(a) *A single invoice under \$2,500.* Payments may be made as soon as the contract, proper invoice, receipt and acceptance documents are matched except where statutory authority prescribes otherwise and except where otherwise contractually stipulated (e.g., governmentwide commercial purchase card.) Vendors shall be entitled to interest penalties if invoice payments are made after the payment due date.

(b) *Small Business (as defined in FAR 19.001 (48 CFR 19.001)).* Agencies may pay a small business as quickly as possible, when all proper documentation, including acceptance, is received in the payment office and before the payment due date. Such payments are not subject to payment restrictions stated elsewhere in this part. Vendors shall be entitled to interest penalties if invoice payments are made after the payment due date.

(c) *Emergency payments.* Payments related to emergencies and disasters (as defined in the Robert T. Stafford Disaster Relief Act and Emergency Assistance, Pub. L. 93-288, as amended (42 U.S.C. 5121 *et seq.*); payments related to the release or threatened release of hazardous substances (as defined in the Comprehensive Environmental Response Compensation and Liability Act of 1980, Pub. L. 96-510, 42 U.S.C. 9606); and payments made under a military contingency (as defined in 10 U.S.C. 101(a)(13)) may be made as soon as the contract, proper invoice, receipt and acceptance documents or any other agreement are matched. Vendors shall be entitled to interest penalties if invoice payments are made after the payment due date.

§ 1315.6 Payment without evidence that supplies have been received (Fast Payment).

(a) In limited situations, payment may be made without evidence that supplies have been received. Instead, a contractor certification that supplies have been shipped may be used as the basis for authorizing payment. Payment may be made within 15 days after the date of receipt of the invoice. This payment procedure may be employed only when all of the following conditions are present:

(1) Individual orders do not exceed \$25,000 (except where agency heads permits a higher amount on a case-by-case basis);

(2) Deliveries of supplies are to occur where there is both a geographical

separation and a lack of adequate communications facilities between Government receiving and disbursing activities that make it impracticable to make timely payments based on evidence of Federal acceptance;

(3) Title to supplies will vest in the Government upon delivery to a post office or common carrier for mailing or shipment to destination or upon receipt by the Government if the shipment is by means other than the Postal Service or a common carrier; and

(4) The contractor agrees to replace, repair, or correct supplies not received at destination, damaged in transit, or not conforming to purchase requirements.

(b) Agencies shall promptly inspect and accept supplies acquired under these procedures and shall ensure that receiving reports and payment documents are matched and steps are taken to correct discrepancies.

(c) Agencies shall ensure that specific internal controls are in place to assure that supplies paid for are received.

(d) As authorized by the 1988 Amendment to the Prompt Payment Act (Section 11(b)(1)(C)), a contract clause at 48 CFR 52.213-1 is provided in the Federal Acquisition Regulations (FAR) at 48 CFR part 13, subpart 13.4 "Fast Payment Procedure," for use when using this fast payment procedure.

§ 1315.7 Discounts.

Agencies shall follow these procedures in taking discounts and determining the payment due dates when discounts are taken:

(a) *Economically justified discounts.* If an agency is offered a discount by a vendor, whether stipulated in the contract or offered on an invoice, an agency may take the discount if economically justified (see discount formula in Treasury Financial Manual (TFM) 6-8040.40)³ but only after acceptance has occurred. Agencies are encouraged to include discount terms in a contract to give agencies adequate time to take the discount if it is determined to be economically justified.

(b) *Discounts taken after the discount date.* If an agency takes the discount after the deadline, the agency shall pay an interest penalty on any amount remaining unpaid as prescribed in § 1315.10(a)(6).

(c) *Payment date.* When a discount is taken, payment will be made as close as possible to, but no later than, the discount date.

(d) *Start date.* The period for taking the discount is calculated from the date

³The Treasury Financial Manual is available by calling the Prompt Payment Hotline at 800-266-9667 or the Prompt Payment web site at <http://www.fms.treas.gov/prompt/index.html>

placed on the proper invoice by the vendor. If there is no invoice date on the invoice by the vendor, the discount period will begin on the date a proper invoice is actually received and date stamped or otherwise annotated by the designated agency office.

§ 1315.8 Rebates.

