



CITY OF HOUSTON

Administration and Regulatory Affairs Department
Strategic Purchasing Division

Annise D. Parker

Mayor

Calvin D. Wells, Deputy Director
City Purchasing Agent
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<https://purchasing.houstontx.gov>

February 12, 2013

Subject: Letter of Clarification No. 1 to Invitation to Bid No. S12-N24427 Purchase of Various Types and Sizes of Pumps 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 in its entirety with the revised bid document dated February 12, 2012.**
- 2) To be considered for award, please submit the Electronic Bid Form and the forms listed in Section A, including the Official Signature Page, which must be signed by a company official authorized to bind the company.
- 3) In addition to the aforementioned Electronic Bid Form and the Official Signature Page, the Forms listed in Table 1 of the solicitation **must be completed and submitted to the Office of the City Secretary on or before the date and time the bid is due**. When submitting bids via UPS/FedEx, etc. please label it with the name: Office of the City Secretary, City Hall Annex, Public Level, 900 Bagby, Houston Texas 77002, along with the bid/proposal number.

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

Martin L. King
Senior Staff Analyst
832-393-8705

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**



CITY OF HOUSTON

INVITATION TO BID

Revised: February 12, 2013

Bid Opening:

Sealed bids, in duplicate, will be received by the City Secretary of the City of Houston, in the City Hall Annex, Public Level, 900 Bagby, Houston, Texas 77002, until 10:30 a.m. Thursday, **February 21, 2013** and all bids will be opened and publicly read in the City Council Chamber, City Hall Annex, Public Level, 900 Bagby at 11:00 a.m. on that date for the purchase of:

**PURCHASE OF VARIOUS TYPES AND SIZES OF PUMPS
FOR THE PUBLIC WORKS & ENGINEERING DEPARTMENT
INVITATION TO BID No. S12-N24427
NIGP-730-64/720-73**

Buyer:

Questions regarding this solicitation package should be addressed to **Martin L. King** at **832-393-8705**, or e-mail to martin.king@houstontx.gov.

Bidding forms, specifications and all necessary information should be downloaded from the Internet at <http://purchasing.houstontx.gov>. By registering and downloading this solicitation document, all updates to this solicitation document will be automatically forwarded via e-mail to all registered bidders. This information may also be obtained from the Supplier Assistance Desk, Strategic Purchasing Division, 901 Bagby, Concourse Level, Houston, Texas 77002.

Electronic Bidding:

In order to submit a bid for the items associated with this procurement, you must fill in the pricing information on the "PLACE BID" page.

Pre-Bid Conference:

A Pre-Bid Conference will be held for all Prospective Bidders in the Strategic Purchasing Division, **Conference Room No.1, City Hall, 901 Bagby, at 2:00 PM on Thursday, February 7, 2013.**

All Prospective Bidders are urged to be present. It is the bidder's responsibility to ensure they have secured and thoroughly reviewed the solicitation documents prior to the Pre-Bid Conference. Any revisions to be incorporated into this solicitation document arising from discussions before, during and subsequent to the Pre-Bid Conference will be confirmed in writing by Letter(s) of Clarification prior to the bid due date. Verbal responses will not otherwise alter the specifications, terms and conditions as stated herein.

The place of the bid opening may be transferred in accordance with Paragraph (b), (5) of Section 15-3 of the Code of Ordinances, Houston, Texas. The bid opening meeting may be rescheduled in accordance with Paragraph (b), (6) of said Section 15-3.

The City reserves the right to reject any or all bids or to accept any bid or combination of bids deemed advantageous to it.

City Employees are prohibited from bidding on this solicitation in accordance with the Code of Ordinances, Section 15 - 1.

***CONTENTS:**

SECTION A: OFFER
SECTION B: SCOPE OF WORK/SPECIFICATIONS
SECTION C: GENERAL TERMS & CONDITIONS

***NOTE 1: Actual page numbers for each Section may change when the solicitation document is downloaded from the Internet or because of Letters of Clarification. Therefore, Bidders must read the bid document in its entirety and comply with all the requirements set forth therein.**

***NOTE 2: To be considered for award, please submit the electronic bid form and the forms listed in Section A, including the official signature page, which must be signed by a company official authorized to bind the company.**

**SECTION A
OFFICIAL BID FORM**



FORMAL ONE-TIME BID

**PURCHASE OF VARIOUS TYPES AND SIZES OF PUMPS
FOR THE PUBLIC WORKS & ENGINEERING DEPARTMENT
BID INVITATION No. S12-N24427
NIGP-720-64/720-73**

To The Honorable Mayor
and City Council Members
of the City of Houston, Texas (the "City"):

The undersigned hereby offers to **furnish and deliver submersible and dry-pit pumps for the Public Works and Engineering Department**, prepaid F.O.B. destination point Houston, Texas, the item(s) listed on the **electronic bid form** and on individual Purchase Orders, in accordance with the price(s) bid and other conditions shown herein, and in accordance with the City's Specifications and General Terms & Conditions and/or samples/drawings provided herein. When issued by the City of Houston, Letters of Clarification shall automatically become part of this bid document and shall supersede any previous specifications or provisions in conflict with Letters of Clarification. It is the responsibility of the bidder to ensure that it has obtained all such letters. By submitting a bid on this project, bidder shall be deemed to have received all Letters of Clarification and to have incorporated them into the bid.

The City may accept this bid offer by issuance of a Notice of Award Letter and/or a Purchase Order at any time on or before the 120th day following the day this Official Bid Form is opened by the City. This offer shall be irrevocable for 120 days after bid opening or for 90 days after City Council awards the bid, whichever comes last, but this period may be extended by written agreement of the parties.

The City reserves the right to INCREASE quantities during the twelve-month (12) period following the issuance of the first purchase order subject to agreement in writing by the Contractor to honor the same bid price.

The City reserves the option, after bids are opened, to adjust the quantities listed on the electronic bid form upward or downward, subject to the availability of funds, and/or make award (s) on a line item basis.

SECTION A

Documents/forms must be downloaded from the City's Website:

<https://purchasing.houstontx.gov>

http://purchasing.houstontx.gov/solicitation_forms.htm

Additional Required Forms to be Included with this Bid:

In addition to the Electronic Bid Form and the Official Signature Page, the Forms listed in Table 1 **must be completed and submitted to the Office of the City Secretary on or before the date and time the bid is due.** When submitting bids via UPS/FedEx, etc. please label it with the name: Office of the City Secretary, City Hall Annex, Public Level, 900 Bagby, Houston, Texas 77002, along with the bid/proposal number:

TABLE 1 - REQUIRED FORMS
Affidavit of Ownership.doc
Fair Campaign Ordinance.doc
Statement of Residency.doc
Conflict of Interest Questionnaire.doc
Contractor's Questionnaire

Table 2 lists other documents and forms that should be viewed/downloaded from the City's website, but are not required to be submitted with the bid. **The City will request these forms, as applicable, to be completed and submitted to the City by the recommended/successful bidder:**

TABLE 2 - DOCUMENTS & FORMS
Drug Forms.doc
EEOC.doc
Formal Instructions for Bid Terms.doc
M/WBE.doc
Sample Insurance Over \$50,000/ Insurance Endorsements
Insurance Endorsements

Questions concerning this Bid should be submitted in writing to: City of Houston, Strategic Purchasing Division, 901 Bagby, Suite B400, Houston, TX 77002, Attn: Martin L. King or via fax: 832-393-8759 or via email (preferred method) to **"martin.king@houstontx.gov"** no later than **4:00 PM, Monday, February 4, 2013.**

CONTRACTOR REFERENCES

In order to receive bid award consideration, the bidder must be able to demonstrate that it has provided, as a prime Contractor, products or services that are similar to those offered on the electronic bid form to governmental agencies or other entities of similar size/scope. The references should be listed in the space provided below. Please attach additional pages as necessary. If references are not included with the bid, the bidder shall be required to provide such references to the City of Houston within five working days from receipt of a written request from the City of Houston to do so. **Bidder's capability and experience shall be a factor in determining the Contractor's responsibility.** The City of Houston reserves the right to determine if such products or services are appropriately similar to those offered.

1. Entity Name: _____
Address: _____
City & State: _____
Name & Phone Number of Contact: _____

2. Entity Name: _____
Address: _____
City & State: _____
Name & Phone Number of Contact: _____

3. Entity Name: _____
Address: _____
City & State: _____
Name & Phone Number of Contact: _____

4. Entity Name: _____
Address: _____
City & State: _____
Name & Phone Number of Contact: _____

5. Entity Name: _____
Address: _____
City & State: _____
Name & Phone Number of Contact: _____

SITE INSPECTION

The City of Houston reserves the right to inspect the Bidder's current place of business to evaluate equipment condition and capabilities, staff experience, training and capabilities, and storage capabilities as they relate to the performance of this contract.

QUALITY AND WORKMANSHIP

The Bidder must be able to demonstrate upon request that it has satisfactorily performed services similar to the services specified herein. The Bidder will provide records of warranty and repair services upon request by City. The City of Houston shall be the sole judge as to whether the services performed are similar to the scope of services contained herein and whether the Bidder is capable of performing such services.

PROTEST

A protest shall comply with and be resolved, according to the City of Houston Procurement Manual http://purchasing.houstontx.gov/docs/Procurement_Manual.pdf and rules adopted thereunder. Protests shall be submitted in writing and filed with both, the City Attorney and the Solicitation contact person. A pre-award protest of the ITB shall be received five (5) days prior to the solicitation due date and a post-award protest shall be filed within five (5) days after City Council approval of the contract award.

A protest shall include the following:

- The name, address, e-mail, and telephone number of the protester;
- The signature of the protester or its representative who has the delegated authority to legally bind its company;
- Identification of the ITB description and the ITB or contract number;
- A detailed written statement of the legal and factual grounds of the protest, including copies of relevant documents, etc.; and
- The desired form of relief or outcome, which the protester is seeking

LOBBYING AND OTHER FORMS OF INFLUENCE PROHIBITED

Neither Bidder(s) nor any person acting on Bidder(s)'s behalf shall attempt to influence the outcome of the award by the offer, presentation or promise of gratuities, favors, or anything of value to any appointed or elected official or employee of the City of Houston, their families or staff members. All inquiries regarding the solicitation are to be directed to the designated City Buyer identified on the first page of the solicitation. Upon issuance of the solicitation through the pre-award phase and up to the award, aside from Bidder's formal response to the solicitation, communications publicly made during the official pre-bid conference, written requests for clarification during the period officially designated for such purpose by the City Buyer, neither Bidder(s) nor persons acting on their behalf shall communicate with any appointed or elected official or employee of the City of Houston, their families or staff through written or oral means in an attempt to persuade or influence the outcome of the award or to obtain or deliver information intended to or which could reasonably result in an advantage to any Bidder. However, nothing in this paragraph shall prevent Bidder from making public statements to the City Council body convened for a regularly scheduled session after the official selection has been made and placed on the City Council agenda for action.

HIRE HOUSTON FIRST:

Designation as a City Business or Local Business

To be designated as a City or Local Business for the purposes of the Hire Houston First Program, as set out in Article XI of Chapter 15 of the Houston City Code, a bidder or proposer must submit the **Hire Houston First Application and Affidavit (“HHF Affidavit”)** to the Director of the Mayor’s Office of Business Opportunities and receive notice that the submission has been approved prior to award of a contract. Bidders are encouraged to secure a designation prior to submission of a bid or proposal if at all possible.

Download the HHF Affidavit from the Office of Business Opportunities Webpage at the City of Houston e-Government Website at the following location:

<http://www.houstontx.gov/hbsc/hirehoustonfirstaffidavit.pdf>

Award of a Procurement of \$100,000 or More for Purchase of Goods:

THE CITY WILL AWARD THIS PROCUREMENT TO A “CITY BUSINESS,” AS THAT TERM IS DEFINED IN SECTION 15-176 OF THE CITY OF HOUSTON CODE OF ORDINANCES (“THE CODE”)

- IF THE BID OF THE CITY BUSINESS IS THE LOWEST RESPONSIBLE BID OR IS WITHIN 3% OF THE LOWEST BID RECEIVED, AND
- UNLESS THE USER DEPARTMENT DETERMINES THAT SUCH AN AWARD WOULD UNDULY INTERFERE WITH CONTRACT NEEDS, AS PROVIDED IN SECTION 15-181 OF THE CODE.

IF THERE IS NO BID OF A CITY BUSINESS THAT MEETS THESE CRITERIA, THE CITY WILL AWARD THE PROCUREMENT TO THE LOWEST RESPONSIBLE BIDDER.

Award of Procurement under \$100,000 for Purchase of Goods:

THE CITY WILL AWARD THIS PROCUREMENT TO A ” CITY BUSINESS,” AS THAT TERM IS DEFINED IN SECTION 15-176 OF THE CITY OF HOUSTON CODE OF ORDINANCES (“THE CODE”)

- IF THE BID OF THE CITY BUSINESS IS THE LOWEST RESPONSIBLE BID OR IS WITHIN 5% OF THE LOWEST BID RECEIVED, AND
- UNLESS THE USER DEPARTMENT DETERMINES THAT SUCH AN AWARD WOULD UNDULY INTERFERE WITH CONTRACT NEEDS, AS PROVIDED IN SECTION 15-181 OF THE CODE.

