



# CITY OF HOUSTON INVITATION TO BID

Issued: April 04, 2008

## **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 AM Thursday, April 24, 2008** and all bids will be opened and publicly read in the City Council Chamber, City Hall Annex, Public Level, 900 Bagby at 11:00 AM on that date for the purchase of:

**CLARIFIER MAINTENANCE, REPAIR AND REPLACEMENT SERVICES  
FOR THE PUBLIC WORKS & ENGINEERING DEPARTMENT  
BID INVITATION NO.: S11-L22817  
NIGP CODE: 936-91**

## **BUYER**

Questions regarding this solicitation document should be addressed to **Gloria Jordan-King, Sr. Procurement Specialist**, at (713) 247-1846, or e-mail to [gloria.king@cityofhouston.net](mailto:gloria.king@cityofhouston.net).

## **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 at the City Hall, Strategic Purchasing Division, 901 Bagby, Conference Rm. 2 (Basement), Houston, Texas 77002 at **1:30 PM on Wednesday, April 16, 2008**.

**All Prospective Bidders are urged to be present. It is the bidder's responsibility to ensure that 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.**

Bidding forms, specifications, and all necessary information should be downloaded from the Internet at <https://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.

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



### **CLARIFIER MAINTENANCE, REPAIR AND REPLACEMENT SERVICES FOR VARIOUS DEPARTMENTS BID INVITATION NO.: S11-L22917 NIGP CODE:**

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

The undersigned Bidder hereby offers to contract with the City upon the terms and conditions stated in that certain "**Contract for Clarifier Maintenance, Repair and Replacement Services for a three-year period with two (2) one-year option periods to extend for the Public Works & Engineering Department**", which was distributed by the City together with the "Notice to Bidders" and is hereby incorporated herein by this reference (the "Contract"). This offer is made at the prices stated on the electronic Bid Form. 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 the 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 its bid.

The City may accept this bid offer by issuance of a Contract covering award of said bid to this Bidder at any time on or before the 180<sup>th</sup> day following the day this Official Bid Form is opened by the City. This offer shall be irrevocable for 180 days, but shall expire on the 181<sup>st</sup> day unless the parties mutually agree to an extension of time in writing.

The City of Houston reserves the option, after bids are opened, to increase or decrease the quantities listed, subject to the availability of funds, and/or make award by line item.

If the City accepts the foregoing offer, this Bidder promises to deliver to the City Purchasing Agent of the City, five (5) original counterparts of said Contract duly executed by this Bidder (as "Contractor") in accordance with this paragraph, proof of insurance as outlined in Article II of the Contract, all on or before the tenth (10<sup>th</sup>) day following the day this Bidder receives from the City the unsigned counterparts shall be executed so as to make it binding upon the Bidder, and all of the applicable requirements stated in the document entitled "Instructions for Execution of Contract Documents," (which was distributed by the City) shall be complied with.

The City reserves the right to accept or reject, in whole or in part, any or all bids received and to make award on the basis of individual items or combination of items, as it is deemed in the best interest of the City.

If the City accepts the foregoing offer, this bidder shall furnish all labor, supervision, materials, supplies, equipment and tools necessary to provide **Clarifier Maintenance, Repair and Replacement Services** for the City in accordance with the Scope of work/Specifications contained in Section "B" of this invitation to bid.

**CLARIFIER MAINTENANCE, REPAIR AND REPLACEMENT SERVICES:**

**Documents/forms must be downloaded from the City's Website <http://www.houstontx.gov/purchasing/index.html>.**

**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:**

<b>TABLE 1 - REQUIRED FORMS</b>
Affidavit of Ownership.doc
Fair Campaign Ordinance.doc
Statement of Residency.doc
Conflict of Interest Questionnaire.doc
Pay or Play Program Acknowledgement Form
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:

<b>TABLE 2 - DOCUMENTS &amp; FORMS</b>
Drug Forms.doc
EEOC.doc
Formal Instructions for Bid Terms.doc
M/WBE.doc
Sample Insurance Over \$25,000.pdf
Pay or Play Affirmative Action & Contract Compliance Q & A
Pay or Play Affirmative Action & Contract Compliance Requirements
Pay or Play Certification of Agreement to Comply w' the Program
Pay or Play Contractor/Subcontractor Payment Reporting Form
Pay or Play Contractor/Subcontractor Waiver Request
Pay or Play List of Participating Subcontractors

**CLARIFIER MAINTENANCE, REPAIR AND REPLACEMENT SERVICES:**

**CONTRACTOR'S QUESTIONNAIRE**

In order to receive bid award consideration, the bidder must be able to demonstrate that they are currently providing or have had at least one contract, as a prime contractor, for **Clarifier Maintenance, Repair and Replacement Services** that is similar in size and scope to this contract. **Bidder must have references documenting that it has performed Clarifier Maintenance, Repair and Replacement Services.** The reference(s) should be included in the space provided below. Please attach another piece of paper if 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.**

1. Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City & State: \_\_\_\_\_  
Name & Phone Number of Contact: \_\_\_\_\_ Years of Services: \_\_\_\_\_
  
2. Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City & State: \_\_\_\_\_  
Name & Phone Number of Contact: \_\_\_\_\_ Years of Services: \_\_\_\_\_
  
3. Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City & State: \_\_\_\_\_  
Name & Phone Number of Contact: \_\_\_\_\_ Years of Services: \_\_\_\_\_

**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.

**SECTION B**  
**SCOPE OF WORK/SPECIFICATIONS**  
**FOR**  
**CLARIFIER MAINTENANCE, REPAIR AND REPLACEMENT SERVICES**  
**FOR THE PUBLIC WORKS & ENGINEERING DEPARTMENT**  
**BID INVITATION NO.: S11-L22817**

**1.0 GENERAL REQUIREMENTS AND SCOPE OF SERVICES**

- 1.1 The Contractor shall furnish all supervision, labor, parts, tools, materials, equipment, supplies, and facilities necessary to provide precision repair services for Clarifiers at various City of Houston Wastewater Operations facilities. If requested by the user department representative (UDR), the Contractor shall demonstrate by means of adequate testing and documentation that the repaired unit has retained its operating efficiency. The cost for this operating efficiency test will be paid by City of Houston.
- 1.2 The meaning of some specific terms as used in this contract /specifications are given in Exhibit A," Definitions".
- 1.3 The clarifier specifications: manufacturer, type, size, group, and the facility location of the existing clarifiers of City of Houston's Wastewater Operations are given in Section "BB, " City of Houston Public Works & Engineering Department, Wastewater Operations Clarifiers Equipment List."
- 1.4 Upon request from the UDR or CTR and within ONE working day, the contractor shall inspect the clarifiers at the Wastewater Treatment facility. The Contractor shall document the condition of the unit on the City of Houston Field Inspection Form, Appendix "A".
- 1.5 This specification covers the general requirements for the repair, overhaul, and testing of the clarifiers located at City of Houston Wastewater Operations facilities. This includes, but it is not limited to, clarifiers, concrete repair of clarifiers (to include resurfacing, leveling, sealing and assessing/repairing possible structural damage), center well/pier to drive unit/rakes leveling/correlation, structural integrity and maintenance of collector arms rakes and replaceable blades or squeegees associated with skimmer arms/scum collectors, weir replacement/leveling, baffle replacement/leveling, all cover plates, hand rails and walkways/catwalks/beam bridge, grating, anchor bolts and trusses/mounting brackets, weir troughs maintenance/leveling, influent/effluent/spray piping (to include substructure piping), limit switches, external skimmer arm center piers (to include bearing maintenance/replacement), wheels (to include vulcanizing/alignment), shut-off valves, maintenance/repair/replacement of rotating scum collectors and associated mechanisms, and all integrated gearboxes.
- 1.6 All test equipment required for test results shall be calibrated at least annually against standards traceable to the National Institute of Standards and Technology (NIST) or equivalent standards laboratories. The Contractor shall establish, document, and maintain calibration records for test and measuring equipment used to demonstrate conformance of product to specified requirements.
- 1.7 The Contractor must be able to furnish copies of current environmental permits and demonstrate compliance with current environmental regulations.

## **CLARIFIER MAINTENANCE, REPAIR AND REPLACEMENT SERVICES**

### **1.0 GENERAL REQUIREMENTS AND SCOPE OF SERVICES (CONTINUED)**

- 1.8 The Contractor facility shall be subject to inspection to verify that the equipment and personnel deemed necessary to perform the type of repair services required under this contract are in place at the time of inspection.
- 1.9 Subcontractors to the Contractor, for the performance of work under this contract are subject to the same standards as the Contractor.
- 1.10 The clarifiers at City facilities are purchased and installed under City's Master Specifications (latest edition) requiring compliance with the applicable sections of the following standards and codes:
  - 1.10.1 American National Standard Institute (ANSI)
  - 1.10.2 Anti-Friction Bearing Manufacturing Association (AFBMA)
  - 1.10.3 Institute of Electrical and Electronic Engineers (IEEE)
  - 1.10.4 National Electrical Code (NEC)
  - 1.10.5 National Electrical Manufacturers Association (NEMA)
  - 1.10.6 American Society of Mechanical Engineers (ASME)
- 1.11 Wherever this document refers to the following codes and standards, then that specific sections of the code/standard shall apply to the repairs being carried out by the Contractor:
  - 1.11.1 Steel Structures Painting Council (SSPC)
  - 1.11.2 Anti-Friction Bearing Manufacturing Association (AFBMA)
  - 1.11.3 American Society for Non-Destructive Testing
  - 1.11.4 City of Houston Electrical Code
  - 1.11.5 American Society for Testing and Materials (ASTM)
- 1.12 The installed clarifiers at City facilities and clarifiers to be purchased in future are manufactured by the following (but not limited to) companies:
  - 1.12.1 Cone
  - 1.12.2 Westech
  - 1.12.3 Enviroquip
  - 1.12.4 Envirex
  - 1.12.5 Singer
  - 1.12.6 Clow
  - 1.12.7 Eimco
  - 1.12.8 Envirorex
  - 1.12.9 Walker Process
  - 1.12.10 Davco (Davis Ind. Inc.)
  - 1.12.11 Weston
  - 1.12.12 National Hydro Systems
  - 1.12.13 Sew Eurodrive
  - 1.12.14 Environmental Elements
  - 1.12.15 Zurn
- 1.13 **ALL MARKUPS SHALL BE BASED ON PART VENDOR'S OR SUB-CONTRACTOR'S ACTUAL ORIGINAL INVOICED DOCUMENTS. THE CONTRACTOR SHALL SUBMIT THESE ACTUAL ORIGINAL INVOICES, AS ATTACHMENTS, WITH THE FINAL INVOICE FOR PAYMENT BY CITY FOR THE WORK PERFORMED THE CONTRACTOR.**

## CLARIFIER MAINTENANCE, REPAIR AND REPLACEMENT SERVICES

### 1.0 GENERAL REQUIREMENTS AND SCOPE OF SERVICES (CONTINUED)

- 1.14 All equipment removed from any City facility shall be documented on a City Equipment Release Form; see Example Appendix "B".
- 1.15 At Contractor's repair facility, the Contractor shall disassemble the unit, inspect it and prepare a scope of work to repair and replace parts with **new OEM** parts *or equal*.
- 1.16 If the Contractor plans to use any part other than an OEM specified part; the Contractor shall obtain, in advance of the use of such part, written permission/approval from UDR and/or Contract Technical Representative (CTR).
- 1.17 The City reserves the rights to pick up all clarifiers parts that are quoted by the Contractor to be replaced. This includes, but is not limited to seals, bearings, gears, and other items of a clarifier unit. Non-repairable units do not need to be reassembled.
- 1.18 If requested by the CTR, Contractor shall furnish parts needed for maintenance activities of clarifier units by City personnel. Contractor shall charge the same price for these parts as scheduled in the Bid Forms under "Parts and Material".
- 1.19 Contractor shall ensure the Equipment Inventory number (EI) tag remains attached to the equipment. Contractor shall notify the CTR if the (EI) tag is damaged or missing.
- 1.20 Contractor shall install a stainless steel identification tag stamped with the Contractor's Job Number and Repair Date to each gearbox housing. The tag shall be secured with stainless steel drive pins. The cost of the identification tag shall be included as a part of the base cost of any repair.
- 1.21 Before disassembly nameplate data shall be verified, all missing or damaged parts shall be identified in writing, recorded, and special items shall be noted on the City of Houston Teardown Form, Appendix "C".
- 1.22 Upon receipt of the clarifier drive unit, the Contractor shall document all information about the conditions of the unit and parts to include digital photographs of drive unit components. The condition of the clarifier unit shall be documented on the City of Houston Teardown Form, Appendix "C".
- 1.23 All illegible or defective nameplates shall be replaced on completion of repair. All original nameplate information, except where changed, shall be stamped on a new stainless or aluminum nameplate. New nameplates shall be permanently attached with mechanical fasteners. The cost of a new nameplate shall be included as a part of the base cost of any repair
- 1.24 Delivery tickets and packing slips shall contain quantity, part number, description of commodity delivered, name of department or section and facility name to which the merchandise was delivered, the City of Houston Ordinance Number, Contract number, signature of receiving employee, printed name, employee number, and the authorization release number.

## CLARIFIER MAINTENANCE, REPAIR AND REPLACEMENT SERVICES

### 1.0 GENERAL REQUIREMENTS AND SCOPE OF SERVICES (CONTINUED)

- 1.25 The repair shop must be able to verify all hours charged for work performed. Where hourly work is performed on behalf of the City, the Contractor (and Sub-Contractors of the Contractor) shall fully document the start of the work, the time spent on the job, and completion of each job. The documentation shall be punch card/time-clock or shop record or any other mutually agreed method. All work will be supported with copies of time cards submitted for verification with the invoice.
- 1.26 At a later date, the City reserves the right to review all payments made to the Contractor by auditing any and all documents associated with the contract. Subject to such audit, any overpayments shall be recovered from the Contractor.
- 1.27 The intent of this contract is for the Contractor to do the repair specifically at the Contractor's facilities. The Contractor shall provide UDR a list of the name(s) and location(s) of ALL shop(s) and subcontractors that will be used for the specified repair work. The Contractor shall obtain written approval for each shop and subcontractor before start of the contract. If the Contractor plans to use any subcontractor not on the list, the Contractor shall obtain written approval from the CTR before subcontracting the work.
- 1.28 The City desires a single vendor to do the work described in this contract documents, but may award to more than one Contractor by groups of clarifier units, as listed in Exhibit "B" of these documents.
- 1.29 The repair shop must be able to verify all hours charged for machine work. This will apply to work done by sub-contractors or the contractor. In-house work will be supported with copies of time cards. This verification shall be submitted with the invoice.
- 1.30 **THE FIELD TIME SHEETS SHOULD BE SIGNED DAILY BY A CITY OF HOUSTON SUPERVISOR AT THE FACILITY LOCATION, IF A CITY SUPERVISOR IS NOT AVAILABLE. ALL TIME SHEETS SHALL BE APPROVED BY THE CTR ON THE LAST WORKING DAY OF EACH WEEK.**
- 1.31 **THE CITY SHALL BE BILLED ONLY FOR THE HOURS THE CONTRACTOR WORKS ON CITY EQUIPMENT WHETHER AT CITY FACILITY OR AT CONTRACTOR'S FACILITY. LABOR RATE FOR WORK AT A CITY FACILITY SHALL COVER THE TRAVEL EXPENSE OF THE CONTRACTOR. NO ITEMIZED TRAVEL TIME IS ALLOWED.**
- 1.31 The price of parts and material and cost of a replacement unit supplied for this contract shall be the total **original invoiced cost to the contractor plus contractor's quoted percentage (%) markup** for the item. The Contractor shall submit the supporting documentations with the final invoice.
- 1.33 The Labor Rates in the Contract Fee Schedule shall apply to all work performed done by the Contractor's personnel. All work performed by subcontractors shall be invoiced, including pricing and separate percentage (%) markup under the line item for subcontractor work.
- 1.34 RESERVED
- 1.35 RESERVED
- 1.36 Wherever OEM documentation such as Operation and Maintenance Manual, etc., specify torque values, the Contractor shall use a torque wrench and adhere to the OEM torque values.

## CLARIFIER MAINTENANCE, REPAIR AND REPLACEMENT SERVICES

### 1.0 GENERAL REQUIREMENTS AND SCOPE OF SERVICES (CONTINUED)

- 1.37 Paint booth shall not be used for Sandblasting.
- 1.38 All clarifier drive units, valves, rakes or other parts subject to corrosion or rust with peeling paint or rust shall be sandblasted. The cost of sandblasting shall be included as a part of the base cost of any repair.
- 1.39 The Contractor shall be responsible for storage of the drive units and all parts. Any parts lost or damaged while in the possession of the Contractor shall be repaired or replaced at Contractor's expense.
- 1.40 All metal parts shall be checked for structural integrity and cracks, and shall be repaired or replaced as needed.
- 1.41 All repairs shall be made to bring the to OEM's specifications.
- 1.42 The enclosed City of Houston "Teardown" reports included in this document shall be used for each repair.
- 1.43 All metal parts shall be checked for structural integrity and cracks, and shall be repaired or replaced as needed.
- 1.44 Terminal boxes and auxiliary equipment enclosures shall be made to meet OEM's specifications.
- 1.45 The Contractor/OEM Distributor/Shop shall use the OEM's latest list price with a discount percentage (plus or minus) applied to the lowest price list column in the price list for the price of parts, materials and replacement units on the contract. The quoted discount percentage is subject to audit by the City of Houston.
- 1.46 The Contractor shall provide to the City a full set of repair record (including completed teardown sheets, work performed on the unit, and test run results including vibration levels at all bearings of the drive and prime mover) upon completion of work, if requested by the CTR. The Contractor shall establish and maintain the repair records for at least three (3) years from the date when the unit passed acceptance inspection and/or test.
- 1.47 ALL labor to perform teardown inspections, cleaning, disassembly, sand blasting, balancing, reassembly, painting, shop testing, and documenting shall be included as labor/base price for the clarifier overhaul-repair.
- 1.48 At a City location, all machinery and equipment that are undergoing maintenance and repair shall be **locked-out/tagged-out (LOTO)** to protect against accidental or inadvertent operation when such operation could cause injury to personnel or damage to equipment. **Authorized personnel only who may include qualified electricians, mechanics, and operators shall carry out LOTO.**
- 1.49 Contractor shall provide the CTR with monthly written progress reports. These reports may be emailed faxed to CTR.
- 1.50 The UDR and the Contractor's manager shall meet once a month to review the records of the completed works, works in progress, and any other matter related to this contract. Any discrepancies shall be resolved at the time and all backlogs shall be completed by the tenth of the following month. The UDR shall provide the Contractor with a spreadsheet for tracking the job's cost and progress. The Contractor shall update the spreadsheet to reflect changes in activities by the Contractor and to ensure availability of Funds to perform the work.

## **CLARIFIER MAINTENANCE, REPAIR AND REPLACEMENT SERVICES**

### **2.0 REPAIR AND REPLACEMENT**

- 2.1 The Contractor shall inspect, repair, and/or troubleshoot the clarifiers including accessories (sub-assemblies) of the clarifiers in lieu of replacement unless the repair cost of a unit and or sub-assemblies exceeds seventy (70) percent of the cost for replacing it with a new item. Generally the seventy (70) percent rule applies, but the City reserves the right to purchase or repair units based on clarifier unit economic evaluation and various operational considerations.
- 2.2 The Contract shall attach quotes/invoices for UDR review when submitting work scope. For all major components such as shafts, gears, and gear assemblies, the repair work scope shall include the cost of a new item as well as the estimated cost to repair such item. Every work scope shall include the purchase price of a new unit identical to the one being repaired.
- 2.3 The CTR must approve in writing, the purchase of a new unit in lieu of repair.
- 2.4 Replacement units and accessories shall be same size and type as the existing ones, unless otherwise authorized in writing by CTR.
- 2.5 If the unit is considered to be “non-repairable”, the Contractor shall use the schedule in the Contract Fee Schedule under “Non-Repairable Shop Cost” to invoice for the work performed by the Contractor to include all costs associated with teardown, reports, and diagnostic.
- 2.6 Contractor shall use the Contract Fee Schedule under “Cost to Replace a Unit...” to invoice the replacement cost.

### **3.0 SPECIFIC TASKS AND SCOPE OF WORK**

- 3.1 Upon request from the UDR or CTR and within ONE working day, the contractor shall inspect the clarifiers at the Wastewater Treatment facility. The Contractor shall document the condition of the unit on the City of Houston Field Inspection Form, Appendix “A”. If repairs can be performed at City facility at the time of inspection, the Contractor shall do the needed repair and release/return the unit to Operation with five working days.
- 3.2 RESERVED
- 3.3 If the clarifier or unit can be repaired at City location but additional parts and services are needed, the Contractor shall notify the UDR and prepare a scope of the work within forty-eight (48) hours and submit it to the UDR for approval. The Contractor, upon receipt of approval, and accusation of parts, shall complete the repair of the clarifier within five (5) working days and release/return the unit to operation.
- 3.4 If the clarifier or unit cannot be repaired at City location, the Contractor shall notify the UDR. Within forty-eight (48) hours, the Contractor shall disassemble the unit from the drive, remove from foundation, and load on Contractor’s vehicle, and transport/deliver the unit to contractor’s repair facility. The Contractor shall ensure that all openings to pipes, inlet and discharge of fluids, and housing openings, are blocked/covered to prevent entry of rain, dirt, rodents, birds, and crawling animals. The covers for the openings shall be made of metal or plywood of sufficient thickness, strength, rigidity, and shall be secured to resist damage by wind and rainstorm.

