



City of Grand Island

Tuesday, August 10, 2010

Council Session

Item G6

**#2010-211 - Approving Contract with HDR for Uranium Removal
System Design and Specifications**

Staff Contact: Gary R. Mader

Council Agenda Memo

From: Gary R. Mader, Utilities Director
Dale Shotkoski, City Attorney

Meeting: August 10, 2010

Subject: Uranium Removal Equipment Procurement Engineering Services

Item #'s: G-6

Presenter(s): Gary R. Mader, Utilities Director

Background

The City's municipal water system is supplied primarily from its Platte River Well Field. This well field is comprised of 21 wells and a pumping station. Recent testing for State regulatory requirements has indicated composite uranium levels to be approaching the Maximum Containment Level (MCL) established by the EPA. Testing of individual wells for uranium has indicated some wells exceed this MCL. To allow use of these wells during high water system demand periods, additional piping was installed in the past year for blending with lower uranium concentration wells.

As a proactive measure, in case uranium levels cannot be controlled below the new MCL by well blending, the Department recommended that more detailed investigation be undertaken to determine uranium removal methods and evaluate those best suited for the Grand Island system. Factors in the evaluation included; the review of available technologies; amount of uranium removal; capital costs; operational costs; and waste disposal. This type of evaluation is best performed by engineering consultants with wide ranging experience in the design of water treatment systems and with expertise in treatment economics and water chemistry.

A Request for Proposal was developed and advertised in accordance with City Purchasing Policy. The Request for Proposal was based on firms providing a "not to exceed" price for a preliminary evaluation of uranium removal processes. Should further evaluation of treatment processes, such as pilot testing, or actual implementation of treatment processes be required, billing rates were required as part of the proposals to allow the City to negotiate subsequent phases of the project should that be deemed necessary. Company and personnel experience in the field of water treatment were

requested for evaluation of the proposal, including detailed design and construction management experience in water treatment facilities.

On October 27, 2009, Council awarded the contract for the uranium treatment system engineering evaluation to HDR Engineering, Inc. of Lincoln, NE. HDR recently completed the evaluation of treatment options. The evaluation screened known water treatment methods and focused on coagulation/filtration, ion exchange, and adsorptive media as the most viable options for radionuclide removal. The recommendation from the screening study was an adsorptive media system. Recognizing that state regulatory agencies may not be familiar with the details of this technology which might be used to address treatment for the relatively new uranium regulations, HDR's design approach was presented at a meeting with Nebraska Health and Human Services, and Nebraska Department of Environmental Quality. The use of this type of technology has been shown to be very effective in radionuclide removal, but it has not been used in an application as large as would be required to treat Grand Island's water demand. The consensus at the meeting was that it may be useful to perform a large scale pilot program on selected wells at the Platte River Well Field. It is anticipated that a full capacity treatment system would be comprised of several modules the size of a pilot plant, therefore, utilization of the pilot plant could be incorporated into the final design solution. Based on the multiple phase structure of the uranium engineering services RFP, HDR was requested to provide a proposal for preparing specifications to issue for bids for an adsorptive media pilot plant. These specifications are for the components and accessories of an integrated treatment system. The suppliers for these systems are very specialized and details for the systems are not standard, therefore, the bidders may be required as part of the bidding process to perform small pilot demonstrations of their system's effectiveness in radionuclide removal from Grand Island's water. It is anticipated that the next phase would be to design facilities and infrastructure modifications for installing the removal system and prepare specifications to issue for bids for installation contractors.

History:

In 2003, the new regulation placing a MCL on uranium in drinking water became effective. Uranium is a naturally occurring element in the aquifers of Nebraska and other states across the nation. Implementation of the new MCL began with the sampling of the state's municipal water systems in accordance with the EPA specified testing protocol. Samples of the Grand Island water supply for regulatory compliance were first taken in 2004. The sampling protocol requires testing for four consecutive quarters, with the average of the year long sampling results being the level by which system compliance is established.

Sampling and testing of the Grand Island water system thus far show full compliance with the EPA regulation. Uranium is naturally occurring in the aquifer in central Nebraska. Uranium is not an acute concern but rather is a concern over a lifetime of exposure. According to the *Neb-Guide from the University of Nebraska*, "*....uranium in water supplies produces very little radioactivity, the health effects from exposure to uranium are primarily thought to be associated with the chemical properties of soluble uranium. Studies suggest that ingestion of high levels of uranium may be associated with*

an increased risk of kidney damage...Exposure to soluble uranium in drinking water has not been shown to increase the risk of developing cancer.”

Discussion

As required in the RFP for uranium removal engineering services, HDR provided a proposal to perform the next phase in the uranium removal project for the Utilities Department. This phase is to develop specifications for procurement of uranium removal equipment for a large scale pilot plant and to assist in the bidding process. The proposal is based on a multiple phase project agreement with task orders to be specified as the project progresses and phase scopes can be defined and includes Task Order No. 1 for procurement of uranium removal equipment. Engineering fees will be billed as costs are incurred. The Task Order includes personnel billing rates with a not to exceed price of \$34,900. Utilities staff has reviewed the scope and fees for Task Order No. 1 and recommends acceptance.

Alternatives

It appears that the Council has the following alternatives concerning the issue at hand. The Council may:

1. Move to approve.
2. Refer the issue to a Committee.
3. Postpone the issue to future date.
4. Take no action on the issue.

Recommendation

City Administration recommends that the Council approve the Multiple Phase Project Agreement for Professional Services, Exhibit A - Task Order No. 1 with HDR Engineering, Inc. of Lincoln, Nebraska, in an amount not to exceed \$34,900.

