



CITY OF CONCORD
CONCORD, NORTH CAROLINA

FOR

BID# 2211

CODDLE CREEK WATER PLANT FILTER CONTROL PLC MODIFICATION

FOR

WATER RESOURCES DEPARTMENT

ANNOUNCED DATE: FRIDAY, JANUARY 4, 2013

DUE DATE: THURSDAY, JANUARY 17, 2013

TIME: 2:00 PM
IN CONFERENCE ROOM C
ALFRED M. BROWN OPERATIONS CENTER
850 WARREN C. COLEMAN BOULEVARD
P.O. BOX 308
CONCORD, NC 28025

REQUEST FOR BID

The City of Concord will receive sealed bids, on Thursday, January 17, 2013 at 2:00 PM, in Conference Room C, Alfred M. Brown Operations Center, 850 Warren C. Coleman Boulevard, Concord, North Carolina 28025. Said proposals will be publicly opened and read for:

BID# 2211
CODDLE CREEK WATER PLANT FILTER CONTROL PLC
MODIFICATION

Copies of the specifications if not included in the bid can be Obtained by contacting the Purchasing Department, Alfred M. Brown Operations Center, 850 Warren C. Coleman Blvd., P.O. Box 308, Concord, N.C. 28025. Telephone (704) 920-5441, Fax (704) 785-8856.

NC General Statutes, including G.S. §143-129, and the city of Concord, NC General Specifications and Instructions to bidders will govern the RFB and award of the contract.

The City of Concord reserves the right to reject any or all bids.

Sid Talbert
Purchasing Manager
City of Concord, N.C.

In accordance with state law (G.S. 143.129), the award shall be made to the lowest responsible, responsive bidder, taking into consideration quality, performance, the time specified in the bid. Prices should be quoted for each line as well as a price for the total award.

Each bid must be submitted in a sealed envelope, so marked as to indicate its contents when being opened. **All bids should be marked BID #2211 CODDLE CREEK WATER PLANT FILTER CONTROL PLC MODIFICATION**

An authorized official of the firm must sign the bid.

The vendor will be required to submit a written request for payment. Payment will depend on projected delivery date stated in the bid for items and certified acceptable by Christie Putnam – Water Resources Director, for City of Concord, P.O. Box 308, Concord, North Carolina 28025. Telephone (704) 920-5343. Questions concerning bid requirements or specifications should be directed to the Purchasing Manager, Alfred M. Brown Operations Center, 850 Warren C. Coleman Boulevard, P.O. Box 308, Concord, NC 28025. Any changes in specifications will be in writing in form of an addendum and furnished to all bidders. Verbal information obtained otherwise will not be considered in the awarding of bids. No changes to specifications will be permitted within (5) days to the bid opening.

Instructions for preparation and submission of a bid/proposal are contained in the attached packet. Please note that specific forms for submission may be required. Any changes to the conditions and specifications must be in the form of a written addendum to be valid; therefore, the Purchasing Department will issue a written addendum to document on all approved changes. Any bid submitted which does not acknowledge the receipt of an issued addendum will not be considered. Bidders should have no contact with elected officials or appointed officials except the Purchasing Manager during the bidding process. Any such contact will subject bidders to immediate disqualification. Questions regarding specifications should be directed to the Purchasing Manager. A bid proposal from your firm will be appreciated.

Bid Proposal

City of Concord
P.O. Box 308
Concord, North Carolina

Gentlemen/Ladies:

The undersigned, as bidder, hereby declares the proposal is made without connection with any other person, company, or parties making a similar bid or proposal, and that it is in all respects fair and in good faith without collusion or fraud. The Bidder has carefully examined the annexed form of the specifications and instructions to the bidder and hereby declares that he will furnish the material called for in a manner prescribed in the specifications and instructions to bidders for the following prices listed.

PRICE _____

DELIVERY DATE _____

COMPANY NAME _____

AUTHORIZED SIGNATURE _____

TYPE NAME AND TITLE _____

FEDERAL ID # _____

NC CONTRACTORS LICENSE # _____

TELEPHONE # _____

Note:

This signature page must be signed for your bid to be valid.