## CLARIFIER MAINTENANCE, REPAIR AND REPLACEMENT SERVICES

### 3.0 SPECIFIC TASKS AND SCOPE OF WORK

- 3.5 The Contractor shall furnish hoist, crane, etc. for loading and unloading of the unit at City facilities and at Contractor's facility.
- 3.6 Before disassembly of the unit at Contractor's shop, the Contractor shall inspect the unit and document the damaged and missing parts. In addition, the Contractor shall photograph the unit and sub-assemblies, as received. These photographs and any subsequent photographs of the unit and its parts shall be parts of the repair record.
- 3.7 The Contractor shall chemically and mechanically clean all external surfaces, as required.
- 3.8 The Contractor shall disassemble unit and clean all internal parts.
- 3.9 The Contractor shall inspect all components of the unit and all critical areas to determine if clearances are within OEM tolerances, and the parts meet manufacturer's specifications. If the manufacturer's data is not available, the tolerances shall be verified with the relevant tables in **industry standards** to assure its conformance.
- 3.10 If needed, the City will assist the Contractor to obtain the OEM data from the manufacturers.
- 3.11 The Contractor shall inspect the unit and its shaft for corrosion, erosion, chipping, and other damages and shall record these observations on the City of Houston Teardown Form, Appendix "C".
- 3.12 The Contractor shall inspect the shafts for "roundness/run out" and determine if it is within OEM tolerance. If the manufacturer's data is not available, the tolerances shall be verified with the relevant tables in **industry standards** to assure its conformance.
- 3.13 The Contractor shall inspect the shaft extensions and key seats (keyways). Shaft extensions must be smooth, polished, and concentric with shaft center. Shaft extension dimension shall be checked to determine if it is within OEM tolerance. If the manufacturer's data is not available, the tolerances shall be verified with the relevant tables in **industry standards** to assure it conformance.
- 3.14 Contractor shall inspect each bolt for damaged threads.
- 3.15 RESERVE
- 3.16 Contractor shall determine what parts are to be machined or replaced with new parts. As a minimum the Contractor shall replace all roller element bearings and seals when the original unit was furnished with such items.
- 3.17 For units which are being repaired at Contractor's facility, the Contractor shall prepare and submit, within ten (10) working days, to the UDR a scope of the repair work to be carried out on the unit. This good faith estimate shall include a brief description of the work to be performed, itemized cost for new replacement OEM parts, and any additional labor hours beyond what is required and specified to repair the unit. This work scope shall include the estimated time for delivery of parts and the schedule to complete the work and a City of Houston Recommended Repair Estimate Form, Appendix "D".

## **CLARIFIER MAINTENANCE, REPAIR AND REPLACEMENT SERVICES**

### **3.0 SPECIFIC TASKS AND SCOPE OF WORK**

- 3.18 Upon acceptance of cost estimate by the UDR, Contractor shall proceed with repairs. The Contractor shall commence to work on the unit and complete the repair within the allocated time for delivery of such item:
- |               |                                       |                 |
|---------------|---------------------------------------|-----------------|
| <b>3.18.1</b> | <b>Primary Drive</b>                  | <b>4 weeks</b>  |
| <b>3.18.2</b> | <b>Secondary (intermediate) Drive</b> | <b>6 weeks</b>  |
| <b>3.18.3</b> | <b>Final Drive</b>                    | <b>12 weeks</b> |
- 3.19 The Contractor shall notify the UDR immediately if the Contractor cannot complete the job within the contractually agreed time period of item 3.18. The Contractor shall submit to UDR a detailed explanation for the delay with a new schedule to complete the job.
- 3.20 At all times during the repair process, Contractor shall maintain City's equipment in a clean and weather protected storage area.
- 3.21 All shaft assemblies shall be checked for total indicated run out (TIR) and recorded on the rotor information sheet. This test shall be carried out on a lathe.
- 3.22 Shaft seal surface, bearing journals and coupling fit, shall be micrometer checked and recorded on the rotor information sheet.
- 3.23 End bells and bearing housing critical dimensions shall be micrometer checked and recorded on the mechanical inspection sheet.
- 3.24 The above measurements shall be submitted to UDR, along with other data sheets, during the teardown inspection.
- 3.25 Replacement bearings shall have an L<sub>10</sub> rating life in accordance with ANSI/AFBMA equal to or longer than OEM bearing.
- 3.26 After parts have been repaired, Contractor shall put together the rotating assembly and check it for correct, smooth operation. The Contractor shall reassemble the unit, test, seal and paint, as required.
- 3.27 The Contractor shall prepare the surfaces to be painted to machine gray a "metal finish" by blast cleaning to SSPC-SP5.
- 3.28 Surface of all units shall be primed and finished, in an approved paint booth, using the unit OEM standard painting system:
- 3.28.1 The minimum Prime coat thickness shall be 3 mils DFT, **dry film thickness (DFT).**
  - 3.28.2 The minimum finish coat thickness shall be 6 mils DFT, **dry film thickness (DFT).**

## **CLARIFIER MAINTENANCE, REPAIR AND REPLACEMENT SERVICES**

### **3.0 SPECIFIC TASKS AND SCOPE OF WORK**

- 3.29 If OEM paint information is not available, the following City of Houston' standard specification for surface coating of clarifiers and equipment shall be followed:
- 3.29.1 The primer and finish coats shall be two-component, rust-inhibitive, polyamide-cured epoxy coating with a recoatable finish,
  - 3.29.2 The prime coat shall be Ameron 38P, Tnemec 69, or equal.
  - 3.29.3 The finish coat shall be Ameron 38S, Tnemec 69, or equal.
- 3.30 No deviation from the paint specification is allowed, unless advance written approval for variance to paint specifications was given by the CTR.
- 3.31 The paint color shall be as the OEM standard for such units unless specifically requested otherwise, in written, by the CTR.
- 3.32 The Contractor shall return the repaired unit to a City facility, set on foundation, check the leveling of the drive base, couple, precision align the drive/chain/ coupling, and reconnect lube piping. The Contractor shall ensure that all shutdown systems/protections are operational before the test run.
- 3.33 If requested by the UDR, the Contractor shall couple, precision align the drive sprockets / chain / coupling of the units which had their drive replaced by the City personnel. The charge for this service will be based on the Stand Labor Rate as quoted in the Contract Fee Schedule.
- 3.34 The Contractor shall start the unit and check the lube system. The Contractor shall measure/record the vibration of drive at DE and ODE in axial, vertical, and horizontal directions.
- 3.35 The vibration levels shall be as specified by the OEM. If needed, the City will assist the Contractor to obtain the OEM data from the manufacturers.
- 3.36 Alignment shall be adjusted, as required, before placing the unit into permanent service.

### **4.0 Drive Unit Inspection and Repair**

- 4.1 The Contractor shall provide a repair record and report showing the condition of drive units upon receipt, the repair work done, vibration levels, and the final test results.
- 4.2 During disassembly, the clarifier components and parts shall be visually inspected to determine and record/report the cause of failure.
- 4.3 The shaft assembly shall be inspected for wear, scoring, cracks.
- 4.4 Shaft seal surface, bearing journals and coupling fit, shall be checked with a micrometer and recorded on the rotor information sheet.

## **CLARIFIER MAINTENANCE, REPAIR AND REPLACEMENT SERVICES**

### **4.0 Drive Unit Inspection and Repair**

- 4.5 Clarifier units that are overhauled-repaired at Contractor facility shall be thoroughly cleaned to be free from dirt, grit, grease, oil, and shall be inspected for damage and repairs made to damaged areas.
- 4.6 Torch heating shall NOT be used for clean up.
- 4.7 The bead or sandblasting shall be done with approved material.
- 4.8 **OVERHAUL- REPAIR AT CONTRACTOR'S FACILITY (OVERHAUL-REPAIR):** The following work scopes shall be followed for all shop overhaul-repair of the clarifier units. All bearings, lip seals, and gaskets shall be replaced. Bearings shall be replaced with new OEM specified bearings that have an L<sub>10</sub> rating life as the original OEM or longer in accordance with ANSI/AFBMA. Equivalent bearing may be used if approved by the CTR. The price in the Contract Fee Schedule for **OVERHAUL-REPAIR (SHOP-REPAIR)** of a clarifier unit shall include ALL cost of supervision, labor, tools, equipment, supplies to complete the work specified herein for Shop-Repair. The lump sum cost does not include the cost of the bearings or lip seals, damaged or broken or worn parts (which are reimbursable) if authorized by the UDR.

#### **4.8.1 Primary Drive Units:**

- 4.8.1.1 Disassemble the gearbox. (Single or multiple stage units shall be treated as a whole unit)
- 4.8.1.2 Bead blast (inside/outside gearbox) or sandblast (outside gearbox only) and clean all parts as needed, and inspect all parts, chase all tapped holes and de-burr, and inspect bores, seal fits, and vents.
- 4.8.1.3 Clean and de-burr all input shaft covers and hone all machine faces.
- 4.8.1.4 Clean and de-burr the housing and hone all machine faces.
- 4.8.1.5 Clean and de-burr the all seal housings and hone all machine faces.
- 4.8.1.6 Clean and de-burr the bearing housing and hone all machine faces.
- 4.8.1.7 Check all shafts for burrs, defects, tolerances and repair/replace as necessary.
- 4.8.1.8 NDT check gears for cracks, damage, wear, pitch and tolerances.
- 4.8.1.9 During reassembly check gear mesh and backlash on all shaft/gear assemblies, shim or adjust as necessary to bring within proper tolerances.
- 4.8.1.10 Paint the assembled unit.

#### **4.8.2 Secondary (Intermediate) Drive Units:**

- 4.8.2.1 Disassemble the gearbox.
- 4.8.2.2 Bead blast (inside/outside gearbox) or sandblast (outside gearbox only) and clean all parts as needed, chase all tapped holes and de-burr, and inspect.
- 4.8.2.3 Clean and de-burr all input and output shaft covers and hone all machine faces.
- 4.8.2.4 Clean and de-burr the housing and hone all machine faces.
- 4.8.2.5 Clean and de-burr the all seal housings and hone all machine faces.
- 4.8.2.6 Clean and de-burr the bearing housing and hone machined faces.
- 4.8.2.7 Check all shafts for burrs, defects, tolerances and repair/replace as necessary.

## CLARIFIER MAINTENANCE, REPAIR AND REPLACEMENT SERVICES

### 4.0 Drive Unit Inspection and Repair (continued)

#### 4.8.2 Secondary (Intermediate) Drive Units:

- 4.8.2.8 NDT check gears for cracks, damage, wear, pitch and tolerances.
- 4.8.2.9 During reassembly check gear mesh and backlash on all shaft/gear assemblies, shim or adjust as necessary to bring within proper tolerances.
- 4.8.2.10 Paint the assembled unit.

#### 4.8.3 Final (Bull gear) Drive Units:

- 4.8.3.1 Disassemble the gearbox.
- 4.8.3.2 Sandblast and clean all parts as needed, chase all tapped holes and de-burr, and inspect.
- 4.8.3.3 Inspect all races and replace as needed.
- 4.8.3.4 Inspect all bearings and replace as needed.
- 4.8.3.5 Replace all damaged or worn out seals
- 4.8.3.6 Clean and de-burr the all housings and hone machined faces.
- 4.8.3.7 NDT check gears for cracks, damage, wear, pitch and tolerances.
- 4.8.3.8 Assure that all drains are clear and replace drain piping and valves as needed.
- 4.8.3.9 Paint the assembled unit.
- 4.8.3.10 Non-Overhaul repairs includes but is not limited to, clarifiers, concrete repair of clarifiers (to include resurfacing, leveling, sealing and assessing/repairing possible structural damage), center well/pier to drive unit/rakes leveling/correlation, structural integrity and maintenance of collector arms rakes and replaceable blades or squeegees associated with skimmer arms/scum collectors, weir replacement/leveling, baffle replacement/leveling, all cover plates, hand rails and walkways/catwalks/beam bridge, grating, anchor bolts and trusses/mounting brackets, weir troughs maintenance/leveling, influent/effluent/spray piping (to include substructure piping), limit switches, external skimmer arm center piers (to include bearing maintenance/replacement), wheels (to include vulcanizing/alignment), shut-off valves, maintenance/repair/replacement of rotating scum collectors and associated mechanisms.

### 5.0 RESPONSE TIME

- 5.1 Contractor shall be accessible to the City via telephone during **normal business** hours (7:00 A.M. – 4:00 P. M. - Monday – Friday). The Contractor shall be ready to start work on any unit within twenty-four (24) hours of receiving the call for the service.
- 5.2 Contractor shall be available and accessible to the City via telephone to work **overtime** if requested by the UDR and/or CTR. Overtime – 4:01 P.M. – 11:59 A. M. (Friday)
- 5.3 Contractor shall be available and accessible to the City via telephone to work on an **emergency** basis if requested by the UDR and/or CTR.
- 5.4 Contractor shall start an emergency job immediately, without scheduling delays, and will not be restricted to normal working hours. The UDR and/or CTR shall coordinate the emergency and overtime work.

## **CLARIFIER MAINTENANCE, REPAIR AND REPLACEMENT SERVICES**

### **6.0 REPAIR TECHNICIANS**

- 6.1 The repair technicians of the Contractor shall be qualified, properly trained in repair-recondition of clarifiers of the type and sizes specified for this contract.
- 6.2 The repair technicians of the Contractor shall have a minimum of three (3) years experience in repair-recondition of clarifiers of the sizes specified in this contract
- 6.3 The Contractor shall furnish the resume of the technicians to the City Inspection Team during the Team's visit of the Contractor's facility.
- 6.4 These requirements shall apply to all of the sub-contractors who work for the Contractor.

### **7.0 ACCEPTANCE OF REPAIR**

- 7.1 The UDR shall inspect the repaired unit before the run test can begin. It is the Contractor's responsibility to ensure communication has been established with the UDR for witnessing of the performance test.
- 7.2 Vibration measurements shall be taken on the completely assembled unit at the DE and ODE, horizontal, axial, and vertical directions on the bearing housings adjacent to the shaft. The measurements shall be performed and recorded for the prime mover as well as the gearboxes.
- 7.3 Vibration measurements shall be expressed as velocity, unfiltered, and recorded on the Repair Data and Final Test Sheets. Acceptable maximum vibration level as specified by the OEM.
- 7.4 After the unit is run continuously for at least four hours with no load; the Contractor shall measure/record the vibration at the same spots as the beginning of the test run. Acceptable maximum vibration level as specified by the OEM.
- 7.5 The test run shall be a continuous run of at least twenty four (24) hours with load; the Contractor shall measure/record the vibration at the same spots as the beginning of the test run. Acceptable maximum vibration level as specified by the OEM.
- 7.6 If deficiencies are detected, the repair work shall be rejected and the contractor shall make the necessary repairs, adjustments or replacements.
- 7.7 After corrective actions are made, the unit shall go through a new test run before the clarifier unit is accepted.
- 7.8 The repair record and report covering teardown report, photographs of the condition of the clarifier unit, specific measurements, and tests such as balancing of rotating elements, vibration measurements, mechanical measurements and others shall be kept for three years by the Contractor, and shall be furnished to the City if requested by UDR and/or CTR. The Contractor shall provide the City of Houston with a monthly Progress and Status Report as shown in the City of Houston Appendix "E".

## **CLARIFIER MAINTENANCE, REPAIR AND REPLACEMENT SERVICES**

### **7.0 ACCEPTANCE OF REPAIR**

- 7.9 The City shall NOT make any payment to the Contractor until ALL corrective actions are made and the equipment repair is accepted.
- 7.10 The weir leveling shall be accomplished to equalize the overflow from this clarifier as well as all the other clarifiers, which are in service to prevent a short-circuiting of the clarification process.

### **8.0 SILENCE OF SPECIFICATIONS**

The apparent silence of these specifications as to any detail, or apparent omission from it of a detailed description concerning any point, shall be regarded as meaning that only the best commercial practice is to prevail and that only material and workmanship of the finest quality are to be used. All interpretations of these specifications shall be made on the basis of this statement.

### **9.0 LABOR RATE**

The labor rate shall include ALL cost associated for the qualified person to work on and repair City equipment including wages paid, all company benefits, transportation, company profits.

### **10.0 PREVENTIVE AND PREDICTIVE MAINTENANCE**

- 10.1 The Preventive Maintenance (PM) and Predictive Maintenance (PdM) programs will be performed on all clarifier units in each group either monthly, quarterly, or annually, but not concurrently.
- 10.2 ALL PM and PdM services involving shut down of equipment shall be approved by UDR or CTR and coordinated with the Operations supervisor of the facility. Contractor shall submit request for shutdown two weeks prior to the shut down. Granting of a Shutdown is subject to Operations' conditions at the time.
- 10.3 The Contractor shall complete any scheduled PM and PdM, and Inspection service of any equipment and return such unit to Operations not withstanding the expiration of the Business Hours and/or other conditions unless authorized, in writing, by UDR or CTR.
- 10.4 The Contractor shall have access to the facilities named in this document and to storage areas designated by Operations within the facilities. Access to the facilities shall be limited to 7:30 a.m. to 4:00 p.m. Monday to Friday, except as required or allowed by the UDR and Operations.
- 10.5 The Contractor shall perform un-scheduled corrective, repair, and maintenance services when requested by the UDR. The contractor shall be reimbursed as shown on the below Formal Bid Forms

### **11.0 PREVENTIVE MAINTENANCE PROGRAM**

The Preventive Maintenance (PM) program mission is to extend the life of equipment and detect critical wear of equipment and initiate the needed remedial action. PM shall accomplish this via the performance of a series of tasks at variable frequencies (monthly, quarterly, or annually) before the equipment fails or breaks down.

## **CLARIFIER MAINTENANCE, REPAIR AND REPLACEMENT SERVICES**

### **12.0 PREDICTIVE MAINTENANCE PROGRAM**

- 12.1 The Predictive Maintenance (PdM) program mission is to initiate remedies before equipment failures thus extending the life of equipment and preventing critical equipment wear. PdM shall accomplish this via the performance of field sampling of the oil lubricant to be conducted annually and tested for the presence of metals.
- 12.2 Monthly testing and reporting shall establish the following priorities that determine the severity of a PdM problem with a clarifier and the urgency in which maintenance actions shall take place:
- 12.2.1 Priority 1: Severe Problem – Equipment requires immediate maintenance action
  - 12.2.2 Priority 2: Significant Problem – Equipment requires urgent attention which shall be scheduled as soon as time allows (within less than a month)
  - 12.2.3 Priority 3: Problem Exists – Equipment requires maintenance action which shall be scheduled at least within three (3) months
  - 12.2.4 Priority 4: Equipment exhibits potential problems with no change in operation efficiency – Maintenance personnel determines no maintenance action presently warranted – Continue to monitor for changes that indicate problem is becoming severe enough to warrant maintenance action
  - 12.2.5 Priority 5: Present data reveals no problem – Equipment does not require maintenance action but monitoring shall continue

### **13.0 ADDITIONAL SERVICES**

- 13.1 Prior to commencement of any “Additional Services,” Contractor shall submit a written proposal for approval by CTR describing the work to be done and include a good faith estimate of the cost. The proposal shall include as a minimum a list of repairs, sub-contractor(s), and a schedule of the repairs.
- 13.2 Contractor shall perform “Additional Services” using the unit rates in the Contract Fee Schedule as specified for the type of service provided. If the “Bid Forms” do not cover the work the Contractor shall be paid on the reimbursable cost-plus basis, supported by documentations. Timing of any “Additional Services” shall be mutually agreed upon between the CTR and the Contractor.

### **14.0 ADDITIONS & DELETIONS:**

- 14.1 The City, by written notice from the City Purchasing Agent to the Contractor, at anytime during the term of this contract, may add or delete like services to be performed. Any such written notice shall take effect on the date stated in the notice from the City. Equipment, locations and/or services added will be subject to the contract services and charges or rates as an item already specified in the fee schedule. In the event the additional service is not identical to any item already under contract, the charges therefor will then be the Contractor’s normal and customary charges or rates for the equipment, locations and/or services classified in the fee schedule.

## **CLARIFIER MAINTENANCE, REPAIR AND REPLACEMENT SERVICES**

### **15.0 ESTIMATED QUANTITIES NOT GUARANTEED:**

15.1 The estimated quantities specified herein are not a guarantee of actual quantities, as the City does not guarantee any particular quantity of Clarifier Maintenance and Repair Services during the term of this contract. The quantities may vary depending upon the actual needs of the user Department. The quantities specified herein are good faith estimates of usage during the term of this contract. Therefore, the City shall not be liable for any contractual agreements/obligations the Contractor enters into based on the City purchasing requiring all the quantities specified herein.

### **16.0 WARRANTY OF SERVICES:**

16.1 *Definitions:* "Acceptance" as used in this clause, means the act of an authorized representative of the City by which the City assumes for itself, approval of specific services, as partial or complete performance of the contract.

16.2 "Correction" as used in this clause, means the elimination of a defect.

16.3 Notwithstanding inspection and acceptance by the City or any provision concerning the conclusiveness thereof, the Contractor warrants that all services performed under this contract will, at the time of acceptance, be free from defects in workmanship and conform to the requirements of this contract. The City shall give written notice of any defect or nonconformance to the Contractor within a one-year period from the date of acceptance by the City. This notice shall state either (1) that the Contractor shall correct or re-perform any defective or non-conforming services at no additional cost to the City, or (2) that the City does not require correction or re-performance.

16.4 If the Contractor is required to correct or re-perform, it shall be at no cost to the City, and any services corrected or re-performed by the Contractor shall be subject to this clause to the same extent as work initially performed. If the Contractor fails or refuses to correct or re-perform, the City may, by contract or otherwise correct or replace with similar services and charge to the Contractor the cost occasioned to the City thereby, or make an equitable adjustment in the contract price.

16.5 If the City does not require correction or re-performance, the City shall make an equitable adjustment in the contract price.

### **17.0 Minimum Wage:**

17.1 Contractor shall pay all employees a minimum wage mandated by Federal guidelines while working under this Contract. If, during the term of this agreement, there is legislation enacted regarding an increase or increases in the minimum wage law, Contractor may submit a request (s) for increase in the Contract Fees to the City Purchasing Agent for consideration, provided such request is accompanied by documentation as requested by the City Purchasing Agent verifying that only Contractor's employees' salaries\* were increased accordingly. The City Purchasing Agent shall consult with the Director before responding to the request.