Agencies shall determine governmentwide commercial purchase card payment dates based on an analysis of the total costs and total benefits to the Federal government as a whole, unless specified in a contract. When calculating costs and benefits, agencies are expected to include the cost to the government of paying early. This cost is the interest the government would have earned, at the Current Value of Funds rate, for each day that payment was not made. Agencies may factor in benefits gained from paying early due to, for example, streamlining the payment process or other efficiencies. A rebate formula is provided in § 1315.17 and at the Prompt Payment website at www.fms.treas.gov/prompt/index.html.

§ 1315.9 Required documentation.

Agencies are required to ensure the following payment documentation is established to support payment of invoices and interest penalties:

(a) The following information from the contract is required as payment documentation:

(1) Payment due date(s) as defined in § 1315.4(g);

(2) A notation in the contract that partial payments are prohibited, if applicable;

(3) For construction contracts, specific payment due dates for approved progress payments or milestone payments for completed phases, increments, or segments of the project;

(4) If applicable, a statement that the special payment provisions of the Packers and Stockyard Act of 1921 (7 U.S.C. 182(3)), or the Perishable Agricultural Commodities Act of 1930 (7 U.S.C. 499a(4)), or Fish and Seafood Promotion Act of 1986 (16 U.S.C. 4003(3)) shall apply;

(5) Where considered appropriate by the agency head, the specified acceptance period following delivery to inspect and/or test goods furnished or to evaluate services performed is stated;

(6) Name (where practicable), title, telephone number, and complete mailing address of officials of the Government's designated agency office, and of the vendor receiving the payments;

(7) Reference to requirements under the Prompt Payment Act, including the payment of interest penalties on late

invoice payments (including progress payments under construction contracts);

(8) Reference to requirements under the Debt Collection Improvement Act (Pub. L. 104-134, 110 Stat. 1321), including the requirement that payments must be made electronically except in situations where the EFT requirement is waived under 31 CFR 208.4. Where electronic payment is required, the contract will stipulate that banking information must be submitted no later than the first request for payment;

(9) If using Fast Payment, the proper FAR clause stipulating Fast Payment is required.

(b) The following correct information constitutes a proper invoice and is required as payment documentation:

(1) Name of vendor;
 (2) Invoice date;
 (3) Government contract number, or other authorization for delivery of goods or services;

(4) Vendor invoice number, account number, and/or any other identifying number agreed to by contract;

(5) Description (including, for example, contract line/subline number), price, and quantity of goods and services rendered;

(6) Shipping and payment terms (unless mutually agreed that this information is only required in the contract);

(7) Taxpayer Identifying Number (TIN), unless agency procedures provide otherwise;

(8) Banking information, unless agency procedures provide otherwise, or except in situations where the EFT requirement is waived under 31 CFR 208.4;

(9) Contact name (where practicable), title and telephone number;

(10) Other substantiating documentation or information required by the contract.

(c) The following information from receiving reports, delivery tickets, and evaluated receipts is required as payment documentation:

(1) Name of vendor;
 (2) Contract or other authorization number;
 (3) Description of goods or services;
 (4) Quantities received, if applicable;
 (5) Date(s) goods were delivered or services were provided;

(6) Date(s) goods or services were accepted;

(7) Signature (or electronic alternative when supported by appropriate internal controls), printed name, telephone number, mailing address of the receiving official, and any additional information required by the agency.

(d) When a delivery ticket is used as an invoice, it must contain information

required by agency procedures. The requirements in paragraph (b) of this section do not apply except as provided by agency procedures.

§ 1315.10 Late payment interest penalties.

(a) *Application and calculation.* Agencies will use the following procedures in calculating interest due on late payments:

(1) Interest will be calculated from the day after the payment due date through the payment date at the interest rate in effect on the day after the payment due date;

(2) Adjustments will be made for errors in calculating interest;

(3) For up to one year, interest penalties remaining unpaid at the end of any 30 day period will be added to the principal and subsequent interest penalties will accrue on that amount until paid;

(4) When an interest penalty is owed and not paid, interest will accrue on the unpaid amount until paid, except as described in paragraph (a)(5) of this section;

(5) Interest penalties under the Prompt Payment Act will not continue to accrue:

(i) After the filing of a claim for such penalties under the Contract Disputes Act of 1978 (41 U.S.C. 601 *et seq.*); or
 (ii) For more than one year;

(6) When an agency takes a discount after the discount date, interest will be paid on the amount of the discount taken. Interest will be calculated for the period beginning the day after the specified discount date through the date of payment of the discount erroneously taken;

(7) Interest penalties of less than one dollar need not be paid;

(8) If the banking information supplied by the vendor is incorrect, interest under this regulation will not accrue until seven days after such correct information is received (provided that the vendor has been given notice of the incorrect banking information within seven days after the agency is notified that the information is incorrect);

(9) Interest calculations are to be based on a 360 day year; and

(10) The applicable interest rate may be obtained by calling the Department of Treasury's Financial Management Service (FMS) Prompt Payment help line at 1-800-266-9667.

