CITY OF HOUSTON

INVITATION TO BID

Issued: *April 19*, 2013

Bid Opening:
Sealed bids, in duplicate, will be received by the City Secretary of the City of Houston, in the City Hall Annex, Public Level, 900 Bagby, Houston, Texas 77002 until **10:30 A.M.** Thursday, ***May 16*, 2013,** and all bids will be opened and publicly read in the City Council Chamber, City Hall Annex, Public Level, 900 Bagby at 11:00 A.M. on that date for the purchase of:

REMOVE EXISTING OIL CIRCUIT BREAKERS AND ASSOCIATED EQUIPMENT AND FURNISH AND INSTALL NEW GAS CIRCUIT BREAKERS AND ASSOCIATED EQUIPMENT FOR THE PUBLIC WORKS AND ENGINEERING DEPARTMENT
Bid No. S50-C24542
NIGP Code: 285-14

Buyer:
Questions regarding this solicitation should be addressed to Arturo Lopez, Senior Procurement Specialist**, at 832-393-8731or e-mail to arturo.lopez@houstontx.gov.**

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.

Prebid Conference:
A Pre-Bid Conference will be held for all Prospective Bidders in the Strategic Purchasing Division, Concourse Level (Basement), Conference Room #1, City Hall, 901 Bagby, at ***10:00 a.m. on Wednesday, May 1, 2013. The site visits will be scheduled at the pre-bid conference.***

All Prospective Bidders are urged to be present. It is the bidder's responsibility to ensure that they have secured and thoroughly reviewed all aspects of 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 www.houstontx.gov/purchasing/index.html. By registering and downloading this solicitation document, all updates to this solicitation document will be automatically forwarded via e-mail to any 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:

A. OFFER
B. SCOPE OF WORK/SPECIFICATIONS
C. GENERAL, SUPPLEMENTARY CONDITIONS AND BOND FORMS

*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 solicitation 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 signature page, which must be signed by a company official authorized to bind the company and a 10% Bid Bond.**

SECTION A

FORMAL ONE-TIME BID
REMOVE EXISTING OIL CIRCUIT BREAKERS AND ASSOCIATED EQUIPMENT AND FURNISH AND INSTALL NEW GAS CIRCUIT BREAKERS AND ASSOCIATED EQUIPMENT
FOR THE PUBLIC WORKS AND ENGINEERING DEPARTMENT
Bid No. S50-C24542
NIGP Code: 285-14

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

The undersigned hereby offers to provide services necessary to **Remove Existing Oil Circuit Breakers and Associated Equipment and Furnish and Install New Gas Circuit Breakers and Associated Equipment at the 69th Street Wastewater Treatment Plant, located at 2525 S/SGT Macario Garcia Drive, Southeast Water Purification Plant, located at 3100 Genoa Red Bluff and the East Water Purification Plant, located at 2300 Federal Road, Houston, Texas for the Public Works and Engineering Department.** F.O.B. destination point Houston, Texas, in accordance with the City's Specifications and General Terms & Conditions and/or samples/drawings provided herein. When issued by the City of Houston, Letters of Clarification shall automatically become part of this bid document and shall supersede any previous specifications or provisions in conflict with Letters of Clarification. It is the responsibility of the bidder to ensure that it has obtained all such letters. By submitting a bid on this project, bidder shall be deemed to have received all Letters of Clarification and to have incorporated them into the bid.

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

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

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

SECTION A

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

Table 1
Affidavit of Ownership
Fair Campaign Ordinance
Statement of Residence
Conflict of Interest Questionnaire
Pay or Play Contract Compliance Acknowledgement Form 1a
Contractor References
10% Bid Bond

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

Table 2
Formal Instructions for Bid Terms
Drug Forms
Insurance Certificates Over $50,000.00 / Insurance Endorsements
OCP Insurance Certificate Over $100,000.00
Pay or Play Form 2 / Certification of Agreement to Comply
Pay or Play Form 3 / List of Subcontractors
Performance, Maintenance and Statutory Payment Bonds
2013 Engineering Construction Wage Decision
2013 Building Construction Wage Decision

Note:

1. Questions concerning the Bid should be submitted in writing to: City of Houston, Strategic Purchasing Division, 901 Bagby, Room B506, Houston, TX 77002, Attn: Arturo Lopez or via fax: 832-393-8759 or via email (preferred method) to arturo.lopez@cityofhouston.net no later than ***4:00 PM, Monday, May 6, 2013.***

2. Although it is the intent of the City to award one contract as results of this invitation to bid, the City reserves the right to award by line item/group.

PERMITS:
Successful Contractor shall be responsible for securing any and all permits for proposed work. Any fee charged for these permits should be the responsibility of the Contractor and not the City of Houston.

CITY BUILDING CODES:
All work performed or equipment installed shall be in strict accordance with the City of Houston Building Codes. The Contractor will immediately correct any deficiencies discovered during work or after completion. Failure to correct deficiencies will result in the City having corrections made at the Contractor's expense.

BID BOND:
The bidder shall be required to provide and submit with its bid a Bid Bond in the amount of 10% of the total amount. The Bid Bond shall be in the same form as that distributed by the City, and attached hereto, all duly executed by this Bidder (as "Principal") and by a corporate surety company licensed to do business in the State of Texas, and if the amount of the bond is greater than $100,000.00 the surety must hold a certificate of authority from the United States Secretary of the Treasury, or a Cashier's or a Certified check in a like amount. Company or personal checks are not acceptable.

PERFORMANCE BOND and PAYMENT BOND:
The successful Contractor(s) shall be required to provide a Performance and Payment Bond in the total amount (100%) of the Contract, if the award is in excess of $25,000.00.