### **18.0 INVOICES**

18.1 Contractor shall submit invoices for payment in triplicate (one original and two copies) that are on Contractor's company stationary with the original signed by an authorized agent of the company. ALL SUPPORT DOCUMENTS SHALL BE ORIGINAL. The invoice number shall not be duplicated during the term of the contract periods. Each invoice shall include the following information:

## CLARIFIER MAINTENANCE, REPAIR AND REPLACEMENT SERVICES

### **18.0 INVOICES (CONTINUED)**

- 18.2 City Contractor Number, City Ordinance Number, City Release Number, and Contractor's Job Number.
- 18.3 Contractor's Job Number and Contract year shall appear clearly on all time sheets [showing hours worked, break(s) and lunch time], invoices, and suppliers' invoices.
- 18.4 Contractor's name and address and where the service was performed.
- 18.5 City equipment EI Number, and City Work Order Number.
- 18.6 City Facility Number and address where equipment had been prior to repair service.
- 18.7 City Facility where equipment was installed/delivered after completion of repair.
- 18.8 Detailed description of services rendered.
- 18.9 Description of Parts or Components repaired or replaced. Provide Part Numbers, listing before and after discount. If Parts are OEM reconditioned, the costs to recondition Parts must be listed as well as the cost of new OEM replacement Parts.
- 18.10 Subcontractors' invoices with detailed description of cost of work performed.
- 18.11 City delivery and pickup tickets.
- 18.12 Subtotal costs for Parts and Labor hours separately.
- 18.13 Shop Teardown and Recommended Repair form, Equipment Release Authorization form, Recommended Repair Estimate form, Field Acceptance Tests form and Progress and Status Report form shall be submitted.
- 18.14 Total invoice costs of the job.
  
- 18.15 All unit prices for labor and parts shall be easily identified against the quoted contract pricing.

Mail invoices to Accounts Payable:  
City of Houston, Accounts Payable  
P.O. Box 61449  
Houston, Texas 77208-1449.

- Appendices:**
- A-Field Inspection Form
  - B-Equipment Release Authorization Form
  - C-Teardown and Recommended Repair Report Form
  - D-Recommended Repair estimate Form
  - E-Progress and Status Report Form

**APPENDIX "A"**  
**Field Inspection Form**

**City of Houston**

Public Works & Engineering Department

**CLARIFIER MAINTENANCE, REPAIR AND REPLACEMENT SERVICES**

*Sample Only, Actual Form is subject to change by CTR after Award of the contract*

Contractor: \_\_\_\_\_ Contractor Job #: \_\_\_\_\_

Contract # \_\_\_\_\_ Ordinance#: \_\_\_\_\_ City Work Order #: \_\_\_\_\_

City Facility Name: \_\_\_\_\_ City Facility#: \_\_\_\_\_ EI #: \_\_\_\_\_

Nameplate Information:

Make:			
Model:			
Serial:			

Visual Inspection Comments and Deficiencies:


Field Repairs:


Standard Electronic Test: \_\_\_\_\_

Standard Mechanical Test \_\_\_\_\_

Field Testing and Certification Results:


Tests Performed By: \_\_\_\_\_ Job Title: \_\_\_\_\_ Date: \_\_\_\_\_

Witnessed By UDR \_\_\_\_\_ Job Title: \_\_\_\_\_ Date: \_\_\_\_\_

**APPENDIX "B"**  
**Equipment Release Authorization Form**  
**City of Houston**  
**Public Works & Engineering Department**  
**CLARIFIER MAINTENANCE, REPAIR AND REPLACEMENT SERVICES**  
*Sample Only, Actual Form is subject to change by CTR after Award of the contract*

RELEASE #: \_\_\_\_\_

DATE: \_\_\_\_\_

CITY WORK ORDER #: \_\_\_\_\_

CITY FACILITY NAME: \_\_\_\_\_ CITY FACILITY#: \_\_\_\_\_ EI #: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_ CONTRACTORJOB#: \_\_\_\_\_

CONTRACTOR ADDRESS: \_\_\_\_\_

CONTRACT #: \_\_\_\_\_

ORDINANCE #: \_\_\_\_\_

**NAME PLATE INFORMATION:**

MAKE:	VOLT:	HP:	RPM:
MODEL:	AMP:	HZ:	SF:
SERIAL:			

REASON FOR THE PULLING OF THE COMPRESSOR:

\_\_\_\_\_

NAME OF THE SHOP THE EQUIPMENT IS BEING TAKEN TO:

\_\_\_\_\_

IS THERE A PICTURE (S) OF THE COMPRESSOR ATTACHED? YES: \_\_\_\_\_ NO: \_\_\_\_\_

**CONTRACTOR REPRESENTATIVE**

**CITY OF HOUSTON REPRESENTATIVE**

NAME: \_\_\_\_\_

NAME: \_\_\_\_\_

EMPLOYEE #: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

EMPLOYEE NUMBER: \_\_\_\_\_

EMPLOYEE #: \_\_\_\_\_

COMMENTS: \_\_\_\_\_



**APPENDIX "D"**

**Recommended Repair Estimate Form  
City of Houston**

Public Works & Engineering Department

**CLARIFIER MAINTENANCE, REPAIR AND REPLACEMENT SERVICES**

*Sample Only, Actual Form is subject to change by CTR after Award of the contract*

Contract #:	City Work Order #:
Ordinance #:	Contractor Job #:
City Facility:	Facility #:
Backflow Preventer Information:	
Manufacturer:	Work Notification Date:
Model #:	Field Inspection Date:
Serial #:	Equipment Pull Date:
El#:	Estimate Date:

<b>UNIT PRICE ITEMS:</b>	Unit	Extended
Item 1 - Prepare for Removal – Each	1.00	
Item 2 - Transport to Shop – Each	1.00	
Item 3 - Return to City – Each	1.00	
<b>Sub-Total Unit Price Items</b>		

<b>COST PLUS ITEMS:</b>	<u>Contract</u>	<u>Extended</u>
	<u>Cost</u>	<u>Price</u>
Item 4 -	1.**	
Item 5 -	1.**	
Item 6 - Work by Sub-contractor (see Original invoices)	1.**	
Item 8 - Parts: (see parts Original Invoices)	1.**	
Item 9 - Rented Crane/Rigging	1.**	
<b>Sub-Total Cost Plus Items</b>		

Additional Services (see worksheet):

**Total Estimated Project Costs**

Total Estimated Clarifier Unit Repair Only

Replacement Cost of an Identical Unit

**I. Repair Cost Expressed as % of Replacement Cost**

Repair Estimate Prepared By: Print Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Repair of Clarifier Unit Approved by City of Houston UDR: Print Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Replacement of Clarifier Unit Approved By City of Houston CTR: Print Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**APPENDIX "E"**  
**Progress and Status Report Form**  
**City of Houston**  
**Public Works & Engineering Department**  
**CLARIFIER MAINTENANCE, REPAIR AND REPLACEMENT SERVICES**  
*Sample Only, Actual Form is subject to change by CTR after Award of the contract*

Release Number	Work Order #	Work Order Date	E.I. #	Fac. #	Fac. Name	Manufact.	Model #	Serial #	Problem	Inspect Date	Test Date	Person Called Date	Allocated Amount	Cost Of Repair	Expended To Date
													\$	\$	\$

**SECTION BB  
LOCATIONS**

Facility Name	Fac.ID	Clarifier #	Component	Manufacturer	Model	Serial	Positional ID or EI#
69TH St.	400	1A	Clarifier 180'	180ft	NAV	NAV	57787
69TH St.	400	1A	Primary Drive	RADICON	NAV	NAV	57785
69th St.	400	1A	Primary Drive	RADICON	NAV	NAV	57782
69th St.	400	1A	Secondary Drive	ZURN	NAV	NAV	57786
69th St.	400	1A	Secondary Drive	ZURN	NAV	NAV	57783
69th St.	400	1A	Final Drive (Bull Gear)	ZURN	NAV	NAV	58027
69th St.	400	1A	Sprocket & Chain	NAV	NAV	N/A	N/A
69th St.	400	1A	Skimmer Arm Drive	NONE			
69th St.	400	1A	Skim. Sproc. & Chain	NONE			
69th St.	400	1B	Clarifier 180'	180ft	NAV	NAV	57794
69th St.	400	1B	Primary Drive	RADICON	NAV	NAV	57792
69th St.	400	1B	Primary Drive	RADICON	NAV	NAV	57787
69th St.	400	1B	Secondary Drive	ZURN	NAV	NAV	57793
69th St.	400	1B	Secondary Drive	ZURN	NAV	NAV	57790
69th St.	400	1B	Final Drive (Bull Gear)	ZURN	NAV	NAV	58028
69th St.	400	1B	Sprocket & Chain	NAV	NAV	N/A	N/A
69th St.	400	1B	Skimmer Arm Drive	NONE			
69th St.	400	1B	Skim. Sproc. & Chain	NONE			
69th St.	400	1C	Clarifier 180'	180ft	NAV	NAV	57881
69th St.	400	1C	Primary Drive	RADICON	NAV	NAV	57799
69th St.	400	1C	Primary Drive	RADICON	NAV	NAV	57796
69th St.	400	1C	Secondary Drive	ZURN	NAV	NAV	NAV
69th St.	400	1C	Secondary Drive	ZURN	NAV	NAV	57797
69th St.	400	1C	Final Drive (Bull Gear)	ZURN	NAV	NAV	NAV
69th St.	400	1C	Sprocket & Chain	NAV	NAV	N/A	N/A
69th St.	400	1C	Skimmer Arm Drive	NONE			
69th St.	400	1C	Skim. Sproc. & Chain	NONE			
69th St.	400	1D	Clarifier 180'	180ft	NAV	NAV	57888
69th St.	400	1D	Primary Drive	RADICON	NAV	NAV	57886
69th St.	400	1D	Primary Drive	RADICON	NAV	NAV	57883
69th St.	400	1D	Secondary Drive	ZURN	NAV	NAV	NAV
69th St.	400	1D	Secondary Drive	ZURN	NAV	NAV	57884
69th St.	400	1D	Final Drive (Bull Gear)	ZURN	NAV	NAV	58031

Facility Name	Fac.ID	Clarifier #	Component	Manufacturer	Model	Serial	Positional ID or EI#
			Gear)				
69th St.	400	1D	Sprocket & Chain	NAV	NAV	N/A	N/A
69th St.	400	1D	Skimmer Arm Drive	NONE			
69th St.	400	1D	Skim. Sproc. & Chain	NONE			
69th St.	400	1E	Clarifier 180'	180ft	NAV	NAV	57895
69th St.	400	1E	Primary Drive	RADICON	NAV	NAV	57893
69th St.	400	1E	Primary Drive	RADICON	NAV	NAV	57890
69th St.	400	1E	Secondary Drive	ZURN	NAV	NAV	57894
69th St.	400	1E	Secondary Drive	ZURN	NAV	NAV	57891
69th St.	400	1E	Final Drive (Bull Gear)	ZURN	NAV	NAV	58032
69th St.	400	1E	Sprocket & Chain				
69th St.	400	1E	Skimmer Arm Drive				
69th St.	400	1E	Skim. Sproc. & Chain				
69th St.	400	1F	Clarifier 180'	180ft	NAV	NAV	57993
69th St.	400	1F	Primary Drive	RADICON	NAV	NAV	57900
69th St.	400	1F	Primary Drive	RADICON	NAV	NAV	57897
69th St.	400	1F	Secondary Drive	ZURN	NAV	NAV	57992
69th St.	400	1F	Secondary Drive	ZURN	NAV	NAV	57898
69th St.	400	1F	Final Drive (Bull Gear)	ZURN	NAV	NAV	58033
69th St.	400	1F	Sprocket & Chain				
69th St.	400	1F	Skimmer Arm Drive				
69th St.	400	1F	Skim. Sproc. & Chain				
69th St.	400	1G	Clarifier 180'	180ft	NAV	NAV	58000
69th St.	400	1G	Primary Drive	RADICON	NAV	NAV	103016
69th St.	400	1G	Primary Drive	RADICON	NAV	NAV	57798
69th St.	400	1G	Secondary Drive	ZURN	NAV	NAV	NAV
69th St.	400	1G	Secondary Drive	ZURN	NAV	NAV	57796
69th St.	400	1G	Final Drive (Bull Gear)	ZURN	NAV	NAV	NAV
69th St.	400	1G	Sprocket & Chain				
69th St.	400	1G	Skimmer Arm Drive				
69th St.	400	1G	Skim. Sproc. & Chain				
69th St.	400	1H	Clarifier 180'	180ft	NAV	NAV	58025
69th St.	400	1H	Primary Drive	RADICON	NAV	NAV	58020
69th St.	400	1H	Primary Drive	RADICON	NAV	NAV	58023
69th St.	400	1H	Secondary Drive	ZURN	NAV	NAV	58021
69th St.	400	1H	Secondary Drive	ZURN	NAV	NAV	58024
69th St.	400	1H	Final Drive (Bull Gear)	ZURN	NAV	NAV	58026

Facility Name	Fac.ID	Clarifier #	Component	Manufacturer	Model	Serial	Positional ID or EI#
			Gear)				
69th St.	400	1H	Sprocket & Chain				
69th St.	400	1H	Skimmer Arm Drive				
69th St.	400	1H	Skim. Sproc. & Chain				
69th St.	400	2A	Clarifier 180'	180ft	NAV	NAV	58050
69th St.	400	2A	Primary Drive	RADICON	NAV	NAV	58044
69th St.	400	2A	Primary Drive	RADICON	NAV	NAV	NAV
69th St.	400	2A	Secondary Drive	ZURN	NAV	NAV	58045
69th St.	400	2A	Secondary Drive	ZURN	NAV	NAV	58048
69th St.	400	2A	Final Drive (Bull Gear)	ZURN	NAV	NAV	58049
69th St.	400	2A	Sprocket & Chain	NAV	NAV	N/A	N/A
69th St.	400	2A	Skimmer Arm Drive	NONE			
69th St.	400	2A	Skim. Sproc. & Chain	NONE			
69th St.	400	2B	Clarifier 180'	180ft	NAV	NAV	58042
69th St.	400	2B	Primary Drive	RADICON	NAV	NAV	58036
69th St.	400	2B	Primary Drive	RADICON	NAV	NAV	58039
69th St.	400	2B	Secondary Drive	ZURN	NAV	NAV	58037
69th St.	400	2B	Secondary Drive	ZURN	NAV	NAV	58040
69th St.	400	2B	Final Drive (Bull Gear)	ZURN	NAV	NAV	NAV
69th St.	400	2B	Sprocket & Chain	NAV	NAV	N/A	N/A
69th St.	400	2B	Skimmer Arm Drive	NONE			
69th St.	400	2B	Skim. Sproc. & Chain	NONE			
69th St.	400	2C	Clarifier 180'	180ft	NAV	NAV	58058
69th St.	400	2C	Primary Drive	RADICON	NAV	NAV	58052
69th St.	400	2C	Primary Drive	RADICON	NAV	NAV	58055
69th St.	400	2C	Secondary Drive	ZURN	NAV	NAV	NAV
69th St.	400	2C	Secondary Drive	ZURN	NAV	NAV	58056
69th St.	400	2C	Final Drive (Bull Gear)	ZURN	NAV	NAV	58057
69th St.	400	2C	Sprocket & Chain	NAV	NAV	N/A	N/A
69th St.	400	2C	Skimmer Arm Drive	NONE			
69th St.	400	2C	Skim. Sproc. & Chain	NONE			
69th St.	400	2D	Clarifier 180'	180ft	NAV	NAV	58066
69th St.	400	2D	Primary Drive	RADICON	NAV	NAV	58060
69th St.	400	2D	Primary Drive	RADICON	NAV	NAV	58063
69th St.	400	2D	Secondary Drive	ZURN	NAV	NAV	58061
69th St.	400	2D	Secondary Drive	ZURN	NAV	NAV	58064
69th St.	400	2D	Final Drive (Bull Gear)	ZURN	NAV	NAV	58065

Facility Name	Fac.ID	Clarifier #	Component	Manufacturer	Model	Serial	Positional ID or EI#
			Gear)				
69th St.	400	2D	Sprocket & Chain	NAV	NAV	N/A	N/A
69th St.	400	2D	Skimmer Arm Drive	NONE			
69th St.	400	2D	Skim. Sproc. & Chain	NONE			
69th St.	400	2E	Clarifier 180'	180ft	NAV	NAV	58102
69th St.	400	2E	Primary Drive	RADICON	NAV	NAV	58096
69th St.	400	2E	Primary Drive	RADICON	NAV	NAV	58099
69th St.	400	2E	Secondary Drive	ZURN	NAV	NAV	58097
69th St.	400	2E	Secondary Drive	ZURN	NAV	NAV	58100
69th St.	400	2E	Final Drive (Bull Gear)	ZURN	NAV	NAV	NAV
69th St.	400	2E	Sprocket & Chain	NAV	NAV	N/A	N/A
69th St.	400	2E	Skimmer Arm Drive	NONE			
69th St.	400	2E	Skim. Sproc. & Chain	NONE			
69th St.	400	2F	Clarifier 180'	180ft	NAV	NAV	58110
69th St.	400	2F	Primary Drive	RADICON	NAV	NAV	58104
69th St.	400	2F	Primary Drive	RADICON	NAV	NAV	58107
69th St.	400	2F	Secondary Drive	ZURN	NAV	NAV	58105
69th St.	400	2F	Secondary Drive	ZURN	NAV	NAV	58108
69th St.	400	2F	Final Drive (Bull Gear)	ZURN	NAV	NAV	58109
69th St.	400	2F	Sprocket & Chain	NAV	NAV	N/A	N/A
69th St.	400	2F	Skimmer Arm Drive	NONE			
69th St.	400	2F	Skim. Sproc. & Chain	NONE			
69th St.	400	2G	Clarifier 180'	180ft	NAV	NAV	58118
69th St.	400	2G	Primary Drive	RADICON	NAV	NAV	58112
69th St.	400	2G	Primary Drive	RADICON	NAV	NAV	58115
69th St.	400	2G	Secondary Drive	ZURN	NAV	NAV	58113
69th St.	400	2G	Secondary Drive	ZURN	NAV	NAV	58116
69th St.	400	2G	Final Drive (Bull Gear)	ZURN	NAV	NAV	58117
69th St.	400	2G	Sprocket & Chain	NAV	NAV	N/A	N/A
69th St.	400	2G	Skimmer Arm Drive	NONE			
69th St.	400	2G	Skim. Sproc. & Chain	NONE			
69th St.	400	2H	Clarifier 180'	180ft	NAV	NAV	58126
69th St.	400	2H	Primary Drive	RADICON	NAV	NAV	58120
69th St.	400	2H	Primary Drive	RADICON	NAV	NAV	58123
69th St.	400	2H	Secondary Drive	ZURN	NAV	NAV	58121
69th St.	400	2H	Secondary Drive	ZURN	NAV	NAV	58124
69th St.	400	2H	Final Drive (Bull Gear)	ZURN	NAV	NAV	58125

Facility Name	Fac.ID	Clarifier #	Component	Manufacturer	Model	Serial	Positional ID or EI#
			Gear)				
69th St.	400	2H	Sprocket & Chain	NAV	NAV	N/A	N/A
69th St.	400	2H	Skimmer Arm Drive	NONE			
69th St.	400	2H	Skim. Sproc. & Chain	NONE			
Almeda Sims	006	1	Clarifier 130'	Environmental Elements	NAV	NAV	62413
Almeda Sims	006	1	Primary Drive	CONE DRIVE	MU 35-2	61384X	62410
Almeda Sims	006	1	Secondary Drive	NAV	NAV	NAV	62411
Almeda Sims	006	1	Final Drive (Bull Gear)	ENELCO	NAV	NAV	62412
Almeda Sims	006	1	Sprocket & Chain	NAV	NAV	N/A	N/A
Almeda Sims	006	1	Skimmer Arm Drive	SYNROGEAR	63-06886-697 J1240187	GWBF	62415
Almeda Sims	006	1	Skim. Sproc. & Chain	NAV	NAV	N/A	N/A
Almeda Sims	006	2	Clarifier 130'	Environmental Elements	NAV	NAV	62421
Almeda Sims	006	2	Primary Drive	CONE DRIVE	MU 35-2	61383X	62418
Almeda Sims	006	2	Secondary Drive	NAV	NAV	NAV	NAV
Almeda Sims	006	2	Final Drive (Bull Gear)	ENELCO	NAV	NAV	NAV
Almeda Sims	006	2	Sprocket & Chain	NAV	NAV	N/A	N/A
Almeda Sims	006	2	Skimmer Arm Drive	SYNCRGEAR	65-03227-111 K312050	GWBF	62422
Almeda Sims	006	2	Skim. Sproc. & Chain	NAV	NAV	N/A	N/A
Almeda Sims	006	3	Clarifier 130'	Environmental Elements	NAV	NAV	62429
Almeda Sims	006	3	Primary Drive	CONE DRIVE	MU 35-2	61382X	62426
Almeda Sims	006	3	Secondary Drive	NAV	NAV		NAV
Almeda Sims	006	3	Final Drive (Bull Gear)	ENELCO	NAV	NAV	62928
Almeda Sims	006	3	Sprocket & Chain	NAV	NAV	N/A	N/A
Almeda Sims	006	3	Skimmer Arm Drive	CONE DRIVE	MU 30-2	03394997-100-1	111463
Almeda Sims	006	3	Skim. Sproc. & Chain	NAV	NAV	N/A	N/A
Almeda Sims	006	4	Clarifier 130'	Environmental Elements	NAV	NAV	62437
Almeda Sims	006	4	Primary Drive	CONE DRIVE	MU 35-2	61381X	NAV
Almeda Sims	006	4	Secondary Drive	NAV	NAV	NAV	NAV
Almeda Sims	006	4	Final Drive (Bull Gear)	ENELCO	NAV	NAV	NAV
Almeda Sims	006	4	Sprocket & Chain	NAV	NAV	N/A	N/A
Almeda Sims	006	4	Skimmer Arm Drive	Sew Eurodrive Inc.	K77DT80N6	NAV	NAV
Almeda Sims	006	4	Skim. Sproc. & Chain	NAV	NAV	N/A	N/A
Almeda Sims	006	5	Clarifier 130'		NAV	NAV	NAV

