

**IT IS THE VENDOR'S RESPONSIBILITY TO CHECK
FOR ADDENDUMS PRIOR TO SUBMITTING PROPOSALS**

**REQUEST FOR PROPOSALS
SPECIFICATION NO. 07-176**

The City of Lincoln, Nebraska intends to enter into a contract and invites you to submit a sealed proposal for:

**SCADA SYSTEM REPLACEMENT,
ASHLAND WATER TREATMENT PLANT,
LINCOLN WATER SYSTEM**

Sealed proposals will be received by the City of Lincoln, Nebraska on or before 12:00 noon **Friday, June 29, 2007** in the office of the Purchasing Agent, Suite 200, K Street Complex, Southwest Wing, 440 South 8th Street, Lincoln, Nebraska 68508. Proposals will be publicly opened at the K Street Complex, reading only the names of the firms submitting proposals.

Proposals may be downloaded from the City's website at www.lincoln.ne.gov Keyword: Bid.

Prospective proposers must monitor the listing for any addendums.

A pre-submission meeting will be held at the Lincoln Water System Ashland Production Facility, 401 Hwy 6, Ashland, NE, 68003 on **Thursday, June 14, 2007 at 10:00 a.m. CDT**. All proposers are encouraged to attend.

Proposers should take caution if U.S. mail or mail delivery services are used for the submission of proposals. Mailing should be made in sufficient time for proposals to arrive in the Purchasing Division, prior to the time and date specified above. Late proposals will not be considered. Fax or e-mail proposals are not acceptable. Proposal response must be in a sealed envelope.

INSTRUCTIONS TO PROPOSERS
CITY OF LINCOLN, NEBRASKA
PURCHASING DIVISION

1. PROPOSAL PROCEDURE

- 1.1 Each RFP must be legibly printed in ink or typed, include full name, business address, telephone number, fax number and email address of the Proposer; and be signed in ink by the Proposer.
- 1.2 Response by a firm/organization other than a corporation must include the name and address of each member.
- 1.3 A response by a corporation must be signed in the name of such corporation by a duly authorized official thereof.
- 1.4 Any person signing a response for a firm, corporation, or other organization must show evidence of his authority so to bind such firm, corporation, or organization.
- 1.5 Proposals received after the time and date established for receiving offers will be rejected.

2. EQUAL OPPORTUNITY

- 2.1 Each proposer agrees that it shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, disability, national origin, age, or marital status. In the employment of persons, proposer shall take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to race, color, religion, sex, disability, national origin, age, or marital status.

3. DATA PRIVACY

- 3.1 Proposer agrees to abide by all applicable State and Federal laws and regulations concerning the handling and disclosure of private and confidential information concerning individuals and corporations as to inventions, copyrights, patents and patent rights.
- 3.2 The proposer agrees to hold the City harmless from any claims resulting from the proposer's unlawful disclosure or use of private or confidential information.

4. PROPOSER'S REPRESENTATION

- 4.1 Each proposer by signing and submitting an offer, represents that he/she has read and understands the specification documents, and the offer has been made in accordance therewith.
- 4.2 Each offer for services further represents that the proposer is familiar with the local conditions under which the work and has correlated the observations with the requirements of the RFP.

5. SPECIFICATION CLARIFICATION

- 5.1 Proposers shall promptly notify the Purchasing Agent of any ambiguity, inconsistency or error which they may discover upon examination of specification documents.

- 5.2 Proposers desiring clarification or interpretation of the specification documents shall make a written request which must reach the Purchasing Agent at least seven (7) calendar days prior to date and time for response receipt, unless otherwise noted in RFP.
- 5.3 Interpretations, corrections and changes made to the specification documents will be made by written addenda.
- 5.4 Oral interpretations/changes to Specification Documents made in any other manner, will not be binding on the City; proposers shall not rely upon oral interpretations.