Sample Motion

Move to approve the Multiple Phase Project Agreement for Professional Services, Exhibit A - Task Order No. 1 with HDR Engineering, Inc. of Lincoln, NE as submitted.

MULTIPLE PHASE PROJECT AGREEMENT FOR PROFESSIONAL SERVICES

THIS AGREEMENT is made as of this _____ day of _____, 2010, between the City of Grand Island, Nebraska with principal offices at 100 East 1st Street, Grand Island, Nebraska, 68802-1968, hereinafter referred to as "OWNER", and HDR Engineering, Inc., hereinafter referred to as "ENGINEER," for engineering services as described in this Agreement.

WHEREAS, OWNER desires to retain ENGINEER, a professional engineering firm, to provide professional engineering, consulting and related services ("Services") on one or more projects in which the OWNER is involved; and

WHEREAS, ENGINEER desires to provide such services on such projects as may be agreed, from time to time; by the parties;

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

SECTION I. PROJECT TASK ORDER

- 1.1 This Agreement shall apply to as many projects as OWNER and ENGINEER agree will be performed under the terms and conditions of this Agreement. Each project ENGINEER performs for OWNER hereunder shall be designated by a "Task Order." A sample Task Order is attached to this Agreement and marked as Exhibit "A". No Task Order shall be binding or enforceable unless and until it has been properly executed by both OWNER and ENGINEER. Each properly executed Task Order shall become a separate supplemental agreement to this Agreement.
- 1.2 In resolving potential conflicts between this Agreement and the Task Order pertaining to a specific project, the terms of the Task Order shall control.
- 1.3 ENGINEER will provide the Scope of Services as set forth in Part 2 of each Task Order.

SECTION II. RESPONSIBILITIES OF OWNER

In addition to the responsibilities described in paragraph 6 of the attached "HDR Engineering, Inc. Terms and Conditions for Professional Services," OWNER shall have the responsibilities described in Part 3 of each Task Order.

SECTION III. COMPENSATION

Compensation for ENGINEER's Services shall be in accordance with Part 5 of each Task Order, and in accordance with paragraph 11 of the attached "HDR Engineering, Inc. Terms and Conditions for Professional Services."

SECTION IV. TERMS AND CONDITIONS OF ENGINEERING SERVICES

The "HDR Engineering, Inc. Terms and Conditions for Professional Services," which are attached hereto, are incorporated into this Agreement by this reference.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first written above.

City of Grand Island, Nebraska

"OWNER"

BY: _____

NAME: _____

TITLE: _____

ADDRESS: _____

HDR ENGINEERING, INC.

"ENGINEER"

BY: _____

NAME: Ronald J. Sova

TITLE: Vice President

ADDRESS: 8404 Indian Hills Drive
Omaha, NE 68114

HDR Engineering, Inc.

Terms and Conditions for Professional Services

1. STANDARD OF PERFORMANCE

The standard of care for all professional engineering, consulting and related services performed or furnished by ENGINEER and its employees under this Agreement will be the care and skill ordinarily used by members of ENGINEER's profession practicing under the same or similar circumstances at the same time and in the same locality. ENGINEER makes no warranties, express or implied, under this Agreement or otherwise, in connection with ENGINEER's services.

2. INSURANCE

ENGINEER agrees to procure and maintain, at its expense, Workers' Compensation insurance as required by statute; Employer's Liability of \$250,000; Automobile Liability insurance of \$1,000,000 combined single limit for bodily injury and property damage covering all vehicles, including hired vehicles, owned and non-owned vehicles; Commercial General Liability insurance of \$1,000,000 combined single limit for personal injury and property damage; and Professional Liability insurance of \$1,000,000 per claim for protection against claims arising out of the performance of services under this Agreement caused by negligent acts, errors, or omissions for which ENGINEER is legally liable. Upon request, OWNER shall be made an additional insured on Commercial General and Automobile Liability insurance policies and certificates of insurance will be furnished to the OWNER. ENGINEER agrees to indemnify OWNER for the claims covered by ENGINEER's insurance.

3. OPINIONS OF PROBABLE COST (COST ESTIMATES)

Any opinions of probable project cost or probable construction cost provided by ENGINEER are made on the basis of information available to ENGINEER and on the basis of ENGINEER's experience and qualifications, and represents its judgment as an experienced and qualified professional engineer. However, since ENGINEER has no control over the cost of labor, materials, equipment or services furnished by others, or over the contractor(s)' methods of determining prices, or over competitive bidding or market conditions, ENGINEER does not guarantee that proposals, bids or actual project or construction cost will not vary from opinions of probable cost ENGINEER prepares.

4. CONSTRUCTION PROCEDURES

ENGINEER's observation or monitoring portions of the work performed under construction contracts shall not relieve the contractor from its responsibility for performing work in accordance with applicable contract documents. ENGINEER shall not control or have charge of, and shall not be responsible for, construction means, methods, techniques, sequences, procedures of construction, health or safety programs or precautions connected with the work and shall not manage, supervise, control or have charge of construction. ENGINEER shall not be responsible for the acts or omissions of the contractor or other parties on the project. ENGINEER shall be entitled to review all construction contract documents and to require that no provisions extend the duties or liabilities of ENGINEER beyond those set forth in this Agreement. OWNER agrees to include ENGINEER as an indemnified party in OWNER's construction contracts for the work, which shall protect ENGINEER to the same degree as OWNER. Further, OWNER agrees that ENGINEER shall be listed as an additional insured under the construction contractor's liability insurance policies.