GENERAL SPECIFICATIONS & INSTRUCTIONS TO BIDDERS

Scope

It is the intent of this bid invitation to obtain proposals for supplying the materials, supplies and/or equipment listed on the Proposal Sheet. You are requested to submit your bid on the enclosed Proposal Sheet and return the entire sealed package to Sid Talbert, Purchasing Manager, City of Concord (hereinafter "City"), PO Box 308, Concord, NC 28026-0308 no later than the time specified in the bid advertisement. Bidders will be required to comply with all applicable statutes, regulations, and local ordinances, ect. And those attached to and made a part of the proposal.

Marking of Bid Envelopes

Bids must be contained in a sealed envelope, plainly marked, showing the bid name, bid number, date, time for opening bids and the bidder's name.

Late Bids Not Considered

Bids received after the stipulated bid opening date and time will not be considered.

Compliance With Specifications

Your bid must be in strict compliance with the specifications and offer the same or equal equipment. Exceptions are to be listed separately in a letter that will become a part of your proposal; otherwise, it is fully understood that the equipment offered is exactly as specified. The City reserves the right to allow or disallow minor deviations from the specifications in order to purchase what is best for the City from a standpoint of quality, price and service to be rendered.

Standard Equipment

To protect the interest of the City, the bidder guarantees that the equipment bid is standard equipment with parts regularly used for equipment offered. There must be no parts or attachments substituted or applied contrary to the manufacturer's recommendations and standards unless expressly called for in the specifications.

Warranty

In submitting a bid, the bidder warrants that all goods furnished shall be free from all defects and shall conform in all respects to the Technical Specifications established herein. Unless otherwise specified, all items shall be guaranteed for a minimum of one (1) year against defects in material and workmanship. At any time during that period, if a defect should occur in any item, that item shall be repaired or replaced by the seller at no cost to the buyer except where it can be shown that the defect was caused by misuse. The bidder expressly warrants that all items bid are fit and sufficient for their intended purpose. If the specifications contain a statement of the particular

City of Concord North Carolina General Specifications and Instructions to Bidders.

purpose for which the goods will be used, the goods offered by bidder shall be fit for this purpose.

Shipping

All prices are to be quoted f.o.b. Concord N.C. delivered unless otherwise specified. Risk of loss and/or damage shall be upon the seller until such time as the goods have been physically delivered and accepted by the buyer.

Unit Prices to Prevail

Prices shall be submitted on per unit basis by line item. In the event of a disparity between the unit price and the extended price, the unit price shall prevail.

Bid Price Corrections

All prices and notations shall be written in ink or typed. Changes or corrections made on the bid form must be initialed by the individual signing the bid. No corrections will be permitted once bids have been opened.

Withdrawal of Bids

Bids may be withdrawn at any time prior to the time specified for the bid opening upon written or personal request of the bidder. No bid may be withdrawn for a period of sixty (60) days after the scheduled bid opening time and date. Negligence on the part of the bidder shall not constitute a right to withdraw the bid subsequent to such bid opening.

Use of Brand Names and References

Unless otherwise stated, the use of manufacturer's names and product numbers are for descriptive purposes and establishing general quality levels only. They are not intended to be restrictive. Bidders are required to state exactly what they intend to furnish; otherwise it is fully understood that they shall furnish all items as stated.

Alternate Bids

Bid submitted as alternate which do not meet or exceed the minimum specifications shall be rejected except that minor deviations may be acceptable. The City shall be the sole judge of what is considered a minor deviation.

Time For Delivery

The time for delivery must be stated in calendar days on the Proposal Sheet and may be a factor in making awards, price notwithstanding.

City of Concord North Carolina General Specifications and Instructions to Bidders.

Rejection of Bids

The City reserves the right to reject any and all bids.

Bonds

A 5% bid bond is waived for the purchases of apparatus, supplies, materials or equipment as stated in the cover section. A 100% performance bond is also waived.

Award

Award shall be made to the lowest responsible, responsive bidder, taking into consideration quality, performance, time specified in the bids for the performance of the contract.

Brochures and Literature

The proposal must be accompanied by descriptive literature marked, indicating the exact item(s) bid upon. The term "as specified" will not be acceptable.

Addendums

The City shall not be responsible for any oral instructions made by its employees or officers of the City with regard to bidding instructions, drawings, specifications or contract documents. Any changes to the specifications will be in the form of an Addendum, which will be mailed to all bidders who are listed with the Purchasing Department as having received the invitation or any other bidder who requests an Addendum.

Responsibility of Compliance With Legal Requirements

The bidder's products, service and facilities shall be in full compliance with any and all applicable state, federal, local, environmental and safety laws, regulations, ordinances and standards, or any standard adopted by nationally recognized testing facilities regardless of whether or not they are referred to in the invitation.