6. ADDENDA

- 6.1 Addenda are written documents issued by the City prior to the date for receipt of offers which modify or interpret the specification document by addition, deletion, clarification or correction.
- 6.2 Changes made to the specification documents will be made by written addenda to all known prospective bidders and posted on the City-County website at lincoln.ne.gov Keyword - Bid.
- 6.3 Copies of addenda will be made available for inspection at the office of the Purchasing Agent and on the City's website.
- 6.4 No addendum will be issued later than forty-eight (48) hours prior to the date and time for receipt of offers, except an addendum withdrawing the RFP, or addendum including postponement.
- 6.5 Proposers shall ascertain prior to submitting their offer that they have received all addenda issued, and they shall acknowledge receipt of addenda in their proposal.

7. ANTI-LOBBYING PROVISION

- 7.1 During the period between the proposal advertisement date and the contract award, proposers, including their agents and representatives, shall not lobby or promote their proposal with any member of the City Council or City Staff.

8. EVALUATION AND AWARD

- 8.1 The signed proposal shall be considered an offer on the part of the proposer. Such offer shall be deemed accepted upon issuance by the City of purchase orders, contract award notifications, or other contract documents appropriate to the work.
- 8.2 No offer shall be withdrawn for a period of ninety (90) calendar days after the time and date established for receiving offers, and each proposer agrees in submitting an offer.
- 8.3 In case of a discrepancy between the unit prices and their extensions, the unit prices shall govern.
- 8.4 The RFP process is designed to be a competitive negotiation platform, where price is not required to be the sole determinative factor; also the City has the flexibility to negotiate with a select firm or selected firms to arrive at a mutually agreeable relationship.

8.5 A committee will be assigned the task of reviewing the proposals received.

8.5.1 The committee may request documentation from Proposer(s) of any information provided in their proposal response, or require the Proposer to clarify or expand qualification statements.

8.5.2 The committee may also require a site visit and/or verbal interview with a Proposer or select group of Proposers to clarify and expand upon the proposal response.

8.6 The offer will be awarded to the lowest responsive, responsible proposer whose proposal will be most advantageous to the City, and as the City deem will best serve their requirements.

8.7 The City reserves the right to accept or reject any or all offers, parts of offers; request new proposals, waive irregularities and technicalities in offers; or to award the RFP on a split-order basis, or lump-sum basis; such as shall best serve the requirements and interests of the City.

9. INDEMNIFICATION

9.1 The proposer shall indemnify and save harmless the City of Lincoln, Nebraska from and against all losses, claims, damages, and expenses, including, attorney's fees arising out of or resulting from the performance of the contract that results in bodily injury, sickness, disease, death, or to injury to or destruction of tangible property, including the loss of use resulting therefrom and is caused in whole or in part by the proposer, any subcontractor, any directly or indirectly employed by any of them or anyone for whose acts any of them may be liable. This section will not require the proposer to indemnify or hold harmless the City of Lincoln for any losses, claims damages, and expenses arising out of or resulting from the sole negligence of the City of Lincoln, Nebraska.

9.2 In any and all claims against the City or any of its members, officers or employees by an employee of the proposer, any subcontractor, anyone directly or indirectly employed by any of them or by anyone for whose acts made by any of them may be liable, the indemnification obligation under paragraph 9.1 shall not be limited in any way by any limitation of the amount or type of damages, compensation or benefits payable by or for the bidder or any subcontractor under worker's or workmen's compensation acts, disability benefit acts or other employee benefit acts.

10. LAWS

10.1 The Laws of the State of Nebraska shall govern the rights, obligations, and remedies of the Parties under this proposal and any agreement reached as a result of this process.

10.2 Proposer agrees to abide by all applicable State and Federal laws and regulations concerning the handling and disclosure of private and confidential

information concerning individuals and corporations as to inventions, copyrights, patents and patent rights.

11. AWARD

11.1 The RFP process is designed to be a competitive negotiation platform, where price is not required to be the sole determinative factor; also the City has the flexibility to negotiate with a selected firm or firms to arrive at a mutually agreeable relationship.