IF THERE IS NO BID OF A CITY BUSINESS THAT MEETS THESE CRITERIA, THE CITY WILL AWARD THE PROCUREMENT TO THE LOWEST RESPONSIBLE BIDDER

Award of Procurement that may be More or Less than \$100,000 for Purchase of Goods:

THE CITY WILL AWARD THIS PROCUREMENT TO A ” CITY BUSINESS,” AS THAT TERM IS DEFINED IN SECTION 15-176 OF THE CITY OF HOUSTON CODE OF ORDINANCES (“THE CODE”)

- IF THE BID OF THE CITY BUSINESS IS LESS THAN \$100,000 AND IS THE LOWEST RESPONSIBLE BID OR IS WITHIN 5% OF THE LOWEST BID RECEIVED, OR
- IF THE BID OF THE CITY BUSINESS IS MORE THAN \$100,000 AND IS THE LOWEST RESPONSIBLE BID OR IS WITHIN 3% OF THE LOWEST BID RECEIVED, AND

- UNLESS THE USER DEPARTMENT DETERMINES THAT SUCH AN AWARD WOULD UNDULY INTERFERE WITH CONTRACT NEEDS, AS PROVIDED IN SECTION 15-181 OF THE CODE.

IF THERE IS NO BID OF A CITY BUSINESS THAT MEETS THESE CRITERIA, THE CITY WILL AWARD THE PROCUREMENT TO THE LOWEST RESPONSIBLE BIDDER.

Award of Procurement of \$100,000 or More for Purchase of Non-Professional Services , Including Construction Services:

THE CITY WILL AWARD THIS PROCUREMENT TO A " CITY BUSINESS," AS THAT TERM IS DEFINED IN SECTION 15-176 OF THE CITY OF HOUSTON CODE OF ORDINANCES ("THE CODE")

- IF THE BID OF THE LOCAL BUSINESS IS THE LOWEST RESPONSIBLE BID OR IS WITHIN 3% OF THE LOWEST BID RECEIVED, AND
- UNLESS THE USER DEPARTMENT DETERMINES THAT SUCH AN AWARD WOULD UNDULY INTERFERE WITH CONTRACT NEEDS, AS PROVIDED IN SECTION 15-181 OF THE CODE.

IF THERE IS NO BID OF A LOCAL BUSINESS THAT MEETS THESE CRITERIA, THE CITY WILL AWARD THE PROCUREMENT TO THE LOWEST RESPONSIBLE BIDDER

Award of Procurement under \$100,000 Purchase of Non-Professional Services Including Construction Services:

THE CITY WILL AWARD THIS PROCUREMENT TO A "LOCAL BUSINESS," AS THAT TERM IS DEFINED IN SECTION 15-176 OF THE CITY OF HOUSTON CODE OF ORDINANCES

- IF THE BID OF THE CITY BUSINESS IS THE LOWEST RESPONSIBLE BID OR IS WITHIN 5% OF THE LOWEST BID RECEIVED, AND
- UNLESS THE USER DEPARTMENT DETERMINES THAT SUCH AN AWARD WOULD UNDULY INTERFERE WITH CONTRACT NEEDS, AS PROVIDED N SECTION 15-181 OF THE CODE.

IF THERE IS NO BID OF A LOCAL BUSINESS THAT MEETS THESE CRITERIA, THE CITY WILL AWARD THE PROCUREMENT TO THE LOWEST RESPONSIBLE BIDDER

Award of Procurement that may be More or Less than \$100,000 for Purchase of Non-Professional Services, Including Construction Services:

THE CITY WILL AWARD THIS PROCUREMENT TO A " LOCAL BUSINESS," AS THAT TERM IS DEFINED IN SECTION 15-176 OF THE CITY OF HOUSTON CODE OF ORDINANCES ("THE CODE")

- IF THE BID OF THE LOCAL BUSINESS IS LESS THAN \$100,000 AND IS THE LOWEST RESPONSIBLE BID OR IS WITHIN 5% OF THE LOWEST BID RECEIVED, OR
- IF THE BID OF THE LOCAL BUSINESS IS MORE THAN \$100,000 AND IS THE LOWEST RESPONSIBLE BID OR IS WITHIN 3% OF THE LOWEST BID RECEIVED, AND
- UNLESS THE USER DEPARTMENT DETERMINES THAT SUCH AN AWARD WOULD UNDULY INTERFERE WITH CONTRACT NEEDS, AS PROVIDED IN SECTION 15-181 OF THE CODE.

IF THERE IS NO BID OF A LOCAL BUSINESS THAT MEETS THESE CRITERIA, THE CITY WILL AWARD THE PROCUREMENT TO THE LOWEST RESPONSIBLE BIDDER

SECTION B
SPECIFICATIONS

PART I

GENERAL SPECIFICATIONS

1.0 BIDDING AND AWARD:

- 1.1 The City may accept this bid offer by issuance of a Notice of Award Letter and/or a Purchase Order at any time on or before the 120th day following the day the Official Bid Form is opened by the City. This offer shall be irrevocable for 120 days after bid opening or for 90 days after City Council awards the bid, whichever comes last, but this period may be extended by written agreement of the parties.
- 1.2 Prices bid shall remain firm through delivery and shall not be subject to increases (or supplemented on the Contractor's invoice(s) for payment).
- 1.3 The City reserves the option to adjust the quantities listed on the City's Official Bid Form upward or downward, subject to the availability of funds, and/or make award on a line item basis. Therefore, the City shall not be liable for any contractual agreements/obligations the Bidder enters into based on the City purchasing all the quantities specified herein.
- 1.4 The City reserves the right to INCREASE quantities during the twelve-month period following the issuance of the first purchase order subject to agreement in writing by the Contractor to honor its original unit bid price.

2.0 APPLICABLE SPECIFICATIONS:

- 2.1 "Notice to Bidders", the "Official Bid Forms", the "General Specifications", the "Technical Specifications", the "General Terms and Conditions" and other specifications that may be included herewith and the purchase orders which refer to these specifications.

3.0 TECHNICAL LITERATURE:

- 3.1 To evaluate the bids, the user department and the City purchasing staff may require product literature/specification sheets. Technical literature may be provided with the bid submittal but is not required. However, the City reserves the right to request literature or clarifications, as needed, after bid submittal.
- 3.2 If required, the Bidder must submit a minimum of TWO SETS of the requested catalogue information, descriptive literature specifications and/or (if applicable) engineering drawings that completely identify the items bid. Bidder(s) shall furnish the requested literature within seven (7) calendar days after the receipt of the City's written request. FAILURE ON BIDDER'S PART TO FURNISH THE REQUESTED TECHNICAL DATA IN THE TIME LIMIT GIVEN MAY BE CAUSE FOR REJECTION OF THE BID.

4.0 WARRANTY:

- 4.1 A minimum twelve (12) month warranty on both materials and workmanship shall be provided. The warranty period shall commence the date the City officially accepts the completed item(s). When extended warranties are available as standard, they shall be included as a part of the bid for the benefit of the City. Any and all documents necessary to effect warranty shall be properly applied for and submitted by the Bidder.
- 4.2 Additional warranties required are listed in the Technical Specifications for each item.

4.3 With respect to any goods, materials, equipment, supplies and parts furnished by it, the Contractor warrants:

- That all items are new and free of defects in title, design, material and workmanship.
- That each item meets or exceeds the manufacturer's specifications and requirements for the equipment structure, or other improvement in which the item is installed and conforms in all respects to the terms of the City Purchase Order and Specifications.
- That each replacement item is new, in accordance with original equipment
- Manufacturer's specifications are of a quality of at least as good as the quality of the item that it replaces (when the replaced item was new).
- That no item or its use infringes any patent, copyright or proprietary right.

4.4 The Contractor's product shall be supported by an authorized service facility that can provide warranty repair, service and maintenance work within 24 hours from notification by the City.

4.5 Any warranty work shall be completed without cost to the City. The Contractor shall be responsible for all shipping and/or freight expense from the City's designated location to the Contractor's facility for all warranty repair and/or maintenance and return to the City's designated location.

5.0 DELIVERY/INSPECTION:

5.1 The item(s) specified above, with delivery tickets and/or other required documents shall be delivered FOB Destination, to the location(s) shown on the purchase order(s) **within the delivery time(s) as listed in the Technical Specifications** after receipt of City of Houston Purchase Order.

5.2 The Contractor shall notify the City Contact listed in the "Ship To" section of the purchase order not less than three (3) days prior to expected delivery/arrival to permit inspection scheduling. The City's contact person shall advise the Contractor as to the date, time and location of authorized delivery/location. An authorized representative of the Contractor shall supervise delivery to the City. The City will not assume any liability for equipment delivered to an unauthorized location.

5.3 Documentation at time of Delivery:

The Contractor shall provide the following documentation **per purchase order** upon delivery:

- Copy of purchase order(s) and original invoice(s).
- Warranty policy (ies) and/or certifications as may be required in the Specifications.
- Parts, service, operators and maintenance manual(s) as may be required in the Technical Specifications.

6.0 SHIPPING TERMS:

6.1 Prices shall be prepaid F.O.B. Destination to the delivery locations, Houston, TX, as indicated on individual City of Houston purchase orders. The Contractor shall retain title and control of all goods until they are delivered and the contract of coverage has been completed. All risk of transportation and all related charges shall be the responsibility of the Contractor. All claims for visible or concealed damage shall be filed by the Contractor. The City will notify the Contractor promptly of any damaged goods and shall assist the Contractor in arranging for inspection.

7.0 **RESOLUTION OF LATE DELIVERY FOR EQUIPMENT:**

- 7.1 Time is of the essence in this Contract and accordingly all time limits shall be strictly construed and rigidly enforced. The work shall be furnished and fully completed within the delivery time specified in the Bid Proposal and Purchase Order to be furnished to the Contractor by the City. In the event that the work or any portions thereof shall remain uncompleted after expiration of the specified time, the Contractor shall furnish to the City a like number of comparable equipment for the City's use until such time as the ordered equipment are delivered. The equipment shall be furnished to the City with insurance to cover the use of this equipment by City personnel and in pursuit of the City's business. Should the Contractor not furnish such specified equipment during the late delivery period, the City retains the right to lease such equipment from a equipment leasing firm and the Contractor agrees and authorizes the City to deduct all such costs associated with such leases from the amounts due and owing to the Contractor under the Purchase Order. The City may avail itself of other remedies that may be available to it in law or equity as to any other event of default
- 7.2 The Contractor will not be liable for delays in performing its obligations to the extent such delays are caused by unforeseeable conditions that are beyond the Contractor's reasonable control and directly interfere with performance, and are without the Contractor's fault or negligence (force majeure). However, the Contractor shall provide written notice to the City of the cause and extent of an **excusable delay** requesting a time extension equal to the estimated duration thereof. Upon cessation of the event causing the delay, the Contractor shall provide written notice to the City of the actual delay incurred. Determination of force majeure shall rest solely with the City Purchasing Agent and the receiving department.

8.0 **CONFLICT IN TERMS:**

- 8.1 Should there be any conflict between the General Specifications and the Technical Specifications, the Technical Specifications shall prevail.

SECTION B

PART II

SCOPE OF WORK

1.0 General:

- 1.1 The Contractor shall be required to furnish all labor, supervision, transportation, permits, tools, consumables, safety equipment, testing and testing equipment necessary to furnish and deliver various types and sizes of pumps, in strict accordance with City of Houston (City) specifications included herein.
- 1.2 This procurement project consists of the purchase of various types and sizes of pumps with hard metal impellers for Public Works & Engineering Department (Department).
- 1.3 Delivery Instructions:
 - 1.3.1 The assembled pumps shall be delivered to the Department's Wastewater Operation Branch and Drinking Water Operation facilities, as specified herein and/or indicated in the purchase order by a delivery vehicle capable of off-loading the assembled unit(s) safely.
 - 1.3.2 The assembled unit (s) shall be packaged to prevent any damage to the unit during transit and off-loading.
 - 1.3.3 The delivery company shall be required to coordinate with the City official designated on the City of Houston Purchase Order (PO) to ensure the units are off-loaded safely.
 - 1.3.4 Final Delivery details should also be coordinated with the Department contact person shown on the purchase order.
- 1.4 General Specifications:
 - 1.4.1 The pumps described herein shall be new, unused and of the current year's production. The style of pump(s) bid and subsequently furnished and delivered to the City must have been in production for a minimum of 5 years, include users list. The pumps shall be of the latest design and in current production completely serviced, ready for work and shall include all standard and optional equipment as specified herein.
 - 1.4.2 The Contractor must have a fully stocked parts and service facility within 50 mile radius of the City of Houston Texas. The City shall have the right to inspect the office and shall be the sole judge of its adequacy to fulfill this requirement.
 - 1.4.3 The Contractor shall be required to deliver the complete pump, including applicable coupling, nord gear and baseplate, if required.**

2.0 Warranty:

- 2.1 The Contractor shall warranty the pumps and associated equipment for a minimum period of **one year**. The warranty shall include all parts, labor, material and transportation cost associated either performing the warranty repairs on site or at the contractors facility. The warranty shall begin subsequent to certification and acceptance of the equipment by the City.
- 2.2 The Contractor shall furnish to the City an Operation & Maintenance (O & M) Manual and any applicable literature and/or viable information associated with the equipment.

TECHNICAL SPECIFICATIONS

1.0 LINE ITEM NO. 1 DRY PIT PUMP AND MOTOR.

Make: Xylem/A-C

Model: Model No. 300-10x10x21 LC or City Approved Substitute

1.1 SUMMARY OF REQUIREMENT:

1.1.1 The Contractor shall be required to provide the pump and motor as specified in this section. The pump(s) bid/furnished and delivered by the contractor shall require no structure and/or piping alterations/modifications.