Facility Name	Fac.ID	Clarifier #	Component	Manufacturer	Model	Serial	Positional ID or EI#
Almeda Sims	006	5	Primary Drive	SM-CYCLO	CLC15 VC 3090	F607098	62442
Almeda Sims	006	5	Secondary Drive	SM-CYCLO	VC 3215/14	F607097	62443
Almeda Sims	006	5	Final Drive (Bull Gear)	Westech	42"	4692	42444
Almeda Sims	006	5	Sprocket & Chain	NONE			
Almeda Sims	006	5	Pivot Bearing	SM-CYCLO	N/A	N/A	N/A
Almeda Sims	006	5	Pinion Bearing	SM-CYCLO	N/A	N/A	N/A
Almeda Sims	006	5	Main Bearing	SM-CYCLO	N/A	N/A	N/A
Beltway	242	1	Clarifier	Westech	NAV	18949A	20033
Beltway	242	1	Primary Drive	SM-CYCLO	CVVJ S4215DAY-7569	CA0017205	119384
Beltway	242	1	Secondary Drive	SM-CYCLO	NAV	NAV	119385
Beltway	242	1	Final Drive (Bull Gear)	Westech Main Gear	60"	NAV	119383
Beltway	242	1	Upper Bearing	Westech	NAV	N/A	N/A
Beltway	242	1	Main Bearing	Westech	NAV	N/A	N/A
Beltway	242	1	Lower Bearing	Westech	NAV	N/A	N/A
Beltway	242	2	Clarifier 53'	Envirorex (Varicraft)	NH-26	NAV	20039
Beltway	242	2	Primary Drive	Morse	35GCDB	NAV	NAV
Beltway	242	2	Secondary Drive	Envirorex	NAV	79-012-01	20041
Beltway	242	2	Final Drive (Bull Gear)	Envirorex	60"H Drive	NAV	20040
Beltway	242	2	Sprocket & Chain	NAV	NAV	N/A	N/A
Beltway	242	2	Skimmer Arm Drive	NONE			
Beltway	242	2	Skim. Sproc. & Chain	NONE			
Beltway	242	3	Clarifier	Westech	NAV	19126-A	119381
Beltway	242	3	Primary Drive	SM-CYCLO	CVVJS-4225DAY-7569	CA00223442	119379
Beltway	242	3	Secondary Drive	SM-CYCLO	NAV	NAV	119378
Beltway	242	3	Final Drive (Bull Gear)	Westech	60"	NAV	119377
Beltway	242	3	Upper Bearing	Westech	NAV	N/A	N/A
Beltway	242	3	Main Bearing	Westech	NAV	N/A	N/A
Beltway	242	3	Lower Bearing	Westech	NAV	N/A	N/A
Beltway	242	4	Clarifier	Westech	NAV	19579-A	199376
Beltway	242	4	Primary Drive	SM-CYCLO	CVVJS-6224DAY-7569	CA0034078	119375
Beltway	242	4	Secondary Drive	SM-CYCLO	NAV	NAV	119373
Beltway	242	4	Final Drive (Bull Gear)	Westech	60"	NAV	119372
Beltway	242	4	Upper Bearing	Westech	NAV	N/A	N/A
Beltway	242	4	Main Bearing	Westech	NAV	N/A	N/A
Beltway	242	4	Lower Bearing	Westech	NAV	N/A	N/A
Bretshire WWF	560	1	Clarifier	Westech CLC15	CWJS-4205	NAV	110710

Facility Name	Fac.ID	Clarifier #	Component	Manufacturer	Model	Serial	Positional ID or EI#
Bretshire WWF	560	1	Primary Drive	SM-CYCLO	CWJS-4205	NAV	110731
Bretshire WWF	560	1	Secondary Drive	SM-CYCLO	NAV	NAV	110711
Bretshire WWF	560	1	Final Drive (Bull Gear)	Westech	NAV	NAV	NAV
Bretshire WWF	560	1	Sprocket & Chain	NONE			
Bretshire WWF	560	1	Skimmer Arm Drive	NONE			
Bretshire WWF	560	1	Skim. Sproc. & Chain	NONE			
Cedar Bayou	244	1	Clarifier	NAV	NAV	NAV	63896
Cedar Bayou	244	1	Primary Drive	NAV	NAV	NAV	63830
Cedar Bayou	244	1	Secondary Drive	NAV	NAV	NAV	63831
Cedar Bayou	244	1	Final Drive (Bull Gear)	NAV	NAV	NAV	63832
Cedar Bayou	244	1	Sprocket & Chain	NAV	NAV	N/A	N/A
Cedar Bayou	244	1	Skimmer Arm Drive	NONE			
Cedar Bayou	244	1	Skim. Sproc. & Chain	NONE			
Cedar Bayou	244	2	Clarifier				63895
Cedar Bayou	244	2	Primary Drive	NAV	NAV	NAV	63836
Cedar Bayou	244	2	Secondary Drive	NAV	NAV	NAV	63837
Cedar Bayou	244	2	Final Drive (Bull Gear)	NAV	NAV	NAV	63838
Cedar Bayou	244	2	Sprocket & Chain	NAV	NAV	N/A	N/A
Cedar Bayou	244	2	Skimmer Arm Drive	NONE			
Cedar Bayou	244	2	Skim. Sproc. & Chain	NONE			
Cedar Bayou	244	3	Clarifier 65'	Enviroquip 65'			112615
Cedar Bayou	244	3	Primary Drive	Windsmith	4MCTD	NAV	112619
Cedar Bayou	244	3	Secondary Drive	Enviroquip	NAV		112620
Cedar Bayou	244	3	Final Drive (Bull Gear)	Enviroquio 42"	42" P.D.	NAV	NAV
Cedar Bayou	244	3	Sprocket & Chain	Martin	NAV	N/A	N/A
Cedar Bayou	244	3	Skimmer Arm Drive	NONE			
Cedar Bayou	244	3	Skim. Sproc. & Chain	NONE			
Chocolate Bayou	039	1	Clarifier 100'	100ft	NAV	NAV	102132
Chocolate Bayou	039	1	Primary Drive	Winsmith	6MFCT	NAV	103539
Chocolate Bayou	039	1	Secondary Drive	Enviroquip	60-F	M-2765-A	6964
Chocolate Bayou	039	1	Final Drive (Bull Gear)	Peabody Welles	NAV	NAV	5310
Chocolate Bayou	039	1	Sprocket & Chain	NAV	NAV	N/A	N/A
Chocolate Bayou	039	1	Skimmer Arm Drive	Winsmith	6MCTD	NAV	102129

Facility Name	Fac.ID	Clarifier #	Component	Manufacturer	Model	Serial	Positional ID or EI#
Bayou							
Chocolate Bayou	039	1	Skim. Sproc. & Chain	NAV	N/A	N/A	N/A
Chocolate Bayou	039	2	Clarifier 100'	100ft		NAV	102146
Chocolate Bayou	039	2	Primary Drive	Winsmith	6MCTW	NAV	NAV
Chocolate Bayou	039	2	Secondary Drive	Enviroquip	60-F	NAV	5307
Chocolate Bayou	039	2	Final Drive (Bull Gear)	SINGER	NAV	NAV	5332
Chocolate Bayou	039	2	Sprocket & Chain	NAV	N/A	N/A	N/A
Chocolate Bayou	039	2	Skimmer Arm Drive	Winsmith	6MCTD	B-366-3-1	102143
Chocolate Bayou	039	2	Skim. Sproc. & Chain				
Chocolate Bayou	039	3	Clarifier 100'	100ft	NAV	NAV	102137
Chocolate Bayou	039	3	Primary Drive	Winsmith	6MCTW	NAV	102136
Chocolate Bayou	039	3	Secondary Drive	Enviroquip	60-F	NAV	5307
Chocolate Bayou	039	3	Final Drive (Bull Gear)	SINGER	NAV	NAV	5308
Chocolate Bayou	039	3	Sprocket & Chain	NAV	NAV	N/A	N/A
Chocolate Bayou	039	3	Skimmer Arm Drive	Winsmith	6MCTD	NAV	102139
Chocolate Bayou	039	3	Skim. Sproc. & Chain	NAV	N/A	N/A	N/A
Clinton Park	040	1	Clarifier 60'	ENVIREX 60ft	RNV1	NAV	111990
Clinton Park	040	1	Primary Drive	Winsmith	4MCTDW	NAV	111996
Clinton Park	040	1	Secondary Drive	ENVIREX	NAV	NAV	111995
Clinton Park	040	1	Final Drive (Bull Gear)	ENVIREX	NAV	NAV	111997
Clinton Park	040	1	Sprocket & Chain	NAV	NAV	N/A	N/A
Clinton Park	040	1	Skimmer Arm Drive	NONE			
Clinton Park	040	1	Skim. Sproc. & Chain	NONE			
Clinton Park	040	2	Clarifier 60'	ENVIREX 60ft	RNV1	NAV	112004
Clinton Park	040	2	Primary Drive	Winsmith	4MCTDW	NAV	112007
Clinton Park	040	2	Secondary Drive	ENVIREX	NAV	NAV	112008
Clinton Park	040	2	Final Drive (Bull Gear)	ENVIREX	NAV	NAV	112009

Facility Name	Fac.ID	Clarifier #	Component	Manufacturer	Model	Serial	Positional ID or EI#
Clinton Park	040	2	Sprocket & Chain	NAV	NAV	N/A	N/A
Clinton Park	040	2	Skimmer Arm Drive	NONE			
Clinton Park	040	2	Skim. Sproc. & Chain	NONE			
Easthaven	059	1	Clarifier 54'	CLOW 54ft	CDH	NAV	114856
Easthaven	059	1	Clarifier 60'	CLOW 60ft	CDH	NAV	114877
Easthaven	059	1	Primary Drive	CONE	NAV	NAV	NAV
Easthaven	059	1	Secondary Drive	CONE	MVOV-20-30-60	NAV	NAV
Easthaven	059	1	Final Drive (Bull Gear)	CLOW 42"	PD	NAV	NAV
Easthaven	059	1	Sprocket & Chain	NONE		NONE	None
Easthaven	059	1	Skimmer Arm Drive	Winsmith	6CTD	NAV	114848
Easthaven	059	1	Skim. Sproc. & Chain	Browning	NAV	N/A	N/A
Easthaven	059	2	Primary Drive	CLOW	NAV	NAV	102184
Easthaven	059	2	Secondary Drive	CLOW 42"	NAV	NAV	NAV
Easthaven	059	2	Final Drive (Bull Gear)	CLOW	NAV	NAV	NAV
Easthaven	059	2	Sprocket & Chain	NONE			
Easthaven	059	2	Skimmer Arm Drive	Winsmith	6CTD	NAV	114848
Easthaven	059	2	Skim. Sproc. & Chain	Browning	NAV	N/A	N/A
Easthaven	059	3	Clarifier 80'	ENVIREX 80ft	NAV	NAV	114851
Easthaven	059	3	Primary Drive	Eurodrive	R60-LP56C	NAV	102192
Easthaven	059	3	Secondary Drive	Envirex	H40 Series	NAV	102193
Easthaven	059	3	Final Drive (Bull Gear)	Envirex	H40LT	NAV	102194
Easthaven	059	3	Sprocket & Chain	NAV	NAV	N/A	N/A
Easthaven	059	3	Skimmer Arm Drive	NONE		None	None
Easthaven	059	3	Skim. Sproc. & Chain	NONE		None	None
Easthaven	059	4	Clarifier 80'	ENVIREX 80ft	CDH	NAV	114854
Easthaven	059	4	Primary Drive	Eurodrive	R60-LP56C	NAV	102189
Easthaven	059	4	Secondary Drive	Envirex	H40 Series	NAV	102187
Easthaven	059	4	Final Drive (Bull Gear)	Envirex	H40LT	NAV	102190
Easthaven	059	4	Sprocket & Chain	NAV	NAV	N/A	N/A
Easthaven	059	4	Skimmer Arm Drive	NONE		None	None
Easthaven	059	4	Skim. Sproc. & Chain	NONE		None	None
FWSD-23	083	2	Clarifier 105'	REX	NAV	NAV	113379
FWSD-23	083	2	Primary Drive	Winsmith	5MCTD	NAV	113503
FWSD-23	083	2	Secondary Drive	Envirex	H60HDDR (assembly)	NAV	35025
FWSD-23	083	2	Final Drive (Bull Gear)	Envirex	60"	NAV	6183
FWSD-23	083	2	Sprocket & Chain	NAV	NAV	N/A	N/A

Facility Name	Fac.ID	Clarifier #	Component	Manufacturer	Model	Serial	Positional ID or EI#
FWSD-23	083	2	Skimmer Arm Drive	NONE			
FWSD-23	083	2	Skim. Sproc. & Chain	NONE			
FWSD-23	083	3	Clarifier 105'	EIMCO			113400
FWSD-23	083	3	Primary Drive	SYNCROGEAR	JF-GWB	NAV	113492
FWSD-23	083	3	Secondary Drive	EIMCO	C30HT (assembly)	NAV	35029
FWSD-23	083	3	Final Drive (Bull Gear)	EIMCO	C30HT (assembly)	NAV	113493
FWSD-23	083	3	Sprocket & Chain	NAV	NAV	N/A	N/A
FWSD-23	083	3	Skimmer Arm Drive				
FWSD-23	083	3	Skim. Sproc. & Chain				
FWSD-23	083	4	Clarifier				113498
FWSD-23	083	4	Primary Drive	SM-CYCLO	NAV	NAV	113505
FWSD-23	083	4	Secondary Drive	SM-CYCLO	NAV	NAV	113503
FWSD-23	083	4	Final Drive (Bull Gear)	Westech	NAV	NAV	113504
FWSD-23	083	4	Sprocket & Chain	NONE	NONE	NONE	NONE
FWSD-23	083	4	Skimmer Arm Drive	NONE	NONE	NONE	NONE
FWSD-23	083	4	Skim. Sproc. & Chain	NONE	NONE	NONE	NONE
Greenridge	240	1	Clarifier 105'	EIMCO 105ft	C3	NAV	NAV
Greenridge	240	1	Primary Drive	Syncrogear	E463	NAV	NAV
Greenridge	240	1	Secondary Drive	EIMCO	C40LT(assm)	NAV	NAV
Greenridge	240	1	Final Drive (Bull Gear)	EIMCO	C40HT	NAV	NAV
Greenridge	240	1	Sprocket & Chain	NAV	NAV	N/A	N/A
Greenridge	240	1	Skimmer Arm Drive	NONE			
Greenridge	240	1	Skim. Sproc. & Chain	NONE			
Greenridge	240	2	Clarifier 105'	EIMCO 105ft	C3		NAV
Greenridge	240	2	Primary Drive	Syncrogear	E463	NAV	NAV
Greenridge	240	2	Secondary Drive	EIMCO	C40LT(assm)	NAV	NAV
Greenridge	240	2	Final Drive (Bull Gear)	EIMCO	C40HT	NAV	NAV
Greenridge	240	2	Sprocket & Chain	NAV	NAV	N/A	N/A
Greenridge	240	2	Skimmer Arm Drive	NONE			
Greenridge	240	2	Skim. Sproc. & Chain	NONE			
Greenridge	240	3	Clarifier 130'	EIMCO 130ft	C3		NAV
Greenridge	240	3	Primary Drive		NAV	NAV	103506
Greenridge	240	3	Secondary Drive		NAV	NAV	NAV
Greenridge	240	3	Final Drive (Bull Gear)		NAV	NAV	107230
Greenridge	240	3	Sprocket & Chain	NAV	NAV	N/A	N/A
Greenridge	240	3	Skimmer Arm Drive	NONE			

Facility Name	Fac.ID	Clarifier #	Component	Manufacturer	Model	Serial	Positional ID or EI#
Greenridge	240	3	Skim. Sproc. & Chain	NONE			
Homestead	107	1	Clarifier 105'	Enviroquip 105ft	NAV	NAV	112055
Homestead	107	1	Primary Drive	Winsmith	6MCTW	NAV	62611
Homestead	107	1	Secondary Drive	Enviroquip	NAV	N8832-B	62612
Homestead	107	1	Final Drive (Bull Gear)	Enviroquip	NAV	NAV	62613
Homestead	107	1	Sprocket & Chain	Martin Sprockets	NAV	N/A	N/A
Homestead	107	1	Skimmer Arm Drive	NONE	NONE	NONE	NONE
Homestead	107	1	Skim. Sproc. & Chain	NONE	NONE	NONE	NONE
Homestead	107	2	Clarifier 105'	Enviroquip 105ft		N/A	112065
Homestead	107	2	Primary Drive	Winsmith	6MCTW	NAV	NAV
Homestead	107	2	Secondary Drive	Enviroquip	NAV	N8832-F	51053
Homestead	107	2	Final Drive (Bull Gear)	Enviroquip	NAV	NAV	62618
Homestead	107	2	Sprocket & Chain	Martin Sprockets	NAV	N/A	N/A
Homestead	107	2	Skimmer Arm Drive	NONE	NONE	NONE	NONE
Homestead	107	2	Skim. Sproc. & Chain	NONE	NONE	NONE	NONE
Imperial Valley	268	1	Clarifier 90'	ENVIROQUIP 90ft	4100	NAV	20140
Imperial Valley	268	1	Primary Drive	Winsmith	6MCTD	NAV	20142
Imperial Valley	268	1	Secondary Drive	NAV	NAV	NAV	20143
Imperial Valley	268	1	Final Drive (Bull Gear)	Enviroquip	60" P.D.C.I.	NAV	20144
Imperial Valley	268	1	Sprocket & Chain	NAV	NAV	N/A	N/A
Imperial Valley	268	1	Skimmer Arm Drive	Winsmith	5MCTD	14320	20147
Imperial Valley	268	1	Skim. Sproc. & Chain				N/A
Imperial Valley	268	2	Clarifier 90'	ENVIROQUIP 90 ft			N/A
Imperial Valley	268	2	Primary Drive	Winsmith	6MCTD	NAV	20150
Imperial Valley	268	2	Secondary Drive	NAV	NAV	NAV	20151
Imperial Valley	268	2	Final Drive (Bull Gear)	Enviroquip	60" P.D.C.I.	NAV	20152
Imperial Valley	268	2	Sprocket & Chain	NAV	NAV	N/A	N/A
Imperial Valley	268	2	Skimmer Arm Drive	Winsmith	5MCTD	14320	201555
Imperial Valley	268	2	Skim. Sproc. & Chain	NAV	NAV	N/A	N/A
Int. Airport	238	1	Clarifier	Rex	REX 145ft	NAV	63494
Int. Airport	238	1	Primary Drive	Sew-Eurodrive	NAV	NAV	63453
Int. Airport	238	1	Secondary Drive	Sew-Eurodrive	NAV	NAV	51882
Int. Airport	238	1	Final Drive (Bull Gear)	Sew-Eurodrive	NAV	NAV	63455
Int. Airport	238	1	Sprocket & Chain	NAV	NAV	N/A	N/A
Int. Airport	238	1	Skimmer Arm Drive	NONE			
Int. Airport	238	1	Skim. Sproc. & Chain	NONE			

Facility Name	Fac.ID	Clarifier #	Component	Manufacturer	Model	Serial	Positional ID or EI#
Int. Airport	238	2	Clarifier				
Int. Airport	238	2	Primary Drive	Sew-Eurodrive	NAV	NAV	63459
Int. Airport	238	2	Secondary Drive	Sew-Eurodrive	NAV	NAV	63460
Int. Airport	238	2	Final Drive (Bull Gear)	Sew-Eurodrive	NAV	NAV	63461
Int. Airport	238	2	Sprocket & Chain	NAV	NAV	N/A	N/A
Int. Airport	238	2	Skimmer Arm Drive	NONE			
Int. Airport	238	2	Skim. Sproc. & Chain	NONE			
Keegans	250	1	Clarifier 150'	ENVIROREX 150ft	NAV	NAV	102060
Keegans	250	1	Primary Drive	Sew eurodrive	R76LP	NAV	no tag
Keegans	250	1	Secondary Drive	ENVIROREX	H60HDDR	NAV	51882
Keegans	250	1	Final Drive (Bull Gear)	ENVIROREX	60"	NAV	no tag
Keegans	250	1	Sprocket & Chain	NAV	NAV	N/A	N/A
Keegans	250	1	Skimmer Arm Drive	NONE	NONE	NONE	NONE
Keegans	250	1	Skim. Sproc. & Chain	NONE	NONE	NONE	NONE
Keegans	250	2	Clarifier 150'	ENVIROREX 150ft			102062
Keegans	250	2	Primary Drive	Sew eurodrive	R76LP	NAV	no tag
Keegans	250	2	Secondary Drive	ENVIROREX	H60HDDR	NAV	51884
Keegans	250	2	Final Drive (Bull Gear)	ENVIROREX	60"	NAV	no tag
Keegans	250	2	Sprocket & Chain				
Keegans	250	2	Skimmer Arm Drive	NONE	NONE	NONE	NONE
Keegans	250	2	Skim. Sproc. & Chain	NONE	NONE	NONE	NONE
Keegans	250	3	Clarifier 150'	ENVIROREX 150ft			102059
Keegans	250	3	Primary Drive	Sew eurodrive	R76LP	NAV	no tag
Keegans	250	3	Secondary Drive	ENVIROREX	H60HDDR	NAV	no tag
Keegans	250	3	Final Drive (Bull Gear)	ENVIROREX	60"	NAV	no tag
Keegans	250	3	Sprocket & Chain				
Keegans	250	3	Skimmer Arm Drive	NONE	NONE	NONE	NONE
Keegans	250	3	Skim. Sproc. & Chain	NONE	NONE	NONE	NONE
Keegans	250	4	Clarifier 150'	ENVIROREX 150ft			102061
Keegans	250	4	Primary Drive	Sew eurodrive	R76LP	NAV	no tag
Keegans	250	4	Secondary Drive	ENVIROREX	H60HDDR	NAV	no tag
Keegans	250	4	Final Drive (Bull Gear)	ENVIROREX	60"	NAV	no tag
Keegans	250	4	Sprocket & Chain	NAV	NAV	N/A	N/A
Keegans	250	4	Skimmer Arm Drive	NONE	NONE	NONE	NONE
Keegans	250	4	Skim. Sproc. & Chain	NONE	NONE	NONE	NONE
M.U.D. 203	243	1	Clarifier 56'	WALKER 56ft	NAV	NAV	63293