11.2 The City shall be the sole judge as to merits of the proposal, and the City's decision will be final.

11.3 A committee will be assigned by the Mayor with the task of reviewing the proposals received.

11.3.1 The committee may request documentation from

Proposer(s) of any information provided in their proposal response, or require the proposer to clarify or expand qualification statements.

11.3.2 A short list of firms from proposals submitted may be selected for a presentation to the committee and ranked by committee members.

11.4 Final approval to enter into contract negotiations with the top ranked firm will be by the Mayor of the City of Lincoln.

11.5 The City shall not be liable for any expense incurred in connection with preparation of a response to this RFP.

11.6 The contract document shall incorporate by reference all requirements, terms and conditions of the solicitation, proposal received and all negotiated details.

12. LIVING WAGE

12.1 The bidders agree to pay all employees employed in the performance of this contract, a base wage of not less than the City Living Wage per Section 2.81 of the Lincoln Municipal Code. This wage is subject to change every July.

1. **PROJECT INFORMATION**
 - 1.1 The City intends to retain a professional engineering firm to perform normal and customary professional services for the engineering pre-design, preparation of bid documents and construction phase services for the replacement of the SCADA system at Lincoln Water System, Water Treatment Plant - Ashland, Nebraska
 - 1.2 The scope of services identified in the RFP are meant to serve as a general description of the anticipated project tasks.
 - 1.3 It is the City-s intent to select the best qualified firm based on their statement of qualifications and project approach which best accomplishes the project objectives.
 - 1.4 The City will rely on the firm-s competence and experience to develop a final scope of services identifying all necessary tasks meetings and deliverables.
 - 1.4.1 Project expectations are further described below.

2. **GENERAL INFORMATION AND BACKGROUND**
 - 2.1 Existing SCADA system was provided by Johnson Yokogawa Company.
 - 2.2 Existing plant SCADA system utilizes Distributed Control System (DCS) architecture.
 - 2.3 The existing SCADA system is used for drinking water system process control, monitoring and historical reporting of water system production, treatment, transmission, and distribution operations.
 - 2.4 It is the City-s intent to obtain a new SCADA system with all the basic functionality of the existing system while incorporating additional new operating features and capabilities.
 - 2.5 It is the City-s intent to have a signed contract with Notice to Proceed to be no later than September 1, 2007.

3. **PRE-SUBMISSION**
 - 3.1 A Pre-submission Meeting will be held at the LWS Ashland Treatment Plant on **June 14, 2007 at 10:00 AM.**
 - 3.2 Applicable Documents such as System Drawings, schematics, diagrams, and existing system configuration data files will be discussed at that time.
 - 3.3 This will be the only time that Respondents will be allowed a site visit for the purpose of gathering sufficient information to prepare their proposal.
 - 3.4 Any and all questions must be directed to Tom Kopplin, Assistant Purchasing Agent via e-mail no later than seven (7) days before due date.
 - 3.5 All correspondence deemed relevant to the process will be addressed by addendum on the Purchasing web-site.

4. **GENERAL DESIGN REQUIREMENTS**
 - 4.1 Review the existing system hardware and software configuration.
 - 4.1.1 **See Sections 13 and 14 for further system details.**
 - 4.2 Conduct a site visit to research physical layout of facilities and existing system.
 - 4.3 Develop a System Implementation Plan.
 - 4.3.1 This plan will include a means for an incremental transition from the existing system to the new system.
 - 4.3.2 Construction and installation of the new system will accommodate operation of new and existing systems during cutover to minimize plant downtime, plant seasonal operational demands, and the overall impact of system cut-over to water system operations.
 - 4.4 Develop a preliminary plan for replication and transfer of the existing SCADA system database for use in new system development.
 - 4.5 Develop an understanding of new system operating requirements, plant operating processes, network security concerns, and system capabilities.
 - 4.5.1 **See Section 15 for further system details.**