(b) *Payment.* Agencies will meet the following requirements in paying interest penalties:

(1) Interest may be paid only after acceptance has occurred or when title passes to the government in a fast payment contract when title passing to

the government constitutes acceptance for purposes of determining when interest may be paid;

(2) Late payment interest penalties shall be paid without regard to whether the vendor has requested payment of such penalty, and shall be accompanied by a notice stating the amount of the interest penalty, the number of days late and the rate used;

(3) The invoice number or other agreed upon transaction reference number assigned by the vendor should be included in the notice to assist the vendor in reconciling the payment. Additionally, it is optional as to whether or not an agency includes the contract number in the notice to the vendor;

(4) The temporary unavailability of funds does not relieve an agency from the obligation to pay these interest penalties or the additional penalties required under § 1315.11; and

(5) Agencies shall pay any late payment interest penalties (including any additional penalties required under § 1315.11) under this part from the funds available for the administration of the program for which the penalty was incurred. The Prompt Payment Act does not authorize the appropriation of additional amounts to pay penalties.

(c) *Penalties not due.* Interest penalties are not required:

(1) When payment is delayed because of a dispute between a Federal agency and a vendor over the amount of the payment or other issues concerning compliance with the terms of a contract. Claims concerning disputes, and any interest that may be payable with respect to the period, while the dispute is being settled, will be resolved in accordance with the provisions in the Contract Disputes Act of 1978, (41 U.S.C. 601 *et seq.*), except for interest payments required under 31 U.S.C. 3902(h)(2);

(2) When payments are made solely for financing purposes or in advance, except for interest payment required under 31 U.S.C. 3902(h)(2);

(3) For a period when amounts are withheld temporarily in accordance with the contract;

(4) When an EFT payment is not credited to the vendor's account by the payment due date because of the failure of the Federal Reserve or the vendor's bank to do so; or

(5) When the interest penalty is less than \$1.00.

§ 1315.11 Additional penalties.

(a) *Vendor entitlements.* A vendor shall be entitled to an additional penalty payment when the vendor is owed a late

payment interest penalty by an agency of \$1.00 or more, if it:

(1) Receives a payment dated after the payment due date which does not include the interest penalty also due to the vendor;

(2) Is not paid the interest penalty by the agency within 10 days after the actual payment date; and

(3) Makes a written request that the agency pay such an additional penalty. Such request must be postmarked, received by facsimile, or by electronic mail, by the 40th day after payment was made. If there is no postmark or if it is illegible, the request will be valid if it is received and annotated with the date of receipt by the agency by the 40th day. The written request must include the following:

(i) Specific assertion that late payment interest is due for a specific invoice, and request payment of all overdue late payment interest penalty and such additional penalty as may be required; and

(ii) A copy of the invoice on which late payment interest was due but not paid and a statement that the principal has been received, and the date of receipt of the principle.

(b) *Maximum penalty.* The additional penalty shall be equal to one hundred (100) percent of the original late payment interest penalty but must not exceed \$5,000.

(c) *Minimum penalty.* Regardless of the amount of the late payment interest penalty, the additional penalty paid shall not be less than \$25. No additional penalty is owed, however, if the amount of the interest penalty is less than \$1.00.

(d) *Penalty basis.* The penalty is based on individual invoices. Where payments are consolidated for disbursing purposes, the penalty determinations shall be made separately for each invoice therein.

(e) *Utility payments.* The additional penalty does not apply to the payment of utility bills where late payment penalties for these bills are determined through the tariff rate-setting process.

§ 1315.12 Payments to governmentwide commercial purchase card issuers.

