



CITY OF HOUSTON

Administration and Regulatory Affairs Department
Strategic Purchasing Division

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April 15, 2013

Subject: Letter of Clarification No. 2 to Invitation to Bid No. S12-C24513 Remove, Furnish and Install Centrifugal Pumps and Associated Equipment for the Public Works & Engineering Department

To: All Prospective Bidders:

This letter of Clarification is being issued for the following reasons:

- **To revise the above referenced solicitation as follows:**

- 1) **Replace the solicitation bid document pages 9 and 13 with the attached revised pages 9A and 13A dated April 15, 2013.**

When issued, Letter(s) of Clarification shall automatically become a part of the solicitation documents and shall supersede any previous specification(s) and/or provision(s) in conflict with the Letter(s) of Clarification. All revisions and answers incorporated into the Letter(s) of Clarification are collaboratively from both the Strategic Purchasing Division and the applicable City Department(s). It is the responsibility of the bidder/respondent to ensure that it has obtained all such letter(s). By submitting a bid on this project, bidders/respondents shall be deemed to have received all Letter(s) of Clarification and to have incorporated them into this solicitation and resulting bid.

Furthermore, it is the responsibility of each Contractor to obtain any previous Letter of Clarification associated with this solicitation.

Martin L. King

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Senior Staff Analyst
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Partnering to better serve Houston

Council Members: Helena Brown Jerry Davis Ellen R. Cohen Wanda Adams Mike Sullivan Al Hoang Oliver Pennington
Edward Gonzalez James G. Rodriguez Stephen C. Costello Andrew C. Burks, Jr. Melissa Noriega
C.O. "Brad" Bradford Jack Christie Larry Green Mike Laster **Controller: Ronald C. Green**

SECTION B
SCOPE OF WORK

1.0 **SUMMARY OF WORK**

- 1.1 **Line Item No. 1.** The Contractor shall be required to provide all supervision, labor, materials, equipment, tools, transportation and ancillary items necessary to remove and dispose of as directed by the City, twenty four existing centrifugal wastewater pumps at the City's 69th Street Wastewater Treatment Plant, located 2525 S/Sgt. Macario Garcia Drive, Houston, Texas 77020. Subsequent to the removal of the pumps, the contractor shall be required to provide all labor, supervision, equipment, materials, tools, transportation and ancillary items necessary and required to furnish and install a total of twenty four new centrifugal wastewater pumps at the aforementioned location. The referenced Manufacturer for the new pumps is Flowserve. (See Part II for the Technical Specifications for the new centrifugal wastewater pumps.)
- 1.2 Contactor needs to install existing hubs and drive shafts to newly provided pumps, and re-align the motor and pump.
- 1.3 The new pumps must be able to operate as a fully coordinated member of the wastewater treatment facility's valve control system.
- 1.4 The pumps shall be rated for wastewater applications.
- 1.5 The pumps furnished and installed by the contractor shall require no alterations/modifications to the facility or existing equipment.

2.0 PERFORMANCE TIME:

- 2.1 The Contractor shall have a minimum of 360 calendar days to complete all work associated with this project after receipt of the Notice – To – Proceed.**

3.0 WARRANTY:

- 3.1 The Contractor shall provide a minimum of one (1) year for all labor, materials and workmanship. The warranty period for the pumps shall commence the day the City officially accepts the complete work at the site. All warranty work is to be completed, without cost to the City, within fifteen (15) days after notification of a service problem.

4.0 SPECIFIED EQUIPMENT OR EQUIVALENT:

- 4.1 Wherever in the specifications any materials or processes are indicated or specified by patent of proprietary name and/or by name of manufacturer, such specifications shall be deemed to be used for the purpose of facilitating descriptions of the performance, materials and/or processes desired and shall be deemed to be followed by the words, "or equivalent", if not so stated in the specifications herein.
- 4.2 The burden of proof shall rest with the bidder, in the course of a technical evaluation, to prove that the proposed item(s) are equivalent to the performance, materials, processes, or articles specified. DETERMINATION AS TO WHETHER THE ITEM (S) BID IS (ARE) EQUIVALENT TO THOSE SPECIFIED SHALL REST SOLELY WITH THE CITY PURCHASING AGENT AND THE RECEIVING DEPARTMENT.

2.0.8 Bearings/Bearing Frame:

- 2.0.8.1 Each pump shall be provided with bearings both radial and thrust, of the tapered spherical roller type, and of ample size to carry all loads imposed under continuous operation without overheating.
- 2.0.8.2 All bearings shall be accessible while the pump is in operation. Bearing frame shall be designed so that the complete rotating element can be removed from casing without disconnecting piping.
- 2.0.8.3 Bearings shall be designed in accordance with the ABMA standards for a minimum L 10 life of 100,000 hours, without the addition of external cooling.
- 2.0.8.4 The bearing frame shall be of one piece ASTM A48 Class 30 cast iron construction, rigidly fixed to the backhead, shoulder fitted and accurately centered. Fabricated bearing housings are not acceptable.
- 2.0.8.5 The pump bearing frame shall be equipped with a bearing system designed to accept all thrust loadings and the radial loads imposed by the pump impeller.
- 2.0.8.6 Each bearing frame shall be designed so that the complete rotating element can be removed from the casing without disconnecting the piping.
- 2.0.8.7 The bearing frame shall contain external provisions for the axial adjustment of the rotating element to maintain clearance between the impeller and suction cover wearing rings as the rings wear.
- 2.0.8.8 A coded shim pack shall be provided to aid in maintaining parallel faces. Pumps without this feature are not acceptable.
- 2.0.8.9 The bearings shall be grease lubricated, and a relief plug shall be provided so that excessive grease pressure will not damage the bearings.

3.0 Major Performance Parameters:

- 3.1 The Contractor shall be required to provide all labor, equipment, facilities, materials, parts, tools, supervision and transportation necessary to remove and install the pump and volute for each pump station within strict accordance with the manufacturer's recommended standards.
- 3.2 The Contractor shall oversee and be responsible for all necessary system checks prior to pumping systems startup.

3.3 The Contractor shall oversee and be responsible for pumping system startup, and subsequent seven day pump system operation and testing period.

4.0 Training:

- 4.1 The Contractor shall be required to provide eight hours of training. The City will determine if the training hours will be provided in one eight-hour session or two four-hour sessions for the valves and actuator operations and maintenance.
- 4.2 The Contractor shall be available to answer questions or follow-ups of equipment training for the first three months after final acceptance of the equipment.

END OF SECTION