- 4.6 Prepare a technical memorandum outlining the proposed scope of work to be included within the construction contract, recommendations on the SCADA system design, other project requirements, and preliminary estimates of project costs.
- 4.7 Prepare final plans, specifications, bidding documents and estimates of probable cost.
- 4.8 Submit plans and specifications to the appropriate review agencies for comments and distribute contract documents to potential bidders.
- 4.9 Assist with prequalification of system suppliers and products.
- 4.10 Address technical questions received by City Purchasing from suppliers and potential bidders during the advertising phase of the project.
- 4.11 Conduct a Pre-Bid Meeting with City Purchasing to familiarize the potential bidders with the site issues, project requirements and other issues prior to the bidding.
- 4.12 Review the bids and prepare a written recommendation on the award of contract.
- 4.13 Assist with pre-qualification of contract bidders and check bidder references after the bid.
- 4.14 Assist with the quality assurance review of system configuration and HMI development tasks performed by the System Supplier and City Staff.
- 4.15 Assist with selection and scheduling of system training for LWS staff members.

5. CITY'S RESPONSIBILITIES

- 5.1 Designate project representative and City project team to coordinate work activities of City project team, Consultant, and other affected parties.
- 5.2 Provide maps, drawings, records, audits, annual reports, and other data that are available in the files of the City and which may be useful in the work involved under this contract.
- 5.3 Provide desk space (as required) for the Consultant-s personnel during preliminary investigations, and construction phase services.
- 5.4 Make all policy and budgetary decisions so as to allow timely completion of the work.
- 5.5 Tentative Project Schedule

5.5.1	Notice to proceed	September 2007
5.5.2	Initial Meeting	September 2007
5.5.3	Begin Field Inspections and Technical Specifications	Consultant to Provide*
5.5.4	Technical Memorandum and 30% Review Meeting	Consultant to Provide*
5.5.5	Technical Specifications Meeting and 60% Review	Consultant to Provide*
5.5.6	Final Documents prepared and delivered with the 90% Review	Consultant to Provide*
5.5.7	City to Receive Bids on Project	Consultant to Provide*
5.5.8	Project Completion Date	Consultant to Provide*

*Consultant shall provide tentative dates for completion to allow sufficient time for the City to implement and meet the dates as previously stated in this RFP.

6. SUBMITTAL REQUIREMENTS- LETTER PROPOSAL FORMAT

- 6.1 General Statement of Qualifications.
- 6.2 Firm name, address, and telephone number.
- 6.3 Year established and former names.
- 6.4 Types of services particularly qualified to perform.
- 6.5 Names of principals and states in which they are registered.
- 6.6 Names of key personnel, experience of each, and length of service with the firm.
- 6.7 Number of staff usually and currently employed.
- 6.8 Outside consultants and associates usually and currently employed.
- 6.9 List of completed projects of a similar nature for which the firm was the principal professional.
- 6.10 Current projects of the firm and estimated construction cost of each.
- 6.11 Willingness and capability to meet the time requirements expressed in the Scope of Services.
- 6.12 Other additional material as may be required in the Scope of Services.