The pump and motor as specified will be used by the City to pump activated sludge at the City's Southwest Wastewater Treatment Plant.

1.1.2 The pump shall be rated for wastewater applications.

1.1.3 The pump shall be rated at 60 HP, 460 Volt, 3 Phase, 60 Hertz, 2700 GPM @ 51 ft of Head, with 80' of power cable.

1.2 PUMP SPECIFICATIONS:

1.2.1 Pump shall pump at least 2700 gpm at 37 feet of head (water).

1.2.2 Shut off head shall be at least 94 feet of water.

1.2.1 Pump hydraulic efficiency at best efficiency point shall be 70% or greater.

1.2.2 Pump shall operate in the range of 600-720 RPM.

1.2.3 Maximum duty point 4500 GPM @ 37 feet TDH.

1.2.4 Minimum duty point 1500 GPM @ 61 feet TDH.

1.2.5 Size: 10x10x21 LC

1.2.6 Motor 100 HP.

1.2.7 Rotation is clockwise.

1.2.8 Solid diameter 6 in.

1.3 EQUIPMENT:

1.3.1 Casing:

1.3.1.1 Pump castings shall be cast iron conforming to ASTM A48, Class 30 or better. Thickness and weight shall insure long life, accurate alignment and reliable operation.

1.3.2 Impellers:

1.3.2.1 The pump impeller shall be non-clog designed with smooth passage to pass liquid and prevent clogging of stringy fibrous material. The impeller material type must be made of cast iron conforming to ASTM 536 Grade 64-45-12 ductile iron. The impeller nut shall be locked in place using setscrews allowing the rotating assembly to rotate in reverse without harm.

1.3.3 Wearplates:

1.3.3.1 Shall be furnished with the suction cover and must be fully adjustable and replaceable and fabricated.

1.3.4 Bearings and shafts:

1.3.4.1 The minimum L_{10} bearing life shall be 100,000 hours at the best efficiency point. Inboard bearing shall be a single row roller bearing suitable for radial loads. Outboard bearing shall be a double row angular contact bearing capable of taking axial load in either direction as well as radial load to counter the moment on the shaft.

1.3.5 Stuffing Box Cover:

1.3.5.1 The stuffing box cover shall be constructed of ASTM A48 Class 30 cast iron. **Stuffing box shall be designed to accept packing. Stuffing box shall be supplied with a self-contained grease dispenser capable of 150ml. Unit shall emit warning light when grease is low or feed blockages occur. Dispenser unit shall be battery operated, explosion proof and time adjustable.**

1.3.6 Motor support:

1.3.6.1 The pump shall be provided with a cast or fabricated steel motor support of sufficient size and strength to support the largest driving motor required by the pump. The motor mounting surface shall be designed for a standard NEMA "P" flange motor. The motor support shall be designed to permit access to the frame and flexible coupling.

1.3.7 Coupling:

1.3.7.1 A flexible coupling shall be provided between pump and motor shaft. The coupling shall be sufficiently sized to transfer nameplate horse power of the motor and shall be capable of absorbing shock, vibration and minor misalignment.

1.4 **DELIVERY/PERFORMANCE TIME:**

1.4.1 The contractor/supplier shall be required to deliver the specific pump(s) to the City of Houston location specified in the purchase order (PO) no later than **112 Calendar days** after receipt of the City of Houston P.O.

1.5 **LITERATURE, TOOLS AND SPARE PARTS:**

The Contractor shall be required to provide four (4) Operations and Maintenance manuals with the delivery of pump(s).

1.6 **WARRANTY:**

The manufacturer shall provide a one (1) year warranty from the date of final system acceptance. Removal and reinstallation is by the City. All shipping charges for warranty work that is required outside of the Houston area will be borne by the supplier.

2.0 **LINE ITEM NO. 2 PUMP AND MOTOR, NON-POTABLE SUBMERSIBLE WITH BRACKET**

Make: FLYGT

Model: Model No. CP 3501 or City Approved Substitute

2.1 **SUMMARY OF REQUIREMENT:**

2.1.1 The Contractor shall be required to provide the submersible pump and motor as specified in this section. The pump(s) bid/furnished and delivered by the contractor shall require no structure and/or piping alterations/modifications. FLYGT Model No. CP 3501 with new SS KSB sliding bracket or City approved equal. The pump and motor as specified will be used by the City to pump return activated sludge at the City's Southwest Wastewater Treatment Plant.

2.1.2 The pump shall be rated for wastewater applications.

2.1.3 The pump shall be rated at 90 HP, 460 Volt, 3 Phase, 60 Hertz, 10,000 GPM @ 27 ft of Head, with 50' of power cable and 1 pilot cable.

2.2 **PUMP SPECIFICATIONS:**

2.2.1 Performance:

2.2.1.1 Pump shall pump at least 10000 gpm at 27 feet of head (water).

2.2.1.2 Shut off head shall be at least 38 feet of water.

2.2.1.3 Pump hydraulic efficiency at best efficiency point shall be 80% or greater.

2.2.1.4 Pump shall operate in the range of 500 RPM.

2.2.1 **Maximum duty point 15000 GPM @15 feet. TD**

2.2.2 **Minimum duty point 5000 GPM@33 feet TDH**

2.2.3 **Discharge size 20 in.**

2.2.4 Motor 90 HP

2.2.5 Rotation clockwise

2.2.6 Solid diameter 6 in.

Pump:

3.2.1.1 The pump shall be constructed of metal capable of withstanding full submersion in corrosive environments and conditions as typically experienced in a wastewater lift station.

3.2.1.2 The pump seals shall be tungsten carbide / tungsten carbide or City of Houston approved equivalent.

3.2.1.3 The pump impeller shall be manufactured from a corrosion resistant material and coated with a corrosive resistant coating to prolong life and reduce wear.

3.2.1.4 The pump impeller shall be cast iron CLASS 35B or better dynamically balanced.

3.2.1.5 The pump shall be able to pass a minimum of a 4 inch spherical solid.

3.2.1.6 The pump shall be equipped with mounting brackets to allow connection onto existing KSB pump guide rail system.

3.2.2 Motor:

- 3.2.2.1 The motor shall comply with National Electrical Manufacturers Association (NEMA) standard MG-1.
- 3.2.2.2 The motor shall be 3-phase, 60-hertz, 460 volt, rated for continuous duty in at least 40° C fluid.
- 3.2.2.3 The motor windings shall be insulated with at least Class H insulation.
- 3.2.2.4 **The motor temperature measuring devices shall be imbedded in the windings to monitor lower bearing temperature, motor housing moisture,**
- 3.2.2.5 **The pump monitoring system shall be capable of providing historical data of pump sensor information and present it in trend-chart. The pump shall be provided with a monitoring system. The base unit shall provide the ability to adjust trip points of each value sensed, and to designate specific alarm actions: either provides warning or shutdown pump.**
- 3.2.2.6 The combined service factor (combined effect of voltage, frequency, and specific gravity effects) shall be a minimum of 1.15.
- 3.2.2.7 The motor shall have NEMA PREMIUM electrical efficiency or equivalent.
- 3.2.2.8 The voltage tolerance shall be at least plus or minus 10%.
- 3.2.2.9 The power cable shall be sized according to the National Electrical Code (NEC) standards and shall be at least 60 feet long.
- 3.2.2.10 The motor and cable shall be capable of withstanding continuous submergence at 50 feet without loss of integrity.
- 3.2.2.11 The motor horsepower shall be 250 hp or greater so the motor will not overload throughout the entire range of pump performance from shutoff through run-out.
- 3.2.2.12 The motor and pump shall be on the same shaft.
- 3.2.2.13 The motor shall be fully compatible and be able to function as intended when connected to the existing switchgear for any of the wet well pumps of equivalent HP.

2.4.1. City of Houston to supply volute or bracket of existing pump so that the Manufacturer/Supplier can fabricate SS KSB slide bracket to ensure pump adaptability to existing guide wire system.

2.5 **DELIVERY/PERFORMANCE TIME:**

2.5.1 The contractor/supplier shall be required to deliver the specific pump(s) to the City of Houston location specified in the purchase order (PO) no later than 112 Calendar days after receipt of the City of Houston P.O.

3.6 **LITERATURE, TOOLS AND SPARE PARTS:**

The Contractor shall be required to provide four (4) Operations and Maintenance manuals with the delivery of pump(s).

3.7 **WARRANTY:**

The manufacturer shall provide a **five (5)** year warranty from the date of final system acceptance.. Removal and reinstallation is by the City. All shipping charges for warranty work that is required outside of the Houston area will be borne by the supplier.

3.0 **LINE ITEM NO. 3** **PUMP AND MOTOR, NON-POTABLE SUBMERSIBLE**

Make: FLYGT

Model: Model No. LL-3531 or City Approved Substitute

3.1 **SUMMARY OF REQUIREMENT:**

3.1.1 The Contractor shall be required to provide the dry pit pump and motor as specified in this section. The pump(s) bid/furnished and delivered by the contractor shall require no structure and/or piping alterations/modifications. The pump and motor as specified will be used by the City to backwash filters at the City's Southwest Wastewater Treatment Plant.

3.1.2 The pump shall be rated for wastewater applications.

3.1.3 The pump shall be rated at 250 HP, 460 Volt, 3 Phase, 60 Hertz, 890 RPM, Impeller No. 830, 14,500 GPM @ 41 ft of Head, with 60' of power cable and 1 pilot cable.

3.2 **PUMP SPECIFICATIONS:**

3.2.1 Performance:

3.2.2.14 Pump shall pump at least 14,500 gpm at 41 feet of head (water).

3.2.2.15 Mass protection controller with embedded web server.

3.2.2.16 The pump hydraulic efficiency at best efficiency point shall be 70% or greater.

3.2.2.17 The pump shall operate in the range of 890 RPM.

3.2.3 Pump:

3.2.3.1 The pump shall be constructed of metal capable of withstanding full submersion in corrosive environments and conditions as typically experienced in a wastewater lift station.

3.2.3.2 The pump seals shall be tungsten carbide/ tungsten carbide, or City of Houston approved equivalent.

3.2.3.3 The pump impeller shall be manufactured from a corrosion resistant material and coated with a corrosive resistant coating to prolong life and reduce wear.

3.2.3.4 The pump impeller shall be dynamically balanced.

3.2.3.5 The pump shall be able to pass a minimum of a 4 inch spherical solid.

3.2.3.6 The pump shall be equipped with mounting brackets to allow connection onto existing pump mounts.

3.2.4 Motor:

3.2.4.1 The motor shall comply with National Electrical Manufacturers Association (NEMA) standard MG-1.

3.2.4.2 The motor shall be 3-phase, 60-hertz, 460 volt, rated for continuous duty in at least 40° C fluid.

3.2.4.3 The motor windings shall be insulated with at least Class H insulation.

3.2.4.4 The motor temperature measuring devices shall be imbedded in the windings to monitor temperature as an input to motor overload protection.

3.2.4.5 The combined service factor (combined effect of voltage, frequency, and specific gravity effects) shall be a minimum of 1.15.

3.2.4.6 The motor shall have NEMA PREMIUM electrical efficiency or equivalent.

- 3.2.4.7 The voltage tolerance shall be at least plus or minus 10%.
- 3.2.4.8 The power cable shall be sized according to the National Electrical Code (NEC) standards and shall be at least 60 feet long.
- 3.2.4.9 The motor and cable shall be capable of withstanding continuous submergence at 50 feet without loss of integrity.
- 3.2.4.10 The motor horsepower shall be 250 hp or greater so the motor will not overload throughout the entire range of pump performance from shutoff through run-out.
- 3.2.4.11 The motor and pump shall be on the same shaft.
- 3.2.4.12 The motor shall be fully compatible and be able to function as intended when connected to the existing switchgear for any of the wet well pumps of equivalent HP.

3.3 **DELIVERY/PERFORMANCE TIME:**

- 3.3.1 The contractor/supplier shall be required to deliver the specific pump(s) to the City of Houston location specified in the purchase order (PO) no later than **112 Calendar days** after receipt of the City of Houston P.O.

3.4 LITERATURE, TOOLS AND SPARE PARTS:

The Contractor shall be required to provide four (4) Operations and Maintenance manuals with the delivery of pump(s).

3.5 WARRANTY:

The manufacturer shall provide a five (5) year warranty from the date of final system acceptance.. Removal and reinstallation is by the City. All shipping charges for warranty work that is required outside of the Houston area will be borne by the supplier.

4.0 **LINE ITEM NO. 4 PUMP AND MOTOR, NON-POTABLE SUBMERSIBLE WITH KSB ADAPTOR BRACKET**
Make: ITT FLYGT
Model: Model No. 3531 or City Approved Substitute

4.1 **SUMMARY OF REQUIREMENT:**

4.1.1 The Contractor shall be required to provide the electrical submersible pump and motor as specified in this section. The pump(s) bid/furnished and delivered by the contractor shall require no structure and/or piping alterations/modifications. The pump and motor as specified will be used by the City to pump sewage at the City's Upper Braes Treatment Plant.

4.1.2 The pump shall be rated for wastewater applications.

4.1.3 The pump shall have a 20 inch discharge complete with non-overloading 350 HP, 4160 Volt, 3 Phase, 60 Hertz, 715 RPM, Impeller No. 1040, 9,000 GPM @ 75 ft. of Head, Shut off head of 109 ft., with 100' of power cable and 1 pilot cable. An additional 100 ft of power cable shall be supplied with pump.