Facility Name	Fac.ID	Clarifier #	Component	Manufacturer	Model	Serial	Positional ID or EI#
M.U.D. 203	243	1	Primary Drive	NAV	NAV	NAV	63300
M.U.D. 203	243	1	Secondary Drive	Walker Process	NAV	NAV	65900
M.U.D. 203	243	1	Final Drive (Bull Gear)	Walker Process	NAV	NAV	65897
M.U.D. 203	243	1	Sprocket & Chain	NAV	NAV	N/A	N/A
M.U.D. 203	243	1	Skimmer Arm Drive	NONE			
M.U.D. 203	243	1	Skim. Sproc. & Chain	NONE			
M.U.D. 203	243	2	Clarifier 56'	WALKER 56ft	NAV	NAV	65894
M.U.D. 203	243	2	Primary Drive	NAV	NAV	NAV	65896
M.U.D. 203	243	2	Secondary Drive	Walker Process	NAV	NAV	NAV
M.U.D. 203	243	2	Final Drive (Bull Gear)	Walker Process	NAV	NAV	65899
M.U.D. 203	243	2	Sprocket & Chain	NAV	NAV	N/A	N/A
M.U.D. 203	243	2	Skimmer Arm Drive	NONE			
M.U.D. 203	243	2	Skim. Sproc. & Chain	NONE			
Metro Central	397	1	Clarifier 75'	Walker Process 75ft	NAV	NAV	106142
Metro Central	397	1	Primary Drive	Winsmith	5MCTW	B553-261-01	102281
Metro Central	397	1	Secondary Drive	Walker Process	NAV	NAV	102280
Metro Central	397	1	Final Drive (Bull Gear)	Walker Process	NAV	NAV	102282
Metro Central	397	1	Sprocket & Chain	NAV	NAV	N/A	N/A
Metro Central	397	1	Skimmer Arm Drive	NONE			
Metro Central	397	1	Skim. Sproc. & Chain	NONE			
Metro Central	397	2	Clarifier 75'	Walker Process 75ft			106140
Metro Central	397	2	Primary Drive	Winsmith	5MCTW	NAV	102286
Metro Central	397	2	Secondary Drive	Walker Process	NAV	NAV	102287
Metro Central	397	2	Final Drive (Bull Gear)	Walker Process	NAV	NAV	102288
Metro Central	397	2	Sprocket & Chain	NAV	NAV	N/A	N/A
Metro Central	397	2	Skimmer Arm Drive	NONE			
Metro Central	397	2	Skim. Sproc. & Chain	NONE			
Northbelt	252	1	Clarifier	Walker Process	NAV	NAV	62506
Northbelt	252	1	Primary Drive	NAV	NAV	NAV	62503
Northbelt	252	1	Secondary Drive	Walker Process	NAV	NAV	62504
Northbelt	252	1	Final Drive (Bull Gear)	Walker Process	NAV	NAV	62505
Northbelt	252	1	Sprocket & Chain	NAV	NAV	N/A	N/A
Northbelt	252	1	Skimmer Arm Drive		NONE		
Northbelt	252	1	Skim. Sproc. & Chain		NONE		
Northbelt	252	2	Clarifier				62510
Northbelt	252	2	Primary Drive	NAV	NAV	NAV	62507

Facility Name	Fac.ID	Clarifier #	Component	Manufacturer	Model	Serial	Positional ID or EI#
Northbelt	252	2	Secondary Drive	Walker Process	NAV	NAV	62508
Northbelt	252	2	Final Drive (Bull Gear)	Walker Process	NAV	NAV	62509
Northbelt	252	2	Sprocket & Chain	NAV	NAV	N/A	N/A
Northbelt	252	2	Skimmer Arm Drive		NONE		
Northbelt	252	2	Skim. Sproc. & Chain		NONE		
NorthBorough	285	1	Clarifier 52'	DAVCO 52ft	0750 CONA	NAV	20326
NorthBorough	285	1	Primary Drive	NAV	NAV	NAV	NAV
NorthBorough	285	1	Secondary Drive	Walker	NAV	NAV	32116
NorthBorough	285	1	Final Drive (Bull Gear)	Walker	NAV	NAV	32117
NorthBorough	285	1	Sprocket & Chain	N/A	N/A	N/A	N/A
NorthBorough	285	1	Skimmer Arm Drive	NONE			
NorthBorough	285	1	Skim. Sproc. & Chain	NONE			
NorthBorough	285	2	Clarifier 66'	DAVCO 66ft			65317
NorthBorough	285	2	Primary Drive	NAV	NAV	NAV	NAV
NorthBorough	285	2	Secondary Drive	Rex	NAV	NAV	NAV
NorthBorough	285	2	Final Drive (Bull Gear)	Rex	NAV	NAV	65320
NorthBorough	285	2	Sprocket & Chain	N/A	N/A	N/A	N/A
NorthBorough	285	2	Skimmer Arm Drive	NONE			
NorthBorough	285	2	Skim. Sproc. & Chain	NONE			
Northeast	146	1	Clarifier 120'	EIMCO 120ft	NAV	23444-01B	112857
Northeast	146	1	Primary Drive	Syncrogear	E457/N09N192RO17F	GWBP	112859
Northeast	146	1	Secondary Drive	EIMCO	C60PS (assm)	NAV	112860
Northeast	146	1	Final Drive (Bull Gear)	EIMCO	C60HT	NAV	112861
Northeast	146	1	Sprocket & Chain	NAV	NAV	N/A	N/A
Northeast	146	1	Skimmer Arm Drive	NONE			
Northeast	146	1	Skim. Sproc. & Chain	NONE			
Northeast	146	2	Clarifier	EIMCO			112838
Northeast	146	2	Primary Drive	Sew-Eurodrive	DFT71D4C-KS/(RF143TS)	NAV	112847
Northeast	146	2	Secondary Drive	Sew-Eurodrive 35"	FA60DT71D4C-K8	NAV	112845
Northeast	146	2	Final Drive (Bull Gear)	Sew-Eurodrive	60" P.D.	NAV	112849
Northeast	146	2	Sprocket & Chain	NONE			
Northeast	146	2	Skimmer Arm Drive	NONE			
Northeast	146	2	Skim. Sproc. & Chain	NONE			
Northeast	146	3	Clarifier	EIMCO		23444-01A	112852
Northeast	146	3	Primary Drive	Syncrogear	E457/N09N192RO17F	GWBP	112853
Northeast	146	3	Secondary Drive	EIMCO	C60PS (assm)		112854

Facility Name	Fac.ID	Clarifier #	Component	Manufacturer	Model	Serial	Positional ID or EI#
Northeast	146	3	Final Drive (Bull Gear)	EIMCO	C60HT	NAV	112855
Northeast	146	3	Sprocket & Chain	NAV	NAV	N/A	N/A
Northeast	146	3	Skimmer Arm Drive	NONE			
Northeast	146	3	Skim. Sproc. & Chain	NONE			
Northeast	146	4	Clarifier 120'	EIMCO 120ft			112839
Northeast	146	4	Primary Drive	Sew-Eurodrive	E457/N09N192RO17F	GWBP	112840
Northeast	146	4	Secondary Drive	Sew-Eurodrive 35"	NAV	NAV	112841
Northeast	146	4	Final Drive (Bull Gear)	Sew-Eurodrive 60"	NAV	NAV	112842
Northeast	146	4	Sprocket & Chain	NONE			
Northeast	146	4	Skimmer Arm Drive	NONE			
Northeast	146	4	Skim. Sproc. & Chain	NONE			
Northgate	270	1	Clarifier 105'	ENVIROQUIP 105ft	SS-V		65721
Northgate	270	1	Primary Drive	Windsmith	4MCTD	NAV	119932
Northgate	270	1	Secondary Drive	Enviroquip	42"	NAV	65691
Northgate	270	1	Final Drive (Bull Gear)	Enviroquip 60"	NAV	NAV	65688
Northgate	270	1	Sprocket & Chain	NAV	NAV	N/A	N/A
Northgate	270	1	Skimmer Arm Drive	NONE			
Northgate	270	1	Skim. Sproc. & Chain	NONE			
Northgate	270	2	Clarifier 105'	ENVIROQUIP 105ft	SS-V		65722
Northgate	270	2	Primary Drive	Windsmith	4MCTD	NAV	65680
Northgate	270	2	Secondary Drive	Enviroquip	42"	NAV	65681
Northgate	270	2	Final Drive (Bull Gear)	Enviroquip 60"	NAV	NAV	65683
Northgate	270	2	Sprocket & Chain	NAV	NAV	N/A	N/A
Northgate	270	2	Skimmer Arm Drive	NONE			
Northgate	270	2	Skim. Sproc. & Chain	NONE			
Northside WWF	567	1	Clarifier	WALKER	NAV	NAV	113831
Northside WWF	567	1	Primary Drive	SEW EURODRIVE	NAV	NAV	113834
Northside WWF	567	1	Secondary Drive	WALKER	NAV	NAV	113835
Northside WWF	567	1	Final Drive (Bull Gear)	WALKER	NAV	NAV	113836
Northside WWF	567	1	Sprocket & Chain	NAV	NAV	N/A	N/A
Northside WWF	567	1	Skimmer Arm Drive	NONE			
Northside WWF	567	1	Skim. Sproc. & Chain	NONE			
Northside WWF	567	2	Clarifier	WALKER		NAV	113838
Northside WWF	567	2	Primary Drive	SEW EURODRIVE	NAV	NAV	113842
Northside WWF	567	2	Secondary Drive	WALKER	NAV	NAV	113841
Northside WWF	567	2	Final Drive (Bull Gear)	WALKER	NAV	NAV	113843

Facility Name	Fac.ID	Clarifier #	Component	Manufacturer	Model	Serial	Positional ID or EI#
			Gear)				
Northside WWF	567	2	Sprocket & Chain	NAV	NAV	N/A	N/A
Northside WWF	567	2	Skimmer Arm Drive	NONE			
Northside WWF	567	2	Skim. Sproc. & Chain	NONE			
Northside WWF	567	3	Clarifier	WALKER	NAV	NAV	113845
Northside WWF	567	3	Primary Drive	SEW EURODRIVE	NAV	NAV	113847
Northside WWF	567	3	Secondary Drive	WALKER	NAV	NAV	113848
Northside WWF	567	3	Final Drive (Bull Gear)	WALKER	NAV	NAV	113849
Northside WWF	567	3	Sprocket & Chain	NAV	NAV	N/A	N/A
Northside WWF	567	3	Skimmer Arm Drive	NONE			
Northside WWF	567	3	Skim. Sproc. & Chain	NONE			
Northwest	145	2	Clarifier	CLOW			110993
Northwest	145	2	Primary Drive	CLOW	NAV	NAV	20642
Northwest	145	2	Secondary Drive	CLOW	NAV	NAV	20643
Northwest	145	2	Final Drive (Bull Gear)	CLOW	NAV	NAV	110995
Northwest	145	2	Sprocket & Chain				
Northwest	145	2	Skimmer Arm Drive	NAV	NAV	NAV	NAV
Northwest	145	2	Skim. Sproc. & Chain	NAV	NAV	N/A	N/A
Northwest	145	3	Clarifier	CLOW			110988
Northwest	145	3	Primary Drive	CLOW	NAV	NAV	20645
Northwest	145	3	Secondary Drive	CLOW	NAV	NAV	20646
Northwest	145	3	Final Drive (Bull Gear)	CLOW	NAV	NAV	110990
Northwest	145	3	Sprocket & Chain				
Northwest	145	3	Skimmer Arm Drive	NAV	NAV	NAV	NAV
Northwest	145	3	Skim. Sproc. & Chain	NAV	NAV	N/A	N/A
Northwest	145	4	Clarifier	CLOW			110985
Northwest	145	4	Primary Drive	CLOW	NAV	NAV	20648
Northwest	145	4	Secondary Drive	CLOW	NAV	NAV	20649
Northwest	145	4	Final Drive (Bull Gear)	CLOW	NAV	NAV	110987
Northwest	145	4	Sprocket & Chain				
Northwest	145	4	Skimmer Arm Drive	NAV	NAV	N/A	N/A
Northwest	145	4	Skim. Sproc. & Chain	NAV	NAV	N/A	N/A
Northwest	145	5	Clarifier 110'	EIMCO 110ft			110980
Northwest	145	5	Primary Drive	EIMCO	Syncrogear	TF-GWB	110981
Northwest	145	5	Secondary Drive	EIMCO	C60R	NAV	110982
Northwest	145	5	Final Drive (Bull Gear)	EIMCO	C60R	NAV	110983

Facility Name	Fac.ID	Clarifier #	Component	Manufacturer	Model	Serial	Positional ID or EI#
Northwest	145	5	Sprocket & Chain	NAV	NAV	N/A	N/A
Northwest	145	5	Skimmer Arm Drive	NONE	NONE	NONE	NONE
Northwest	145	5	Skim. Sproc. & Chain	NONE	NONE	NONE	NONE
Northwest	145	6	Clarifier	EIMCO			110970
Northwest	145	6	Primary Drive	EIMCO	Syncrogear	TF-GWB	110976
Northwest	145	6	Secondary Drive	EIMCO	C60R	NAV	110977
Northwest	145	6	Final Drive (Bull Gear)	EIMCO	C60R	NAV	110978
Northwest	145	6	Sprocket & Chain	NAV	NAV	N/A	N/A
Northwest	145	6	Skimmer Arm Drive	NONE	NONE	NONE	NONE
Northwest	145	6	Skim. Sproc. & Chain	NONE	NONE	NONE	NONE
Northwest	145	7	Clarifier	EIMCO			110970
Northwest	145	7	Primary Drive	EIMCO	Syncrogear	TF-GWB	110971
Northwest	145	7	Secondary Drive	EIMCO	C60R	NAV	110972
Northwest	145	7	Final Drive (Bull Gear)	EIMCO	C60R	NAV	110974
Northwest	145	7	Sprocket & Chain	NAV	NAV	N/A	N/A
Northwest	145	7	Skimmer Arm Drive	NONE	NONE	NONE	NONE
Northwest	145	7	Skim. Sproc. & Chain	NONE	NONE	NONE	NONE
Park Ten	245	1	Clarifier 60'	WALKER 60ft	RSP	NAV	101481
Park Ten	245	1	Primary Drive	STERLING	AONF-2	NAV	101483
Park Ten	245	1	Secondary Drive	WALKER	NAV	NAV	101484
Park Ten	245	1	Final Drive	WALKER	60" P.D.	NAV	101485
Park Ten	245	1	Sprocket & Chain	NAV	NAV	N/A	N/A
Park Ten	245	1	Skimmer Arm Drive	NONE			
Park Ten	245	1	Skim. Sproc. & Chain	NONE			
Park Ten	245	2	Clarifier 60'	WALKER 60ft	RSP	NAV	101487
Park Ten	245	2	Primary Drive	SM-CYCLO	NAV	NAV	101489
Park Ten	245	2	Secondary Drive	SM-CYCLO	NAV	NAV	101490
Park Ten	245	2	Final Drive (Bull Gear)	NAV	NAV	NAV	101491
Park Ten	245	2	Sprocket & Chain	NONE			
Park Ten	245	2	Skimmer Arm Drive	NONE			
Park Ten	245	2	Skim. Sproc. & Chain	NONE			
Park Ten	245	3	Clarifier 60'	WALKER 60ft	RSP	NAV	101494
Park Ten	245	3	Primary Drive	SM-CYCLO	NAV	NAV	101497
Park Ten	245	3	Secondary Drive	SM-CYCLO	NAV	NAV	101498
Park Ten	245	3	Final Drive (Bull Gear)	NAV	NAV	NAV	NAV
Park Ten	245	3	Sprocket & Chain	NONE			

Facility Name	Fac.ID	Clarifier #	Component	Manufacturer	Model	Serial	Positional ID or EI#
Park Ten	245	3	Skimmer Arm Drive	NONE			
Park Ten	245	3	Skim. Sproc. & Chain	NONE			
Sagemont	171	1	Clarifier 100'	WALKER 100ft	RSP	NAV	114956
Sagemont	171	1	Primary Drive	Eurodrive	R67(3)LP145-KS	NAV	114958
Sagemont	171	1	Secondary Drive	WALKER 16"	NAV	NAV	114960
Sagemont	171	1	Final Drive (Bull Gear)	WALKER 60"	S60N16	NAV	114962
Sagemont	171	1	Sprocket & Chain	NAV	NAV	N/A	N/A
Sagemont	171	1	Skimmer Arm Drive	Winsmith	6MSFD1	NAV	103531
Sagemont	171	1	Skim. Sproc. & Chain	NAV	NAV	N/A	N/A
Sagemont	171	2	Clarifier 100'	WALKER 100ft	RSP	NAV	114969
Sagemont	171	2	Primary Drive	Eurodrive	R67(3)LP145-KS	NAV	114970
Sagemont	171	2	Secondary Drive	WALKER 16"	NAV	NAV	114972
Sagemont	171	2	Final Drive (Bull Gear)	WALKER 60"	S60N16	NAV	114975
Sagemont	171	2	Sprocket & Chain	NAV	NAV	N/A	N/A
Sagemont	171	2	Skimmer Arm Drive	Winsmith	6MSFD1	NAV	114977
Sagemont	171	2	Skim. Sproc. & Chain	NAV	NAV	N/A	N/A
Sagemont	171	3	Clarifier 100'	ENVIREX 100ft	NAV	NAV	NAV
Sagemont	171	3	Primary Drive	Sew-Eurodrive	R63DT90L4	NAV	65362
Sagemont	171	3	Secondary Drive	Envirex	H60A	NAV	65363
Sagemont	171	3	Final Drive (Bull Gear)	Envirex	H60A HT	NAV	65364
Sagemont	171	3	Sprocket & Chain	NAV	NAV	N/A	N/A
Sagemont	171	3	Skimmer Arm Drive	Eurodrive	R73R42		65371
Sagemont	171	3	Skim. Sproc. & Chain	Martin			
Scott WWF	540	1	Clarifier 130'	Westech 130ft	NAV	NAV	114723
Scott WWF	540	1	Primary Drive	SM-CYCLO	NAV	NAV	114726
Scott WWF	540	1	Secondary Drive	SM-CYCLO	NAV	NAV	114727
Scott WWF	540	1	Final Drive (Bull Gear)	Westech	NAV	NAV	NAV
Scott WWF	540	1	Sprocket & Chain	NONE			
Scott WWF	540	1	Skimmer Arm Drive	NONE			
Scott WWF	540	1	Skim. Sproc. & Chain	NONE			
Scott WWF	540	2	Clarifier 130'	Westech 130ft		NAV	114717
Scott WWF	540	2	Primary Drive	SM-CYCLO	NAV	NAV	114720
Scott WWF	540	2	Secondary Drive	SM-CYCLO	NAV	NAV	114721
Scott WWF	540	2	Final Drive (Bull Gear)	Westech	NAV	NAV	NAV
Scott WWF	540	2	Sprocket & Chain	NONE			
Scott WWF	540	2	Skimmer Arm Drive	NONE			

Facility Name	Fac.ID	Clarifier #	Component	Manufacturer	Model	Serial	Positional ID or EI#
Scott WWF	540	2	Skim. Sproc. & Chain	NONE			
Scott WWF	540	3	Clarifier 130'	Westech 130ft	NAV	NAV	114716
Scott WWF	540	3	Primary Drive	SM-CYCLO	NAV	NAV	114714
Scott WWF	540	3	Secondary Drive	SM-CYCLO	NAV	NAV	114715
Scott WWF	540	3	Final Drive (Bull Gear)	Westech	NAV	NAV	NAV
Scott WWF	540	3	Sprocket & Chain	NONE			
Scott WWF	540	3	Skimmer Arm Drive	NONE			
Scott WWF	540	3	Skim. Sproc. & Chain	NONE			
Sims Bayou	183	1	Clarifier	EIMCO	NAV	NAV	114416
Sims Bayou	183	1	Primary Drive	Sew-Eurodrive	NAV	NAV	114411
Sims Bayou	183	1	Secondary Drive	Sew-Eurodrive	NAV	NAV	114410
Sims Bayou	183	1	Final Drive (Bull Gear)	Sew-Eurodrive	NAV	NAV	114407
Sims Bayou	183	1	Sprocket & Chain	NONE			
Sims Bayou	183	1	Skimmer Arm Drive	NONE			
Sims Bayou	183	1	Skim. Sproc. & Chain	NONE			
Sims Bayou	183	2	Clarifier	EIMCO		NAV	114414
Sims Bayou	183	2	Primary Drive	Sew-Eurodrive	NAV	NAV	114425
Sims Bayou	183	2	Secondary Drive	Sew-Eurodrive	NAV	NAV	114417
Sims Bayou	183	2	Final Drive (Bull Gear)	Sew-Eurodrive	NAV	NAV	114418
Sims Bayou	183	2	Sprocket & Chain	NONE			
Sims Bayou	183	2	Skimmer Arm Drive	NONE			
Sims Bayou	183	2	Skim. Sproc. & Chain	NONE			
Sims Bayou	183	3	Clarifier	EIMCO	NAV	NAV	114412
Sims Bayou	183	3	Primary Drive	Sew-Eurodrive	NAV	NAV	NAV
Sims Bayou	183	3	Secondary Drive	EIMCO	NAV	NAV	59824
Sims Bayou	183	3	Final Drive (Bull Gear)	EIMCO	NAV	NAV	59825
Sims Bayou	183	3	Sprocket & Chain	NAV	NAV	N/A	N/A
Sims Bayou	183	3	Skimmer Arm Drive	NONE			
Sims Bayou	183	3	Skim. Sproc. & Chain	NONE			
Sims Bayou	183	4	Clarifier	EIMCO	NAV	NAV	114427
Sims Bayou	183	4	Primary Drive	Sew-Eurodrive	NAV	NAV	110044
Sims Bayou	183	4	Secondary Drive	EIMCO	NAV	NAV	114428
Sims Bayou	183	4	Final Drive (Bull Gear)	EIMCO	NAV	NAV	114429
Sims Bayou	183	4	Sprocket & Chain	NAV	NAV	N/A	N/A
Sims Bayou	183	4	Skimmer Arm Drive	NONE			
Sims Bayou	183	4	Skim. Sproc. & Chain	NONE			