The Performance and/or Payment Bond shall be in the same form as that distributed by the City, and attached hereto, all duly executed by this bidder (as "Principal") and by an incorporated surety company licensed to do business in the State of Texas. If the amount of the bond is greater than $100,000.00 the surety must hold a certificate of authority from the United States Secretary of the Treasury.

The Contractor(s) shall be required to provide a Performance and/or Payment Bond as outlined above, which will be delivered to the City Purchasing Agent of the City, on or before the tenth (10th) day following the day the bidder receives notice from the City.

MAINTENANCE BOND:
The Contractor shall furnish a maintenance bond in the total (100%) bid amount in the form required by the City (samples attached). One bond, also referred to as the One Year Maintenance Bond, will be conditioned upon Contractor's repair, replacement or restoration of any work or any portion of the work which is found to be defective or fails in any way to comply strictly with this contract or the plans and specifications for such work within a period of one (1) year from the date of acceptance of such work by the City Council or after the date that the "CO", or its designee in writing, determines, in a written notice to the Contractor, to be the date upon which the project is both substantially complete and available for the full and beneficial occupancy or use of the City.

QUALITY AND WORKMANSHIP:
The bidder must be able to demonstrate upon request that it has performed satisfactorily, services similar to the services specified herein. The bidder will provide records of warranty and repair services performed for others upon request. The City of Houston shall be the sole judge whether the services performed are similar to the scope of services specified herein.

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.

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

A protest shall include the following:

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

INTERLOCAL AGREEMENTS:
Under the same terms and conditions hereunder, the Contract may be expanded to other government entities through inter-local agreements between the City of Houston and the respective government entity that encompass all or part of the products/services provided under this contract. Separate contracts will be drawn to reflect the needs of each participating entity.

NO CONTACT PERIOD:
Neither bidder(s) nor any person acting on bidder(s)'s behalf shall attempt to influence the outcome of the award by the offer, presentation or promise gratuities, favors, or anything of value to any appointed or elected official or employee of the City of Houston, their families or staff members. All inquiries regarding the solicitation are to be directed to the designated City Representative identified on the first page of the solicitation. Upon issuance of the solicitation through the pre-award phase and up to the award, aside from bidder's formal response to the solicitation, communications publicly made during the official prebid conference, written requests for clarification during the period officially designated for such purpose by the City Representative, neither bidder(s) nor persons acting on their behalf shall communicate with any appointed or elected official or employee of the City of Houston, their families or staff through written or oral means in an attempt to persuade or influence the outcome of the award or to obtain or deliver information intended to or which could reasonably result in an advantage to any bidder. However, nothing in this paragraph shall prevent a bidder from making public statements to the City Council convened for a regularly scheduled session after the official selection has been made and placed on the City Council agenda for action.

HIRE HOUSTON FIRST:

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

all possible.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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, for ***removing, furnishing and installing oil and gas circuit breakers*** that is similar in size and scope to this contract. **Bidder must have references documenting that it has removed, furnished and installed oil and gas circuit breakers.** 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. Business Name: _____

Business Address: _____

City, State, Zip: _____

Name of Owner/Contact Person: _____

Phone: _____ Fax: _____Email:_____

No. of Years providing Service to this business: _____

2. Business Name: _____

Business Address: _____

City, State, Zip: _____

Name of Owner/Contact Person: _____

Phone: _____Fax:_____ Email:_____

No. of Years providing Service to this business: _____

3. Business Name: _____

Business Address: _____

City, State, Zip: _____

Name of Owner/Contact Person: _____

Phone: _____Fax:_____ Email:_____

No. of Years providing Service to this business: _____

4. Business Name: _____

Business Address: _____

City, State, Zip: _____

Name of Owner/Contact Person: _____

Phone: _____Fax:_____ Email:_____

No. of Years providing Service to this business: _____

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
PUBLIC UTILITIES DIVISION

PROJECT MANUAL

69th Street WBS No. R-000509-0026-5, SEWPP S000012-0029-4 , and EWPP S000056-0075-4

VOLUME 1 of 1

Divisions 00 through 16

December 2012

SECTION B
SCOPE OF WORK / SPECIFICATIONS

PART I

1.0 SCOPE OF WORK FOR LINE ITEM NOS. 1, 3 & 4 PER BID GROUP:

1.1 **Item No. 1** The Contractor shall be required to provide all supervision, labor, materials, equipment, tools, transportation and ancillary items necessary to remove and properly dispose for green credits, twelve existing oil circuit breakers (OCB's) and associated equipment, four each at the 69th Street Wastewater Treatment Plant (69th WWTP) located at, 2525 S/SGT Macario Garcia Drive**,** Southeast Water Purification Plant (SEWPP) located at, 3100 Genoa Red Bluff and the East Water Purification Plant (EWPP) located at, 2300 Federal Road, Houston, Texas.

1.2 **Item No. 3** The Contractor shall be required to install twelve gas circuit breakers (GCB's) and associated equipment, four each at the 69th Street Wastewater Treatment Plant (69th WWTP) located at, 2525 S/SGT Macario Garcia Drive**,** Southeast Water Purification Plant (SEWPP) located at, 3100 Genoa Red Bluff and the East Water Purification Plant (EWPP) located at, 2300 Federal Road, Houston, Texas, in strict accordance with the manufacturer's recommended installation methods and in accordance with applicable federal, state and local codes and regulations.

1.3 **Item No. 4** The Contractor shall be required to furnish the final Operating and Maintenance (O & M) manuals and revised final project drawings in strict accordance with the scope of work/specifications.

2.0 GENERAL SCOPE OF WORK FOR BID LINE ITEM NO. 2 PER BID GROUP (See Part II for Technical Specifications)

2.1 The Contractor shall be required to furnish twelve gas circuit breakers (GCB's) and associated equipment, four each at the aforementioned facilities in strict accordance with the scope of work/specifications herein.