4.1.3 The pump shall be provided with a monitoring system. The base unit shall provide the ability to adjust trip points of each value sensed, and to designate specific alarm actions: either provides warning or shutdown pump. The base unit shall include three (3) relay contacts to provide annunciation of warning (NO/NC), annunciation of alarm (NO/NC), and to shut down the pump (NC). The pump monitoring system shall be capable of providing historical data of pump sensor information and present it in trend-chart.

The City of Houston will determine the parameters tracked and shall include the following:

- Temperature (main and support bearings, stator windings)
- Vibration
- Leakage (in stator housing, junction box, and water into oil chamber)
- Power monitoring

4.2 **PUMP SPECIFICATIONS:**

4.2.1 Performance:

4.2.1.1 The pump shall pump at least 9,000 gpm at 75 feet of head (water).

4.2.1.2 The pump shall contain temperature sensors in the stator windings and main bearings.

4.2.1.3 The pump automatic pump shut off via float switch sensor positioned below the bearings and stator end coils should liquid penetrate the pump's stator housing.

4.2.1.4 The pump hydraulic efficiency at best efficiency point shall be 70% or greater.

4.2.1.5 The pump shall operate in the range of 715 RPM.

4.2.2 Pump:

4.2.2.1 The pump shall be constructed of metal capable of withstanding full submersion in corrosive environments and conditions as typically experienced in a wastewater lift station.

4.2.2.2 The pump seals shall be tungsten carbide, silicon carbide, or City of Houston approved equivalent.

4.2.2.3 The pump Impeller shall be manufactured from a corrosion resistant material and coated with a corrosive resistant coating to prolong life and reduce wear.

4.2.2.4 The pump Impeller shall be dynamically balanced.

4.2.2.5 **The pump will have a cooling jacket capable of cooling pump when water level is at top of volute.** The pump shall be able to pass a minimum of a 4 inch spherical solid.

4.2.2.6 The pump shall be equipped with mounting brackets to allow connection onto existing pump mounts.

4.2.3 Motor:

- 4.2.3.1 The motor shall comply with National Electrical Manufacturers Association (NEMA) standard MG-1.
- 4.2.3.2 **The motor shall be 3-phase, 60-hertz, 4160 volt, rated for continuous duty in at least 40° C fluid.**
- 4.2.3.3 Motor: Squirrel cage, high-performance, induction motor, specially designed for submersible applications.
- 4.2.3.4 Cooling: shall be high-efficiency cooling system that uses the pumped liquid as the coolant.
- 4.2.3.5 **Bearings: Designed with one roller bearing and one or two angular-contact ball bearings. The design prevents water from passing through the bearings in the event of leakage. The motor windings shall be insulated with at least Class H insulation.**
- 4.2.3.6 Seals: Two sets of mechanical shaft that work independently, for double safety. Designed, patented, and manufactured by Flygt.
- 4.2.3.7 Oil housing: In addition to lubricating the seals, the oil-filled compartment dissipates heat from the motor and bearing. The housing also provides additional safety against penetration by liquids.
- 4.2.3.8 Wear rings: Easily replaced wear rings help maintain high pumping efficiency
- 4.2.3.9 The motor temperature measuring devices shall be imbedded in the windings to monitor temperature as an input to motor overload protection.
- 4.2.3.10 The combined service factor (combined effect of voltage, frequency, and specific gravity effects) shall be a minimum of 1.15.
- 4.2.3.11 The motor shall have NEMA PREMIUM electrical efficiency or equivalent.
- 4.2.3.12 The voltage tolerance shall be at least plus or minus 10%.
- 4.2.3.13 The power cable shall be sized according to the National Electrical Code (NEC) standards and shall be at least 100 feet long.
- 4.2.3.14 The motor and cable shall be capable of withstanding continuous submergence at 50 feet without loss of integrity.
- 4.2.3.15 The motor horsepower shall be 350 hp or greater so the motor will not overload throughout the entire range of pump performance from shutoff through **run-out**.
- 4.2.3.16 The motor and pump shall be on the same shaft.
- 4.2.3.17 The motor shall be fully compatible and be able to function as intended when connected to the existing switchgear for any of the wet well pumps of equivalent HP.

4.3 **DELIVERY/PERFORMANCE TIME:**

- 4.3.1 The contractor/supplier shall be required to deliver the specific pump(s) to the City of Houston location specified in the purchase order (PO) no later than **112 Calendar days** after receipt of the City of Houston P.O.

4.4 **LITERATURE, TOOLS AND SPARE PARTS:**

The Contractor shall be required to provide four (4) Operations and Maintenance manuals with the delivery of pump(s).

4.5 **WARRANTY:**

The manufacturer shall provide a five (5) year warranty from the date of final system acceptance.. Removal and reinstallation is by the City. All shipping charges for warranty work that is required outside of the Houston area will be borne by the supplier.

5.0 **LINE ITEM NO. 5 PUMP, NON-CLOG, VERTICAL DRY PIT PUMP:**
Make: ITT-AC
Model: Model No. NSWZ, 10x10x21 LC or City Approved Substitute

5.1 **SUMMARY OF REQUIREMENT:**

- 5.1.1 The Contractor shall be required to provide the non-clog vertical dry pit pump as specified in this section. The pump(s) bid/furnished and delivered by the contractor shall require no structure and/or piping alterations/modifications. The pump as specified will be used by the City to pump raw wastewater at the City's Northwest Treatment Plant.
- 5.1.2 The pump shall be rated for wastewater applications.
- 5.1.3 The pump rotating assembly shall match the City's existing units dimensionally and must fit into the existing casing without modification. The pump rotating assembly shall be designed to perform satisfactorily with a reasonable service life when operated either continuously or intermittently in typical wastewater services. Assembly is to be mounted into existing casing

5.2 **PUMP SPECIFICATIONS:**

- 5.2.1 Casing: Casing is existing and to be reused. .
- 6.2.2 Discharge flange: Existing and to be reused.
- 6.2.3 Discharge position: Existing and to be reused.
- 6.2.4 Suction cover: Existing and to be reused.
- 6.2.5 Impeller:
- 5.2.5.1 The impeller shall be of the single-suction, enclosed type with two vanes, made of ductile Iron. Impellers shall be specially designed with smooth water passages to prevent clogging by stringy or fibrous materials, and shall be capable of passing solids having at least a sphere size of 3". Impeller shall be dynamically balanced. Impeller shall have a tapered bore and shall be keyed and secured to the shaft by an 18-8 Stainless Steel nut locked in place. It shall be readily removable without the use of special tools.
- 6.2.6 Wear Ring:
- 5.2.6.1 A replacement 11.5-14% chrome steel AL@ shaped wear ring shall be provided. Ring shall be mounted on impeller to provide a renewable surface opposite the suction cover wear plate. 5.5.2 Pump shall have provisions for adjustment of axial clearance. This adjustment shall be made through the use of shims placed between the frame and outboard bearing housing.
- 6.2.7 Shaft:
- 5.2.7.1 The pump shaft shall be high-strength carbon steel, AISI #1045 or 4140, accurately machined, tapered at the impeller end and of sufficient size to transmit full driver output. It shall be protected from the pumped liquid by a shaft sleeve. A seal shall be provided, by a synthetic rubber O-ring between the shaft and shaft sleeve to prevent leakage of pumped liquid out and/or air into the pump.
- 6.2.8 Shaft sleeve:
- 5.2.8.1 The renewable shaft sleeve shall be 316 SS with a Ni-CR-Boron coating to a hardness of 58-63RC(approximately 650 Brinell). The sleeve provided shall extend through the seal housing.
- 6.2.9 Each pump shall be provided with a Dynamic Seal System.

6.2.10 Seal box:

5.2.10.1 The pumps shall be fitted with a single stage Dynamic Seal capable of balancing out positive suction heads. A throttle bushing and sleeve shall be placed in the stuff box cover. Both pieces shall be made of 316 SS with a Ni-CR-Boron coating to a hardness of 58-63RC (approximately 650 Brinell). The Dynamic Seal expeller shall be made of nodular iron, ASTM 536 or 304 Stainless Steel. A pressure relief connection with elbow, fittings, and tubing shall be provided in the seal cover to bleed liquid back to the suction cover of the pump.

6.2.11 Static seal:

5.2.11.1 The dual static seals, provided with a grease cavity between them, shall be installed in the seal cover to provide leakage along the shaft, when the pump is not running. A positive means for adding grease shall be provided in the suction cover. Seals shall contact a 316 SS sleeve with a Ni-CR-Boron coating to a hardness of 58-63RC (approximately 650 Brinell).

6.2.12 Bearing frame and bearings:

5.2.12.1 The pump bearing frame shall be one-piece rigid cast iron construction. The frame shall be provided with a cast iron bearing housing at the outboard end, and a cast iron end over at the inboard end. Both ends of the frame shall be provided with lip type grease seals and labyrinth type deflectors to prevent the entrance of contaminants. The bearing frame shall be designed so that complete rotation element, including motor, can be removed from casing without disconnecting piping or coupling.

5.2.12.2 The bearings shall be designed for 50,000 hours minimum life at 50% of B.E.P. Radial inboard bearings shall be roller type suitable for all loads encountered in the service conditions. Outboard bearing arrangement shall consist of one deep groove ball bearing to take the radial loads and one angular contact bearing to take axial loads.

5.2.12.3 Bearings shall be grease lubricated with provisions for addition and relief of grease.

6.2.13 Suction elbow: Existing and to be reused.

6.2.14 Coupling/Drive Shaft: Existing and to be reused.

6.2.15 Data plate:

5.2.15.1 All data plates shall be stainless steel suitable attached to the pump. Data plates shall contain the manufacturer's name, pump size and type, serial number, speed, impeller diameter, rated capacity and head, and other pertinent data. A separate nameplate shall identify the frame and bearing numbers.

6.2.16 Pump drive: Drive is existing and to be reused.

5.3 **DELIVERY/PERFORMANCE TIME:**

5.3.1 The contractor/supplier shall be required to deliver the specific pump(s) to the City of Houston location specified in the purchase order (PO) no later than **112 Calendar days** after receipt of the City of Houston P.O.

5.4 **LITERATURE, TOOLS AND SPARE PARTS:**

The Contractor shall be required to provide four (4) Operations and Maintenance manuals with the delivery of pump(s).

5.5 **WARRANTY:**

The manufacturer shall provide **a one (1) year** warranty from the date of final system acceptance and allow the City the option to purchase an extended warranty. Removal and reinstallation is by the City. All shipping charges for warranty work that is required outside of the Houston area will be borne by the supplier.

5.6 **TRAINING:**

A minimum of four hours of training shall be conducted by the successful bidder. All training will be conducted at a City of Houston location to be determined at a later date.

6.0 LINE ITEM NO. 6 PUMP, NON-CLOG, VERTICAL DRY PIT PUMP

Make: ITT-AC

Model: Model No. NSWZ, 8x8x17 SC or City Approved Substitute

6.1 SUMMARY OF REQUIREMENT:

6.1.1 The Contractor shall be required to provide the non-clog vertical dry pit pump as specified in this section. The pump(s) bid/furnished and delivered by the contractor shall require no structure and/or piping alterations/modifications. The pump as specified will be used by the City to pump raw wastewater at the City's Northwest Treatment Plant.

6.1.2 The pump shall be rated for wastewater applications.

6.1.3 The pump rotating assembly shall match the City's existing units dimensionally and must fit into the existing casing without modification. The pump rotating assembly shall be designed to perform satisfactorily with a reasonable service life when operated either continuously or intermittently in typical wastewater services. Assembly is to be mounted into existing casing.

6.2 PUMP SPECIFICATIONS:

6.2.1 Construction: Rotating assembly shall be designed to perform satisfactorily with a reasonable service life when operated either continuously or intermittently in typical wastewater services. Assembly is to be mounted into existing casing.

6.2.1.1 Casing: Casing is existing and to be reused.

6.2.1.2 Discharge flange: Existing and to be reused.

6.2.1.3 Discharge position: Existing and to be reused.

6.2.1.4 Suction cover: Existing and to be reused.

6.2.1.5 Impeller:

6.2.1.5.1 The impeller shall be of the single-suction, enclosed type with two vanes, made of ductile Iron. Impellers shall be specially designed with smooth water passages to prevent clogging by stringy or fibrous materials, and shall be capable of passing solids having at least a sphere size of 3". Impeller shall be dynamically balanced. Impeller shall have a tapered bore and shall be keyed and secured to the shaft by an 18-8 Stainless Steel nut locked in place. It shall be readily removable without the use of special tools.

6.2.6 Wear Ring:

6.2.6.1 A replacement 11.5-14% chrome steel AL@ shaped wear ring shall be provided. Ring shall be mounted on impeller to provide a renewable surface opposite the suction cover wear plate. 5.5.2 Pump shall have provisions for adjustment of axial clearance. This adjustment shall be made through the use of shims placed between the frame and outboard bearing housing.

6.2.7 Shaft:

6.2.7.1 The pump shaft shall be high-strength carbon steel, AISI #1045 or 4140, accurately machined, tapered at the impeller end and of sufficient size to transmit full driver output. It shall be protected from the pumped liquid by a shaft sleeve. A seal shall be provided, by a synthetic rubber O-ring between the shaft and shaft sleeve to prevent leakage of pumped liquid out and/or air into the pump.

6.2.8 Shaft sleeve:

6.2.8.1 The renewable shaft sleeve shall be 316 SS with a Ni-CR-Boron coating to a hardness of 58-63RC (approximately 650 Brinell). The sleeve provided shall extend through the seal housing.