Facility Name	Fac.ID	Clarifier #	Component	Manufacturer	Model	Serial	Positional ID or EI#
Sims Bayou	183	5	Clarifier	EIMCO	NAV	NAV	114419
Sims Bayou	183	5	Primary Drive	Sew-Eurodrive	NAV	NAV	110050
Sims Bayou	183	5	Secondary Drive	EIMCO	NAV	NAV	110052
Sims Bayou	183	5	Final Drive (Bull Gear)	EIMCO	NAV	NAV	110053
Sims Bayou	183	5	Sprocket & Chain	NAV	NAV	N/A	N/A
Sims Bayou	183	5	Skimmer Arm Drive	NONE			
Sims Bayou	183	5	Skim. Sproc. & Chain	NONE			
Sims Bayou	183	6	Clarifier	EIMCO	NAV	NAV	114421
Sims Bayou	183	6	Primary Drive	Sew-Eurodrive	NAV	NAV	NAV
Sims Bayou	183	6	Secondary Drive	EIMCO	NAV	NAV	NAV
Sims Bayou	183	6	Final Drive (Bull Gear)	EIMCO	NAV	NAV	59837
Sims Bayou	183	6	Sprocket & Chain	NAV	NAV	N/A	N/A
Sims Bayou	183	6	Skimmer Arm Drive	NONE			
Sims Bayou	183	6	Skim. Sproc. & Chain	NONE			
Sims Bayou	183	7	Clarifier	EIMCO		NAV	114437
Sims Bayou	183	7	Primary Drive	Sew-Eurodrive	NAV	NAV	59850
Sims Bayou	183	7	Secondary Drive	EIMCO	NAV	NAV	114438
Sims Bayou	183	7	Final Drive (Bull Gear)	EIMCO	NAV	NAV	59853
Sims Bayou	183	7	Sprocket & Chain	NAV	NAV	N/A	N/A
Sims Bayou	183	7	Skimmer Arm Drive	NONE			
Sims Bayou	183	7	Skim. Sproc. & Chain	NONE			
Sims Bayou	183	8	Clarifier	EIMCO	NAV	NAV	114432
Sims Bayou	183	8	Primary Drive	Sew-Eurodrive	NAV	NAV	59838
Sims Bayou	183	8	Secondary Drive	EIMCO	NAV	NAV	114433
Sims Bayou	183	8	Final Drive (Bull Gear)	EIMCO	NAV	NAV	59841
Sims Bayou	183	8	Sprocket & Chain	NAV	NAV	N/A	N/A
Sims Bayou	183	8	Skimmer Arm Drive	NONE			
Sims Bayou	183	8	Skim. Sproc. & Chain	NONE			
Sims Bayou	183	9	Clarifier	EIMCO	NAV	NAV	114434
Sims Bayou	183	9	Primary Drive	Sew-Eurodrive	NAV	NAV	59842
Sims Bayou	183	9	Secondary Drive	EIMCO	NAV	NAV	114431
Sims Bayou	183	9	Final Drive (Bull Gear)	EIMCO	NAV	NAV	59844
Sims Bayou	183	9	Sprocket & Chain	NAV	NAV	N/A	N/A
Sims Bayou	183	9	Skimmer Arm Drive	NONE			
Sims Bayou	183	9	Skim. Sproc. & Chain	NONE			
Sims Bayou	183	10	Clarifier	EIMCO	NAV	NAV	114435

Facility Name	Fac.ID	Clarifier #	Component	Manufacturer	Model	Serial	Positional ID or EI#
Sims Bayou	183	10	Primary Drive	Sew-Eurodrive	NAV	NAV	59846
Sims Bayou	183	10	Secondary Drive	EIMCO	NAV	NAV	114436
Sims Bayou	183	10	Final Drive (Bull Gear)	EIMCO	NAV	NAV	59848
Sims Bayou	183	10	Sprocket & Chain	NAV	NAV	N/A	N/A
Sims Bayou	183	10	Skimmer Arm Drive				
Sims Bayou	183	10	Skim. Sproc. & Chain				
Sims South	283	1	Clarifier 138'	WALKER 138'	SWP	W62604-6	114175
Sims South	283	1	Primary Drive	NORD	SK32 VLN56C	810133077500-01NO	no tag
Sims South	283	1	Secondary Drive	WALKER	S80119assm	NAV	32116
Sims South	283	1	Final Drive (Bull Gear)	WALKER	S80119assm	NAV	32117
Sims South	283	1	Sprocket & Chain	NAV	NAV	N/A	N/A
Sims South	283	1	Skimmer Arm Drive	NONE			
Sims South	283	1	Skim. Sproc. & Chain	NONE			
Sims South	283	2	Clarifier 138'	WALKER 138'	SWP	W62604-5	114177
Sims South	283	2	Primary Drive	NORD	SK32 VLN56C	810141343200-006	114171
Sims South	283	2	Secondary Drive	WALKER	S80119assm	NAV	32120
Sims South	283	2	Final Drive (Bull Gear)	WALKER	S80119assm	NAV	32121
Sims South	283	2	Sprocket & Chain	NAV	NAV	N/A	N/A
Sims South	283	2	Skimmer Arm Drive	NONE			
Sims South	283	2	Skim. Sproc. & Chain	NONE			
Sims South	283	3	Clarifier 138'	WALKER 138'	SWP	W62604-3	114174
Sims South	283	3	Primary Drive	NORD	SK32 VLN56C	810141343200-004	114020
Sims South	283	3	Secondary Drive	WALKER	S80119assm	NAV	32124
Sims South	283	3	Final Drive (Bull Gear)	WALKER	S80119assm	NAV	32125
Sims South	283	3	Sprocket & Chain	NAV	NAV	N/A	N/A
Sims South	283	3	Skimmer Arm Drive	NONE			
Sims South	283	3	Skim. Sproc. & Chain	NONE			
Sims South	283	4	Clarifier 138'	WALKER 138'	SWP	W62604-4	114176
Sims South	283	4	Primary Drive	NORD	SK32 VLN56C	810141343200-007	no tag
Sims South	283	4	Secondary Drive	WALKER	S80119assm	NAV	32128
Sims South	283	4	Final Drive (Bull Gear)	WALKER	S80119assm	NAV	32129
Sims South	283	4	Sprocket & Chain	NAV	NAV	N/A	N/A
Sims South	283	4	Skimmer Arm Drive	NONE			
Sims South	283	4	Skim. Sproc. & Chain	NONE			
Sims South	283	5	Clarifier 138'	WALKER 138'	SWP	W62604-1	114189

Facility Name	Fac.ID	Clarifier #	Component	Manufacturer	Model	Serial	Positional ID or EI#
Sims South	283	5	Primary Drive	NORD	SK32 VLN56C	810141343200-002	no tag
Sims South	283	5	Secondary Drive	WALKER	S80119assm	NAV	32132
Sims South	283	5	Final Drive (Bull Gear)	WALKER	S80119assm	NAV	32133
Sims South	283	5	Sprocket & Chain	NAV	NAV	N/A	N/A
Sims South	283	5	Skimmer Arm Drive	NONE			
Sims South	283	5	Skim. Sproc. & Chain	NONE			
Sims South	283	6	Clarifier 138'	WALKER 138'	SWP		114178
Sims South	283	6	Primary Drive	NORD	SK32 VLN56C	810141343200-001	no tag
Sims South	283	6	Secondary Drive	WALKER	S80119assm		32136
Sims South	283	6	Final Drive (Bull Gear)	WALKER	S80119assm		32137
Sims South	283	6	Sprocket & Chain	NAV	NAV	N/A	N/A
Sims South	283	6	Skimmer Arm Drive	NONE			
Sims South	283	6	Skim. Sproc. & Chain	NONE			
SouthEast	189	1	Clarifier	WALKER	90ft	NAV	115114
SouthEast	189	1	Primary Drive	SEW Eurodrive	R67(3)LP145-KS	NAV	115118
SouthEast	189	1	Secondary Drive	Walker 16"	NAV	NAV	115119
SouthEast	189	1	Final Drive (Bull Gear)	Walker 60"	S60N16	NAV	115125
SouthEast	189	1	Sprocket & Chain	NAV	NAV	N/A	N/A
SouthEast	189	1	Skimmer Arm Drive	NONE			
SouthEast	189	1	Skim. Sproc. & Chain	NONE			
SouthEast	189	1	Thickener	Walker			107397
SouthEast	189	2	Clarifier	WALKER	90ft		115113
SouthEast	189	2	Primary Drive	SEW Eurodrive	R67(3)LP145-KS	NAV	115121
SouthEast	189	2	Secondary Drive	Walker 16"	NAV	NAV	115122
SouthEast	189	2	Final Drive (Bull Gear)	Walker 60"	NAV	NAV	115123
SouthEast	189	2	Sprocket & Chain	NAV	NAV	N/A	N/A
SouthEast	189	2	Skimmer Arm Drive	NONE			
SouthEast	189	2	Skim. Sproc. & Chain	NONE			
SouthEast	189	3	Clarifier	Walker	135ft	NAV	107081
SouthEast	189	3	Primary Drive	Sew-Eurodrive	NAV	NAV	NAV
SouthEast	189	3	Secondary Drive	Sew-Eurodrive	NAV	NAV	NAV
SouthEast	189	3	Final Drive (Bull Gear)	Sew-Eurodrive	NAV	NAV	107086
SouthEast	189	3	Sprocket & Chain	NONE			
SouthEast	189	3	Skimmer Arm Drive	NONE			
SouthEast	189	3	Skim. Sproc. & Chain	NONE			
Southwest	190	1	Clarifier 160'	EIMCO 160ft	C3	23601-01-B	57507

Facility Name	Fac.ID	Clarifier #	Component	Manufacturer	Model	Serial	Positional ID or EI#
Southwest	190	1	Primary Drive	SYNCROGEAR	GWBP	NAV	NAV
Southwest	190	1	Secondary Drive	EIMCO	C60PS	NAV	NAV
Southwest	190	1	Final Drive (Bull Gear)	EIMCO	C60HT	NAV	NAV
Southwest	190	1	Sprocket & Chain	NAV	NAV	N/A	N/A
Southwest	190	1	Skimmer Arm Drive	NONE			
Southwest	190	1	Skim. Sproc. & Chain	NONE			
Southwest	190	2	Clarifier 160'	EIMCO 160ft	C3	23601-01-C	30352
Southwest	190	2	Primary Drive	SYNCROGEAR	GWBP	NAV	30344
Southwest	190	2	Secondary Drive	EIMCO	NAV	NAV	30339
Southwest	190	2	Final Drive (Bull Gear)	EIMCO	C60HT	NAV	NAV
Southwest	190	2	Sprocket & Chain	NAV	NAV	N/A	N/A
Southwest	190	2	Skimmer Arm Drive	NONE			
Southwest	190	2	Skim. Sproc. & Chain	NONE			
Southwest	190	3	Clarifier 160'	EIMCO 160ft	C3	23601-01-D	30353
Southwest	190	3	Primary Drive	SYNCROGEAR	GWBP	NAV	30346
Southwest	190	3	Secondary Drive	EIMCO	NAV	NAV	30340
Southwest	190	3	Final Drive (Bull Gear)	EIMCO	C60HT	NAV	NAV
Southwest	190	3	Sprocket & Chain	NAV	NAV	N/A	N/A
Southwest	190	3	Skimmer Arm Drive	NONE			
Southwest	190	3	Skim. Sproc. & Chain	NONE			
Southwest	190	4	Clarifier 160'	EIMCO 160ft	C3	23601-01-E	30354
Southwest	190	4	Primary Drive	SYNCROGEAR	GWBP	NAV	110044
Southwest	190	4	Secondary Drive	EIMCO	NAV	NAV	110046
Southwest	190	4	Final Drive (Bull Gear)	EIMCO	C60HT	NAV	110047
Southwest	190	4	Sprocket & Chain	NAV	NAV	N/A	N/A
Southwest	190	4	Skimmer Arm Drive	NONE			
Southwest	190	4	Skim. Sproc. & Chain	NONE			
Southwest	190	5	Clarifier 160'	EIMCO 160ft	C3	23601-01-A	30355
Southwest	190	5	Primary Drive	SYNCROGEAR	GWBP	NAV	110050
Southwest	190	5	Secondary Drive	EIMCO	NAV	NAV	110052
Southwest	190	5	Final Drive (Bull Gear)	EIMCO	C60HT	NAV	110053
Southwest	190	5	Sprocket & Chain	NAV	NAV	N/A	N/A
Southwest	190	5	Skimmer Arm Drive	NONE			
Southwest	190	5	Skim. Sproc. & Chain	NONE			
Southwest	190	6	Clarifier 160'	EIMCO 160ft	C3	23601-01-F	57508
Southwest	190	6	Primary Drive	SYNCROGEAR	GWBP	NAV	NAV

Facility Name	Fac.ID	Clarifier #	Component	Manufacturer	Model	Serial	Positional ID or EI#
Southwest	190	6	Secondary Drive	EIMCO	NAV	NAV	NAV
Southwest	190	6	Final Drive (Bull Gear)	EIMCO	C60HT	NAV	NAV
Southwest	190	6	Sprocket & Chain	NAV	NAV	N/A	N/A
Southwest	190	6	Skimmer Arm Drive	NONE			
Southwest	190	6	Skim. Sproc. & Chain	NONE			
Southwest	190	7	Clarifier 160'	EIMCO 160ft	C3	23601-01-G	57510
Southwest	190	7	Primary Drive	SYNCROGEAR	GWBP	NAV	57509
Southwest	190	7	Secondary Drive	EIMCO	NAV	NAV	NAV
Southwest	190	7	Final Drive (Bull Gear)	EIMCO	C60HT	NAV	NAV
Southwest	190	7	Sprocket & Chain	NAV	NAV	N/A	N/A
Southwest	190	7	Skimmer Arm Drive	NONE			
Southwest	190	7	Skim. Sproc. & Chain	NONE			
Tidwell Timbers	498	1	Clarifier 60'	ENVIROQUIP 60ft	NAV	NAV	113573
Tidwell Timbers	498	1	Primary Drive	ENVIROQUIP	NAV	NAV	113581
Tidwell Timbers	498	1	Secondary Drive	ENVIROQUIP	NAV	NAV	113583
Tidwell Timbers	498	1	Final Drive (Bull Gear)	ENVIROQUIP	NAV	NAV	113582
Tidwell Timbers	498	1	Sprocket & Chain	NAV	NAV	N/A	N/A
Tidwell Timbers	498	1	Skimmer Arm Drive	NONE			
Tidwell Timbers	498	1	Skim. Sproc. & Chain	NONE			
Turkey Creek	201	1	Clarifier 120'	Weston 120ft	NAV	NAV	100546
Turkey Creek	201	1	Primary Drive	SM-CYCLO	VC1820	NAV	100475
Turkey Creek	201	1	Secondary Drive	SM-CYCLO	VCS19040	NAV	100476
Turkey Creek	201	1	Final Drive (Bull Gear)	Westech	NAV	NAV	NAV
Turkey Creek	201	1	Sprocket & Chain	NONE			
Turkey Creek	201	1	Skimmer Arm Drive	NONE			
Turkey Creek	201	1	Skim. Sproc. & Chain	NONE			
Turkey Creek	201	2	Clarifier 120'	Weston 120ft		NAV	100552
Turkey Creek	201	2	Primary Drive	SM-CYCLO	VC1820	NAV	100548
Turkey Creek	201	2	Secondary Drive	SM-CYCLO	NAV	NAV	100549
Turkey Creek	201	2	Final Drive (Bull Gear)	Westech	NAV	NAV	100550
Turkey Creek	201	2	Sprocket & Chain	NONE			
Turkey Creek	201	2	Skimmer Arm Drive	NONE			
Turkey Creek	201	2	Skim. Sproc. & Chain	NONE			
Turkey Creek	201	3	Clarifier 120'	Weston 120ft	NAV	NAV	100558
Turkey Creek	201	3	Primary Drive	SM-CYCLO	VC1820	NAV	100554
Turkey Creek	201	3	Secondary Drive	SM-CYCLO	NAV	NAV	100555

Facility Name	Fac.ID	Clarifier #	Component	Manufacturer	Model	Serial	Positional ID or EI#
Turkey Creek	201	3	Final Drive (Bull Gear)	Westech	NAV	NAV	100556
Turkey Creek	201	3	Sprocket & Chain	NONE			
Turkey Creek	201	3	Skimmer Arm Drive	NONE			
Turkey Creek	201	3	Skim. Sproc. & Chain	NONE			
Turkey Creek	201	4	Clarifier 120'	Weston 120ft	NAV	NAV	100564
Turkey Creek	201	4	Primary Drive	SM-CYCLO	VC1820	NAV	100560
Turkey Creek	201	4	Secondary Drive	SM-CYCLO	NAV	NAV	100561
Turkey Creek	201	4	Final Drive (Bull Gear)	Westech	NAV	NAV	100562
Turkey Creek	201	4	Sprocket & Chain	NONE			
Turkey Creek	201	4	Skimmer Arm Drive	NONE			
Turkey Creek	201	4	Skim. Sproc. & Chain	NONE			
UpperBraes	286	1	Clarifier 155'	Nat.Hydro Sys.155ft	NAV	NAV	62799
UpperBraes	286	1	Primary Drive	NORD	SK773-140 TC	NAV	62796
UpperBraes	286	1	Secondary Drive	Envirex (US Filter)	H Series	NAV	62797
UpperBraes	286	1	Final Drive (Bull Gear)	Envirex (US Filter)	H80A-LT	NAV	62798
UpperBraes	286	1	Sprocket & Chain	NAV	NAV	N/A	N/A
UpperBraes	286	1	Skimmer Arm Drive	NONE			
UpperBraes	286	1	Skim. Sproc. & Chain	NONE			
UpperBraes	286	2	Clarifier 155'	Nat.Hydro Sys.155ft		NAV	62804
UpperBraes	286	2	Primary Drive	NORD	SK773-140 TC	NAV	62801
UpperBraes	286	2	Secondary Drive	Envirex (US Filter)	H Series	NAV	62802
UpperBraes	286	2	Final Drive (Bull Gear)	Envirex (US Filter)	H80A-LT	NAV	62803
UpperBraes	286	2	Sprocket & Chain	NAV	NAV	N/A	N/A
UpperBraes	286	2	Skimmer Arm Drive	NONE			
UpperBraes	286	2	Skim. Sproc. & Chain	NONE			
UpperBraes	286	3	Clarifier 155'	Nat.Hydro Sys.155ft	NAV	NAV	62809
UpperBraes	286	3	Primary Drive	NORD	SK773-140 TC	NAV	62806
UpperBraes	286	3	Secondary Drive	Envirex (US Filter)	H Series	NAV	62807
UpperBraes	286	3	Final Drive (Bull Gear)	Envirex (US Filter)	H80A-LT	NAV	62808
UpperBraes	286	3	Sprocket & Chain	NAV	NAV	N/A	N/A
UpperBraes	286	3	Skimmer Arm Drive	NONE			
UpperBraes	286	3	Skim. Sproc. & Chain	NONE			
UpperBraes	286	4	Clarifier 155'	Nat.Hydro Sys.155ft	NAV	NAV	119060
UpperBraes	286	4	Primary Drive	NORD	SK773-140 TC	NAV	119062
UpperBraes	286	4	Secondary Drive	Envirex (US Filter)	H Series	NAV	119063
UpperBraes	286	4	Final Drive (Bull Gear)	Envirex (US Filter)	H80A-LT	NAV	119064

Facility Name	Fac.ID	Clarifier #	Component	Manufacturer	Model	Serial	Positional ID or EI#
			Gear)				
UpperBraes	286	4	Sprocket & Chain	NAV	NAV	N/A	N/A
UpperBraes	286	4	Skimmer Arm Drive	NONE			
UpperBraes	286	4	Skim. Sproc. & Chain	NONE			
W.District	237	1	Clarifier 90'	Westech 90ft	CLC25	NAV	no tag
W.District	237	1	Primary Drive	SM-CYCLO	CVVJ S4225DAY-6177(assm)	CA0015751	no tag
W.District	237	1	Secondary Drive	SM-CYCLO	NAV	NAV	no tag
W.District	237	1	Final Drive (Bull Gear)	Westech	60"	18750-B	no tag
W.District	237	1	Skimmer Arm Drive	Eurodrive	FA77R37DT71D4	860063355	no tag
W.District	237	1	Skim. Sproc. & Chain	NONE			
W.District	237	1	Upper Bearing	Westech	N/A	N/A	N/A
W.District	237	1	Main Bearing	Westech	N/A	N/A	N/A
W.District	237	2	Clarifier 95'	Westech 95ft	CLC15		no tag
W.District	237	2	Primary Drive	SM-CYCLO	CVVJ S4225DAY-6177(assm)	CA0015753	no tag
W.District	237	2	Secondary Drive	SM-CYCLO	NAV	NAV	no tag
W.District	237	2	Final Drive (Bull Gear)	Westech	60"	18750A-1	no tag
W.District	237	2	Skim. Sproc. & Chain	NONE			
W.District	237	2	Upper Bearing	Westech	N/A	N/A	N/A
W.District	237	2	Main Bearing	Westech	N/A	N/A	N/A
W.District	237	3	Clarifier 95'	Westech 95ft	NAV	CLC15	NAV
W.District	237	3	Primary Drive	SM-CYCLO	CVVJ S4225DAY-6177(assm)	CA0015752	no tag
W.District	237	3	Secondary Drive	SM-CYCLO	NAV	NAV	no tag
W.District	237	3	Final Drive (Bull Gear)	Westech	60"	18750A-2	no tag
W.District	237	3	Skim. Sproc. & Chain	NONE			
W.District	237	3	Upper Bearing	Westech	N/A	N/A	N/A
W.District	237	3	Main Bearing	Westech	N/A	N/A	N/A
W.District	237	4	Clarifier 180'	Enviroquip 180ft	NAV	N-7178-A	110043
W.District	237	4	Primary Drive	Winsmith	6MCTD	A666-7-1	110044
W.District	237	4	Secondary Drive	Enviroquip	NAV	NAV	110046
W.District	237	4	Final Drive (Bull Gear)	Enviroquip	80" P.D.	NAV	110047
W.District	237	4	Sprocket & Chain	Browning	N/A	N/A	N/A
W.District	237	4	Skimmer Arm Drive	NONE			
W.District	237	4	Skim. Sproc. & Chain	NONE			
W.District	237	5	Clarifier 180'	Enviroquip 180ft	NAV	N-7178-B	110049