2.2 The Contractor shall be required to provide a *"Turn-key" job.* The new gas circuit breakers must be installed with no/minimal modifications to the existing infrastructure. All control wire shall be replaced back to the 138KV Relay Room. If additional conduit needs to be provided or any minimal modification required to install the new gas circuit breakers to the existing infrastructure, this shall be the responsibility of the Contractor with no additional cost to the City.

2.3 All work shall be completed in strict accordance with federal, state and local regulations, laws and codes. In addition, the Contractor shall be required, at its own expense, to secure approval of the installation drawings/plans from the City of Houston Public Works and Engineering Department Wastewater and Drinking Water Operations.

2.4 The three plant facilities shall maintain normal operations at all times. The OCB's will be replaced as directed by the City of Houston.

2.5 The current transformers (CT's) for the new 4000 ampere replacement circuit breakers must be as specified in Technical Specification No. 007-231-14:

2.5.1 Each 138 KV circuit breaker shall be equipped with two 3,000:5 A multi-ratio CT's per 138 KV bushing. Each CT shall have an accuracy of C800 on the 2,000:5 A tap in accordance with IEEE C57.13. The secondary resistance of circuit breaker bushing CT's shall not exceed 0.0025 ohms per turn. The CT secondary rated continuous current shall be 10 A minimum. The Rating Factor (R.F.) shall equal be 2.0.

2.5.2 The 3000:5 multi-ratio CT's shall have an accuracy of C800 within the 2,000:5A tap to interface with any existing circuit breakers with 2000:5, multi-ratio CT's. The CT's shall have the design capability for 4000 ampere operations.

2.6 The Contractor shall be required to provide scheduling of switching with the Center Point regional transmission organization (RTO), receive all required switching instructions from the RTO, perform all required switching, make all required confirmation upon switching competition to the RTO and follow Centerpoint Energy Transmission and Substation Outage & Clearance Coordination Procedure. The Contractor shall be required to notify the appropriate plant personnel prior to switching. The Contractor also be required to perform an Arc-Flash study on all equipment listed within this contract and install sticker's indicating the Cal-Rating, Approach Boundaries and required personal protective equipment (PPE) for each piece of equipment. City Electrical personnel will inspect all Contractor terminations prior to energizing the new GCB's.

2.7 The project technical specification is provided by Centerpoint Energy (CNP). In order for CNP to grant permission to connect the new GCB's to the power grid, this equipment must meet the CNP-defined requirements included in the project Technical Specification; outlined in No. 007-231-14, provided by CNP.

3.0 SECURITY PROTOCOL:

3.1 The successful bidder(s) shall comply with the Public Works and Engineering Policy and Procedure guide on background checks of Employment Applicants, Employees, Contractors, Suppliers and follow the Department standard operating procedures (SOP) for Contractor Badge Issuance and Access to Critical Infrastructure Sites.

4.0 PERFORMANCE TIME:

4.1 The Contractor shall have **540 calendar days** to furnish, deliver and install the new GCB's and associated equipment and dispose of the old OCB's for Green Points that will be transferred to the City of Houston in strict accordance with the scope of work/specifications after receipt of the City of Houston Purchase Order.

5.0 WARRANTY:

5.1 The Contractor shall warranty the GCB's and associated equipment for a period of **three-years.** The warranty shall include all parts, labor, material and transportation costs associated either performing the warranty repairs on site or at the contractor's facility. The warranty shall subsequent to certification and acceptance of the equipment by the City of Houston.

6.0 SPECIFIED EQUIPMENT OR EQUIVALENT:

6.1 Wherever in the specifications any materials or processes are indicated or specified by patent of proprietary name and/or by name of manufacturer, such specifications shall be deemed to be used for the purpose of facilitating descriptions of the performance, materials and/or processes desired and shall be deemed to be followed by the words, "or equivalent", if not so stated in the specifications herein.

6.2 The burden of proof shall rest with the bidder, in the course of a technical evaluation, to prove that the proposed item(s) are equivalent to the performance, materials, processes, or articles specified. DETERMINATION AS TO WHETHER THE ITEM (S) BID IS (ARE) EQUIVALENT TO THOSE SPECIFIED SHALL REST SOLELY WITH THE CITY PURCHASING AGENT AND THE RECEIVING DEPARTMENT.

7.0 BRAND NAME OR TRADE NAME:

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

END OF SECTION

TECHNICAL SPECIFICATIONS

PART II

7.1.2. Power transformers shall have a minimum of two 600:5 A multi-ratio current transformers (CT's) per 138 kV bushing. Each CT shall have IEEE C57.13 accuracy C400 or better. Where applications require additional CT's and/or different ratios, CenterPoint Energy shall provide ratios to support equipment purchase schedule. The secondary resistance of power transformer bushing CT's shall not exceed 0.0025 Ω per turn. CT secondary rated continuous current shall be 10 A minimum. Rating Factor (R.F.) shall equal 2.0.

7.1.3. High side surge arresters shall be provided in accordance with Sub-Article 7.4.

7.1.4. The customer shall determine the need for, and if applicable, settings for a tap changer for de-energized operation (no load tap) and automatic on-load tap changer. CenterPoint Energy recommends power transformers be equipped with automatic on-load tap changer.

7.2. CIRCUIT BREAKERS

7.2.1. Circuit breakers shall be of the three-pole, outdoor type, 138 kV nominal, in accordance with ANSI C37.06 and IEEE C37.60, C37.04 and C37.40.