Standards for payments to government wide commercial purchase card issuers follow:

(a) *Payment date.* All individual purchase card invoices under \$2,500 may be paid at any time, but not later than 30 days after the receipt of a proper invoice. Matching documents is not required before payment. The payment due date for invoices in the amount of \$2,500 or more shall be determined in accordance with § 1315.8. I TFM 4-

4535.10⁴ permits payment of the bill in full prior to verification that goods or services were received.

(b) *Disputed line items.* Disputed line items do not render the entire invoice an improper invoice for compliance with this proposed regulation. Any undisputed items must be paid in accordance with paragraph (a) of this section.

§ 1315.13 Commodity Credit Corporation payments.

As provided in § 1315.1(d), the provisions of this part apply to payments relating to the procurement of property and services made by the Commodity Credit Corporation (CCC) pursuant to Section 4(h) of the Act of June 29, 1948 (15 U.S.C. 714b(h)) ("CCC Charter Act") and payments to which producers on a farm are entitled under the terms of an agreement entered into pursuant to the Agricultural Act of 1949 (7 U.S.C. 1421 *et seq.*) ("1949 Act"). Such payments shall be subject to the following provisions:

(a) *Payment standards.* Payments to producers on a farm under agreements entered into under the 1949 Act and payments to vendors providing property and services under the CCC Charter Act, shall be made as close as possible to the required payment date or loan closing date.

(b) *Interest penalties.* An interest penalty shall be paid to vendors or producers if the payment has not been made by the required payment or loan closing date. The interest penalty shall be paid:

(1) On the amount of payment or loan due;

(2) For the period beginning on the first day beginning after the required payment or loan closing date and, except as determined appropriate by the CCC consistent with applicable law, ending on the date the amount is paid or loaned; and

(3) Out of funds available under Section 8 of the CCC Charter Act (15 U.S.C. 714f).

(c) *Contract Disputes Act of 1978.* Insofar as covered CCC payments are concerned, provisions relating to the Contract Disputes Act of 1978 (41 U.S.C. 601 *et seq.*) in § 1315.10(a)(5)(i) and § 1315.6(a) do not apply.

(d) *Extended periods for payment.* Notwithstanding other provisions of this part, the CCC may allow claims for such periods of time as are consistent with authorities applicable to its operations.

§ 1315.14 Payments under construction contracts.

(a) *Payment standards.* Agencies shall follow these standards when making progress payments under construction contracts:

(1) An agency may approve a request for progress payment if the application meets the requirements specified in paragraph (b) of this section;

(2) The certification by the prime vendor as defined in paragraph (b)(2) of this section is not to be construed as final acceptance of the subcontractor's performance;

(3) The agency shall return any such payment request which is defective to the vendor within seven days after receipt, with a statement identifying the defect(s);

(4) A vendor is obligated to pay interest to the Government on unearned amounts in its possession from:

(i) The eighth day after receipt of funds from the agency until the date the vendor notifies the agency that the performance deficiency has been corrected, or the date the vendor reduces the amount of any subsequent payment request by an amount equal to the unearned amount in its possession, when the vendor discovers that all or a portion of a payment received from the agency constitutes a payment for the vendor's performance that fails to conform to the specifications, terms, and conditions of its contract with the agency, under 31 U.S.C. 3905(a); or

(ii) The eighth day after the receipt of funds from the agency until the date the performance deficiency of a subcontractor is corrected, or the date the vendor reduces the amount of any subsequent payment request by an amount equal to the unearned amount in its possession, when the vendor discovers that all or a portion of a payment received from the agency would constitute a payment for the subcontractor's performance that fails to conform to the subcontract agreement and may be withheld, under 31 U.S.C. 3905(e);

(5) Interest payment on unearned amounts to the government under 31 U.S.C. 3905(a)(2) or 3905(e)(6), shall:

(i) Be computed on the basis of the average bond equivalent rates of 91-day Treasury bills auctioned at the most recent auction of such bills prior to the date the vendor received the unearned amount;

(ii) Be deducted from the next available payment to the vendor; and

(iii) Revert to the Treasury.

(b) *Required Documentation.* (1) Substantiation of the amount(s) requested shall include:

⁴ See footnote 3 in § 1315.7(a)

(i) An itemization of the amounts requested related to the various elements of work specified in the contract;

(ii) A listing of the amount included for work performed by each subcontractor under the contract;

(iii) A listing of the total amount for each subcontractor under the contract;

(iv) A listing of the amounts previously paid to each subcontractor under the contract; and

(v) Additional supporting data and detail in a form required by the contracting officer.