Facility Name	Fac.ID	Clarifier #	Component	Manufacturer	Model	Serial	Positional ID or EI#
W.District	237	5	Primary Drive	Winsmith	6MCTD	NAV	110050
W.District	237	5	Secondary Drive	Enviroquip	NAV	NAV	110052
W.District	237	5	Final Drive (Bull Gear)	Enviroquip	80" P.D.	NAV	110053
W.District	237	5	Sprocket & Chain	Browning	NAV	N/A	N/A
W.District	237	5	Skimmer Arm Drive	NONE			
W.District	237	5	Skim. Sproc. & Chain	NONE			
W.District	237	6	Clarifier 180'	Enviroquip 180ft	NAV	N-7178-C	110055
W.District	237	6	Primary Drive	Winsmith	6MCTD	NAV	110056
W.District	237	6	Secondary Drive	Enviroquip	NAV	NAV	110058
W.District	237	6	Final Drive (Bull Gear)	Enviroquip	80" P.D.	NAV	110059
W.District	237	6	Sprocket & Chain	Browning	N/A	N/A	N/A
W.District	237	6	Skimmer Arm Drive	NONE			
W.District	237	6	Skim. Sproc. & Chain	NONE			
WCID#111	279	1	Clarifier 108'	EIMCO 108ft	C3	23720-01A	115758
WCID#111	279	1	Primary Drive	Sew Eurodrive	R60 DT80 N4	NAV	NAV
WCID#111	279	1	Secondary Drive	EIMCO	C40HT(assm)	NAV	62692
WCID#111	279	1	Final Drive (Bull Gear)	EIMCO	NAV	NAV	62693
WCID#111	279	1	Sprocket & Chain	NAV	NAV	N/A	N/A
WCID#111	279	1	Skimmer Arm Drive	NONE			
WCID#111	279	1	Skim. Sproc. & Chain	NONE			
WCID#111	279	2	Clarifier 108'	EIMCO 108ft	C3	23720-01B	115757
WCID#111	279	2	Primary Drive	Sew Eurodrive	R60 DT80 N4	NAV	NAV
WCID#111	279	2	Secondary Drive	WALKER	NAV	NAV	62696
WCID#111	279	2	Final Drive (Bull Gear)	WALKER	NAV	NAV	62697
WCID#111	279	2	Sprocket & Chain	NAV	NAV	N/A	N/A
WCID#111	279	2	Skimmer Arm Drive	NONE			
WCID#111	279	2	Skim. Sproc. & Chain	NONE			
WCID#47	225	1	Clarifier	Walker	NAV	NAV	110822
WCID#47	225	1	Primary Drive	NAV	NAV	NAV	110823
WCID#47	225	1	Secondary Drive	Walker	NAV	NAV	5696
WCID#47	225	1	Final Drive (Bull Gear)	Walker	NAV	NAV	5697
WCID#47	225	1	Sprocket & Chain	NAV	NAV	N/A	N/A
WCID#47	225	1	Skimmer Arm Drive	NONE			
WCID#47	225	1	Skim. Sproc. & Chain	NONE			
WCID#47	225	2	Clarifier			NAV	110824
WCID#47	225	2	Primary Drive		NAV	NAV	102368

Facility Name	Fac.ID	Clarifier #	Component	Manufacturer	Model	Serial	Positional ID or EI#
WCID#47	225	2	Secondary Drive	NAV	NAV	NAV	115288
WCID#47	225	2	Final Drive (Bull Gear)	NAV	NAV	NAV	102370
WCID#47	225	2	Sprocket & Chain	NONE			
WCID#47	225	2	Skimmer Arm Drive	NONE			
WCID#47	225	2	Skim. Sproc. & Chain	NONE			
WCID#47	225	3	Clarifier	Westech	CLC15	NAV	110521
WCID#47	225	3	Primary Drive	SM-CYLO	VC4195DA RC-0205A	F623424	110523
WCID#47	225	3	Secondary Drive	SM-CYLO	VC4195DA RC-0205A	F623424	110524
WCID#47	225	3	Final Drive (Bull Gear)	Westech	90"	4985A	110525
WCID#47	225	3	Pivot Bearing	SM-CYLO	N/A	N/A	N/A
WCID#47	225	3	Main Bearing	Westech	N/A	N/A	N/A
WCID#76	485	1	Clarifier 75'	SEW-EURODRIVE 75'	NAV	NAV	113612
WCID#76	485	1	Primary Drive	SEW-EURODRIVE	NAV	NAV	113611
WCID#76	485	1	Secondary Drive	SEW-EURODRIVE	NAV	NAV	113609
WCID#76	485	1	Final Drive (Bull Gear)	SEW-EURODRIVE	NAV	NAV	113610
WCID#76	485	1	Sprocket & Chain	NONE			
WCID#76	485	1	Skimmer Arm Drive	NONE			
WCID#76	485	1	Skim. Sproc. & Chain	NONE			
Westway	398	1	Clarifier 65'	EIMCO 65ft	C3	NAV	114405
Westway	398	1	Primary Drive	SYNCRGEGEAR	GWBP	NAV	NAV
Westway	398	1	Secondary Drive	EIMCO	C40LT(assem)	BAP0133-100A	114336
Westway	398	1	Final Drive (Bull Gear)	EIMCO	NAV	NAV	114337
Westway	398	1	Sprocket & Chain	NAV	NAV	N/A	N/A
Westway	398	1	Skimmer Arm Drive	NONE	NONE	NONE	NONE
Westway	398	1	Skim. Sproc. & Chain	NONE	NONE	NONE	NONE
WhiteOak	274	1	Clarifier 104'	Enviroquip 104ft	NAV	NAV	119780
WhiteOak	274	1	Primary Drive	Enviroquip	NAV	NAV	119782
WhiteOak	274	1	Secondary Drive	Enviroquip	15"	NAV	119784
WhiteOak	274	1	Final Drive (Bull Gear)	Enviroquip	60" P.D.C.I.	NAV	119783
WhiteOak	274	1	Sprocket & Chain	NAV	NAV	N/A	N/A
WhiteOak	274	1	Skimmer Arm Drive	NONE			
WhiteOak	274	1	Skim. Sproc. & Chain	NONE			
WhiteOak	274	2	Clarifier 110'	Enviroquip 110ft		NAV	119786
WhiteOak	274	2	Primary Drive	Enviroquip	NAV	NAV	119788
WhiteOak	274	2	Secondary Drive	Enviroquip	15"	NAV	119789

Facility Name	Fac.ID	Clarifier #	Component	Manufacturer	Model	Serial	Positional ID or EI#
WhiteOak	274	2	Final Drive (Bull Gear)	Enviroquip	60" P.D.C.I.	NAV	119790
WhiteOak	274	2	Sprocket & Chain	NAV	NAV	N/A	N/A
WhiteOak	274	2	Skimmer Arm Drive	NONE			
WhiteOak	274	2	Skim. Sproc. & Chain	NONE			
Willow Run	585	1	Clarifier	DAVIS Ind. Inc. (Davco)	NAV	NAV	116832
Willow Run	585	1	Primary Drive	GROVE	NAV	NAV	116834
Willow Run	585	1	Secondary Drive	NAV	NAV	NAV	116837
Willow Run	585	1	Final Drive (Bull Gear)	NAV	NAV	NAV	116838
Willow Run	585	1	Sprocket & Chain	NONE	NONE	NONE	NONE
Willow Run	585	1	Skimmer Arm Drive	NONE	NONE	NONE	NONE
Willow Run	585	1	Skim. Sproc. & Chain	NONE	NONE	NONE	NONE
Willowbrook	469	1	Clarifier 100'	100ft	NAV	NAV	111948
Willowbrook	469	1	Primary Drive	NAV	NAV	NAV	111951
Willowbrook	469	1	Secondary Drive	NAV	NAV	NAV	111952
Willowbrook	469	1	Final Drive (Bull Gear)	NAV	NAV	NAV	111953
Willowbrook	469	1	Sprocket & Chain	NAV	NAV	N/A	N/A
Willowbrook	469	1	Skimmer Arm Drive	NONE	NONE	NONE	NONE
Willowbrook	469	1	Skim. Sproc. & Chain	NONE	NONE	NONE	NONE

**SECTION C  
GENERAL TERMS & CONDITIONS**

**THE STATE OF TEXAS**  
  
**COUNTY OF HARRIS**

**BID #** \_\_\_\_\_  
**ORDINANCE #** \_\_\_\_\_  
**CONTRACT #** \_\_\_\_\_

**1.PARTIES**

**1.0 ADDRESS**

THIS AGREEMENT for **CLARIFIER MAINTENANCE, REPAIR AND REPLACEMENT SERVICES** ("Agreement") is made on the Countersignature Date between the **CITY OF HOUSTON, TEXAS** ("City"), a municipal corporation and \_\_\_\_\_ ("Contractor or Vendor"), a corporation doing business in Texas.

The initial addresses of the parties, which one party may change by giving written notice to the other party, are as follows:

**City**

City Purchasing Agent for the Directors  
of the Public Works & Engineering Department  
City of Houston  
P.O. Box 1562  
Houston, Texas 77251

**Contractor**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_

The Parties agree as follows:

**2.0 TABLE OF CONTENTS**

2.1 This Agreement consists of the following sections:

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EXHIBITS

- A. DEFINITIONS
- \* B. SCOPE OF SERVICES
- \*BB LOCATIONS
- \* C. EQUAL EMPLOYMENT OPPORTUNITY
- \* D. MWBE SUBCONTRACT TERMS
- \* E. DRUG POLICY COMPLIANCE AGREEMENT
- F. CERTIFICATION OF NO SAFETY IMPACT POSITIONS
- \* G. DRUG POLICY COMPLIANCE DECLARATION
- H. FEES AND COSTS
- \*I. CITY’S CONTRACTORS PAY OR PLAY PROGRAM

\* Note: These Exhibits shall be inserted into the Contract agreement at the time of Contract execution.

**3.0 PARTS INCORPORATED**

3.1 The above described sections and exhibits are incorporated into this Agreement.

**4.0 CONTROLLING PARTS**

4.1 If a conflict among the sections or exhibits arises, the Exhibits control over the Sections.

**5.0 DEFINITIONS**

5.1 Certain terms used in this Agreement are defined in Exhibit "A".

**6.0 SIGNATURES**

1.1 The Parties have executed this Agreement in multiple copies, each of which is an original.

ATTEST/SEAL: (if a corporation)  
WITNESS: (if not corporation)

\_\_\_\_\_

By: \_\_\_\_\_  
Name:  
Title:

By: \_\_\_\_\_  
Name:  
Title:  
Federal Tax ID Number: \_\_\_\_\_

ATTEST/SEAL:

CITY OF HOUSTON, TEXAS  
Signed by:

\_\_\_\_\_  
City Secretary

\_\_\_\_\_  
Mayor

APPROVED:

COUNTERSIGNED BY:

\_\_\_\_\_  
City Purchasing Agent

\_\_\_\_\_  
City Controller

DATE COUNTERSIGNED:

\_\_\_\_\_

This Contract has been reviewed as to form by the undersigned legal assistant and has been found to meet established Legal Department criteria. The Legal Department has not reviewed the content of these documents.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Legal Assistant

## II. DUTIES OF CONTRACTOR

### 1.0 SCOPE OF SERVICES

- 1.1 In consideration of the payments specified in this Agreement, Contractor shall provide all supervision, labor, tools, equipment, permits, parts, expendable items, material, and supplies necessary to perform the services described in Exhibit "B" & "BB."

### RELEASE

- 2.1 PRIME CONTRACTOR/SUPPLIER 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.

### INDEMNIFICATION

- 3.1 PRIME CONTRACTOR/SUPPLIER 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, ATTORNEY'S 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:
- 3.1.1 PRIME CONTRACTOR/SUPPLIER AND/OR ITS AGENTS', EMPLOYEES', OFFICERS', DIRECTORS', CONTRACTORS', OR SUBCONTRACTORS' (COLLECTIVELY IN NUMBERED PARAGRAPHS 2.1-3.2, "CONTRACTOR") ACTUAL OR ALLEGED NEGLIGENCE OR INTENTIONAL ACTS OR OMISSIONS;
  - 3.1.2 THE CITY'S AND PRIME CONTRACTOR/SUPPLIER ACTUAL OR ALLEGED CONCURRENT NEGLIGENCE, WHETHER CONTRACTOR IS IMMUNE FROM LIABILITY OR NOT; AND
  - 3.1.3 THE CITY'S AND PRIME CONTRACTOR/SUPPLIER ACTUAL OR ALLEGED STRICT PRODUCTS LIABILITY OR STRICT STATUTORY LIABILITY, WHETHER CONTRACTOR IS IMMUNE FROM LIABILITY OR NOT.
  - 3.1.4 PRIME CONTRACTOR/SUPPLIER SHALL DEFEND, INDEMNIFY, AND HOLD THE CITY HARMLESS DURING THE TERM OF THIS CONTRACT AND FOR FOUR YEARS AFTER THE CONTRACT TERMINATES. CONTRACTOR'S INDEMNIFICATION IS LIMITED TO \$500,000.00 PER OCCURRENCE. CONTRACTOR SHALL NOT INDEMNIFY THE CITY FOR THE CITY'S SOLE NEGLIGENCE.
- 3.2 CONTRACTOR SHALL REQUIRE ALL OF ITS SUBCONTRACTORS (AND THEIR SUBCONTRACTORS) TO RELEASE AND INDEMNIFY THE CITY TO THE SAME EXTENT AND IN SUBSTANTIALLY THE SAME FORM AS ITS RELEASE AND INDEMNITY TO THE CITY.

## **INDEMNIFICATION PROCEDURES**

- 4.1 **Notice of Claims.** If the City or Prime Contractor/Supplier 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:
- 4.1.1 a description of the indemnification event in reasonable detail, and
  - 4.1.2 the basis on which indemnification may be due and
  - 4.1.3 the anticipated amount of the indemnified loss.
- 4.2 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 Prime Contractor/Supplier is prejudiced, suffers loss, or incurs expense because of the delay.
- 4.3 **Defense of Claims**
- 4.3.1 **Assumption of Defense.** Prime Contractor/Supplier may assume the defense of the claim at its own expense with counsel chosen by it that is reasonably satisfactory to the City. Prime Contractor/Supplier shall then control the defense and any negotiations to settle the claim. Within 10 days after receiving written notice of the indemnification request, Prime Contractor/Supplier must advise the City as to whether or not it will defend the claim. If Prime Contractor/Supplier does not assume the defense, the City shall assume and control the defense, and all defense expenses constitute an indemnification loss.
  - 4.3.2 **Continued Participation.** If Prime Contractor/Supplier 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. Prime Contractor/Supplier 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 Prime Contractor/Supplier 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.

## **INSURANCE**

- 5.1 Contractor shall maintain in effect certain insurance coverage and shall furnish certificates of insurance, in duplicate form, before beginning its performance under this Agreement. 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 in the following amounts:
- 5.1.1 Commercial General Liability insurance including Contractual Liability insurance:  
\$500,000 per occurrence; \$1,000,000 aggregate
  - 5.1.2 Workers' Compensation including Broad Form All States endorsement:  
Statutory amount

5.1.3 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

5.1.4 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)

5.2 All insurance policies must require on their face, or by endorsement, that the insurance carrier waives any rights of subrogation against the City, and that it shall give 30 days written notice to the City before they may be canceled. 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 or sole discretion, may:

5.2.1 immediately suspend Contractor from any further performance under this Agreement and begin procedures to terminate for default, or

5.2.2 purchase the required insurance with City funds and deduct the cost of the premiums from amounts due to Contractor under this Agreement.

## **WARRANTIES**

6.1 Contractor represents and warrants that it shall perform all work in a good and workmanlike manner, meeting the standards of quality prevailing in Harris County, Texas for work of this kind. Contractor shall perform all work using trained and skilled persons having substantial experience performing the work required under this Agreement.

6.2 With respect to any parts and goods furnished by it, Contractor warrants:

6.2.1 that all items are free of defects in title, material, and workmanship,

6.2.2 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,

6.2.3 that each replacement item is new in accordance with original equipment manufacturer's specifications, and of a quality at least as good as the quality of the item which it replaces (when the replaced item was new), and

6.2.4 that no item or its use infringes any patent, copyright, or proprietary right.

## **LICENSES AND PERMITS**

7.1 Contractor shall obtain and pay for all licenses, permits, and certificates required by any statute, ordinance, rule, or regulation.

## **COMPLIANCE WITH EQUAL OPPORTUNITY ORDINANCE**

8.1 Contractor shall comply with the City's Equal Employment Opportunity Ordinance as set out in Exhibit "C".

## **MWBE COMPLIANCE**

9.1 Contractor shall comply with the City's Minority and Women Business Enterprise ("MWBE") programs as set out in Chapter 15, Article V of the City of Houston Code of Ordinances. Contractor shall make good faith efforts to award subcontracts or supply agreements in at least **11%** of the value of this Agreement to MWBEs. Contractor acknowledges that it has reviewed

the requirements for good faith efforts on file with the City's Affirmative Action Division and will comply with them.

- 9.2 Contractor shall require written subcontracts with all MWBE subcontractors and shall submit all disputes with MWBEs to binding arbitration in Houston, Texas if directed to do so by the Affirmative Action Division Director. MWBE subcontracts must contain the terms set out in Exhibit "D". If 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, the subcontract must also be signed by the attorneys of the respective parties.

### **DRUG ABUSE DETECTION AND DETERRENCE**

- 10.1 It is the policy of the City to achieve a drug-free workforce and workplace. The manufacture, distribution, dispensation, possession, sale, or use of illegal drugs or alcohol by contractors while on City Premises is prohibited. Contractor shall comply with all the requirements and procedures set forth in the Mayor's Drug Abuse Detection and Deterrence Procedures for Contractors, Executive Order No. 1-31 ("Executive Order"), which is incorporated into this Agreement and is on file in the City Secretary's Office.
- 10.2 Before the City signs this Agreement, Contractor shall file with the Contract Compliance Officer for Drug Testing ("CCODT"):
- 10.2.1 a copy of its drug-free workplace policy,
  - 10.2.2 the Drug Policy Compliance Agreement substantially in the form set forth in Exhibit "E", together with a written designation of all safety impact positions, and
  - 10.2.3 if applicable (e.g. no safety impact positions), the Certification of No Safety Impact Positions, substantially in the form set forth in Exhibit "F".
- 10.3 If Contractor files a written designation of safety impact positions with its Drug Policy Compliance Agreement, it also shall file every 6 months during the performance of this Agreement or on completion of this Agreement if performance is less than 6 months, a Drug Policy Compliance Declaration in a form substantially similar to Exhibit "G". Contractor shall submit the Drug Policy Compliance Declaration to the CCODT within 30 days of the expiration of each 6-month period of performance and within 30 days of completion of this Agreement. The first 6-month period begins to run on the date the City issues its Notice to Proceed or if no Notice to Proceed is issued, on the first day Contractor begins work under this Agreement.
- 10.4 Contractor also shall file updated designations of safety impact positions with the CCODT if additional safety impact positions are added to Contractor's employee work force.
- 10.5 Contractor shall require that its subcontractors comply with the Executive Order, and Contractor shall secure and maintain the required documents for City inspection.

### **ENVIRONMENTAL LAWS**

- 11.1 Contractor shall comply with all rules, regulations, statutes, or orders of the Environmental Protection Agency ("EPA"), the Texas Commission on Environmental Quality ("TCEQ"), and any other governmental agency with the authority to promulgate environmental rules and regulations ("Environmental Laws"). Contractor shall promptly reimburse the City for any fines or penalties levied against the City because of Contractor's failure to comply.
- 11.2 Contractor shall not possess, use, generate, release, discharge, store, dispose of, or transport any Hazardous Materials on, under, in, above, to, or from the site except in strict compliance with the Environmental Regulations. "Hazardous Materials" means any substances, materials, or wastes that are or become regulated as hazardous or toxic substances under any applicable federal, state, or local laws, regulations, ordinances, or orders. Contractor shall not deposit oil,

gasoline, grease, lubricants or any ignitable or hazardous liquids, materials, or substances in the City's storm sewer system or sanitary sewer system or elsewhere on City Property in violation of the Environmental Laws.

### **CITY'S CONTRACTOR PAY OR PLAY PROGRAM**

- 12.1 The requirement and terms of the City of Houston Pay or Play Policy, as set out in Executive Order 1-7, are incorporated into this Agreement for all purposes. Contractor has reviewed Executive Order 1-7 and shall comply with its terms and conditions as they are set out at the time of City Council approval of this Agreement.