7.2.2. Continuous current rating of 138 kV circuit breakers shall be 4,000 A, with a three phase symmetrical short circuit interrupting capability of 63 kA rms symmetrical. For substations with four or more 138 kV transmission lines, circuit breakers may be required to have a higher continuous rating. The rated interrupting time of the circuit breakers shall be three cycles or less. In some applications, the installation of TRV shaping capacitors may be required in order to achieve the circuit breaker interrupting capability of 63 kA rms symmetrical for line faults. CenterPoint Energy shall determine the placement of TRV shaping capacitors, when required.

7.2.3. Each 138 kV circuit breaker shall be equipped with two 3,000:5 A multi-ratio CT's per 138 kV bushing. Each CT shall have an accuracy of C800 on the 2,000:5 A tap in accordance with IEEE C57.13. The secondary resistance of circuit breaker bushing CT's shall not exceed 0.0025 Ω per turn. CT secondary rated continuous current shall be 10 A minimum. Rating Factor (R.F.) shall equal 2.0 (i.e. to accommodate interface with any existing circuit breakers with 2000:5 multi-ratio CT's in an existing substation while maintaining the design capability for 4000 ampere operation in the future and in a new substation).

7.2.4. Two trip coils shall be provided with independent 125 VDC control circuits. If both trip coils operate a single armature, both coils shall be designed or marked in such a way as to prevent their being connected in a manner that would result in the breaker not tripping in the event that both coils are energized simultaneously.

7.2.5. Trip and close DC current shall not exceed 15 A (instantaneous and steady state) per trip circuit and shall not be less than 4 A per trip and close circuit.

7.2.6. Trip circuits shall not be fused inside the circuit breaker control cabinet.

7.2.7. Surge suppression shall be provided on each trip and close coil. Reference CenterPoint Energy Specification, 007-400-02.

7.2.8. The circuit breaker operating mechanism shall be both mechanically and electrically trip-free in any position. For oil circuit breakers, a latch check switch shall be provided.

7.2.9. Circuit breakers with air closing mechanisms shall have stored energy for 5 close-open operations. Circuit breakers with spring closing mechanisms shall have the spring charging

motor circuit connected to a 125 VDC battery source utilizing a DC supply cable dedicated for this purpose. Voltage rollover from AC to DC shall not be installed for the spring charging motor circuit for circuit breakers.

7.2.10. **Gas circuit breakers shall have low gas pressure alarm and close inhibit contact.**

7.2.11. Circuit breaker internal time delay circuitry for reclosing shall not be utilized. External time delayed automatic reclosing, when utilized, shall be wired/connected directly to the circuit breaker close circuit. External time delay for reclosing circuit is to be provided by other relays.

7.3. AIR BREAK SWITCHES

7.3.1. Transmission line disconnect switches and all disconnect switches in the substation "loop" shall be of the outdoor, three pole, gang operated type rated 138 kV nominal, 4,000 A continuous, 164 kA peak withstand minimum. The transmission line disconnect switches shall have a 2-hr emergency rating of 4,400A. Disconnect switches that are not in the substation "loop" (i.e. transformer high side disconnect switch) may be rated for less than 4,000 A continuous, but must be rated for 164 kA peak withstand minimum. For substations with four or more 138 kV transmission lines, contact CenterPoint Energy for the required rating of switches. The switch air gap BIL shall coordinate with the BIL rating of the switch insulators.

7.3.2. Transmission line disconnect switches are required for "full loop" substations or "loop tap" substations converted to "full loop".

7.3.3. "Loop tap" substations must be configured and designed with equipment to permit switching for the scheduled outage of either transmission line section without interrupting service to the customer's load. An interrupting device attached to a disconnect switch in a "loop tap" substation for transmission line load breaking, loop switching or line dropping is not acceptable.

7.3.4. Two auxiliary "a" contacts shall be provided on the disconnect switch between transformers in a three circuit breaker, two transformer substation and the disconnect switch between lines in a two circuit breaker substation.

7.4. SURGE ARRESTERS

7.4.1. Surge Arresters must be installed to protect substation 138 kV equipment including instrument transformers.

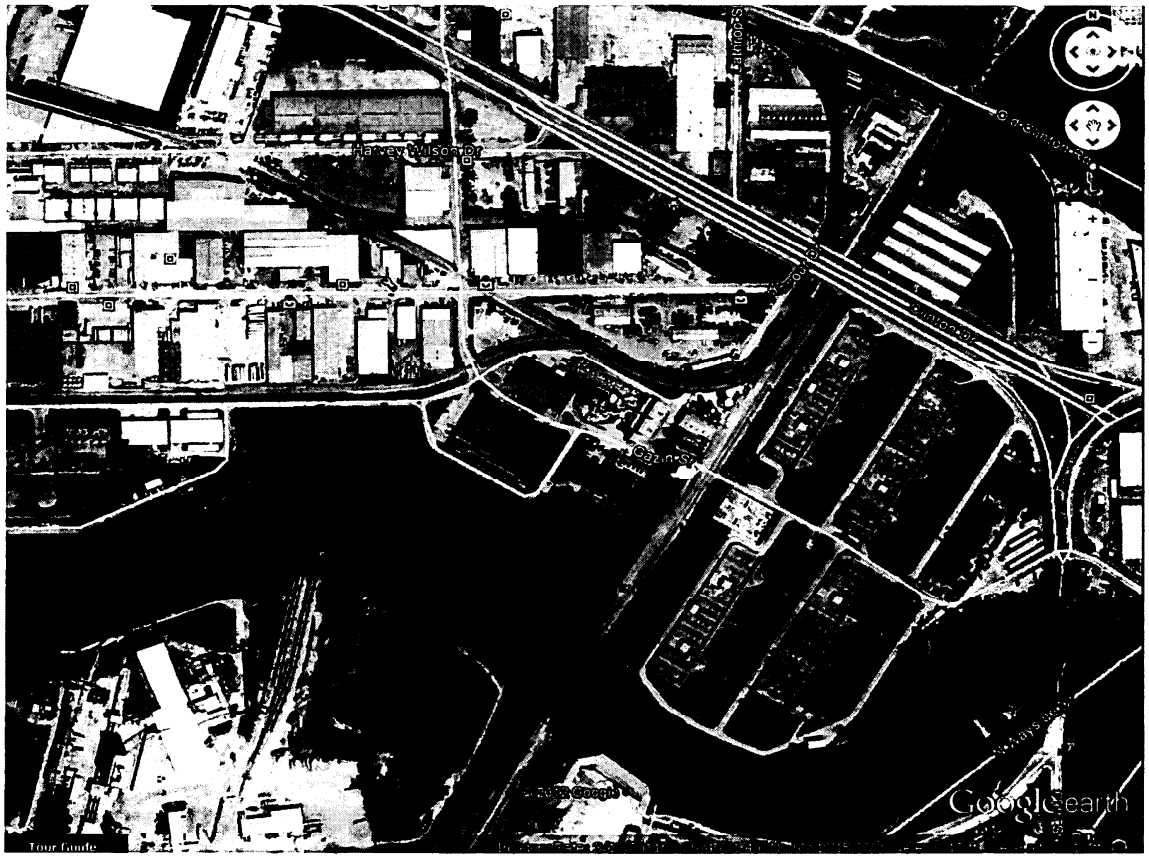
7.4.2. All surge arresters shall be metal oxide varsistor type 108 kV class minimum, with a maximum continuous over voltage (MCOV) rating of 88 kV minimum. The minimum required energy absorption capability is 7 kilojoules/ kV of MCOV rating. The surge arrester must have directional pressure relief device and minimum required pressure relief capability is 63 kA rms symmetrical.