6.2.9 Each pump shall be provided with a Dynamic Seal System.

6.2.10 Seal box:

6.2.10.1 The pumps shall be fitted with a single stage Dynamic Seal capable of balancing out positive suction heads. A throttle bushing and sleeve shall be placed in the stuff box cover. Both pieces shall be made of 316 SS with a Ni-CR-Boron coating to a hardness of 58-63RC (approximately 650 Brinell). The Dynamic Seal expeller shall be made of nodular iron, ASTM 536 or 304 Stainless Steel. A pressure relief connection with elbow, fittings, and tubing shall be provided in the seal cover to bleed liquid back to the suction cover of the pump.

6.2.11 Static seal:

6.2.11.1 The dual static seals, provided with a grease cavity between them, shall be installed in the seal cover to provide leakage along the shaft, when the pump is not running. A positive means for adding grease shall be provided in the suction cover. Seals shall contact a 316 SS sleeve with a Ni-CR-Boron coating to a hardness of 58-63RC (approximately 650 Brinell).

6.2.12 Bearing frame and bearings:

6.2.12.1 The pump bearing frame shall be one-piece rigid cast iron construction. The frame shall be provided with a cast iron bearing housing at the outboard end, and a cast iron end over at the inboard end. Both ends of the frame shall be provided with lip type grease seals and labyrinth type deflectors to prevent the entrance of contaminants. The bearing frame shall be designed so that complete rotation element, including motor, can be removed from casing without disconnecting piping or coupling.

6.2.12.2 The bearings shall be designed for 50,000 hours minimum life at 50% of B.E.P. Radial inboard bearings shall be roller type suitable for all loads encountered in the service conditions. Outboard bearing arrangement shall consist of one deep groove ball bearing to take the radial loads and one angular contact bearing to take axial loads.

6.2.12.3 Bearings shall be grease lubricated with provisions for addition and relief of grease.

6.2.13 Suction elbow: Existing and to be reused.

6.2.14 Coupling/Drive Shaft: Existing and to be reused.

6.2.15 Data plate:

6.2.15.1 All data plates shall be stainless steel suitable attached to the pump. Data plates shall contain the manufacturer's name, pump size and type, serial number, speed, impeller diameter, rated capacity and head, and other pertinent data. A separate nameplate shall identify the frame and bearing numbers.

6.2.16 Pump drive: Drive is existing and to be reused.

6.3 **DELIVERY/PERFORMANCE TIME:**

6.3.1 The contractor/supplier shall be required to deliver the specific pump(s) to the City of Houston location specified in the purchase order (PO) no later than **112 Calendar days** after receipt of the City of Houston P.O.

6.4 **LITERATURE, TOOLS AND SPARE PARTS:**

The Contractor shall be required to provide four (4) Operations and Maintenance manuals with the delivery of pump(s).

6.5 **WARRANTY:**

The manufacturer shall provide a **one (1) year** warranty from the date of final system acceptance. Removal and reinstallation is by the City. All shipping charges for warranty work that is required outside of the Houston area will be borne by the supplier.

6.6 **TRAINING:**

A minimum of four hours of training shall be conducted by the successful bidder. All training will be conducted at a City of Houston location to be determined at a later date.

7.0 LINE ITEM NO. 7 PUMP, BARE SUCTION

Make: Moyno

Model: Centennial Model No. 2E012G1SSF3CAA or City Approved Substitute

7.1 SUMMARY OF REQUIREMENT:

7.1.1 The Contractor shall be required to provide the non-clog vertical dry pit pump as specified in this section. The pump(s) bid/furnished and delivered by the contractor shall require no structure and/or piping alterations/modifications. The pump as specified will be used by the City to pump polymer at the City's Keegans Bayou Wastewater Treatment Plant.

7.1.2 The pump shall be rated for wastewater applications.

7.2 PUMP SPECIFICATIONS:

7.2.1 The pump will have its own BaseASM, Carbon Steel Piggy-Back Break Bent Base with anchor and grout holes, and drain package- consisting of drain rim.

7.2.1 The pump shall be equipped with a BLTPYLASM Belt and Pulley assembly, Target RPM-250, Ratio- 4:64.

7.2.1 The pump shall be equipped with a Belt Guard.

7.3 DELIVERY/PERFORMANCE TIME:

7.3.1 The contractor/supplier shall be required to deliver the specific pump(s) to the City of Houston location specified in the purchase order (PO) no later than **120Calendar days** after receipt of the City of Houston P.O.

7.4 LITERATURE, TOOLS AND SPARE PARTS:

The Contractor shall be required to provide four (4) Operations and Maintenance manuals with the delivery of pump(s).

7.5 WARRANTY:

The manufacturer shall provide a one (1) year warranty from the date of final system acceptance.. Removal and reinstallation is by the City. All shipping charges for warranty work that is required outside of the Houston area will be borne by the supplier

7.6 TRAINING:

A minimum of four hours of training shall be conducted by the successful bidder. All training will be conducted at a City of Houston location to be determined at a later date.

8.0 LINE ITEM NO. 8 PUMP, HEAVY DUTY POSITIVE DISPLACEMENT

Make: Moyno

Model: 2000 Model No. 1E03G1CDQX3AAX or City Approved Substitute

8.1 SUMMARY OF REQUIREMENT:

8.1.1 The Contractor shall be required to provide the positive displacement, progressive cavity pump as specified in this section The pump(s) bid/furnished and delivered by the contractor shall require no structure and/or piping alterations/modifications . The pump as specified will be used by the City to pump sludge at the City's Metro Wastewater Treatment Plant.

8.1.2 The pump shall be rated for wastewater applications.

8.2 PUMP SPECIFICATIONS:

8.2.1 Each pump will have its own BaseASM, Carbon Steel Piggy-Back Break Bent Base with anchor and grout holes, and drain package- consisting of drain rim.

8.2.2 The pump shall be cradle-mounted to allow the normal vertical suction port to be rotated to any angle perpendicular to the centerline to facilitate piping connections.

8.2.3 The bearing and suction housings of the pump to be thick walled cast iron.

8.2.4 E All cast parts shall be free of sand holes, blow holes and other defects.

8.2.5 The suction housing shall incorporate two rectangular inspection ports.

8.2.6 The pump bearings will be integral and of the grease lubricated, tapered roller type for maximum pressure.

8.2.7 Bearings are to be designed for a minimum B-10 life of 100,000 hours under maximum operating conditions.

8.2.8 The Moyno Ultra-Shield rotor shall be of a one-piece construction with integrally machined rotor head.

8.2.9 The rotor shall be machined from alloy steel or 316 Stainless steel. The alloy steel shall be ASTM A331-90, grade 4150 cold finish with a yield strength greater than 55,000 psi.

8.2.10 .The Moyno Ultra Shield rotor shall be of the single helix design with a Moyno Ultra Shield. 05 hard chrome plate thickness of 0.10 inches.

8.2.11 The Moyno Ultra Flex stators shall be of the double helix design and chemically bonded to the inside of a carbon steel tube.

8.2.12 Each pump inspection plate to be tapped with .75 fitting.

8.3 DELIVERY/PERFORMANCE TIME:

8.3.1 The contractor/supplier shall be required to deliver the specific pump(s) to the City of Houston location specified in the purchase order (PO) no later than **120 Calendar days** after receipt of the City of Houston P.O.

8.4 LITERATURE, TOOLS AND SPARE PARTS:

The Contractor shall be required to provide four (4) Operations and Maintenance manuals with the delivery of pump(s).

8.5 **WARRANTY:**

The manufacturer shall provide a one (1) year warranty from the date of final system acceptance. Removal and reinstallation is by the City. All shipping charges for warranty work that is required outside of the Houston area will be borne by the supplier

8.6 **TRAINING:**

A minimum of four hours of training shall be conducted by the successful bidder. All training will be conducted at a City of Houston location to be determined at a later date.

9.0 LINE ITEM NO. 9 PUMP, HEAVY DUTY POSITIVE DISPLACEMENT

Make: Moyno

Model: 2000 Model No. 1G065G1CDQ-X 3AAA or City Approved Substitute

9.1 SUMMARY OF REQUIREMENT:

9.1.1 The Contractor shall be required to provide the positive displacement, progressive cavity pump as specified in this section. The pump(s) bid/furnished and delivered by the contractor shall require no structure and/or piping alterations/modifications. The pump as specified will be used by the City to pump thickened sludge at the City's Upper Braes Treatment Plant.

9.1.2 The pump shall be rated for wastewater applications.

9.2 PUMP SPECIFICATIONS:

9.2.1 Each pump will have its own BaseASM, Carbon Steel Piggy-Back Break Bent Base with anchor and grout holes, and drain package- consisting of drain rim.

9.2.2 Each pump will have its own BaseASM, Carbon Steel Piggy-Back Break Bent Base with anchor and grout holes, and drain package- consisting of drain rim.

9.2.3 Each pump shall be equipped with BLTPYLASM Belt and Pulley assembly, Target RPM-250, Ratio- 4:64.

9.2.4 Each pump shall be equipped with a Belt Guard.

9.3 MOTOR:

9.3.1 Each pump to come with a Motor- Baldor/ Reliance 5 hp AC Motor, with feet, Frame-215T, Service factor- 1.15, 1160 RPM, Assembly- F1, Enclosure- TEFC, Insulation-F, 60 Hertz, Voltage-3, Phase- 460 volt, foot mounted to base, Standard Options- Severe Duty- Efficiency Design, Premium Efficient, Additional Requirements- Suitable for use with VFD.

9.3 DELIVERY/PERFORMANCE:

9.3.1 The contractor/supplier shall be required to deliver the specific pump(s) to the City of Houston location specified in the purchase order (PO) no later than **98 Calendar days** after receipt of the City of Houston P.O.

9.4 LITERATURE, TOOLS AND SPARE PARTS:

The Contractor shall be required to provide four (4) Operations and Maintenance manuals with the delivery of pump(s).

9.5 WARRANTY:

The manufacturer shall provide a one (1) year warranty from the date of final system acceptance. Removal and reinstallation is by the City. All shipping charges for warranty work that is required outside of the Houston area will be borne by the supplier

9.6 TRAINING:

A minimum of four hours of training shall be conducted by the successful bidder. All training will be conducted at a City of Houston location to be determined at a later date.

10.0 LINE ITEM NO. 10 PUMP, HEAVY DUTY DOUBLE DISK

Make: Penn Valley Pump Company, Inc.

Model: No. 6DDSX76 or City Approved Substitute

10.1 SUMMARY OF REQUIREMENT:

10.1.1 The Contractor shall be required to provide the 6-INCH double disk pump as specified in this section. The pump(s) bid/furnished and delivered by the contractor shall require no structure and/or piping alterations/modifications. The pump as specified will be used by the City to pump thickened sludge at the City's Southeast Water Purification Plant.

10.2 PUMP SPECIFICATIONS:

10.2.1 15 HP Motor, WEG, Explosion Proof with Thermal Overload.

10.2.2 250 RPM Pump Speed.

10.2.3 Side Motor Mount.

10.2.4 Suction & Discharge Pulsation Dampeners in Mild Steel.

10.2.5 304SS Frame, Belt Pulley Cover & Drive Guard

10.2.6 Pressure Gauge Switch Assembly in 316SS

10.2.7 Vacuum Gauge Switch Assembly in 316SS

10.3 DELIVERY/PERFORMANCE TIME:

10.3.1 The contractor/supplier shall be required to deliver the specific pump(s) to the City of Houston location specified in the purchase order (PO) no later than **120 Calendar days** after receipt of the City of Houston P.O.

10.4 LITERATURE, TOOLS AND SPARE PARTS:

The Contractor shall be required to provide four (4) Operations and Maintenance manuals with the delivery of pump(s).

10.5 WARRANTY:

The manufacturer shall provide a two (2) year warranty from the date of final system acceptance. Removal and reinstallation is by the City. All shipping charges for warranty work that is required outside of the Houston area will be borne by the supplier

10.6 TRAINING:

A minimum of four hours of training shall be conducted by the successful bidder. All training will be conducted at a City of Houston location to be determined at a later date.

11.0 LINE ITEM NO. 11 PUMP, HEAVY DUTY SUBMERSIBLE
Make: HOMA.
Model: No. AV444-215/10NSFM or City Approved Substitute

11.1 SUMMARY OF REQUIREMENT:

11.1.1 The Contractor shall be required to provide the submersible vortex pump as specified in this section. The pump(s) bid/furnished and delivered by the contractor shall require no structure and/or piping alterations/modifications. The pump as specified will be used by the City to pump thickened sludge at the City's Southeast Wastewater Treatment Plant.

11.1.2 The pump shall be rated for wastewater applications.

11.2 PUMP SPECIFICATIONS:

11.2.1 Motor 10.5 hp, 230/460 Volts, 60 hz, 1750 RPM.

11.2.2 Pump Operating data- 440 gpm, 38 ft. head.

11.2.3 Motor housing made of cast iron ASTM A48; CI.40B

11.2.4 Impeller made of cast iron ASTM A48;CI.40B

11.2.5 Pump Housing made of cast iron ASTM A48;CI.40B

11.2.6 Motor Shaft made of AISI 430 F Stainless Steel

11.2.7 Bolts made of AISI 304 Stainless Steel

11.2.8 Motor Jacket Stainless Steel

11.2.9 Elastomeres- Nitrile Rubber

11.2.10 Mechanical seal on motor side

11.2.11 Mechanical seal on medium side

11.2.12 Lower Bearing- Double row angular ball bearing

11.2.13 Upper Bearing- Deep Groove Ball Bearing

11.3 DELIVERY/PERFORMANCE TIME:

11.3.1 The contractor/supplier shall be required to deliver the specific pump(s) to the City of Houston location specified in the purchase order (PO) no later than **98 Calendar days** after receipt of the City of Houston P.O.