5. CONTROLLING LAW

This Agreement is to be governed by the law of the state where ENGINEER's services are performed.

6. SERVICES AND INFORMATION

OWNER will provide all criteria and information pertaining to OWNER's requirements for the project, including design objectives and constraints, space, capacity and performance requirements, flexibility and expandability, and any budgetary limitations. OWNER will also provide copies of any OWNER-furnished Standard Details, Standard Specifications, or Standard Bidding Documents which are to be incorporated into the project.

OWNER will furnish the services of soils/geotechnical engineers or other consultants that include reports and appropriate professional recommendations when such services are deemed necessary by ENGINEER. The OWNER agrees to bear full responsibility for the technical accuracy and content of OWNER-furnished documents and services.

In performing professional engineering and related services hereunder, it is understood by OWNER that ENGINEER is not engaged in rendering any type of legal, insurance or accounting services, opinions or advice. Further, it is the OWNER's sole responsibility to obtain the advice of an attorney, insurance counselor or accountant to protect the OWNER's legal and financial interests. To that end, the OWNER agrees that OWNER or the OWNER's representative will examine all studies, reports, sketches, drawings, specifications, proposals and other documents, opinions or advice prepared or provided by ENGINEER, and will obtain the advice of an attorney, insurance counselor or other consultant as the OWNER deems necessary to protect the OWNER's interests before OWNER takes action or forebears to take action based upon or relying upon the services provided by ENGINEER.

7. SUCCESSORS AND ASSIGNS

OWNER and ENGINEER, respectively, bind themselves, their partners, successors, assigns, and legal representatives to the covenants of this Agreement. Neither OWNER nor ENGINEER will assign, sublet, or transfer any interest in this Agreement or claims arising therefrom without the written consent of the other.

8. RE-USE OF DOCUMENTS

All documents, including all reports, drawings, specifications, computer software or other items prepared or furnished by ENGINEER pursuant to this Agreement, are instruments of service with respect to the project. ENGINEER retains ownership of all such documents. OWNER may retain copies of the documents for its information and reference in connection with the project; however, none of the documents are intended or represented to be suitable for reuse by OWNER or others on extensions of the project or on any other project. Any reuse without written verification or adaptation by ENGINEER for the specific purpose intended will be at OWNER's sole risk and without liability or legal exposure to ENGINEER, and OWNER will defend, indemnify and hold harmless ENGINEER from all claims, damages, losses and expenses, including attorney's fees, arising or resulting therefrom. Any such verification or adaptation will entitle ENGINEER to further compensation at rates to be agreed upon by OWNER and ENGINEER.

9. TERMINATION OF AGREEMENT

OWNER or ENGINEER may terminate the Agreement, in whole or in part, by giving seven (7) days written notice, if the other party substantially fails to fulfill its obligations under the Agreement through no fault of the terminating party. Where the method of payment is "lump sum," or cost reimbursement, the final invoice will include all services and expenses associated with the project up to the effective date of termination. An equitable adjustment shall also be made to provide for termination settlement costs ENGINEER incurs as a result of commitments that had become firm before termination, and for a reasonable profit for services performed.

10. SEVERABILITY

If any provision of this agreement is held invalid or unenforceable, the remaining provisions shall be valid and binding upon the parties. One or more waivers by either party of any provision, term or condition shall not be construed by the other party as a waiver of any subsequent breach of the same provision, term or condition.

11. INVOICES

ENGINEER will submit monthly invoices for services rendered and OWNER will make prompt payments in response to ENGINEER's invoices.

ENGINEER will retain receipts for reimbursable expenses in general accordance with Internal Revenue Service rules pertaining to the support of expenditures for income tax purposes. Receipts will be available for inspection by OWNER's auditors upon request.

If OWNER disputes any items in ENGINEER's invoice for any reason, including the lack of supporting documentation, OWNER may temporarily delete the disputed item and pay the remaining amount of the invoice. OWNER will promptly notify ENGINEER of the dispute and request clarification and/or correction. After any dispute has been settled, ENGINEER will include the disputed item on a subsequent, regularly scheduled invoice, or on a special invoice for the disputed item only.

OWNER recognizes that late payment of invoices results in extra expenses for ENGINEER. ENGINEER retains the right to assess OWNER interest at the rate of one percent (1%) per month, but not to exceed the maximum rate allowed by law, on invoices which are not paid within thirty (30) days from the date of the invoice. In the event undisputed portions of ENGINEER's invoices are not paid when due, ENGINEER also reserves the right, after seven (7) days prior written notice, to suspend the performance of its services under this Agreement until all past due amounts have been paid in full.

12. CHANGES

The parties agree that no change or modification to this Agreement, or any attachments hereto, shall have any force or effect unless the change is reduced to writing, dated, and made part of this Agreement. The execution of the change shall be authorized and signed in the same manner as this Agreement. Adjustments in the period of services and in compensation shall be in accordance with applicable paragraphs and sections of this Agreement. Any proposed fees by ENGINEER are estimates to perform the services required to complete the project as ENGINEER understands it to be defined. For those projects involving conceptual or process development services, activities often are not fully definable in the initial planning. In any event, as the project progresses, the facts developed may dictate a change in the services to be performed, which may alter the scope. ENGINEER will inform OWNER of such situations so that changes in scope and adjustments to the time of performance and compensation can be made as required. If such change, additional services, or suspension of services results in an increase or decrease in the cost of or time required for performance of the services, an equitable adjustment shall be made, and the Agreement modified accordingly.