7.4.3. To allow for grading / leakage current monitoring, CenterPoint Energy recommends that surge arresters be mounted on plates using insulated spacers and associated hardware. The insulated ground conductor from the bottom flange of the arrester must be isolated from any other ground until it passes the point where a tong ammeter reading can be taken. The independent, insulated ground leads should be adequately marked to indicate A, B, and C phases.

END OF SECTION

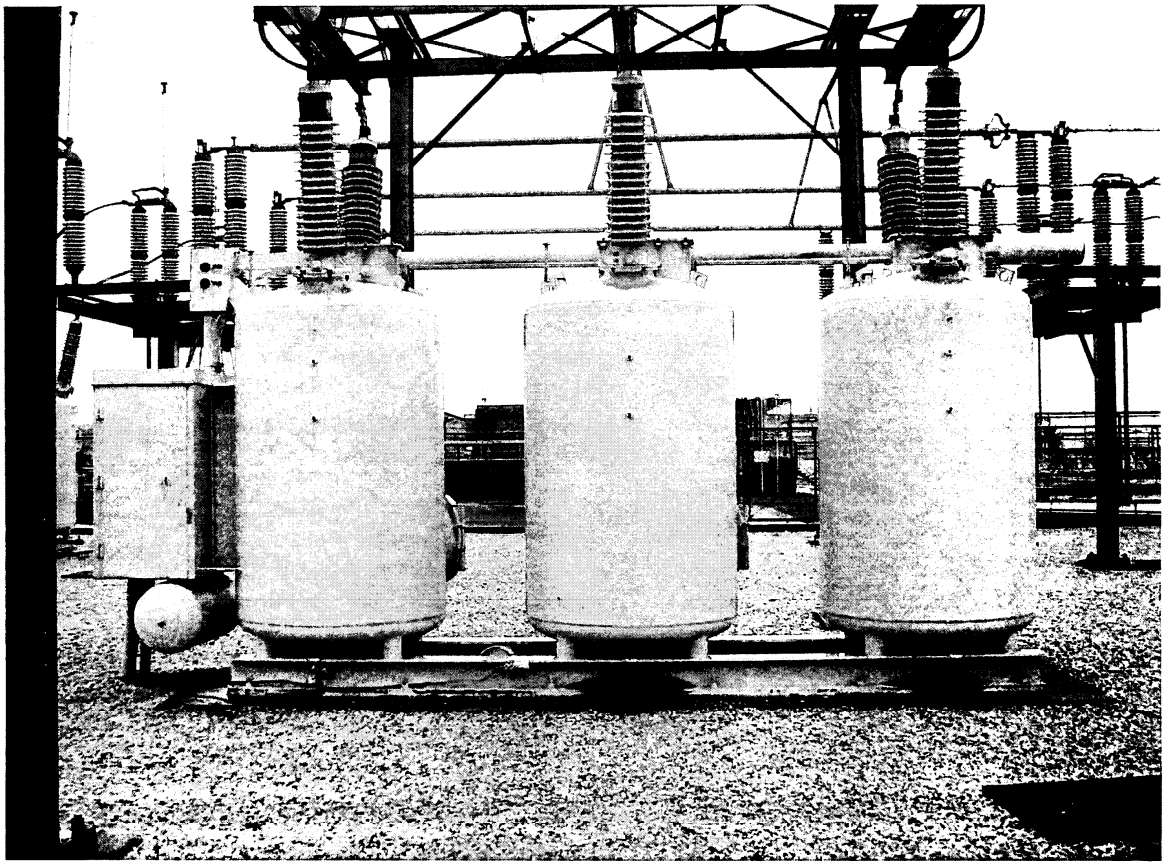
A PDF version of the Technical Specifications can be viewed on the following web link https://purchasing.houstontx.gov/buyer/BidDocumentManager.aspx?id=C24542