(2) Certification by the prime vendor is required, to the best of the vendor's knowledge and belief, that:

(i) The amounts requested are only for performance in accordance with the specifications, terms, and conditions of the contract;

(ii) Payments to subcontractors and suppliers have been made from previous payments received under the contract, and timely payments will be made from the proceeds of the payment covered by the certification, in accordance with their subcontract agreements and the requirements of 31 U.S.C. chapter 39; and

(iii) The application does not include any amounts which the prime vendor intends to withhold or retain from a subcontractor or supplier, in accordance with the terms and conditions of their subcontract.

(c) *Interest penalties.* (1) Agencies will pay interest on:

(i) A progress payment request (including a monthly percentage-of-completion progress payment or milestone payments for completed phases, increments, or segments of any project) that is approved as payable by the agency pursuant to paragraph (b) of this section, and remains unpaid for:

(A) A period of more than 14 days after receipt of the payment request by the designated agency office; or

(B) A longer period specified in the solicitation and/or contract if required, to afford the Government a practicable opportunity to adequately inspect the work and to determine the adequacy of the vendor's performance under the contract;

(ii) Any amounts that the agency has retained pursuant to a prime contract clause providing for retaining a percentage of progress payments otherwise due to a vendor and that are approved for release to the vendor, if such retained amounts are not paid to the vendor by a date specified in the contract, or, in the absence of such a specified date, by the 30th day after final acceptance;

(iii) Final payments, based on completion and acceptance of all work (including any retained amounts), and payments for partial performances that have been accepted by the agency, if such payments are made after the later of:

(A) The 30th day after the date on which the designated agency office receives a proper invoice; or

(B) The 30th day after agency acceptance of the completed work or services. Acceptance shall be deemed to have occurred on the effective date of contract settlement on a final invoice where the payment amount is subject to contract settlement actions.

(2) For the purpose of computing interest penalties, acceptance shall be deemed to have occurred on the seventh day after work or services have been completed in accordance with the terms of the contract.

§ 1315.15 Grant recipients.

Recipients of Federal assistance may pay interest penalties if so specified in their contracts with contractors. However, obligations to pay such interest penalties will not be obligations of the United States. Federal funds may not be used for this purpose, nor may interest penalties be used to meet matching requirements of federally assisted programs.

§ 1315.16 Relationship to other laws.

(a) *Contract Disputes Act of 1978 (41 U.S.C. 605).* (1) A claim for an interest penalty (including the additional penalty for non-payment of interest if the vendor has complied with the requirements of § 1315.9) not paid under this part may be filed under Section 6 of the Contract Disputes Act.

(2) An interest penalty under this part does not continue to accrue after a claim for a penalty is filed under the Contract Disputes Act or for more than one year. Once a claim is filed under the Contract Disputes Act interest penalties under this part will never accrue on the amounts of the claim, for any period after the date the claim was filed. This does not prevent an interest penalty from accruing under Section 13 of the Contract Disputes Act after a penalty stops accruing under this part. Such penalty may accrue on an unpaid contract payment and on the unpaid penalty under this part.

(3) This part does not require an interest penalty on a payment that is not made because of a dispute between the head of an agency and a vendor over the amount of payment or compliance with the contract. A claim related to such a dispute and interest payable for the period during which the dispute is

being resolved is subject to the Contract Disputes Act.

(b) *Small Business Act (15 U.S.C. 644(k)).* This Act has been amended to require that any agency with an Office of Small and Disadvantaged Business Utilization must assist small business concerns to obtain payments, late payment interest penalties, additional penalties, or information due to the concerns.

§ 1315.17 Formulas.

(a) *Rebate formula.* (1) Agencies shall determine credit card payment dates based on an analysis of the total benefits to the Federal government as a whole. Specifically, agencies should compare daily basis points offered by the card issuer with the corresponding daily basis points of the government's Current Value of Funds (CVF) rate. If the basis points offered by the card issuer are greater than the daily basis points of the government's funds, the government will maximize savings by paying on the earliest possible date. If the basis points offered by the card issuer are less than the daily basis points of the government's funds, the government will minimize costs by paying on the Prompt Payment due date or the date specified in the contract.