7. PROPOSAL CONTENTS

- 7.1 Describe and outline the Firm's Approach for performing the work required by this project.
 - 7.1.1 Include an implementation plan describing project design philosophy, project phases, key work elements and issues to meet critical project dates and a recommended schedule of meetings to provide for timely input by City project team.
- 7.2 Outline your firm's proposed project schedule dates to complete the Project Tentative Schedule.
 - 7.2.1 Provisions for meaningful input from City project team during the initial project review are essential and shall be addressed.
- 7.3 Delineate the Project Team and Organization.
 - 7.3.1 Include the names of key individuals to be assigned to and work directly on the project.
 - 7.3.2 Describe specific areas and limits of responsibilities for each member of the team and any proposed sub-consultants to be utilized.
 - 7.3.3 Include a project team organizational chart showing lines of responsibility and extent of involvement for sub-consultants.
 - 7.3.4 Include resumes for project team members, key individuals and sub-consultants.
- 7.4 Describe the Ability of the Firm to Meet the Intent of Required Services outlined in this RFP, including:
 - 7.4.1 Time availability of team members to meet the tentative project schedule.
 - 7.4.2 Quality Assurance and Quality Control (QA/QC) review procedures to be utilized on this project.
 - 7.4.3 Cost estimating and cost control procedures used by the firm on similar projects.
 - 7.4.4 A statement of general qualifications and background experience of the firm and project team members which also includes sub-consultants in this type of project and work.
 - 7.4.4.1 Include a comparison to projects of similar size and capacity.
 - 7.4.5 List projects of similar size and capacity.
 - 7.4.6 List what types of anticipated assistance that may be required from the City project team or other City agencies.
 - 7.4.6.1 Include a list of contacts of former clients (to include contact person, title, and telephone number) for which your firm was engaged with the past five (5) years to perform similar services as described herein.

7.4.6.2 **NOTE:** Proposals will be reviewed and evaluated by the Department of Public Works and Utilities, Lincoln Water System and ranked (e.g.: 1,2,3) in accordance with the selection process and procedure.

8. EVALUATION CRITERIA

- 8.1 Understanding of the requirements of this project.
- 8.2 Relevance and suitability of the project approach and schedule to meet the needs of the City.
- 8.3 Qualifications and expertise of the key personnel to be assigned to this project.
- 8.4 Background experience of the firm and the project team as it directly relates to this project.
- 8.5 Record of past performance on similar projects.
- 8.6 Comments and opinions provided by references.
- 8.7 Quality and cost control procedures to be used on this project. Identify personnel responsible for these controls.
- 8.8 Resources of the firm to conduct and complete this project in a satisfactory manner.
- 8.9 Factors to be considered include:
 - 8.9.1 Current work load (including current work with the City), proposed schedule for completion, and ability and willingness to commit the key personnel.
 - 8.9.2 The clarity, conciseness, and organization of proposal.

9. SUBMITTAL PROCEDURES

- 9.1 Submit Seven (7) copies of your proposal to the City Purchasing Agent at the address **no later than** the date specified in this Request for Proposal.
- 9.2 Each submitter must include with their proposal a separate sealed envelope breaking down their proposed fees for this proposal.

10. CONTACTS

- 10.1 Contact regarding the development of a proposal shall be made only with the City Purchasing Department via email to, tkopplin@lincoln.ne.gov.
- 10.2 All correspondence deemed relevant to the process and any responses will be addressed by addendum.
 - 10.2.1 All addenda answering questions providing clarifications will be posted by the City Purchasing Department on their web-site located at: <http://www.lincoln.ne.gov/city/finance/purch/spec/index.htm>
 - 10.2.2 Contact city purchasing at 402-441-7410 with any questions regarding locating this information at our web site.

11. FACILITY

- 11.1 The Lincoln Water System, Water Treatment Facility is a secured facility.
- 11.2 All Visitors, Contractors, or Sub-Contractors will be subject to all Lincoln Water System security protocols.

12. PROJECT SECURITY

- 12.1 The exact location of the facilities that are to be built by this project are secured facilities.
- 12.2 They are identified as part of the City of Lincoln's critical infrastructure and protected from disclosure under the Public Records Act 84-712.05.
- 12.3 Copies of existing reports or drawings are not to be copied, reproduced, transmitted electronically, or publicized in any manner.
- 12.4 Prior to any copies being issued to prospective consultants, a non-disclosure agreement must be signed by the consultant stipulating to the City of Lincoln's requirements.
- 12.5 All copies shall be returned to LWS by the date indicated in the agreement.
- 12.6 Any breaches in the non-disclosure agreement shall result in appropriate action taken against the consultant by the City of Lincoln.