11.4 LITERATURE, TOOLS AND SPARE PARTS:

The Contractor shall be required to provide four (4) Operations and Maintenance manuals with the delivery of pump(s).

11.5 WARRANTY:

The manufacturer shall provide a five (5) year warranty from the date of final system acceptance. Removal and reinstallation is by the City. All shipping charges for warranty work that is required outside of the Houston area will be borne by the supplier

11.6 TRAINING:

A minimum of four hours of training shall be conducted by the successful bidder. All training will be conducted at a City of Houston location to be determined at a later date.

12.0 **LINE ITEM NO. 12 PUMP, HEAVY DUTY SUBMERSIBLE**
Make: Netzsch
Model: No. NM053SY01L04B or City Approved Substitute

12.1 **SUMMARY OF REQUIREMENT:**

12.1.1 The Contractor shall be required to provide the submersible progressive cavity pump as specified in this section. **The pump(s) bid/furnished and delivered by the contractor shall require no structure and/or piping alterations/modifications.** The pump as specified will be used by the City to pump polymer at the City's 69th Street Wastewater Treatment Plant.

12.1.2 The pump shall be rated for wastewater applications.

12.2 **PUMP SPECIFICATIONS:**

12.2.1 Pump(s) shall be heavy duty horizontally mounted pump rated for polymer applications containing low to highly viscous fluids with or without solids.

12.2.2 Flow capacity rating shall be 2200 GPM or better at operating head with pressures up to 680 PSI.

12.2.3 Housing shall be cast iron, stainless steel internals, stainless steel rotor, Vinton stator, MG-1 Mach Seal

12.2.4 Capable of reverse direction rotation

12.2.5 Pump should have inspection openings

12.2.6 Pump is Bareshaft only.

12.3 **DELIVERY/PERFORMANCE TIME:**

12.3.1 The contractor/supplier shall be required to deliver the specific pump(s) to the City of Houston location specified in the purchase order (PO) no later than **98 Calendar days** after receipt of the City of Houston P.O.

12.4 **LITERATURE, TOOLS AND SPARE PARTS:**

The Contractor shall be required to provide four (4) Operations and Maintenance manuals with the delivery of pump(s).

12.5 **WARRANTY:**

The manufacturer shall provide a five (5) year warranty from the date of final system acceptance. Removal and reinstallation is by the City. All shipping charges for warranty work that is required outside of the Houston area will be borne by the supplier

12.6 **TRAINING:**

A minimum of four hours of training shall be conducted by the successful bidder. All training will be conducted at a City of Houston location to be determined at a later date.

13.0 LINE ITEM NO. 13 PUMP, HEAVY DUTY DRY PIT

Make: Chicago Yeoman Series 6260

Model: No. 64215SC or City Approved Substitute

13.1 SUMMARY OF REQUIREMENT:

13.1.1 The Contractor shall be required to provide the dry pit pump as specified in this section. The pump(s) bid/furnished and delivered by the contractor shall require no structure and/or piping alterations/modifications.

The pump as specified will be used by the City to pump waste activated sludge at the City's Southeast Wastewater Treatment Plant.

13.1.2 The pump shall be rated for wastewater applications.

13.2 PUMP SPECIFICATIONS:

13.2.1 Pump(s) shall be heavy duty dry pit with special Hi-Chrome Construction, Right Hand Rotation, Tompac TP-4000 Seal Compound, 6-Inch Suction, 364TCS Frame Motor Mounting Parts, and Stainless Steel Wear Rings.

13.2.1.1 OPERATING FLOW (Required) 700 GPM @ 140 ft. TDH

13.2.1.2 SUCTION PIPE DIAMETER 4 in

13.2.1.3 DISCHARGE PIPE DIAMETER 4 in

13.2.1.4 EXISTING MOTOR INFO Marathon, 60 hp

13.2.2 Pump castings (Casing, suction cover and separation tank) shall be cast iron conforming to ASTM A48, Class 30 or better.

13.2.3 The pump impeller shall be balanced solids-handling type made of cast iron conforming to ASTM A48 Class 30 or better. The impeller and blades shall be designed and shaped to not allow rags or similar material to clog the impeller or significantly diminish efficiency.

13.2.4 The pump wear plates shall be fully adjustable and replaceable, fabricated of 400 series stainless steel for both the suction cover and impeller.

13.2.5 The pump bearings shall be fitted with radial and thrust bearing of ample size to carry all loads under continuous operation without overheating. Bearings shall be anti-friction ball or tapered roller bearings of adequate size to withstand imposed loads for sustained pumping at maximum duty points. The minimum L₁₀ bearing life shall be 100,000 hours at the primary duty point and 40,000 hours at the most extreme operating point. The pump shaft shall be made from high grade treated alloy steel, rigid shaft type.

13.3 DELIVERY/PERFORMANCE TIME:

13.3.1 The contractor/supplier shall be required to deliver the specific pump(s) to the City of Houston location specified in the purchase order (PO) no later than **98 Calendar days** after receipt of the City of Houston P.O.

13.4 LITERATURE, TOOLS AND SPARE PARTS:

The Contractor shall be required to provide four (4) Operations and Maintenance manuals with the delivery of pump(s).

13.5 WARRANTY:

The manufacturer shall provide a five (5) year warranty from the date of final system acceptance. Removal and reinstallation is by the City. All shipping charges for warranty work that is required outside of the Houston area will be borne by the supplier

13.6 **TRAINING:**

A minimum of four hours of training shall be conducted by the successful bidder. All training will be conducted at a City of Houston location to be determined at a later date.

14.0 LINE ITEM NO. 14 PUMP, HEAVY DUTY SUBMERSIBLE

Make: Watson Marlow, Inc.

Model: No. SPX65 or City Approved Substitute

14.1 SUMMARY OF REQUIREMENT:

14.1.1 The Contractor shall be required to provide the chemical pump as specified in this section. The pump(s) bid/furnished and delivered by the contractor shall require no structure and/or piping alterations/modifications.

The pump as specified will be used by the City to pump/transfer sodium hypochlorite chemicals at the City's Northeast Water Purification Plant.

14.2 PUMP SPECIFICATIONS:

14.2.1 Nominal Flow: 51 gpm nominal (29 rpm) constant speed.

14.2.2 Twin, Sliding Epoxy Shoe, Fully Supported Rotor Assembly.

14.2.3 High-Strength Twin-Bearing Hub

14.2.4 Cast Iron Housing, 316SS Pump Supports

14.2.5 Bolted Carbon Steel Cover with PMMA Site Window

14.2.6 65 mm EPDM hoses with machined outside diameter

14.2.7 2.5" Zinc-Plated Steel 150# Flanges w/Polypropylene Inserts

14.2.8 1.77 gallon/revolution

14.2.9 316SS nameplate

14.2.10 5.3 gallons of Glycerin/Glycol Lubricant

14.2.11 High Lubricant Level Sensor

14.2.12 Buffer Zone Seals Lubricant Inside Pumphead to Protect Gearing

14.2.13 3-Stage Integral Planetary Gearing with Fully Protected Drive Feature, 29 rpm, with 213-215TC Input

14.2.14 Frame, 91% Efficient

14.2.15 7.5 HP Baldor motor, model VEM3770T

14.2.16 Standard factory paint - Red

14.2.17 Pump in position 2 - ports facing right

10.3 DELIVERY/PERFORMANCE TIME:

8.3.1 The contractor/supplier shall be required to deliver the specific pump(s) to the City of Houston location specified in the purchase order (PO) no later than 98 Calendar days after receipt of the City of Houston P.O.

10.4 LITERATURE, TOOLS AND SPARE PARTS:

The Contractor shall be required to provide four (4) Operations and Maintenance manuals with the delivery of pump(s).

10.5 WARRANTY:

The manufacturer shall provide a two (2) year warranty from the date of final system acceptance. Removal and reinstallation is by the City. All shipping charges for warranty work that is required outside of the Houston area will be borne by the supplier.

10.6 TRAINING:

A minimum of four hours of training shall be conducted by the successful bidder. All training will be conducted at a City of Houston location to be determined at a later date.

15.0 LINE ITEM NO. 15 PUMP, HEAVY DUTY, VERTICAL DRY PIT NON-CLOG w/ MOTOR

Make: Fairbanks Morse

Model: No. 5414 8" S/N K4E1-077990 or City Approved Substitute

15.1 SUMMARY OF REQUIREMENT:

15.1.1 The Contractor shall be required to provide the 8" vertical dry pit non-clog sewage pump as specified in this section. The pump(s) bid/furnished and delivered by the contractor shall require no structure and/or piping alterations/modifications. The pump as specified will be used by the City to pump sewage at the City's Sagemont Wastewater Treatment Plant.

15.1.2 The pump shall be rated for wastewater applications.

15.2 PUMP SPECIFICATIONS:

15.2.1 **Casings shall be 30 Cast Iron 8" Vertical Dry Pit Non-Clog Sewage Pumps. Hydraulic and dimensional duplicate to existing pump. The casing wear ring is stainless steel.**

15.2.2 The pump shall be equipped with a 16" High ring base motor stand.

15.2.3 Packing: Stuffing box shall be supplied with a self-contained grease dispenser capable of 150mL. Unit shall emit warning light when grease is low or feed blockages occur. Dispenser unit shall be battery operated, explosion proof and time adjustable.

15.2.3

15.2.4 Impeller: CL. 30 Cast Iron Impeller with CCW rotation, Dynamically Balanced and Stainless Steel Wear-Rings and Impeller fastener.

15.2.5 Shafts: Standard Shaft Coupling

15.3 **MOTOR:** The pump motor shall be a 40 hp, 1200 RPM, 240V, 1.15 TEFC service factor, premium efficiency to fit a 8" 5414 Pump with a 449HPV Frame, Space Heater, Stainless Steel Drain & Breather Vents, Vertical Solid Shaft and a Normal Thrust.

15.3 DELIVERY/PERFORMANCE TIME:

15.3.1 The contractor/supplier shall be required to deliver the specific pump(s) to the City of Houston location specified in the purchase order (PO) no later than **120Calendar days** after receipt of the City of Houston P.O.

15.4 LITERATURE, TOOLS AND SPARE PARTS:

The Contractor shall be required to provide four (4) Operations and Maintenance manuals along with two (2) Kellum Grips with the delivery of pump(s).

15.5 WARRANTY:

The manufacturer shall provide a one (1) year warranty from the date of final system acceptance.. Removal and reinstallation is by the City. All shipping charges for warranty work that is required outside of the Houston area will be borne by the supplier.

16.0 LINE ITEM NO. 16 PUMP, HEAVY DUTY, VERTICAL DRY PIT NON-CLOG w/ MOTOR

Make: Fairbanks Morse

Model: No. B5711 16" S/N K4E1-077989 or City Approved Substitute

16.1 SUMMARY OF REQUIREMENT:

16.1.1 The Contractor shall be required to provide the 16" vertical dry pit non-clog sewage pump as specified in this section. **The pump(s) bid/furnished and delivered by the contractor shall require no structure and/or piping alterations/modifications .** The pump as specified will be used by the City to pump sewage at the City's Sagemont Wastewater Treatment Plant.

16.1.2 The pump shall be rated for wastewater applications.

16.2 PUMP SPECIFICATIONS:

16.2.1 **Casings shall be 30 Cast Iron 8" Vertical Dry Pit Non-Clog Sewage Pumps. Hydraulic and dimensional duplicate to existing pump. The casing wear ring is stainless steel.**

16.2.2 The pump shall be equipped with a 16" High ring base motor stand.

16.2.3 Packing: Stuffing box shall be supplied with a self-contained grease dispenser capable of 150ml. Unit shall emit warning light when grease is low or feed blockages occur. Dispenser unit shall be battery operated, explosion proof and time adjustable.

16.2.4 Impeller: CL. 30 Cast Iron Impeller with CCW rotation, Dynamically Balanced and Stainless Steel Wear-Rings and Impeller fastener.

16.2.5 Shafts: Standard Shaft Coupling

16.3 **MOTOR:** The pump motor shall be a 100 hp, 720 RPM, 240V, 1.15 TEFC service factor, premium efficiency to fit a 16" B5711 Pump with a 449HPV Frame, Space Heater, Stainless Steel Drain & Breather Vents, Vertical Solid Shaft and a Normal Thrust.

16.3 DELIVERY/PERFORMANCE TIME:

16.3.1 The contractor/supplier shall be required to deliver the specific pump(s) to the City of Houston location specified in the purchase order (PO) no later than 120 Calendar days after receipt of the City of Houston P.O.

16.4 LITERATURE, TOOLS AND SPARE PARTS:

The Contractor shall be required to provide four (4) Operations and Maintenance manuals along with two (2) Kellum Grips with the delivery of pump(s).

16.5 WARRANTY:

The manufacturer shall provide a one (1) year warranty from the date of final system acceptance. Removal and reinstallation is by the City. All shipping charges for warranty work that is required outside of the Houston area will be borne by the supplier.