13. CONTROLLING AGREEMENT

These Terms and Conditions shall take precedence over any inconsistent or contradictory provisions contained in any proposal, contract, purchase order, requisition, notice-to-proceed, or like document.

14. EQUAL EMPLOYMENT AND NONDISCRIMINATION

In connection with the services under this Agreement, ENGINEER agrees to comply with the applicable provisions of federal and state Equal Employment Opportunity for individuals based on color, religion, sex, or national origin, or disabled veteran, recently separated veteran, other protected veteran and armed forces service medal veteran status, disabilities under provisions of executive order 11246, and other employment, statutes and regulations, as stated in Title 41 Part 60 of the Code of Federal Regulations § 60-1.4 (a-f), § 60-300.5 (a-e), § 60-741 (a-e).

15. HAZARDOUS MATERIALS

OWNER represents to ENGINEER that, to the best of its knowledge, no hazardous materials are present at the project site. However, in the event hazardous materials are known to be present, OWNER represents that to the best of its knowledge it has disclosed to ENGINEER the existence of all such hazardous materials, including but not limited to asbestos, PCB's, petroleum, hazardous waste, or radioactive material located at or near the project site, including type, quantity and location of such hazardous materials. It is acknowledged by both parties that ENGINEER's scope of services do not include services related in any way to hazardous materials. In the event ENGINEER or any other party encounters undisclosed hazardous materials, ENGINEER shall have the obligation to notify OWNER and, to the extent required by law or regulation, the

appropriate governmental officials, and ENGINEER may, at its option and without liability for delay, consequential or any other damages to OWNER, suspend performance of services on that portion of the project affected by hazardous materials until OWNER:

(i) retains appropriate specialist consultant(s) or contractor(s) to identify and, as appropriate, abate, remediate, or remove the hazardous materials; and (ii) warrants that the project site is in full compliance with all applicable laws and regulations. OWNER acknowledges that ENGINEER is performing professional services for OWNER and that ENGINEER is not and shall not be required to become an "arranger," "operator," "generator," or "transporter" of hazardous materials, as defined in the Comprehensive Environmental Response, Compensation, and Liability Act of 1990 (CERCLA), which are or may be encountered at or near the project site in connection with ENGINEER's services under this Agreement. If ENGINEER's services hereunder cannot be performed because of the existence of hazardous materials, ENGINEER shall be entitled to terminate this Agreement for cause on 30 days written notice. To the fullest extent permitted by law, OWNER shall indemnify and hold harmless ENGINEER, its officers, directors, partners, employees, and subconsultants from and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) caused by, arising out of or resulting from hazardous materials, provided that (i) any such cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or injury to or destruction of tangible property (other than completed Work), including the loss of use resulting therefrom, and (ii) nothing in this paragraph shall obligate OWNER to indemnify any individual or entity from and against the consequences of that individual's or entity's sole negligence or willful misconduct.

16. EXECUTION

This Agreement, including the exhibits and schedules made part hereof, constitute the entire Agreement between ENGINEER and OWNER, supersedes and controls over all prior written or oral understandings. This Agreement may be amended, supplemented or modified only by a written instrument duly executed by the parties.

17. LIMITATION OF LIABILITY

ENGINEER's and its employees' total liability to OWNER for any loss or damage, including but not limited to special and consequential damages arising out of or in connection with the performance of services or any other cause, including ENGINEER's and its employees' professional negligent acts, errors, or omissions, shall not exceed the greater of \$50,000 or the total compensation received by ENGINEER hereunder, except as otherwise provided under this Agreement, and OWNER hereby releases and holds harmless ENGINEER and its employees from any liability above such amount.

18. LITIGATION SUPPORT

In the event ENGINEER is required to respond to a subpoena, government inquiry or other legal process related to the services in connection with a legal or dispute resolution proceeding to which ENGINEER is not a party, OWNER shall reimburse ENGINEER for reasonable costs in responding and compensate ENGINEER at its then standard rates for reasonable time incurred in gathering information and documents and attending depositions, hearings, and trial.

19. UTILITY LOCATION

If underground sampling/testing is to be performed, a local utility locating service shall be contacted to make arrangements for all utilities to determine the location of underground utilities. In addition, OWNER shall notify ENGINEER of the presence and location of any underground utilities located on the OWNER's property which are not the responsibility of private/public utilities. ENGINEER shall take reasonable precautions to avoid damaging underground utilities that are properly marked. The OWNER agrees to waive any claim against ENGINEER and will indemnify and hold ENGINEER harmless from any claim of liability, injury or loss caused by or allegedly caused by ENGINEER's damaging of underground utilities that are not properly marked or are not called to ENGINEER's attention prior to beginning the underground sampling/testing.

EXHIBIT A
TASK ORDER

This Task Order pertains to an Agreement by and between City of Grand Island, Nebraska, ("OWNER"), and HDR Engineering, Inc. ("ENGINEER"), dated _____, 20____, ("the Agreement"). Engineer shall perform services on the project phase described below as provided herein and in the Agreement. This Task Order shall not be binding until it has been properly signed by both parties. Upon execution, this Task Order shall supplement the Agreement as it pertains to the project described below.