13. PRESENT EXISTING SCADA SYSTEM HARDWARE IN SERVICE

- 13.1 Three (3) HMI Redundant Servers
- 13.2 Eighteen (18) HMI Client Workstations
- 13.3 Eight (8) Distributed Data Base Processors
- 13.4 Two (2) Serial Wireless Communication Channels
- 13.5 Twenty-one (21) RS-485 Wired Serial Data Channels
- 13.6 One (1) RS-485 Wired Serial PLC
- 13.7 One-hundred seventy-four (174) Opto-22 Analog and Digital I/O Boards
- 13.8 Thirty-two (32) Wireless Accessed Remote PLCs
- 13.9 CAT 5 and Multimode Fiber Ethernet cabling and equipment.
- 13.10 Miscellaneous Report and Screen Printers.

14. PRESENT EXISTING SYSTEM HMI SOFTWARE IN SERVICE

- 14.1 Existing HMI software is the INCON XL/s software originally sold and installed by Johnson B Yokogawa Company.
- 14.2 Original system configuration performed by B Black and Veach, Co.
- 14.3 The existing SCADA database currently uses the following estimated number and types of system data points:
 - 14.3.1 3,100 Field Digital Inputs
 - 14.3.2 1,850 Field Digital Outputs
 - 14.3.3 1,396 Field Analog Inputs
 - 14.3.4 388 Field Analog Outputs
 - 14.3.5 676 Custom Process Screens
 - 14.3.6 350 Custom Control Strategies

15. NEW SYSTEM GENERAL REQUIREMENTS

- 15.1 It is the intent of the owner to retain certain subsystems of the existing SCADA system and to interface the new SCADA system with these existing components.
- 15.2 The new SCADA system shall have the capability to have full hardware and data exchange inter-connectivity with portions of the existing Optomux I/O Digital and Analog Panels, GE Fanuc 90-30 Series, and GE Fanuc VersaMax PLC equipment.
 - 15.2.1 The type and protocol of the I/O interface network is to be determined.
- 15.3 The new system shall reuse, to the extent possible, existing fiber optic and CAT 5 copper network infrastructure.
 - 15.3.1 The Consultant in conjunction with the City will determine if any existing infrastructure needs to be replaced during the installation phase.
 - 15.3.2 The new system shall incorporate secure network technology to interface with two existing wireless serial data links to the Production Well Fields and the Lincoln Transmission and Distribution Facilities.
 - 15.3.3 The new system shall incorporate LWS Cyber Audit network security recommendations including network intrusion prevention and firewall technology on network connections between SCADA system and unsecured portions of the Management Information System networks (City Network).
 - 15.3.4 The new system shall include complete system hardware and software documentation, and drawings
 - 15.3.5 The new system shall incorporate secure Administrator level remote access connectivity to the new system.
 - 15.3.6 The location of a new HMI client workstation will be the LWS Administration Building located at 2021 N. 27th St. Lincoln, Nebraska.
 - 15.3.6.1 The location of a the HMI client workstation shall have secure network connectivity for access to new SCADA system.

- 15.3.6.2 Network connectivity between Ashland Treatment Plant and LWS N. 27th St. shall be via City fiber and microwave link.
- 15.3.7 The new system shall have historical data reporting capability utilizing integration, averaging, and collection and recording of live system data.
- 15.3.8 Then new system shall have the capability for the long-term storage of operating historical data to local and removable media.
 - 15.3.8.1 System shall have the capability to retrieve, and sort stored historical data for inclusion in custom reports.
- 15.3.9 Additional system requirements may be added at the recommendation of the Owner or Consultant.
- 15.3.10 The new system shall duplicate control strategy functions of the existing system.

16. SYSTEM HARDWARE REDUNDANCY

- 16.1 The new System shall incorporate hardware and software redundancy at the HMI server level.

17. NEW SYSTEM CUTOVER REQUIREMENTS

- 17.1 The new system implementation shall provide a plan for an incremental cut-over from the existing system.
- 17.2 Installation of new equipment shall allow parallel operation of new and existing systems during cut-over to minimize the downtime and the impact to water system operations.