17.0 LINE ITEM NO. 17 PUMP, ROTATING ASSEMBLY (PUMP LESS VOLUTE)

Make: ITT Goulds/A-C

Model: No. PWOV or City Approved Substitute

17.1 SUMMARY OF REQUIREMENT:

17.1.1 The Contractor shall be required to provide the rotating assembly (pump, less volute) as specified in this section. **The pump(s) bid/furnished and delivered by the contractor shall require no structure and/or piping alterations/modifications** ITT Goulds/A-C, Model PWOV, size 8X5-17S, Serial No. 248C573, or City approved equal. The rotating assembly as specified will be used on existing vertical centrifugal pumps currently installed at the City's West District and Turkey Creek Wastewater Treatment Plants.

17.1.2 The rotating assembly shall be rated for wastewater applications.

17.2 PUMP ROTATING ASSEMBLY SPECIFICATIONS:

17.2.1 Pump Construction: Pumps shall be constructed of material that will be able to completely withstand all hazards associated with operating continuously or intermittently in typical wastewater environment, without malfunction, for long periods of time.

17.2.2 Casing: Existing. (Do not include) Provide new casing gasket.

17.2.3 Impeller: Impeller shall be of the single suction, open type, made of 316SS. Impeller shall be designed to be capable of passing small solids and stringy materials. Impeller shall be dynamically balanced. Impeller shall be screwed onto the shaft in opposite direction of rotation to prevent loosening during normal operation.

17.2.4 Impeller clearance adjustment: Pump shall have provisions for adjustment of axial clearance. This adjustment shall be made through an adjusting nut assembly which permits the complete rotating element to be moved in an axial plane. Both coupling end and pump end bearings shall be mounted within the adjusting assembly to assure bearing alignment.

17.2.5 Shaft: Pump shaft shall be high-strength carbon steel, AISI #1140 or 4140, accurately machined and of sufficient size to transmit full driver output. It shall be protected from the pumped liquid by a shaft sleeve.

17.2.6 Shaft Sleeve: Renewable shaft sleeve shall be XH800 Ni-Chrome-Boron coated/316SS. Sleeve shall be the hook-type design secured between the back hub of the impeller and a shaft shoulder, free to expand the frame end.

17.2.7 Stuffing Box: Each pump shall be provided with a packed stuffing box. Box and cover shall be made of cast iron. Stuffing box shall contain five (5) rings of packing and lantern ring. Gland shall be split type to permit easy access and removal.

17.2.8 Bearing Frame: Pump bearing frame shall be rigid cast iron construction. Frame shall be provided with a cast iron bearing housing at the outboard end, and a cast iron end over at the inboard end. Both ends of the frame shall be provided with lip type grease seals and labyrinth type deflectors to prevent the entrance of contaminants.

17.2.9 Bearings: Bearings shall be designed for 40,000 hours minimum life at 50% of B.E.P. Radial inboard bearings shall be roller type suitable for all loads encountered in the service conditions. Outboard bearing arrangement shall consist of one deep groove ball bearing to take the radial loads and one angular contact bearing to take axial loads.

17.2.10 Lubrication: Bearings shall be grease lubricated with provisions for addition and relief of grease.

17.2.11 The supplier and/or manufacturer shall be a pump company which also specializes in repairs and installation of pumps.

17.3 **DELIVERY/PERFORMANCE TIME:**

17.3.1 The contractor/supplier shall be required to deliver the specific pump(s) to the City of Houston location specified in the purchase order (PO) no later than 98 Calendar days after receipt of the City of Houston P.O.

18.4 **LITERATURE, TOOLS AND SPARE PARTS:**

The Contractor shall be required to provide four (4) Operations and Maintenance manuals with the delivery of pump(s).

18.5 **WARRANTY:**

The manufacturer shall provide a one (1) year warranty from the date of final system acceptance. Removal and reinstallation is by the City. All shipping charges for warranty work that is required outside of the Houston area will be borne by the supplier

18.6 **TRAINING:**

A minimum of four hours of training shall be conducted by the successful bidder. All training will be conducted at a City of Houston location to be determined at a later date.

END OF SECTION

SECTION C

GENERAL TERMS AND CONDITIONS

1.0 COMPETITIVE BIDDING:

- 1.1 It is the intent of the City of Houston to solicit the lowest and best responsible bid or price under competitive conditions. All materials and/or equipment shall be new unless stated otherwise. Prospective bidders are advised that the specifications within this bid invitation are not to be considered restricted to any referenced manufacturer.

2.0 AWARD:

- 2.1 The City reserves the right to consider and make awards of bids on articles of similar nature that will in all respects serve the purpose for which the purchase is being made. The City reserves the right to be the sole judge as to whether such articles will serve the purpose.
- 2.2 Unless otherwise specified, the City reserves the right to accept or reject in whole or in part any bid submitted or to waive any informalities that are in the best interests of the City.

3.0 CONDITIONS PART OF BID:

- 3.1 In the event of any conflict, the terms and provisions incorporated in the bid specifications shall control over the terms and provisions of the General Terms & Conditions for any or all purposes. Otherwise, all the terms and provisions appearing within the General Terms & Conditions shall be given full effect and shall be construed in harmony to the maximum extent by the parties hereto.
- 3.2 The failure of the City to insist, in any one or more instances, upon performance of any of the terms, covenants or conditions of this Contract, General Terms & Conditions or Specifications shall not be construed as a waiver or relinquishment of the future performance of such term, covenant or condition by the City, but the obligation of the Contractor with respect to such future performance shall continue in full force and effect.

4.0 SILENCE OF SPECIFICATIONS:

- 4.1 The apparent silence of these specifications as to any detail or the apparent omission from them of a detailed description concerning any point shall be regarded as meaning that only the best commercial practice shall prevail and only materials and workmanship of first quality are acceptable. All interpretations of these specifications shall be made upon the basis of this statement.

5.0 SPECIFIED EQUIPMENT OR EQUIVALENT:

- 5.1 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.
- 5.2 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.

6.0 BRAND NAME OR TRADE NAME:

6.1 Any manufacturer's names, trade names, brand names, or catalog numbers used in the specifications are for the purpose of describing and establishing the general quality level, design and performance desired. Such references are not intended to limit or restrict bidding by other Contractors/Suppliers, but are intended to approximate the quality design or performance that is desired. Any bid that proposes like quality, design or performance, will be considered. Equivalent products will be considered, provided a complete description and product literature is provided. Unless a specific exception is made, the assumption will be that the item bid is exactly as specified on the Invitation to Bid.

7.0 PATENTS:

7.1 The Contractor agrees to indemnify and save harmless the city, its agents, employees, officers, and legal representatives from all suits and actions of every nature and description brought against them or any of them, for or on account of the use of patented appliances, products or processes, and it shall pay all royalties and charges which are legal and equitable. Evidence of such payment or satisfaction shall be submitted, upon request of the City Purchasing Agent, as a necessary requirement in connection with the final estimate for payment in which such patented appliance, products or processes are used.

8.0 TERMINATION OF AGREEMENT:

8.1 By the City for Convenience:

8.1.1 The City Purchasing Agent may terminate this Contract at any time upon 30-calendar days notice in writing to the Contractor. Upon receipt of such notice, the Contractor shall, unless the notice directs otherwise, discontinue all services in connection with the performance of the contract and shall proceed to cancel promptly all existing orders and contracts insofar as such orders and contracts are chargeable to this Contract. As soon as practicable after the receipt of notice of termination, the Contractor shall submit a statement to the appropriate department(s) showing in detail the services performed or items delivered under this Contract to date of termination. The City agrees to compensate the Contractor for that portion of the prescribed charges for which the services were actually performed or items delivered under this contract and not previously paid.

8.2 By the City for Default by the Contractor:

8.2.1 In the event that the materials and/or services furnished by the Contractor do not conform to the standard set forth herein, or if the deliveries and servicing of this contract do not conform to the requirements detailed herein, the City through a written notice from the City Purchasing Agent to the Contractor describing such default may as its options:

- (1) Terminate the contract for default and the City shall have no further obligation under the Contract.
- (2) Allow the Contractor to cure default within a reasonable time as specified in the notice. The City, at its sole option, may extend the proposed date of termination to a later date. If prior to the proposed date of termination, the Contractor cures such default to the City's satisfaction, then the proposed termination shall be ineffective. If the Contractor fails to cure such default prior to the propose date of termination, then the City may terminate its performance under this contract as of such date and have no further obligation under the contract.

8.2.2 In the event of failure to deliver any or all of the items or to perform required services, the City may cover its loss by reasonably procuring from another source the items not delivered or the services not performed. The Contractor shall be responsible for and shall pay to the

City immediately upon demand the difference in price between that offered by the Contractor and that which the City was forced to pay for covering the Contractor's failure to deliver or perform services.

8.3 By the Contractor for Default by City:

8.3.1 Default by the City shall occur if the City fails to perform or observe the terms and conditions of this Contract required to be performed or observed by the City, and the Contractor gives notice in writing to the City within 30 calendar days of the act or omission claimed by the Contractor to constitute default on the part of the City.

8.3.2 Upon receipt of such notice in writing from the Contractor, however, the City shall have 30 calendar days to cure such default. The Contractor, at its sole option, may extend the proposed date of termination to a later date.

8.3.3 If City cures such default prior to the proposed date of termination, the proposed termination shall be ineffective. If the City fails to cure such default prior to the proposed date of termination, then the Contractor may terminate its performance under this contract as of such date

9.0 SUCCESSORS & ASSIGNS:

9.1 The Contractor may not assign this contract or dispose of substantially all of its assets without the written consent of the City Purchasing Agent. The Contractor's failure to obtain such consent shall be an event of default, authorizing the City Purchasing Agent to terminate this contract according to its terms.

10. RELEASE:

10.1 THE CONTRACTOR AGREES TO AND SHALL RELEASE THE CITY, ITS AGENTS, EMPLOYEES, OFFICERS, AND LEGAL REPRESENTATIVES (COLLECTIVELY THE "CITY") FROM ALL LIABILITY FOR INJURY, DEATH, DAMAGE, OR LOSS TO PERSONS OR PROPERTY SUSTAINED IN CONNECTION WITH OR INCIDENTAL TO PERFORMANCE UNDER THIS AGREEMENT, EVEN IF THE INJURY, DEATH, DAMAGE, OR LOSS IS CAUSED BY THE CITY'S SOLE OR CONCURRENT NEGLIGENCE AND/OR THE CITY'S STRICT PRODUCTS LIABILITY OR STRICT STATUTORY LIABILITY.

11.0 INDEMNIFICATION:

11.1 THE CONTRACTOR AGREES TO AND SHALL DEFEND, INDEMNIFY, AND HOLD THE CITY, ITS AGENTS, EMPLOYEES, OFFICERS, AND LEGAL REPRESENTATIVES (COLLECTIVELY THE "CITY") HARMLESS FOR ALL CLAIMS, CAUSES OF ACTION, LIABILITIES, FINES, AND EXPENSES (INCLUDING, WITHOUT LIMITATION, ATTORNEYS' FEES, COURT COSTS, AND ALL OTHER DEFENSE COSTS AND INTEREST) FOR INJURY, DEATH, DAMAGE, OR LOSS TO PERSONS OR PROPERTY SUSTAINED IN CONNECTION WITH OR INCIDENTAL TO PERFORMANCE UNDER THIS AGREEMENT INCLUDING, WITHOUT LIMITATION, THOSE CAUSED BY:

- (1) THE CONTRACTOR'S AND/OR ITS AGENTS', EMPLOYEES', OFFICERS', DIRECTORS', CONTRACTORS', OR SUBCONTRACTORS' (COLLECTIVELY IN NUMBERED PARAGRAPHS 1-3, "THE CONTRACTOR") ACTUAL OR ALLEGED NEGLIGENCE OR INTENTIONAL ACTS OR OMISSIONS;**
- (2) THE CITY'S AND THE CONTRACTOR'S ACTUAL OR ALLEGED CONCURRENT NEGLIGENCE, WHETHER THE CONTRACTOR IS IMMUNE FROM LIABILITY OR NOT; AND**
- (3) THE CITY'S AND THE CONTRACTOR'S ACTUAL OR ALLEGED STRICT PRODUCTS LIABILITY OR STRICT STATUTORY LIABILITY, WHETHER THE CONTRACTOR IS IMMUNE FROM LIABILITY OR NOT.**

11.2 THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE CITY HARMLESS DURING THE TERM OF THIS AGREEMENT AND FOR FOUR YEARS AFTER THE AGREEMENT TERMINATES. THE CONTRACTOR'S INDEMNIFICATION IS LIMITED TO \$500,000 PER OCCURRENCE. THE CONTRACTOR SHALL NOT INDEMNIFY THE CITY FOR THE CITY'S SOLE NEGLIGENCE.

11.3 INDEMNIFICATION PROCEDURES:

11.3.1 Notice of Claims. If the City or the Contractor receives notice of any claim or circumstances which could give rise to an indemnified loss, the receiving party shall give written notice to the other party within 10 days. The notice must include the following:

- (a) a description of the indemnification event in reasonable detail,
- (b) the basis on which indemnification may be due, and
- (c) the anticipated amount of the indemnified loss.

11.3.2 This notice does not stop or prevent the City from later asserting a different basis for indemnification or a different amount of indemnified loss than that indicated in the initial notice. If the City does not provide this notice within the 10 day period, it does not waive any right to indemnification except to the extent that the Contractor is prejudiced, suffers loss, or incurs expense because of the delay.