TASK ORDER NUMBER:
PROJECT PHASE NAME:

PART 1.0 PROJECT DESCRIPTION:

PART 2.0 SCOPE OF SERVICES TO BE PERFORMED BY ENGINEER ON THE
PROJECT:

PART 3.0 OWNER'S RESPONSIBILITIES:

PART 4.0 PERIODS OF SERVICE:

PART 5.0 PAYMENTS TO ENGINEER:

PART 6.0 OTHER:

EXHIBIT A
URANIUM REMOVAL WATER TREATMENT PLANT
TASK ORDER NO. 1

This Task Order pertains to an Agreement by and between City of Grand Island, Nebraska, ("OWNER"), and HDR Engineering, Inc. ("ENGINEER"), dated _____, 2010, ("the Agreement"). Engineer shall perform services on the project phase described below as provided herein and in the Agreement. This Task Order shall not be binding until it has been properly signed by both parties. Upon execution, this Task Order shall supplement the Agreement as it pertains to the project described below.

TASK ORDER NUMBER: 1
PROJECT PHASE NAME: URANIUM REMOVAL EQUIPMENT PROCUREMENT

PART 1.0 PROJECT DESCRIPTION:

- 1.1 The City of Grand Island (City) Water Supply System consists of nineteen low pressure wells, located in town, under Permit A-10267 and twenty-one low pressure wells, located in 1200 acre well field, under Permit A-10266. The twenty-one wells under permit 10266 have been tested for high uranium concentrations. A study was completed to examine uranium removal for these twenty one wells.

Raw water from the well field is drawn from a 1200 acre island in the Platte River. The wells are classified as a groundwater supply, approximately 130-ft to 140-ft deep, yielding up to 2 mgd each of generally good quality water. Uranium is the parameter of concern (Maximum Contaminant Level (MCL) of 30 ug/L), for the wells under Permit A-10266, with composite levels ranging from 20 ug/L to a maximum of 50 ug/L dependent upon the wells in operation.

The objective of the previously completed study was to define the nature and extent of regulatory issues, analyze the alternatives, address the water quality issues and define the recommended improvements and an implementation plan. The study report consisted of two technical memorandums addressing the following:

- Water Demand, Water Quality, and Technology Screening
- Uranium Removal Evaluation

Water quality data suggested that Uranium and gross alpha are the only contaminants of concern in the raw water.

The treatment technologies of coagulation/filtration, ion exchange and adsorptive media (Water Remediation Technologies (WRT)) were screened as viable technologies to be investigated and evaluated further to determine the recommended improvement. Screened technologies were evaluated on issues of process viability, system configuration, finished water quality, residuals management and capital and O&M costs.

It has been recommended that an adsorptive media (WRT) treatment plant be implemented for the well field in a phased construction approach. A five (5) MGD plant is recommended to be implemented at this time as a demonstrative project. The plant will treat flows from a few selected wells. Future phases will be constructed when required to meet the regulatory requirements of the remainder of the wells.

The City of Grand Island desires to prepare equipment procurement documents to receive bids for the purchase of the adsorptive media treatment equipment. Bids will be evaluated to make a selection of the desired equipment to be purchased. The City of Grand Island will assign the equipment purchase contract for implementation as part of the second phase of the project for the design and construction of the water treatment facility. The first phase of the project to be authorized by this Task Order is for the procurement of the adsorptive media treatment equipment.

PART 2.0 SCOPE OF SERVICES TO BE PERFORMED BY ENGINEER:

2.1 This Scope of Services for this Task Order is for Engineer to provide engineering services ("Services") to the OWNER. Major categories of work in this scope of services include:

- Project Management
- Procurement by OWNER of Uranium Removal Treatment Equipment

See detailed summary of tasks below:

TASK SERIES 100 - PROJECT MANAGEMENT

Objective: Provide management activities over Project duration including planning, organizing and monitoring Project team activities, preparing and monitoring bidding document production standards, attending meetings, and Project cost projections

HDR Activities

110 - Team Management and Project Control

- Resource management and allocation based on Project schedules and activities
- Budget and invoice management
- Schedule monitoring and update for Project development
- Production coordination

120 – Production Guide Standards

- Review OWNER design standards and bidding document standards
- Develop Project Guide including OWNER specific design standards applicable for the Project Guide will document to all personnel Project activities, constraints, guidelines, budgets and procedures.
- Maintain Project Guide, distribute and update as activities dictate

130 - Meetings

- Project kickoff meeting
- Project coordination meetings – Additional Service
- Bid Package Review Meeting

TASK SERIES 200 – EQUIPMENT PROCUREMENT DOCUMENTS

Objective: Develop bidding documents for equipment procurement outside of the construction contract.

HDR Activities:

210 - Equipment Procurement Bid Package

- Establish viable equipment manufacturers for procurement bid package for adsorptive media equipment to provide:
 - Treatment vessels
 - Adsorptive media
 - Process piping
 - Instrumentation/Controls/PLC's
 - Valves
 - Electrical control equipment
 - All other auxiliary equipment for process operation
- Procurement package will include protocol/requirements for pilot testing for alternate manufacturers (other than WRT). All equipment required for pilot plant shall be the responsibility of the manufacturer.
- Equipment procurement specifications will be developed. Approved Manufacturers listed in those specifications will be given opportunity to comment on specification content prior to issuance of bid package.
- HDR will work in conjunction with OWNER to develop Notice-To-Bidders, Bid Form and Agreement using EJCDC procurement documents as a basis for development. Manufacturers will provide bid for the equipment which will include
 - Complete Uranium Removal adsorptive media System
 - Supervision and assistance for the installation of system and start up of equipment package.
 - Operator training and Operation and Maintenance Manuals.
 - Maintenance of the system during period of contract.
 - Radioactive Materials License for system operation and media handling for the term of the contract.
 - Handling of all treatment media.
 - Installation and replacement of media.
 - Safe transportation and disposal of spent media in a licensed facility.
 - Operating analytical fees (analysis of samples required by the manufacturer for operational monitoring)
 - Performance guarantees to meet the design criteria for uranium removal.