Taxes

The City of Concord is subject to 7.00% N.C. Sales & Use tax. Tax will not be shown on the proposal; however, invoices will indicate all applicable sales tax. The city is exempt from Federal Excise Tax and will provide a Federal Exemption number.

Terms and Conditions

Payment will be made by the City in full for all equipment delivered as soon after complete delivery and receipt of a correct invoice as can be processed in accordance with these specifications.

City of Concord North Carolina General Specifications and Instructions to Bidders.

Any company submitting a "No Bid" response to a bid invitation should clearly mark the outside of the envelope.

Terms and Conditions attached to the bid by the bidder and made a condition of purchase may render the bid non-responsive and may be rejected by the City.

Terms and Conditions included herein are an integral part of the bid document and shall prevail, unless changes or attachments are agreed to and initialed by the City prior to the bid opening.

Introduction in Use of Goods: Demonstration

A demonstration may be required of the goods bid upon. The demonstration shall be at no cost to the City. If the bidder cannot make a demonstration within twenty days of the request, his or her bid may be rejected. Performance of the equipment at the demonstration must be made with the exact equipment offered in the bid and may be completed at the same time as competitive demonstrations.

Trade-ins

Goods listed for trade-in, if any, may be examined after contacting the Purchasing Department. Goods listed for trade-in are represented "as is" and "where is". Such goods will be released to the successful bidder after receipt of the new equipment and in the same condition as when examined, excepting normal wear and tear.

The City reserves the right to retain goods listed as trade-in if it is deemed to be in the best interest to do so.

Training/Safety

When requested or required, a factory-trained representative shall be present at the time of delivery to train City personnel in the use of and/or safety aspect of the equipment or chemical. The factory representative shall effectively train the City personnel in all aspects, including assembly, disassembly, operating procedures, safety and any other training necessary for its safe and effective use. Items received without sufficient training when requested will be set aside and payment withheld until sufficient training can be completed.

Training shall include OSHA related training in the handling of hazardous materials.

MSDS sheets must be sent with each order. Failure to provide MSDS sheets prior to or at the time of delivery will result in withholding payment until such sheets are received.

Service

City of Concord North Carolina General Specifications and Instructions to Bidders.

All vehicles furnished under a bid shall receive without additional cost whatsoever the usual check-up, guarantees and adjustment identical to that which is normally furnished on vehicles sold to the general public.

Manuals

One parts, one service, and one operators manual shall be furnished with each type vehicle delivered if applicable to this bid.

Bankruptcy

Successful bidders shall execute a contract that contains the following language:

If any bankruptcy or insolvency proceedings are commenced against the contractor And are not dismissed within thirty (30) days after service of such proceeding on the Contractor, or if the contractor shall file petition in bankruptcy or for reorganization or To effect a plan or other arrangement with creditors, or be adjudicated bankrupt or make an assignment for the benefit of creditors, or be dissolved or liquidated, or shall Admit in writing its inability to pay its debts generally as they become due, or a receiver, trustee or liquidator of the contractor or of all or substantially all of the property of the contractor is appointed in any proceeding brought by the contractor, or if any such receiver, trustee, or liquidator is appointed in any proceeding against the contractor, and any such receiver, trustee or liquidator is not discharged within (30) days after service of such appointment on the contractor, this agreement shall be null and void.

W-9 Form

Prior to the first payment by the City under any contract awarded to the successful bidder, the successful bidder shall submit a complete and accurate W-9 form to the Purchasing Manager.

Dissolution of Corporate Status

Successful bidders shall execute a contract that contains the following language:

Failure to register the agent of the corporation or other business entity, if any, with the N.C. Secretary of State or voluntary, judicial or administrative dissolution of the corporation or other business entity shall automatically terminate this contract or agreement unless the bidder or contractor notifies the City of Concord in writing within 72 hours of the dissolution or failure to register the agent and makes satisfactory arrangements and/or guarantees with the City Purchasing Officer and City Attorney to fulfill the contractors obligations under the contract or agreement.

Concord NC Licenses and Taxes

City of Concord North Carolina General Specifications and Instructions to Bidders.

ALL BIDDERS SHOULD BE IN COMPLIANCE WITH THE CITY OF CONCORD PRIVILEGE LICENSE TAX ORDINANCE AND AWARD OF BID WILL BE CONTINGENT UPON RECEIPT OF COPY OF LICENSE.