69th Street Wastewater Treatment Plant Photos of Facility

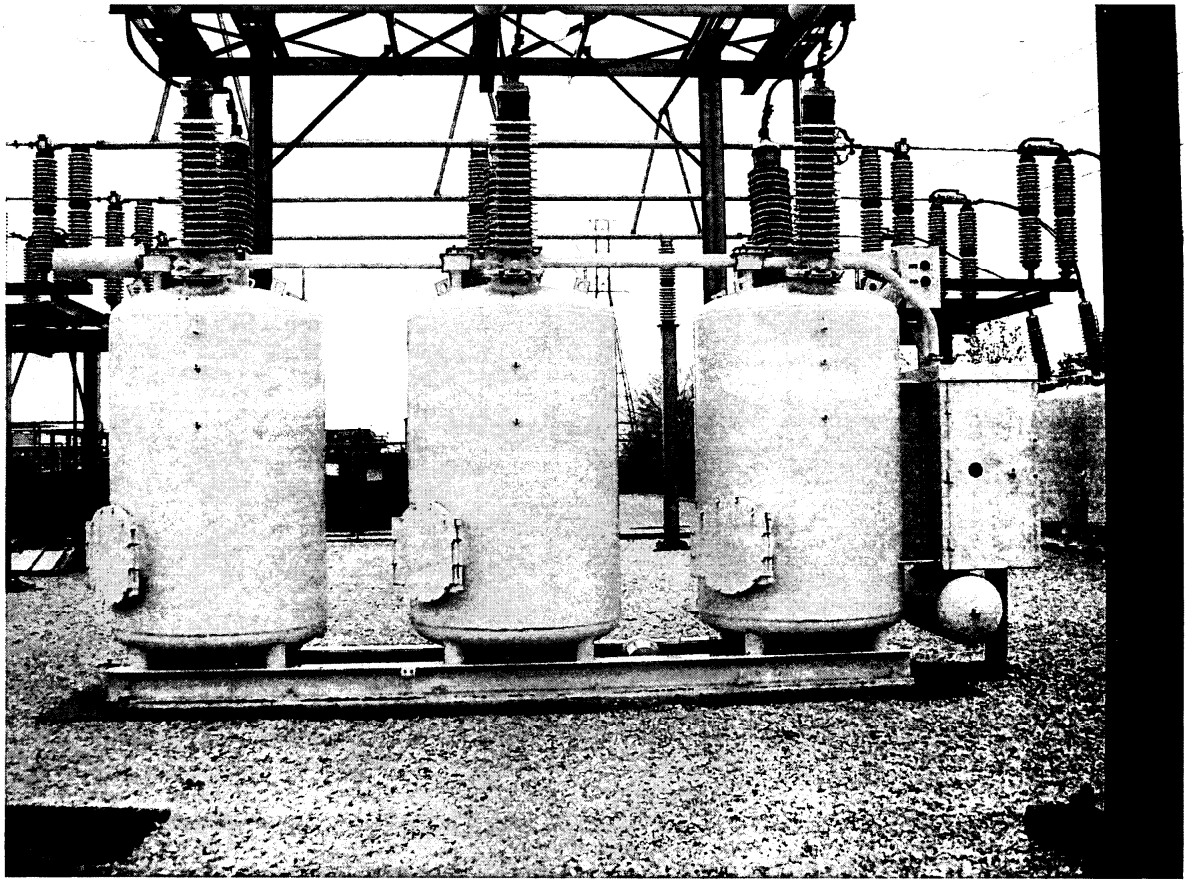


69th Street Wastewater Treatment Plant Photos of Facility

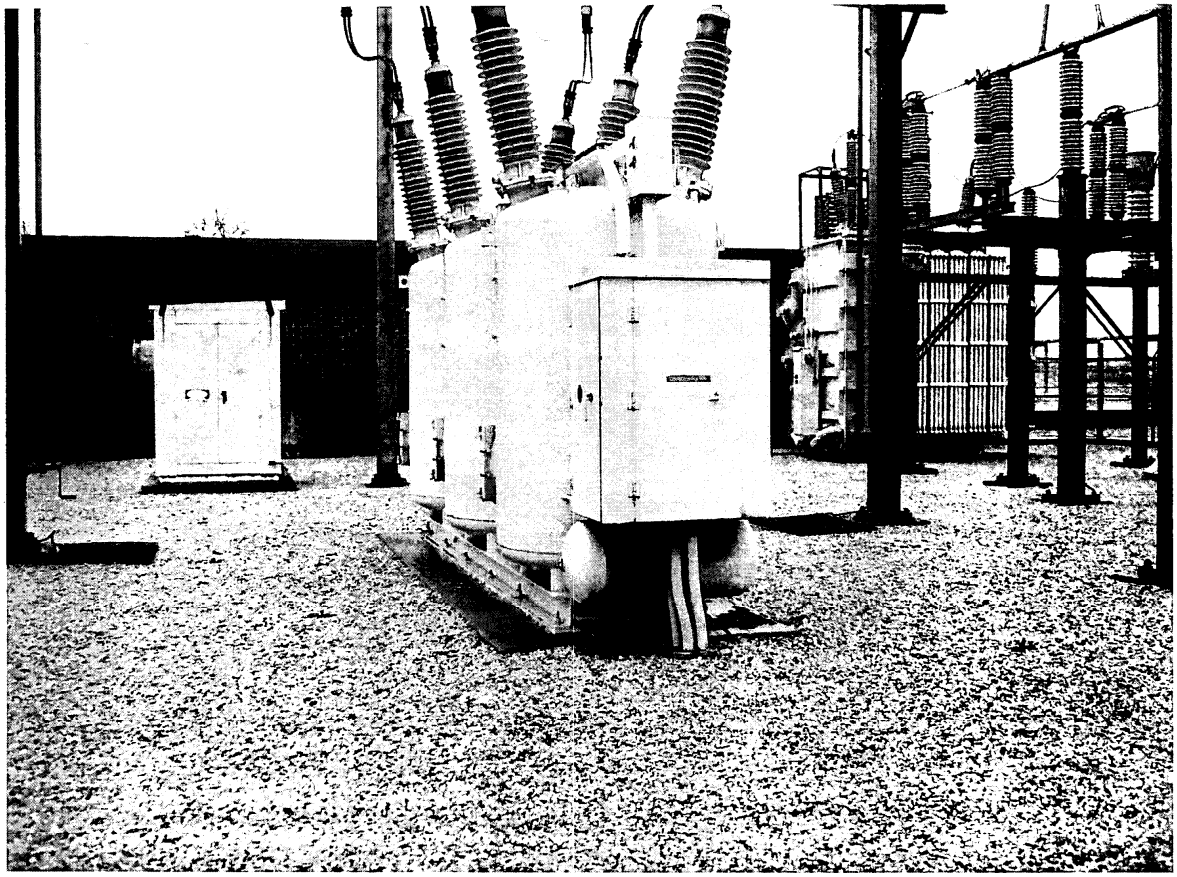
69th Street Wastewater Treatment Plant Photos of Facility