220 - Bid Package Review.

- Submit equipment procurement bid packages to OWNER for review and comment
- Schedule meeting with OWNER to discuss and resolve comments.
- Finalize equipment procurement bid package and issue to regulatory agency
- Conduct internal QC of bid documents
- Incorporate OWNER, regulatory agency and internal HDR QC comments into final bid document package.

230 - Distribution and Bidding

- Print bidding documents and distribute to bidders.
- Provide interpretations and answer questions concerning the bidding documents as requested by the perspective bidders
- Develop addenda as appropriate to interpret, clarify and expand the bidding documents in response to bidder's questions
- Attend bid letting for receipt of bids
- Review each bid proposal received
- Provide written recommendation for award

2.2 Additional Services Requiring Owner's Written Authorization

A. If authorized in writing by Owner, Engineer shall furnish or obtain from others Additional Services of the types listed below.

- 1) Services to make measured drawings of or to investigate existing conditions or facilities, or to verify the accuracy of drawings or other information furnished by Owner or others.
- 2) Services resulting from significant changes in the scope, extent, or character of the portions of the Project designed or specified by Engineer or its design requirements including, but not limited to, changes in size, complexity, Owner's schedule, character of construction, or method of financing; and revising previously accepted studies, reports, Drawings, Specifications, or Contract Documents when such revisions are required by changes in Laws and Regulations enacted subsequent to the Effective Date of this Agreement or are due to any other causes beyond Engineer's control.
- 3) Services resulting from Owner's request to evaluate additional Study and Report Phase alternative solutions beyond those identified in Part 1.
- 4) Services required as a result of Owner's providing incomplete or incorrect Project information to Engineer.
- 5) Furnishing services of Engineer's Consultants for other than Basic Services.
- 6) Determining the acceptability of substitute materials and equipment proposed during the Bidding or Negotiating Phase when substitution prior to the award of contract as allowed by the Bidding Documents.

- 7) Assistance in connection with Bid protests, rebidding, or renegotiating contracts for construction, materials, equipment, or services, except when such assistance is required.
- 8) Providing assistance in responding to the presence of any Constituent of Concern at the Site, in compliance with current Laws and Regulations.
- 9) Preparing to serve or serving as a consultant or witness for Owner in any litigation, arbitration, or other dispute resolution process related to the Project.
- 10) Other services performed or furnished by Engineer not otherwise provided for in this Agreement.

PART 3.0 OWNER'S RESPONSIBILITIES:

3.1 In addition to other responsibilities of Owner as set forth in this Agreement, Owner shall at its expense:

- A. Provide Engineer with all criteria and full information as to Owner's requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, flexibility, and expandability, and any budgetary limitations; and furnish copies of all design and construction standards which Owner will require to be included in the Drawings and Specifications; and furnish copies of Owner's standard forms, conditions, and related documents for Engineer to include in the Bidding Documents, when applicable.
- B. Furnish to Engineer any other available information pertinent to the Project including reports and data relative to previous designs, or investigation at or adjacent to the Site.
- C. Following Engineer's assessment of initially-available Project information and data and upon Engineer's request, furnish or otherwise make available such additional Project related information and data as is reasonably required to enable Engineer to complete its Basic and Additional Services.
- D. Give prompt written notice to Engineer whenever Owner observes or otherwise becomes aware of the presence at the Site of any Constituent of Concern, or of any other development that affects the scope or time of performance of Engineer's services, or any defect or nonconformance in Engineer's services, the Work, or in the performance of any Contractor.
- E. Authorize Engineer to provide Additional Services as set forth in Part 2 of Task Order of the Agreement as required.
- F. Arrange for safe access to and make all provisions for Engineer to enter upon public and private property as required for Engineer to perform services under the Agreement.
- G. Examine all alternate solutions, studies, reports, sketches, Drawings, Specifications, proposals, and other documents presented by Engineer (including obtaining advice of an attorney, insurance counselor, and other advisors or consultants as Owner deems appropriate with respect to such examination) and render in writing timely decisions pertaining thereto.
- H. Provide reviews, approvals, and permits from all governmental authorities having jurisdiction to approve all phases of the Project designed or specified by Engineer

and such reviews, approvals, and consents from others as may be necessary for completion of each phase of the Project.

I. Provide, as required for the Project:

- 1) Accounting, bond and financial advisory, independent cost estimating, and insurance counseling services.
- 2) Legal services with regard to issues pertaining to the Project as Owner requires or deems appropriate, Contractor raises, or Engineer reasonably requests, including but not limited to the review of Contract Documents supplied by Engineer.
- 3) Such auditing services as Owner requires to ascertain how or for what purpose Contractor has used the moneys paid.
- 4) Placement and payment for advertisement for Bids in appropriate publications.

N. Attend the pre-bid conference and bid opening.

PART 4.0 PERIODS OF SERVICE:

HDR will perform services under this Task Order with in a period of 120 calendar days following notice to proceed from OWNER.