(2) Agencies may use a rebate spreadsheet which automatically calculates the net savings to the government and whether the agency should pay early or late. The only variables required for input to this spreadsheet are the CVF rate, the Maximum Discount Rate, that is, the rate from which daily basis points offered by the card issuer are derived, and the amount of debt. This spreadsheet is available for use on the prompt payment website at www.fms.treas.gov/prompt/index/html.

(3) If agencies chose not to use the spreadsheet, the following may be used to determine whether to pay early or late. To calculate whether to pay early or late, agencies must first determine the respective basis points. To obtain Daily Basis Points offered by card issuer, refer to the agency's contract with the card issuer. Use the following formula to calculate the average daily basis points of the CVF rate:

$$(CVF/360) * 100$$

(4) For example: The daily basis points offered to agency X by card issuer Y are 1.5 basis points. That is, for every day the agency delays paying the card issuer the agency loses 1.5 basis points in savings. At a CVF of 5 percent, the daily basis points of the Current Value of Funds Rate are 1.4 basis points. That is, every day the agency delays paying,

the government earns 1.4 basis points. The basis points were calculated using the formula:

$$(CVF/360) * 100 \\ (5/360) * 100 = 1.4$$

(5) Because 1.5 is greater than 1.4, the agency should pay as early as possible. If the basis points offered by the card issuer are less than the daily basis points of the government's funds (if for instance the rebate equaled 1.3 basis points and the CVF was still 1.4 basis points or if the rebate equaled 1.5 but the CVF equaled 1.6), the government will minimize costs by paying as late as possible, but by the payment due date.

(b) *Daily simple interest formula.* (1) To calculate daily simple interest the following formula may be used:

$$P(r/360*d)$$

Where:

P is the amount of principle or invoice amount;

r equals the Prompt Payment interest rate; and

d equals the numbers of days for which interest is being calculated

(2) For example, if a payment is due on April 1 and the payment is not made until April 11, a simple interest calculation will determine the amount of interest owed the vendor for the late payment. Using the formula above, at an invoice amount of \$1,500 paid 10 days late and an interest rate of 6.5%, the amount of interest owed is calculated as follows:

$$\$1,500 (.065/360*10) = \$2.71$$

(c) *Monthly compounding interest formula.* (1) To calculate interest as required in § 1315.10(a)(3), the following formula may be used:

$$P(1+r/12)^n * (1+(r/360*d)) - P$$

Where:

P equals the principle or invoice amount;

r equals the interest rate;

n equals the number of months; and

d equals the number of days for which interest is being calculated

(2) The first part of the equation calculates compounded monthly interest. The second part of the equation calculates simple interest on any additional days beyond a monthly increment.

(3) For example, if the amount owed is \$1,500, the payment due date is April 1, the agency does not pay until June 15 and the applicable interest rate is 6 percent, interest is calculated as follows:

$$\$1,500(1+.06/12)^2 * (1+(.06/360*15)) - \$1,500 = \$18.83$$

§ 1315.18 Inquiries.

(a) *Regulation.* Inquiries concerning this part may be directed in writing to the Department of the Treasury, Financial Management Service (FMS), Cash Management Policy and Planning Division, 401 14th Street, S.W. Washington, D.C. 20227, (202) 874-6590, or by calling the Prompt Payment help line at 1-800-266-9667, by emailing questions to FMS at prompt.inquiries@fms.sprint.com, or by completing a Prompt Payment inquiry

form available at www.fms.treas.gov/prompt/inquiries.html.

(b) *Applicable interest rate.* The rate is published by the Fiscal Service, Department of the Treasury, semiannually in the **Federal Register** on or about January 1 and July 1. The rate also may be obtained from the Department of Treasury's Financial Management Service (FMS) at 1-800-266-9667. This information is also available at the FMS Prompt Payment Web Site at <http://www.fms.treas.gov/prompt/index.html>.

(c) *Agency payments.* Questions concerning delinquent payments should be directed to the designated agency office, or the office responsible for issuing the payment if different from the designated agency office. Questions about disagreements over payment amount or timing should be directed to the contracting officer for resolution. Small business concerns may obtain additional assistance on payment issues by contacting the agency's Office of Small and Disadvantaged Business Utilization.

§ 1315.19 Regulatory references to OMB Circular A-125.

This part supercedes OMB Circular A-125 ("Prompt Payment"). Until revised to reflect the codification in this part, regulatory references to Circular A-125 shall be construed as referring to this part.