It is the intent of the City of Concord to issue purchase orders for the Bid items to cover the Fiscal Year July 1, 2012 to June 30, 2013.

CODDLE CREEK WATER PLANT FILTER CONTROL MODIFICATION

PART 1 – GENERAL

1.1 DESCRIPTION

Convert the existing filter control PLC2 and PLC3 from Allen Bradley PLC-5 controller with redundant Data Highway communication to an Allen Bradley ControlLogix platform seamlessly by code conversion and migration. Conversion shall include all I/O associated with the PLC-5 and converted to the ControlLogix platform while maintaining communication to the two existing SCADA computers at Coddle Creek WTP and the two existing SCADA computers at Hillgrove WTP. Convert all PLC2 and PLC3 tag database in the SCADA system to match the new ControlLogix PLCs. Communication between the new ControlLogix PLCs and the existing PLC5 shall be maintained. Provide ControlLogix with Ethernet connectivity to enhance the communication with the SCADA system. Provide in the new controller the monitoring, fault detection, control function, and other operations as required for a complete and operable control system.

Convert the existing OIT to an Allen Bradley PanelView Plus 1000 color terminal. Provide the latest firmware version terminal with enhanced operator control screens. Update I/O database to support ControlLogix with SCADA. Provide Ethernet connectivity between Panelview terminal and the ControlLogix PLC. Provide a layer-2 managed Ethernet switch.

Provide a fast and efficient method of wire conversion from PLC-5 to ControlLogix. Match existing equipment makes and models so that system additions can be easily integrated with respect to operation & maintenance.

1.2 QUALITY ASSURANCE

- A. Referenced manufacturers /suppliers are as follows and are named to establish standards of quality:
 - 1. PLC manufacture is Allen Bradley
 - 2. OIT manufacture is Allen Bradley
 - 3. System supplier qualification: To assure quality of the systems design and installation, as a minimum the system supplier shall be licensed in North Carolina as a Chapter 87 Engineering firm AND shall have an unlimited electrical license. Their engineering staff shall include at least one Controls Engineer and one Electrical Engineer who both shall be licensed in North Carolina. Proof of the above listed licenses shall be included with the bid.

- B. Require minimum downtime to plant operation. In the case where the conversion requires more than a period of one day to complete, it is expected that a piecewise approach to the conversion be used so that the plant can stay running in between time.
- C. Technical Services:
1. Provide service of a factory certified service technician, specifically trained on the type of equipment specified herein and at the following times:
 - a. Installation and erection - Four days, two trips.
 - b. Start up and training - Ten days, two trips.
 - c. System testing & training six months after start-up - One day, one trip.
 - d. System testing & training one year after start-up - One days, one trip.
 2. Provide all devices specified herein or required and provide all required and specified collateral services in connection with the system such as testing, calibration, start-up, operation and maintenance manuals.
 3. All submittals from the System Supplier must be sealed by a Professional Engineer who is registered in the State of North Carolina and who is a full time employee of the System Supplier. This is required to prove the depth and design capabilities of the System Supplier.

PART 2 – DELIVERABLE

- A. PLC Conversion:
1. Convert the PLC-5 controller and all the associated I/O to ControlLogix platform.
 2. Provide an efficient method for converting remote 1771 I/O to 1756, using it to transfer all I/O to the controller via produced/consumed connection over the backplane to the controller.
 3. Maintain existing control cabinet physical footprint and existing field wiring with the conversion

4. Provide detail schematic wiring diagram showing all the connection to the new PLCs.
5. Provide CAT 6 Ethernet cable connection from the new ControlLogix PLCs at PLC2 and PLC3 to the two SCADA computers in the control room. Provided a 16-port managed Ethernet switch in the control room.

B. OIT Conversion:

1. Convert existing OIT with an Allen Bradley PanelView Plus 1000 color graphic terminal
2. Provide operator interface conversion while maintaining connectivity to the existing Data Highway and Ethernet to the new ControlLogix PLC.
3. Design interface screens that maximize operator's usage

C. Programming:

1. Provide software program migration of all logic and tag database
2. Provide application code conversion of existing PLC and Remote I/O to the new controller
3. Provide new controller program for system function that enhance existing operation and preform SCADA update to the new ControlLogix controller
4. Provide PLC programming software for on-line and off-line editing of the new ControlLogix PLCs.