### **CONTRACTOR'S PERFORMANCE**

- 13.1 Contractor shall make citizen satisfaction a priority in providing services under this Agreement. Contractor shall train its employees to be customer service-oriented and to positively and politely interact with citizens when performing contract services. Contractor's employees shall be clean, courteous, efficient, and neat in appearance and committed to offering the highest quality of service to the public. If, in the Director's opinion, Contractor is not interacting in a positive and polite manner with citizens, he or she shall direct Contractor to take all remedial steps to conform to these standards.

### **PAYMENT OF EMPLOYEES AND SUBCONTRACTORS**

- 14.1 Contractor shall make timely payments in accordance with applicable state and federal law to all persons and entities supplying labor, materials or equipment for the performance of this Agreement including Contractor's employees.
- 14.2 Failure of Contractor to pay its employees as required by law shall constitute a default under this contract for which the Contractor and its surety shall be liable on Contractor's performance bond if Contractor fails to cure the default as provided under this Agreement.
- 14.3 Contractor shall defend and indemnify the City from any claims or liability arising out of Contractor's failure to pay its subcontractors as required by law. Contractor shall submit disputes relating to payment of M/WBE subcontractors to arbitration in the same manner as any other disputes under the M/WBE subcontract.

## **III. DUTIES OF CITY**

### **PAYMENT TERMS**

- 1.1 The City shall pay and Contractor shall accept fees provided in Exhibit "H" for all services rendered and the Deliverables furnished by Contractor. The fees must only be paid from Allocated Funds, as provided below.

### **TAXES**

- 2.1 The City is exempt from payment of Federal Excise and Transportation Tax and Texas Limited Sales and Use Tax. Contractor's invoices to the City must not contain assessments of any of these taxes. The Director will furnish the City's exemption certificate and federal tax identification number to Contractor if requested.

**METHOD OF PAYMENT**

- 3.1 The City shall pay Contractor on the basis of invoices submitted by Contractor and approved by the Director, showing the specific tasks completed in the preceding month and the corresponding prices. The City shall make payments to Contractor at its address for notices within 30 days of receipt of an approved invoice.

**METHOD OF PAYMENT - DISPUTED PAYMENTS**

- 4.1 If the City disputes any items in an invoice Contractor submits for any reason, including lack of supporting documentation, the Director shall temporarily delete the disputed item and pay the remainder of the invoice. The Director shall promptly notify Contractor of the dispute and request remedial action. After the dispute is settled, Contractor shall include the disputed amount on a subsequent regularly scheduled invoice or on a special invoice for the disputed item only.

**LIMIT OF APPROPRIATION**

- 5.1 The City's duty to pay money to Contractor under this Agreement is limited in its entirety by the provisions of this Section.
- 5.2 In order to comply with Article II, Sections 19 and 19a of the City's Charter and Article XI, Section 5 of the Texas Constitution, the City has appropriated and allocated the sum of \$\_\_\_\_\_ to pay money due under this Agreement (the "Original Allocation"). The executive and legislative officers of the City, in their discretion, may allocate supplemental funds for this Agreement, but they are not obligated to do so. Therefore, the parties have agreed to the following procedures and remedies:
- 5.3 The City makes a Supplemental Allocation by issuing to Contractor a Service Release Order, or similar form approved by the City Controller, containing the language set out below. When necessary, the Supplemental Allocation shall be approved by motion or ordinance of City Council.

**NOTICE OF SUPPLEMENTAL ALLOCATION OF FUNDS**

By the signature below, the City Controller certifies that, upon the request of the responsible director, the supplemental sum set out below has been allocated for the purposes of the Agreement out of funds appropriated for this purpose by the City Council of the City of Houston. This supplemental allocation has been charged to such appropriation.

- 5.4 The Original Allocation plus all supplemental allocations are the Allocated Funds. The City shall never be obligated to pay any money under this Agreement in excess of the Allocated Funds. Contractor must assure itself that sufficient allocations have been made to pay for services it provides. If Allocated Funds are exhausted, Contractor's only remedy is suspension or termination of its performance under this Agreement and it has no other remedy in law or in equity against the City and no right to damages of any kind.

## **CHANGES**

- 6.1 At any time during the Agreement Term, the City Purchasing Agent or Director may issue a Change Order to increase or decrease the scope of services or change plans and specifications, as he or she may find necessary to accomplish the general purposes of this Agreement. 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 extra work.
- 6.2 The City Purchasing Agent or Director will issue the Change Order in substantially the following form:

### **CHANGE ORDER**

TO: [Name of Contractor]  
FROM: City of Houston, Texas (the "City")  
DATE: [Date of Notice]  
SUBJECT: Change Order under the Agreement between the City and [Name of Contractor] countersigned by the City Controller on [Date of countersignature of the Agreement]

Subject to all terms and conditions of the Agreement, the City requests that Contractor provide the following:

[Here describe the additions to or changes to the equipment or services and the Change Order Charges applicable to each.]

Signed:  
[Signature of City Purchasing Agent or Director]

- 6.3 The City Purchasing Agent or Director may issue more than one Change Order, subject to the following limitations:
- 6.3.1 Council expressly authorizes the City Purchasing Agent or Director to approve a Change Order of up to \$50,000. A Change Order of more than \$50,000 over the approved contract amount must be approved by the City Council.
- 6.3.2 If a Change Order describes items that Contractor is otherwise required to provide under this Agreement, the City is not obligated to pay any additional money to Contractor.
- 6.3.3 The total of all Change Orders issued under this section may not increase the Original Agreement amount by more than 25%.
- 6.4 The City Purchasing Agent or Director may issue more than one Change Order, subject to the following limitations:
- 6.4.1 Council expressly authorizes the City Purchasing Agent or Director to approve a Change Order of up to \$50,000. A Change Order of more than \$50,000 over the approved contract amount must be approved by the City Council.

- 6.4.2 If a Change Order describes items that Contractor is otherwise required to provide under this Agreement, the City is not obligated to pay any additional money to Contractor.
- 6.4.3 The total of all Change Orders issued under this section may not increase the Original Agreement amount by more than 25%.
- 6.5 Whenever Contractor receives a Change Order, Contractor shall furnish all material, equipment, and personnel necessary to perform the work described in the Change Order. Contractor shall complete the work within the time prescribed. If no time for completion is prescribed, Contractor shall complete the work within a reasonable time. If the work described in any Change Order causes an unavoidable delay in any other work Contractor is required to perform under this Agreement, Contractor may request a time extension for the completion of the work. The City Purchasing Agent's or Director's decision regarding a time extension is final.
- 6.6 A product or service provided under a Change Order is subject to inspection, acceptance, or rejection in the same manner as the work described in the Original Agreement, and is subject to the terms and conditions of the Original Agreement as if it had originally been a part of the Agreement.
- 6.7 Change Orders are subject to the Allocated Funds provisions of this Agreement.

#### **IV. TERM AND TERMINATION**

##### **CONTRACT TERM**

- 1.1 This Agreement is effective on the Countersignature Date and expires three (3) years after the starting date specified in the Notice to Proceed unless sooner terminated according to the terms of this Agreement.

##### **NOTICE TO PROCEED**

- 2.1 Contractor shall begin performance under this Agreement on the date specified in a Notice to Proceed from the City Purchasing Agent.

##### **RENEWALS**

- 3.1 Upon expiration of the Initial Term, and so long as the City makes sufficient supplemental allocations, this Agreement will be automatically renewed for two successive one-year terms on the same terms and conditions. If the Director/Chief of the City Department elects not to renew this Agreement, the City Purchasing Agent shall notify Contractor in written of non-renewal at least 30 days before the expiration of the then current term.

##### **TIME EXTENSIONS**

- 4.1 If Department requests an extension of time to complete its performance, then the City Purchasing Agent may, in his or her sole discretion, extend the time so long as the extension does not exceed 90 days. The extension must be in writing but does not require amendment of this Agreement. Contractor is not entitled to damages for delay(s) regardless of the cause of the delay(s).

## **TERMINATION FOR CONVENIENCE BY THE CITY**

- 5.1 The City Purchasing Agent or Director may terminate this Agreement at any time by giving 30 days written notice to Contractor. The City's right to terminate this Agreement for convenience is cumulative of all rights and remedies, which exist now or in the future.
- 5.2 On receiving the notice, Contractor shall, unless the notice directs otherwise, immediately discontinue all services under this Agreement and cancel all existing orders and subcontracts that are chargeable to this Agreement. As soon as practicable after receiving the termination notice, Contractor shall submit an invoice showing in detail the services performed under this Agreement up to the termination date. The City shall then pay the fees to Contractor for services actually performed, but not already paid for, in the same manner as prescribed in Section III unless the fees exceed the allocated funds remaining under this Agreement.
- 5.3 TERMINATION OF THIS AGREEMENT AND RECEIPT OF PAYMENT FOR SERVICES RENDERED ARE CONTRACTOR'S ONLY REMEDIES FOR THE CITY'S TERMINATION FOR CONVENIENCE, WHICH DOES NOT CONSTITUTE A DEFAULT OR BREACH OF THIS AGREEMENT. CONTRACTOR WAIVES ANY CLAIM (OTHER THAN ITS CLAIM FOR PAYMENT AS SPECIFIED IN THIS SECTION), IT MAY HAVE NOW OR IN THE FUTURE FOR FINANCIAL LOSSES OR OTHER DAMAGES RESULTING FROM THE CITY'S TERMINATION FOR CONVENIENCE.

## **TERMINATION FOR CAUSE BY CITY**

- 6.1 If Contractor defaults under this Agreement, the City Purchasing Agent or Director may either terminate this Agreement or allow Contractor to cure the default as provided below. The City's right to terminate this Agreement for Contractor's default is cumulative of all rights and remedies, which exist now or in the future. Default by Contractor occurs if:
  - 6.1.1 Contractor fails to perform any of its duties under this Agreement;
  - 6.1.2 Contractor becomes insolvent;
  - 6.1.3 all or a substantial part of Contractor's assets are assigned for the benefit of its creditors; or
  - 6.1.4 a receiver or trustee is appointed for Contractor.
- 6.2 If a default occurs, the City Purchasing Agent or Director may, but is not obligated to, deliver a written notice to Contractor describing the default and the termination date. The City Purchasing Agent or Director, at his or her sole option, may extend the termination date to a later date. If the City Purchasing Agent or Director allows Contractor to cure the default and Contractor does so to the City Purchasing Agent's or Director's satisfaction before the termination date, then the termination is ineffective. If Contractor does not cure the default before the termination date, then the City Purchasing Agent or Director may terminate this Agreement on the termination date, at no further obligation of the City.
- 6.3 To effect final termination, the City Purchasing Agent or Director must notify Contractor in writing. After receiving the notice, Contractor shall, unless the notice directs otherwise, immediately discontinue all services under this Agreement, and promptly cancel all orders or subcontracts chargeable to this Agreement.

## **TERMINATION FOR CAUSE BY CONTRACTOR**

- 7.1 Contractor may terminate its performance under this Agreement only if the City defaults and fails to cure the default after receiving written notice of it. Default by the City occurs if the City fails to perform one or more of its material duties under this Agreement. If a default occurs and Contractor wishes to terminate the Agreement, then Contractor must deliver a written notice to the Director describing the default and the proposed termination date.
- 7.2 The date must be at least 30 days after the Director receives notice. Contractor, at its sole option, may extend the proposed termination date to a later date. If the City cures the default before the proposed termination date, then the proposed termination is ineffective. If the City does not cure the default before the proposed termination date, then Contractor may terminate its performance under this Agreement on the termination date.

## **REMOVAL OF CONTRACTOR OWNED EQUIPMENT AND MATERIALS**

- 8.1 Upon expiration, or termination of this Agreement, Contractor is permitted ten (10) days within which to remove contractor-owned material and equipment from the City's premises. The City shall make such material and equipment readily available to Contractor. The time period may be extended upon approval by the Director. The City reserves the right to deny any extension of time.

## **V. MISCELLANEOUS**

### **INDEPENDENT CONTRACTOR**

- 1.1 Contractor shall perform its obligations under this Agreement as an independent contractor and not as an employee of the City.

### **FORCE MAJEURE**

- 2.1 Timely performance by both parties is essential to this Agreement. However, neither party is liable for delays or other failures to perform its obligations under this Agreement to the extent the delay or failure is caused by Force Majeure. Force Majeure means fires, floods, explosions, and other acts of God, war, terrorist acts, riots, court orders, and the acts of superior governmental or military authority.
- 2.2 This relief is not applicable unless the affected party does the following:
  - 2.2.1 uses due diligence to remove the Force Majeure as quickly as possible, and
  - 2.2.2 provides the other party with prompt written notice of the cause and its anticipated effect.
- 2.3 The City may perform contract functions itself or contract them out during periods of Force Majeure. Such performance does not constitute a default or breach of this Agreement by the City.
- 2.4 If the Force Majeure continues for more than 30 days, the City Purchasing Agent or Director may terminate this Agreement by giving 30 days written notice to Contractor. This termination is not a default or breach of this Agreement. CONTRACTOR WAIVES ANY CLAIM IT MAY HAVE FOR FINANCIAL LOSSES OR OTHER DAMAGES RESULTING FROM THE TERMINATION EXCEPT FOR AMOUNTS DUE UNDER THE AGREEMENT AT THE TIME OF THE TERMINATION.

## **SEVERABILITY**

- 3.1 If any part of this Agreement is for any reason found to be unenforceable, all other parts remain enforceable unless the result materially prejudices either party.

## **ENTIRE AGREEMENT**

- 4.1 This Agreement merges the prior negotiations and understandings of the Parties and embodies the entire agreement of the Parties. No other agreements, assurances, conditions, covenants (express or implied), or other terms of any kind exist between the Parties regarding this Agreement.

## **WRITTEN AMENDMENT**

- 5.1 Unless otherwise specified elsewhere in this Agreement, this Agreement may be amended only by written instrument executed on behalf of the City (by authority of an ordinance duly adopted by the City Council) and Contractor. The Director is only authorized to perform the functions specifically delegated to him or her in this Agreement.

## **APPLICABLE LAWS**

- 6.1 This Agreement is subject to the laws of the State of Texas, the City Charter and Ordinances, the laws of the federal government of the United States, and all rules and regulations of any regulatory body or officer having jurisdiction.
- 6.2 Venue for any litigation relating to this Agreement is Harris County, Texas.

## **NOTICES**

- 7.1 All notices required or permitted by this Agreement must be in writing and are deemed delivered on the earlier of the date actually received or the third day following: (1) deposit in a United States Postal Service post office or receptacle; (2) with proper postage (certified mail, return receipt requested); and (3) addressed to the other party at the address set out in the preamble of this Agreement or at such other address as the receiving party designates by proper notice to the sending party.

## **NON-WAIVER**

- 8.1 If either party fails to require the other to perform a term of this Agreement, that failure does not prevent the party from later enforcing that term and all other terms. If either party waives the other's breach of a term, that waiver does not waive a later breach of this Agreement.
- 8.2 An approval by the Director, or by any other employee or agent of the City, of any part of Contractor's performance does not waive compliance with this Agreement or establish a standard of performance other than that required by this Agreement and by law. The Director is not authorized to vary the terms of this Agreement.

## **INSPECTIONS AND AUDITS**

- 9.1 City representatives may perform, or have performed, (1) audits of Contractor's books and records, and (2) inspections of all places where work is undertaken in connection with this Agreement. Contractor shall keep its books and records available for this purpose for at least 3 years after this Agreement terminates. This provision does not affect the applicable statute of limitations.

## **ENFORCEMENT**

- 10.1 The City Attorney or his or her designee may enforce all legal rights and obligations under this Agreement without further authorization. Contractor shall provide to the City Attorney all documents and records that the City Attorney requests to assist in determining Contractor's compliance with this Agreement, with the exception of those documents made confidential by federal or State law or regulation.

## **AMBIGUITIES**

- 11.1 If any term of this Agreement is ambiguous, it shall not be construed for or against any party on the basis that the party did or did not write it.

## **SURVIVAL**

- 12.1 Contractor shall remain obligated to the City under all clauses of this Agreement that expressly or by their nature extend beyond the expiration or termination of this Agreement, including but not limited to, the indemnity provisions.

## **13.0 PARTIES IN INTEREST**

- 13.1 This Agreement does not bestow any rights upon any third party, but binds and benefits the City and Contractor only.

## **SUCCESSORS AND ASSIGNS**

- 14.1 This Agreement binds and benefits the Parties and their legal successors and permitted assigns; however, this provision does not alter the restrictions on assignment and disposal of assets set out in the following paragraph. This Agreement does not create any personal liability on the part of any officer or agent of the City.

## **BUSINESS STRUCTURE AND ASSIGNMENTS**

- 15.1 Contractor shall not assign this Agreement at law or otherwise or dispose of all or substantially all of its assets without the City Purchasing Agent's or Director's prior written consent. Nothing in this clause, however, prevents the assignment of accounts receivable or the creation of a security interest under Section 9.406(c) of the Texas Business & Commerce Code. In the case of such an assignment, Contractor shall immediately furnish the City with proof of the assignment and the name, telephone number, and address of the Assignee and a clear identification of the fees to be paid to the Assignee.
- 15.2 Contractor shall not delegate any portion of its performance under this Agreement without the City Purchasing Agent's or Director's prior written consent.

## **16.0 REMEDIES CUMULATIVE**

- 16.1 Unless otherwise specified elsewhere in this Agreement, the rights and remedies contained in this Agreement are not exclusive, but are cumulative of all rights and remedies which exist now or in the future. Neither party may terminate its duties under this Agreement except in accordance with its provisions.

## **CONTRACTOR DEBT**

- 17.1 If Contractor, at any time during the term of this agreement, incurs a debt, as the word is defined in Section 15-122 of the Houston City Code of Ordinances, it shall immediately notify the City Controller in writing. If the City Controller becomes aware that Contractor has incurred a debt, she shall immediately notify contractor in writing. If Contractor does not pay the debt within 30 days of either such notification, the City Controller may deduct funds in an amount equal to the debt from any payments owed to Contractor under this agreement, and Contractor waives any recourse therefore.

## **EXHIBIT A DEFINITIONS**

As used in this Agreement, the following terms have the meanings set out below:

"Agreement" means this contract between the Parties, including all exhibits, change orders, and any written amendments authorized by City Council and Contractor.

"City" is defined in the preamble of this Agreement and includes its successors and assigns.

"City Purchasing Agent" is defined as the person or duly authorized successor, authorized in writing to act for the City. The term includes, except as otherwise provided in this Contract, the authorized representative of the City Purchasing Agent acting within the limits of delegated authority.

"Contract Award Notice" means the official notification substantiated by the Notice to Proceed issued by the City Purchasing Agent to the Contractor.

"Contract Charges" means charges that accrue during a given month as defined in Article III.

"Contract Term" is defined in Article IV.

"Contractor" is defined in the preamble of this Agreement and includes its successors and assigns.

"Countersignature Date" means the date this agreement is countersigned by the City Controller.

"Director" mean the Directors/Chiefs of each of the Departments or the City Purchasing Agent for the City, or the person he or she designates.

"Effective Date" is defined as date contract is countersigned by the City Controller.

"Governing Body" means the Mayor and City Council of the City of Houston.

"Hazardous Materials" is defined in Article II (Environmental Laws).

"Notice to Proceed" means a written communication from the City Purchasing Agent to Contractor instructing Contractor to begin performance.

"Parties" mean all the entities set out in the Preamble who are bound by this Agreement.

**EXHIBIT B**  
**SCOPE OF SERVICES**

(To be inserted by the City at the time of Contract execution)

**EXHIBIT BB  
LOCATIONS**

(To be inserted by the City at the time of Contract execution)

**EXHIBIT C  
EQUAL EMPLOYMENT OPPORTUNITY**

(To be inserted by the City at the time of Contract execution)

**EXHIBIT D  
MWBE SUBCONTRACT TERMS**

(To be inserted by the City at the time of Contract execution)

**EXHIBIT E**  
**DRUG POLICY COMPLIANCE AGREEMENT**

(To be inserted by the City at the time of Contract execution)

**EXHIBIT F  
CONTRACTOR'S CERTIFICATION OF NO SAFETY IMPACT POSITIONS  
IN PERFORMANCE OF A CITY CONTRACT**

I, \_\_\_\_\_  
**(Name - Print/Type)** **(Title)**

as an owner or officer of \_\_\_\_\_ (Contractor) have authority to bind the Contractor with respect to its bid, and I hereby certify that Contractor has no employee safety impact positions as defined in §5.18 of Executive Order No. 1-31 that will be involved in performing this City Contract. Contractor agrees and covenants that it shall immediately notify the City's Director of Personnel if any safety impact positions are established to provide services in performing this City Contract.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Contractor Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

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**CONTRACTOR'S CERTIFICATION OF NON-APPLICATION OF  
CITY OF HOUSTON DRUG DETECTION AND DETERRENCE PROCEDURES  
FOR CONTRACTORS**

I, \_\_\_\_\_  
**(Name - Print/Type)**

as an owner or officer of \_\_\_\_\_ (Contractor) have authority to bind the Contractor with respect to its bid, and I hereby certify that Contractor has fewer than fifteen (15) employees during any 20-week period during a calendar year and also certify that Contractor has no employee safety impact positions as defined in §5.18 of Executive Order No. 1-31 that will be involved in performing this City Contract. Safety impact position means a Contractor's employment position involving job duties that if performed with inattentiveness, errors in judgment, or diminished coordination, dexterity, or composure may result in mistakes that could present a real and/or imminent threat to the personal health or safety of the employee, co-workers, and/or the public.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Contractor Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

**EXHIBIT G  
DRUG POLICY COMPLIANCE DECLARATION**

(To be inserted by the City at the time of Contract execution)

**EXHIBIT H  
FEES AND COSTS**

(To be inserted by the City at the time of Contract execution)

**EXHIBIT I  
PAY OR PLAY**

(To be inserted by the City at the time of Contract execution)