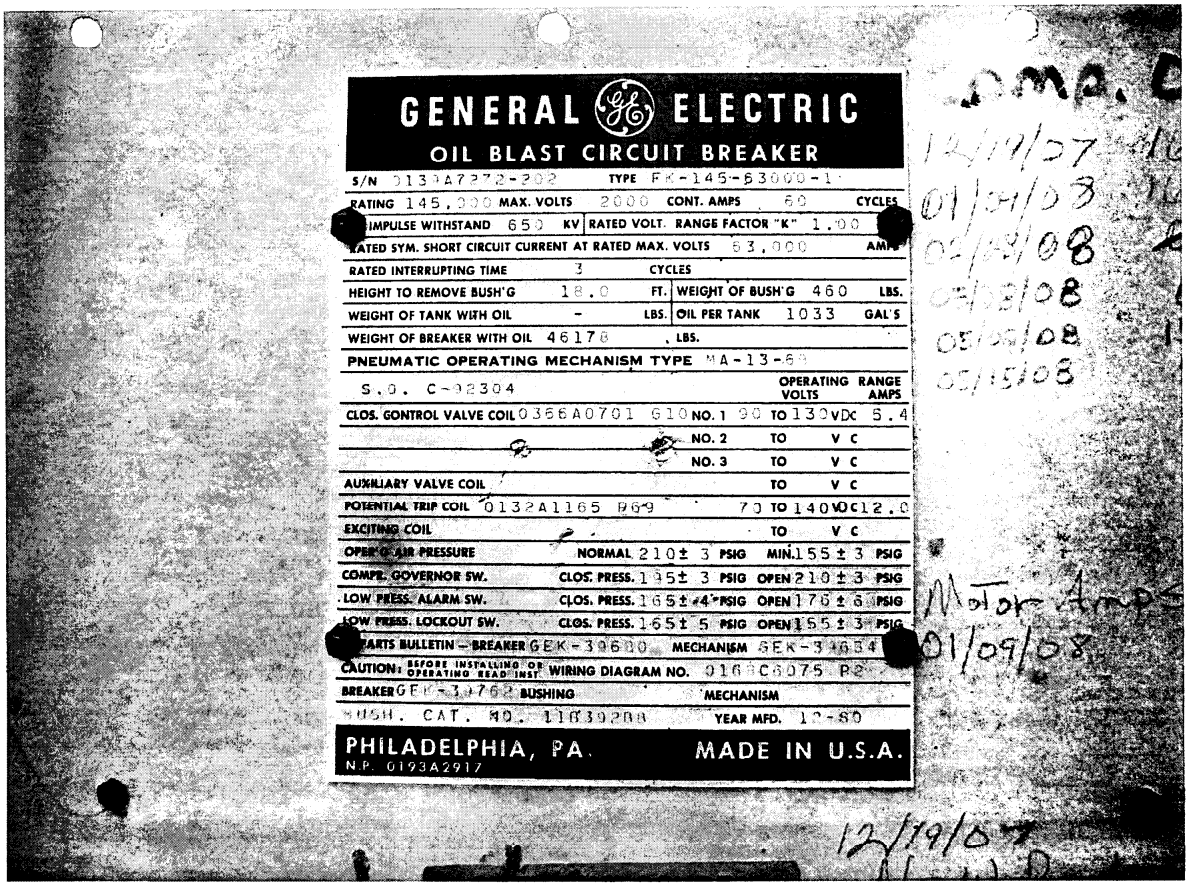
69th Street Wastewater Treatment Plant Photos of Facility