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BILLING CODE 3110-01-P

(Canceling Sixth Revision, Sheet No. 4; Sixteenth Revision, Sheet No. 5; Second Revision, Sheet No. 6; First Revision, Sheet No. 8; First Revision, Sheet No. 5A and First Printing, Sheet No. 9)

Hardin County Water District No. 1

CLASSIFICATION OF SERVICE:
RATES, SURCHARGES AND MONTHLY CHARGES

(1)

- d. **Wholesale Rate:** The wholesale rate shall apply to all water used and shall be based on each 1,000 gallons used and shall be rounded for amounts smaller than 1,000 gallons depending on the capabilities of the District's billing software. The rate are as follows;
 - i. **All water used = \$1.92 per 1,000 gallons**
 - ii. All other terms and conditions for a Wholesale Customer are included in the Wholesale Users Agreement which a sample of is included in this tariff. Each wholesale customer must sign the agreement which shall also include the rate and volume of water that will be provided and what are the responsibilities of both the customer and the District.
 - e. **Late Penalties:** All customers who do not pay the amount due by the due date will be assessed an additional ten (10) percent as a late charge to the previous outstanding balance. Said late charge shall apply to all charges, fees or prior penalties included in the outstanding balance on the due date. In order to avoid a late penalties being added, the payment must be received at the District office on the due date shown on the customer bill. If the due date falls on a holiday when District offices are closed, the payment must be received on the first business day prior to the due date. The District cannot be responsible for slow mail delivery, lost mail or other causes beyond the District's control which may make the payment arrive after the due date.
3. **Estimated Bills:** If a meter reading cannot be obtained because the meter is not working, or access to the meter has been denied due to weather or customers causes, the District may determine the customers water use and prepare a bill using an estimated use. The method of estimating will normally use a three (3) month average, however the District reserves the right to use other methods or calculations. If a bill is estimated, it will be noted on the bill.

DATE OF ISSUE December 14, 2006

ISSUED BY: Jim Bruce, Mr. Jim Bruce, General Manager
Hardin County Water District No. 1, Radcliff, Kentucky

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. 2006-00410 DATED August 2, 2007

PUBLIC SERVICE COMMISSION
OF KENTUCKY
EFFECTIVE
DATE EFFECTIVE 9/1/2007 Pursuant to 807 KAR 5.011
SECTION 9 (1)
[Signature]
Executive Director

30. Explain why Hardin District believes that a deviation from 807 KAR 3066 is necessary. Identify the specific subsection(s) of the administrative regulation for which Hardin District seeks a deviation.

ANSWER 30:

Hardin District is specifically requesting deviation from 807 KAR 5:066, section 6(3) pertaining to un-accounted for water loss. As the system has only forty-eight (48) various sized meters, and an estimated 10,000 water connections, there is not a means of calculating unaccounted for water. The reason provided for in HCWD1's application (par. 15, pg 2) was:

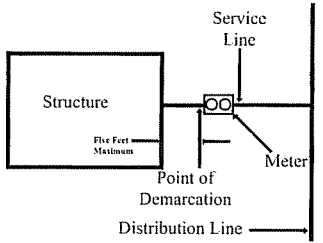
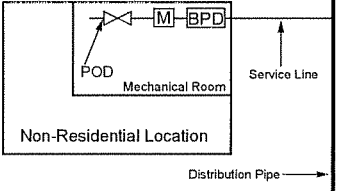
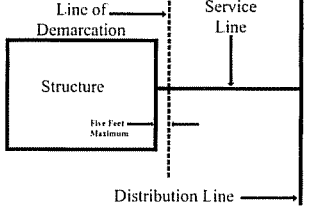
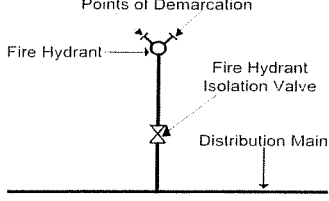
"The contract for service between the District and the Government is a fixed fee, non-metered Contract. Very few of the buildings on post at Ft. Knox have meters installed, nor is water to individual buildings billed to an individual customer. There are about 50 individual meters, which the Government bills for utility services as "reimbursable customers". As part of the Contract, the District will be responsible to maintain, read and replace only these meters, but the billing and collection and customer relationship will remain with the Government. The District will be installing new master meters at the two water treatment plants, and completing a leak survey to identify and repair leaks in the distribution system. Because of the lack of meters at the end user, it will not be possible to calculate unaccounted for water within the percentage required by the regulation. Further, the Government requires a fixed fee agreement, not based on metered use, the cost of leaked water is already recovered and agreed to by the customer".