PART 5.0 PAYMENTS TO ENGINEER:

5.1 Compensation For Basic Services and Additional Services – Salary Costs Times a Factor Method of Payment

A. Owner shall pay Engineer for Basic Services set forth in Task Order No. 1, as follows:

- 1) An amount equal to Engineer's Salary Costs times a factor of 2.15 for all Basic Services by principals and employees engaged directly on the Project, plus Reimbursable Expenses, and Engineer's Consultant's charges. HDR Billing Rates are summarized as follows:

CLASSIFICATION	HOURLY RATE	ASSIGNED STAFF FOR URANIUM TREATMENT EQUIPMENT PROCUREMENT
Principal-In-Charge	\$170-\$270	\$215
Project Manager	\$120-\$270	\$200
QA/QC Engineer	\$170-\$270	\$270
Senior Engineer/Process Engineer	\$120-\$190	\$160-\$180
Staff Engineer	\$80-\$150	\$110-\$130

CLASSIFICATION	HOURLY RATE	ASSIGNED STAFF FOR URANIUM TREATMENT EQUIPMENT PROCUREMENT
Environmental Engineer	\$115-\$220	\$218
CADD Technician	\$70-\$110	\$90
Hydrogeologist	\$130-\$180	\$155
Administrative Assistant	\$50-\$75	\$72
Architect	\$80-\$170	-
Electrical	\$90-\$175	-
Structural	\$90-\$160	-
Mechanical	\$90-\$165	-
Instrumentation	\$90-\$175	-
Civil	\$85-\$150	-
Clerical	\$40-\$60	\$53

- 2) The total compensation for services under Part 5 is estimated to be \$34,900 based on the Fee Summary Sheet attached.
- 3) Engineer may alter the distribution of compensation between individual phases of the work noted herein to be consistent with services actually rendered, but shall not exceed the total compensation amount unless approved in writing by Owner.
- 4) The total compensation for Engineer's services incorporates all labor, overhead, profit, Reimbursable Expenses, and Engineer's Consultant's charges.
- 5) The portion of the amounts billed for Engineer's services will be based on the applicable Salary Costs for the cumulative hours charged to the Project incurred during the billing period by Engineer's principals and employees multiplied by the above designated factor, plus Reimbursable Expenses and Engineer's Consultant's charges.
- 6) Salary Costs means salaries and wages paid to Engineer's employees plus the cost of customary and statutory benefits including, but not limited to, social security contributions, unemployment, excise and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation, and holiday pay applicable thereto.

- 7) The Salary Costs and the factor applied to Salary Costs will be adjusted annually (as of 01/01/10) to reflect equitable changes in the compensation payable to Engineer.

5.2 Compensation for Reimbursable Expenses

- A. Owner shall pay Engineer for all Reimbursable Expenses including the following categories: transportation and subsistence incidental thereto; obtaining bids or proposals from Contractor(s); toll telephone calls and mobile phone charges; reproduction of reports, Drawings, Specifications, Bidding Documents, and similar Project-related items in addition to those required under Task Order No. 1, and, if authorized in advance by Owner, overtime work requiring higher than regular rates. HDR reimbursable expenses are summarized as follows:
- 1) Personal auto mileage invoices at current IRS rate \$0.55 per mile.
 - 2) Other transit (airfare, rental car, gas for rental car, lodging, and meals) invoiced at actual cost incurred.
 - 3) Telephone, postage and copy costs will be invoiced at actual cost incurred.
 - 4) Technology charges will be invoiced at \$3.70 for each labor hour.
 - 5) Charges for sub consultants will be billed at the invoice cost plus 5%.
- B. The amounts payable to Engineer for Reimbursable Expenses will be the Project-related internal expenses actually incurred or allocated by Engineer, plus all invoiced external Reimbursable Expenses allocable to the Project, the latter multiplied by a factor of 1.00.

This Task Order is executed this _____ day of _____, 2010.

_____ "OWNER"	HDR ENGINEERING, INC. "ENGINEER"
BY: _____	BY: _____
NAME: _____	NAME: <u>Ronald J. Sova</u>
TITLE: _____	TITLE: <u>Vice President</u>
ADDRESS: _____ _____	ADDRESS: <u>8404 Indian Hills Drive</u> <u>Omaha, NE 68114</u>