11.3.3 Defense of Claims.

- (a) Assumption of Defense. The Contractor may assume the defense of the claim at its own expense with counsel chosen by it that is reasonably satisfactory to the City. The Contractor shall then control the defense and any negotiations to settle the claim. Within 10 days after receiving written notice of the indemnification request, the Contractor must advise the City as to whether or not it will defend the claim. If the Contractor does not assume the defense, the City shall assume and control the defense, and all defense expenses constitute an indemnification loss.
- (b) Continued Participation. If the Contractor elects to defend the claim, the City may retain separate counsel to participate in (but not control) the defense and to participate in (but not control) any settlement negotiations. The Contractor may settle the claim without the consent or agreement of the City, unless it (i) would result in injunctive relief or other equitable remedies or otherwise require the City to comply with restrictions or limitations that adversely affect the City, (ii) would require the City to pay amounts that Contractor does not fund in full, (iii) would not result in the City's full and complete release from all liability to the plaintiffs or claimants who are parties to or otherwise bound by the settlement.

12.0 INSURANCE:

12.1 Contractor shall maintain in effect certain insurance coverage and shall furnish certificates of insurance, in duplicate form, before beginning its performance under this Agreement/purchase order. All policies except Professional Liability and Workers' Compensation must name the City as an additional insured. The issuer of any policy (1) shall have a Certificate of Authority to transact insurance business in Texas or (2) shall be an eligible non-admitted insurer in the State of Texas and have a Best's rating of at least B+ and a Best's Financial Size Category of Class VI or better, according to the most current edition Best's Key Rating Guide. Contractor shall maintain the following insurance coverage's in the following amounts:

12.1.1 Commercial General Liability insurance including Contractual Liability insurance: \$500,000 per occurrence; \$1,000,000 aggregate

12.1.2 Workers' Compensation including Broad Form All States endorsement:

Statutory amount

- 12.1.3 Automobile Liability insurance
\$1,000,000 combined single limit per occurrence
Defense costs are excluded from the face amount of the policy.
Aggregate Limits are per 12-month policy period unless otherwise indicated.
- 12.1.4 Employer's Liability
Bodily injury by accident \$100,000 (each accident)
Bodily injury by disease \$100,000 (policy limit)
Bodily injury by disease \$100,000 (each employee)
- 12.2 All insurance policies must require on their face, or by endorsement, that the insurance carrier waives any rights of subrogation against the City, Contractor shall give written notice to the Director if any of its insurance policies are cancelled, materially changed or non-renewed. Within the 30 day period, Contractor shall provide other suitable policies in lieu of those about to be canceled, materially changed, or non-renewed so as to maintain in effect the required coverage. If Contractor does not comply with this requirement, the Director, at his/her or sole discretion, may:
 - 12.2.1 Immediately suspend Contractor from any further performance under this Agreement/purchase order and begin procedures to terminate for default, or
 - 12.2.2 Purchase the required insurance with City funds and deduct the cost of the premiums from amounts due to Contractor under this contract/purchase order.
 - 12.2.3 All certificates of insurance submitted by Contractor shall be accompanied by endorsements for additional insured coverage in favor of the City for Commercial General Liability and Automobile Liability policies; and waivers of subrogation in favor of the City for Commercial General Liability, Automobile Liability, and Worker's Compensation/Employers' Liability policies. For a list of pre-approved endorsement, forms see <http://purchasing.houstontx.gov/forms.shtml>. The Director will consider all other forms on a case-by-case basis.

INSURANCE IS NOT REQUIRED IF ITEM IS DROP-SHIPPED BY MANUFACTURER OR IS DELIVERED BY COMMON CARRIER.

13.0 MINORITY AND WOMEN BUSINESS ENTERPRISES:

- 13.1 These provisions apply to goal-oriented contracts. A goal oriented contract means any contract awarded for the supply of goods or non-professional services of approximately \$100,000.00 for which competitive bids are required by law and which the City Purchasing Agent has determined to have City of Houston Certified MWBE subcontracting potential.
- 13.2 The Contractor agrees to comply with the City's Minority and Women Business Enterprise programs as set out in Chapter 15, Article V of the City of Houston Code of Ordinances insofar as such programs apply to this Contract. The Contractor further agrees that it will make good faith efforts to award subcontracts or supply agreements in at least 3% of the value of this Contract to Minority and Women-owned Business Enterprises certified by the City's Office of Business Opportunity. In addition, the Contractor acknowledges that it has reviewed the requirements for good faith efforts that are on file with the City's Office of Business Opportunity, is familiar with such requirements, and will comply with them.
- 13.3 The Contractor shall require written subcontracts with all MWBE subcontractors and suppliers, which must contain the terms, set out in the documents attached herein. If the Contractor is an individual person (as distinguished from a corporation, partnership, or other legal entity), and the amount of the subcontract is \$50,000 or less, then the subcontract must also be signed by the attorneys of the respective parties.

- 13.4 Refer to the "City of Houston Goal-Oriented Minority and Women Business Enterprises Contract Provisions" attachment, which is incorporated in the specifications herein by this reference for all purposes, for more detailed information on this requirement.

14.0 REJECTIONS:

- 14.1 Articles not in accordance with samples and specifications must be removed by the Contractor and at its expense. All disputes concerning quality of supplies delivered under this offer will be determined by the City Purchasing Agent or designated representative.
- 14.2 All articles enumerated in the offer shall be subject to inspection on delivery by an officer designated for the purpose and if found inferior to the quality called for, or not equal in value to the Department's samples, or deficient in weight, measurements, workmanship or otherwise, this fact shall be certified to the City Purchasing Agent who shall have the right to reject the whole or any part of the same.

15.0 INVOICING:

- 15.1 In order to expedite payments all invoices must be submitted in triplicate, itemized as to quantity, part and/or model number, description in the same order and form as in the City of Houston Purchase Order. Variations will only delay payment. In addition, invoices must show the name of the Department, Division or Section to which the merchandise was delivered, and the City of Houston Purchase Order Number.
- 15.2 All delivery tickets must have a description of the item delivered.
- 15.3 Mail invoices to the Accounts Payable Section of the Department and to the address, as noted on individual purchase orders.
- 15.4 Delivery tickets and packing slips will contain the same information as the invoice.
- 15.5 All packing slips and delivery tickets must be signed by the receiving employee with their City Employee Number and must be signed by the Contractor's Representative.

16.0 TAXES:

- 16.1 The City is exempt from the Federal Excise and Transportation Tax, and the limited Sales and Use Tax. Unless the Bid Form or Specifications specifically indicate otherwise, the bid price must be net exclusive of above-mentioned taxes. A Contractor desiring refunds of, or exemptions from, taxes paid on merchandise accepted by the City, must submit the proper forms, and the City Purchasing Agent, if satisfied as to the facts, may approve or issue the necessary certificates.

17.0 PAYMENT:

- 17.1 Payment is due thirty (30) days after the City has approved the invoice or after the City has accepted the equipment and all required documents, whichever occurs later. Invoices received that do not agree with the provisions set forth herein shall be returned for correction and will result in payment being delayed.

17.2 PAYMENT OF SUBCONTRACTORS:

- 17.2.1 The Contractor shall make time payments to all persons and entities supplying labor, materials or equipment for the performance of this Contract. The Contractor agrees to protect, defend, and indemnify the City from any claims or liability arising out of the Contractor's failure to make such payments. (Disputes relating to payment of MWBE subcontractors shall be submitted to arbitration in the same manner as any other disputes under the MWBE subcontract. Failure of the Contractor/ Supplier to comply with the decisions of the arbitrator may be deemed, at the sole discretion of the City, a material breach leading to termination of this Contract.)

18.0 INSPECTIONS AND AUDITS:

- 18.1 The City reserves all rights to review all payments made to the Contractors by auditing at a later date. Subject to such audit, any overpayments may be recovered from the Contractor.
- 18.2 City representatives may have the right to perform, or have performed, (1) audits of the Contractor's books and records, and (2) inspections of all places where work is undertaken in connection with this Agreement. The Contractor shall keep its books and records available for this purpose for at least four years after this Agreement terminates. This provision does not affect the applicable statute of limitations.
- 18.3 City representatives have the right to examine the books of all subcontractors and/or suppliers supplying goods and/or services under the contract insofar as those books and records relate to performance under the prime contract.

19.0 CITY OF HOUSTON FAIR CAMPAIGN ORDINANCE:

- 19.1 The City of Houston Fair Campaign Ordinance makes it unlawful for a Contractor to offer any contribution to a candidate for City elective office (including elected officers and officers-elect). All respondents to this invitation to bid must comply with Houston Code of Ordinances Chapter 18 as amended relating to the contribution and solicitation of funds for election campaigns. Provisions of this ordinance are provided in part in the paragraphs that follow. Complete copies may be obtained from the office of the City Secretary.
- 19.2 Candidates for city office may neither solicit nor receive contributions except during a period commencing 270 calendar days prior to an election date for which a person is a candidate for such office and ending 90 calendar days after the election date, including run off elections if such candidate is on the ballot.
- 19.3 Further, it shall be unlawful either for any person who submits a bid or proposal to contribute or offer any contribution to a candidate or for any candidate to solicit or accept any contribution from such person for a period commencing at the time of posting of the City Council Meeting Agenda including an item for the award of the Contract and ending upon the 30th day after the award of the Contract by City Council.
- 19.4 For the purposes of this Ordinance, a **Contract** is defined as each Contract having a value in excess of \$30,000 that is let by the City for professional services, personal services, or other goods or services of any other nature whether the Contract is awarded on a negotiated basis, request for proposal basis, competitive proposal basis or formal sealed competitive bids. The term **Contractor** includes proprietors of proprietorships, partners having an equity interest of 10% or more of partnerships, (including limited liability partnerships and companies), all officers and directors of corporations (including limited liability corporations), and all holders of 10% or more of the outstanding shares of corporations.
- 19.5 **A STATEMENT DISCLOSING THE NAMES AND BUSINESS ADDRESSES EACH OF THOSE PERSONS WILL BE REQUIRED TO BE SUBMITTED WITH EACH BID OR PROPOSAL FOR A CITY CONTRACT.** Completion of the attached form entitled "**Contractor Submission List**" will satisfy this requirement. Failure to provide this information may be just cause for rejection of your bid or proposal.

20.0 CITY OF HOUSTON CONTRACTOR OWNERSHIP DISCLOSURE ORDINANCE:

- 20.1 City Council requires knowledge of the identities of the owners of entities seeking to contract with the City in order to review their indebtedness to the City and other qualifying governmental entities prior to entering into contracts. Therefore, all respondents to this invitation to bid must comply with Houston Code of Ordinances Chapter 15, as amended (Sections 15-122 through 15-126) relating to the disclosure of owners of entities bidding on, proposing for or receiving City contracts. Provisions of this ordinance are provided in part in the paragraphs that follow. Complete copies may be obtained from the office of the City Secretary.

- 20.2 Contracting entity means a sole proprietorship, corporation, non-profit corporation, partnership, joint venture, limited liability company, or other entity that seeks to enter into a contract requiring approval by the Council but excluding governmental entities.
- 20.3 A contracting entity must submit at the time of its bid or proposal, an affidavit listing the full names and the business and residence addresses of all persons owning 5% or more of a contracting entity or, where a contracting entity is a non-profit corporation, the full names and the business and residence addresses of all officers of the non-profit corporation.
- 20.4 Completion of the “**Affidavit of Ownership or Control**”, included herein, and submitted with the Official Bid or Proposal Form will satisfy this requirement. Failure to provide this information with your bid or proposal may be just cause for rejection of your bid or proposal.

21.0 CHANGE ORDERS:

- 21.1 At any time during the Agreement Term, the City Purchasing Agent, or designated representative, may issue a change order to increase or decrease the scope of services, or change plans and specifications, as may be necessary to accomplish the general purposes of this Agreement. The Contractor shall furnish the services or deliverables in the change order in accordance with the requirements of this Agreement plus any special provisions, specifications, or special instructions issued to execute the additional work.
- 21.2 The Contractor shall not make any changes to the specifications or drawings contained herein without written authorization from the City Purchasing Agent or designated representative. The City may refuse to accept all or part of the work performed or equipment/supplies delivered if changes are made to the specifications or drawings without the written authorization of the City Purchasing Agent or designated representative. The City shall not be responsible for costs incurred by the Contractor on unauthorized change orders.
- 21.3 Documentation acceptable to the City Purchasing Agent as evidence of the Contractor’s change(s) shall reference the City’s bid specification by section(s) and page number(s). A letter with supporting documentation of the requested change(s) shall be submitted to the City Purchasing Agent, and the City Purchasing Agent must approve any requested changes PRIOR TO ANY CHANGES BEING PERFORMED. The face of the envelope containing this letter shall clearly state, “CHANGE ORDER REQUEST” and THE NUMBER OF THE BID INVITATION AND THE NUMBER(S) OF THE PURCHASE ORDER(S) referenced. Failure to provide clear and concise evidence as stated above and in the format requested will result in denial until the Contractor complies with these provisions. Documentation shall be mailed to:

City Purchasing Agent
City of Houston, Administration & Regulatory Affairs Department
Strategic Purchasing Division
P. O. Box 1562
Houston, TX 77251-1562

- 21.4 The City Purchasing Agent, or designated representative, may issue change orders, subject to the following limitations:
- 21.4.1 City Council expressly authorizes the City Purchasing Agent to approve change orders of **\$50,000** or less. A change order of more than **\$50,000** over the approved contract amount must be approved by City Council.
- 21.4.2 The total of all change orders issued under this section may not increase the Original Agreement amount by more than 25%.
- 21.4.3 For any items described in a change order that the Contractor is otherwise required to provide under the Original Agreement, the City shall not pay additional money to the Contractor.