WITNESS: Mr. Brett Pyles, Operations Manager, HCWD1

31. State Hardin District's "point of service" to the United States Government for water service provided under the provisions of the Utility Service Contract.

ANSWER 31:

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 (point of service) 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 table below describes different scenarios and is part of Hardin District's contract with the United States Government;

Point of Demarcation	Applicable Scenario	Sketch
<p>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.</p>	<p>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.</p>	
<p>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.</p>	<p>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.</p>	
<p>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.</p>	<p>No water meter, backflow device, or cutoff valve exists on the service line entering the structure.</p>	
<p>No point of demarcation exists; the utility service contractor will own all exterior fire suppression infrastructure, up to and including fire hydrants.</p>	<p>Exterior fire protection exists at the Installation.</p>	

As these specific demarcation points were prescribed in the contract, and requested by the customer, and there will be no metered HCWD1 customers within the FK water system, these rules differ from 807 KAR 5:066, Section 12 which define ownership and point of service for metered customers.

WITNESS: Mr. Brett Pyles, Operations Manager, HCWD1

32. Identify each provision of the Utility Service Contract that imposes a requirement that conflicts with or differs from a requirement of KRS Chapter 278 or Title 807 of the Kentucky Administrative Regulations.

ANSWER 32:

The contract between HCWD1 and USG encompasses by reference a vast array of federal acquisition regulations. These regulations impose certain obligations on HCWD1 not otherwise found within KRS Chapter 278 or KAR Title 807. HCWD1 would submit that the obligations imposed by the FAR's are basically supplemental to those otherwise imposed by the Commonwealth of Kentucky and, therefore, are not in conflict with Kentucky regulatory obligations in general.

Exceptions to this general perspective would be found in 807 KAR 5:066 section 2, section 5, section 6, section 8, section 9 and 13. These conflicting provisions are primarily attributable to two factors. The first has to do with the contractual agreement with the USG which specifically and intentionally omits HCWD1's otherwise existing obligation to read meters. The contract with the USG is a flat-fee agreement and is not a function of consumption. Therefore, the provisions of 807 KAR 5:066 section 2, section 6, and section 13 do not apply to this agreement and, therefore, could be deemed to be in "conflict" with applicable state law. Secondly, section 8 and 9 of the aforementioned KAR deal with the location and configuration of distribution mains (section 8) and service mains (section 9). As the District is acquiring these lines as they exist, there exist a distinct possibility that the assets acquired pursuant to the contract are not in conformity with section 8 and 9 of the aforementioned KAR.

Counsel for HCWD1 is of the general impression that there are no material deviations between the terms and conditions of the utility service contract and applicable statutory and regulatory obligations of HCWD1. The only obvious deviation pertains to the government's request that it receive a flat fee as opposed to a metered fee. It is requested this deviation be approved by the Commission.

WITNESS: Mr. David T. Wilson II, Legal Counsel for HCWD1

33. State whether KRS Chapter 74 authorizes Hardin District's proposed acquisition and operation of the Fort Knox potable water utility system. Explain

ANSWER 33:

Presumably KRS Chapter 74 authorizes HCWD1's acquisition of the Fort Knox Potable Water Utility System in light of the Commission's findings and order in Case no. 2004-00422 wherein it approved HCWD1's acquisition of the FK Sanitary Sewer System. Certainly the broad authority set forth in KRS 74.070 regarding the making of contracts would presumably authorize such an acquisition. See also Valla v. Preston Street Road Water District, 395 SW 2d 772 (Ky. 1965). Furthermore, KRS 74.100 authorizes the acquisition of existing systems operating in any water district. As with the acquisition of the sewer utility (PSC case no. 2004-00422) it is understood that HCWD1 will be required to obtain approval from the Hardin County Fiscal Court to alter its district to encompass certain portions of the Fort Knox Military Installation in accordance with KRS 74.100.

WITNESSES: Mr. David T. Wilson II, Legal Counsel for HCWD1 and Mr. Jim Bruce, General Manager, HCWD1