TASK ORDER NO. 1

FEE SUMMARY SHEET
URANIUM REMOVAL WATER TREATMENT PLANT
EQUIPMENT PROCUREMENT

TASK DESCRIPTION	PRINC	PROJ MGR	SR. PROJECT ENGINEER	SR ENGR/QC	HYDRO- GEOLOGIST	PROJECT ENGR	SENIOR PROCESS ENGR	URANIUM TREATMENT SPECIALIST	ASSIST. PROJECT ENGR	SR TECH	ENVIRON. ENGINEER	ADM. ASSIST	CLERICAL	TOTAL HOURS
Task Series 100 – Management/ Project Implementation	0.0	34.0	0.0	0.0	0.0	28.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	68.0
Task Series 110 - Project Management	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0
- Team Management		2.0												2.0
- Budget and Invoicing		8.0												8.0
- Schedule		1.0												1.0
- Coordination		4.0												4.0
Task Series 120 - Production Guide Standard	0.0	7.0	0.0	0.0	0.0	12.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	25.0
- Design and Bidding Standards		2.0				6.0								10.0
- Project Guide		4.0				4.0							4.0	12.0
- Maintain Project Guide		1.0											2.0	3.0
Task Series 130 - Meetings		12.0	0.0	0.0	0.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.0
- Project Kick off Meeting		8.0				6.0								14.0
- Bid Package Review Meeting		6.0				8.0								14.0
- Special Meetings as requested by Owner - Additional Service														0.0
Task Series 200 - Equipment Procurement Documents	0.0	33.0	0.0	6.0	0.0	84.0	8.0	2.0	0.0	0.0	0.0	0.0	38.0	109.0
Task 210 Equipment Procurement Bid Package	0.0	6.0	0.0	0.0	0.0	40.0	6.0	2.0	0.0	0.0	0.0	0.0	16.0	72.0
- Establish Visible Equipment Manufacturers		2.0				6.0		2.0						12.0
- Pilot Testing Protocol		1.0				6.0	4.0							13.0
- Procurement Specifications		1.0				16.0	4.0						12.0	33.0
- Bid Form/Bidding Requirements		2.0				6.0							4.0	14.0
Task 220 Bid Package Review	0.0	10.0	0.0	6.0	0.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	40.0
- Submit Bid Package						4.0							4.0	8.0
- Schedule Review Meeting		2.0												2.0
- Complete Bid Package/Submit to NHHS		2.0				6.0							4.0	14.0
- QA/QC Bidding Document		4.0		6.0										10.0
- Incorporate Final Comments		2.0				4.0								6.0
Task 230 Distribution and Bidding	0.0	17.0	0.0	0.0	0.0	28.0	0.0	6.0	0.0	0.0	0.0	0.0	12.0	57.0
- Print and Distribute Bidding Documents		1.0				4.0							8.0	13.0
- Address Bidder Questions		2.0				6.0								10.0
- Prepare Addenda as required		2.0				6.0							4.0	14.0
- Attend Bid Listing		4.0												4.0
- Review Bid Proposals		4.0				6.0								12.0
- Written Recommendation		4.0												4.0
Task Series 100 – Management/ Project Implementation	0.0	34.0	0.0	0.0	0.0	28.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	68.0
Task Series 200 – Equipment Procurement Documents	0.0	33.0	0.0	6.0	0.0	84.0	8.0	2.0	0.0	0.0	0.0	0.0	38.0	109.0
TASK SERIES 100 - 400 SUBTOTAL	0.0	67.0	0.0	6.0	0.0	112.0	8.0	2.0	0.0	0.0	0.0	0.0	42.0	237.0

TOTAL LABOR COST	\$32,723
EXPENSES	\$2,177
TOTAL PROJECT COST	\$34,900

TASK ORDER NO. 1

FEE SUMMARY SHEET
URANIUM REMOVAL WATER TREATMENT PLANT
EQUIPMENT PROCUREMENT

Expense Description	Brandhuber	Mileage/mile	Meals each, avg.	Printing	Miscellaneous	Total Cost
Rate	1	\$0.50	\$12.50	1	1	
Expenses						
Technical fee					\$876.90	
Initial Meeting		250	5			
Print Preliminary Review Documents				\$50.00		
Bid Document Review Meeting				\$50.00		
Print Regulatory/QA/QC Review Documents				\$150.00		
Print Bidding Documents				\$500.00		
Attend Bid Letting		250	4			
Bid Document Review Meeting		250	5			
Meals (5)						
SUBTOTAL	\$0.00	\$375.00	\$175.00	\$750.00	\$876.90	\$2,176.90



Wes Nespor, Purchasing Agent

*Working Together for a
Better Tomorrow, Today*

**REQUEST FOR PROPOSAL
FOR
URANIUM REMOVAL METHODS EVALUATION ENGINEERING SERVICES**

RFP DUE DATE: October 8, 2009 at 4:00 p.m.

DEPARTMENT: Utilities

PUBLICATION DATE: September 22, 2009

NO. POTENTIAL BIDDERS: 4

SUMMARY OF PROPOSALS RECEIVED

CH2M Hill
Omaha, NE

Olsson Associates
Lincoln, NE

HDR Engineering, Inc.
Lincoln, NE

cc: Gary Mader, Utilities Director
Jeff Pederson, City Administrator
Dale Shotkoski, City Attorney
Pat Gericke, Utilities Admin. Assist.
Tim Luchsinger, Utilities Assist. Director

Bob Smith, Assist. Utilities Director
Mary Lou Brown, Finance Director
Wes Nespor, Purchasing Agent
Karen Nagel, Utilities Secretary

P1372

RESOLUTION 2010-211

WHEREAS, the City's municipal water system is supplied primarily from its Platte River Well Field; and

WHEREAS, uranium is naturally occurring in the aquifer in central Nebraska; and

WHEREAS, testing of individual wells for uranium has indicated some wells exceed the Maximum Containment Level (MCL) established by the EPA; and

WHEREAS, to allow use of these wells during high water system demand periods, additional piping was installed in the past year for blending with lower uranium concentration wells; and

WHEREAS, as a proactive measure, in case uranium removal is necessary in the future, a Request for Proposal for uranium treatment system engineering services was awarded to HDR Engineering, Inc., of Lincoln, Nebraska on October 27, 2009; and

WHEREAS, HDR is familiar with the details of the Uranium Removal Water Treatment technology; and

WHEREAS, the Request for Proposal included provisions for additional engineering services; and

WHEREAS, HDR has provided a price quotation to provide engineering services for procurement of uranium removal equipment for a large scale pilot treatment plant.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that the Multiple Phase Project Agreement for Professional Services, Task Order No. 1, between the City of Grand Island, and HDR Engineering, Inc., of Lincoln, Nebraska, is hereby approved.

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Adopted by the City Council of the City of Grand Island, Nebraska, August 10, 2010.

Margaret Hornady, Mayor

Attest:

Approved as to Form	☐ _____
August 6, 2010	☐ City Attorney

RaNae Edwards, City Clerk