69th Street Wastewater Treatment Plant Photos of Facility

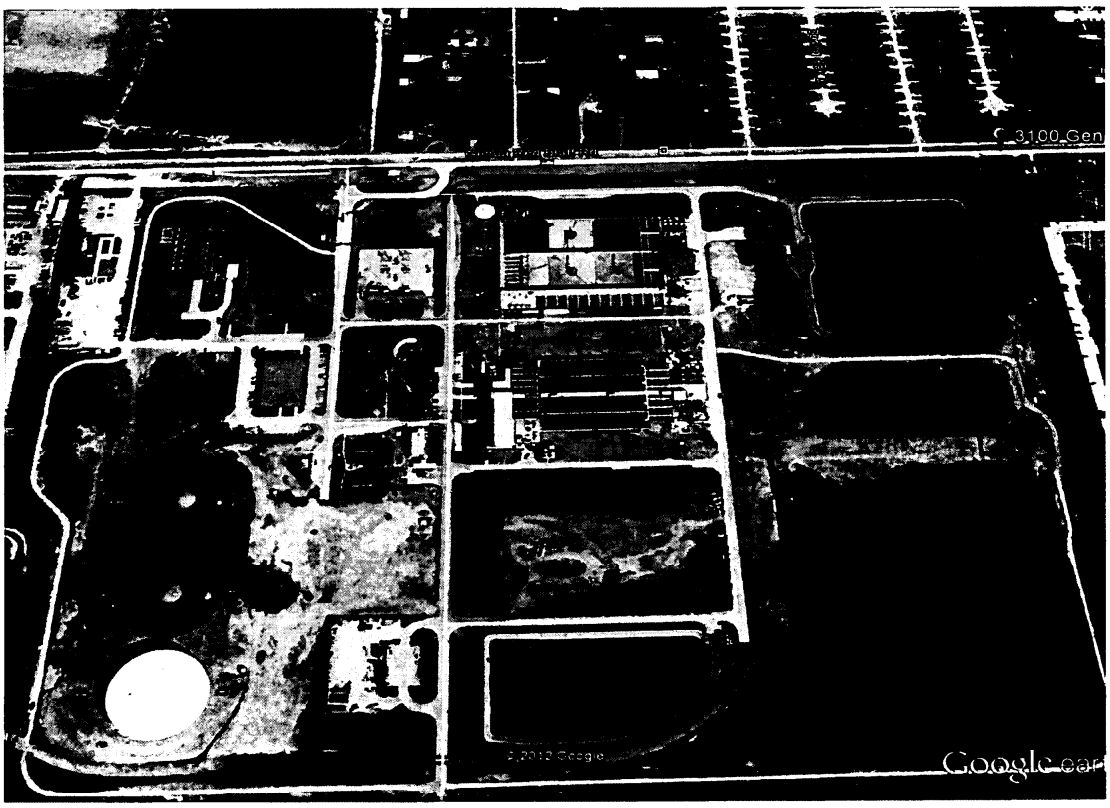


69th Street Wastewater Treatment Plant Photos of Facility



Southeast Wastewater Treatment Plant Photos of Facility

SOUTHEAST WATER PURIFICATION PLANT & S' TATION – CITY OF HOUSTON – 3100 GENOA-RED BLUFF



Southeast Wastewater Treatment Plant Photos of Facility

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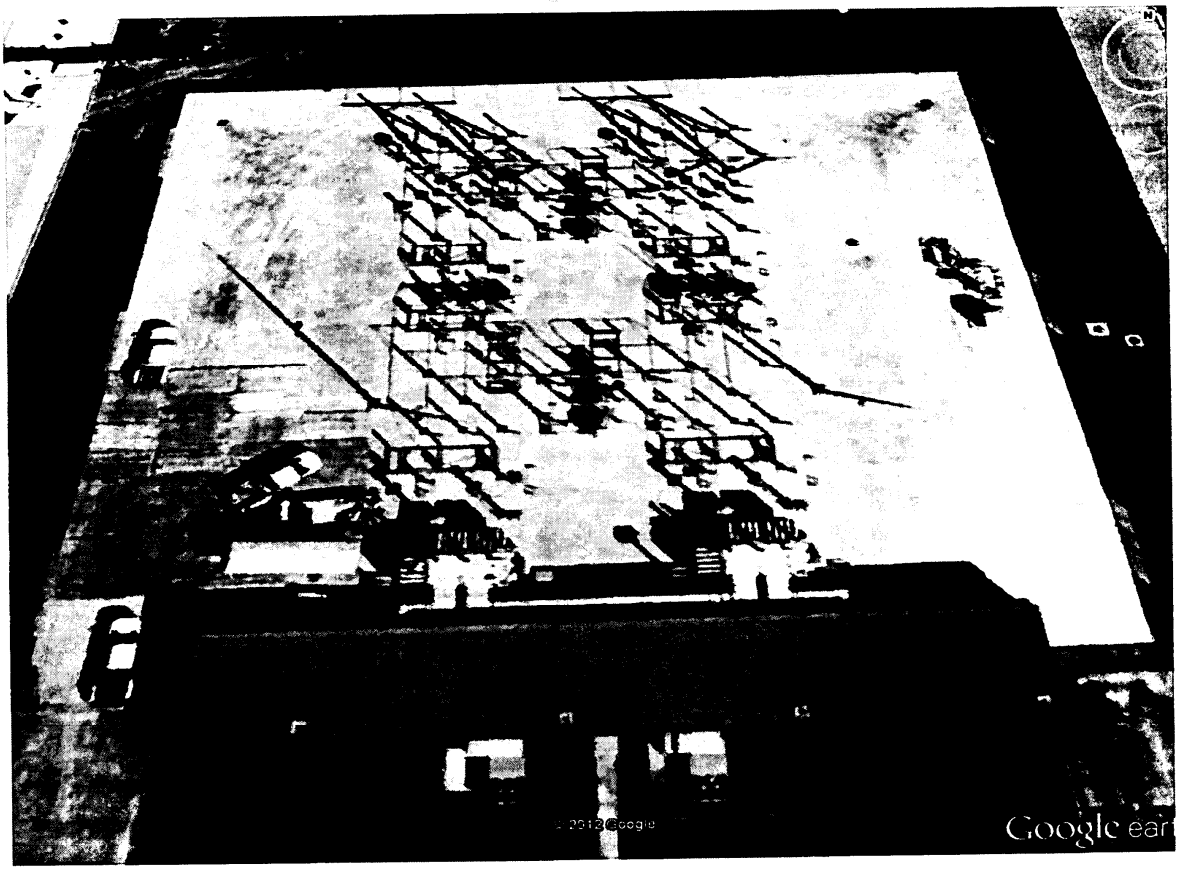
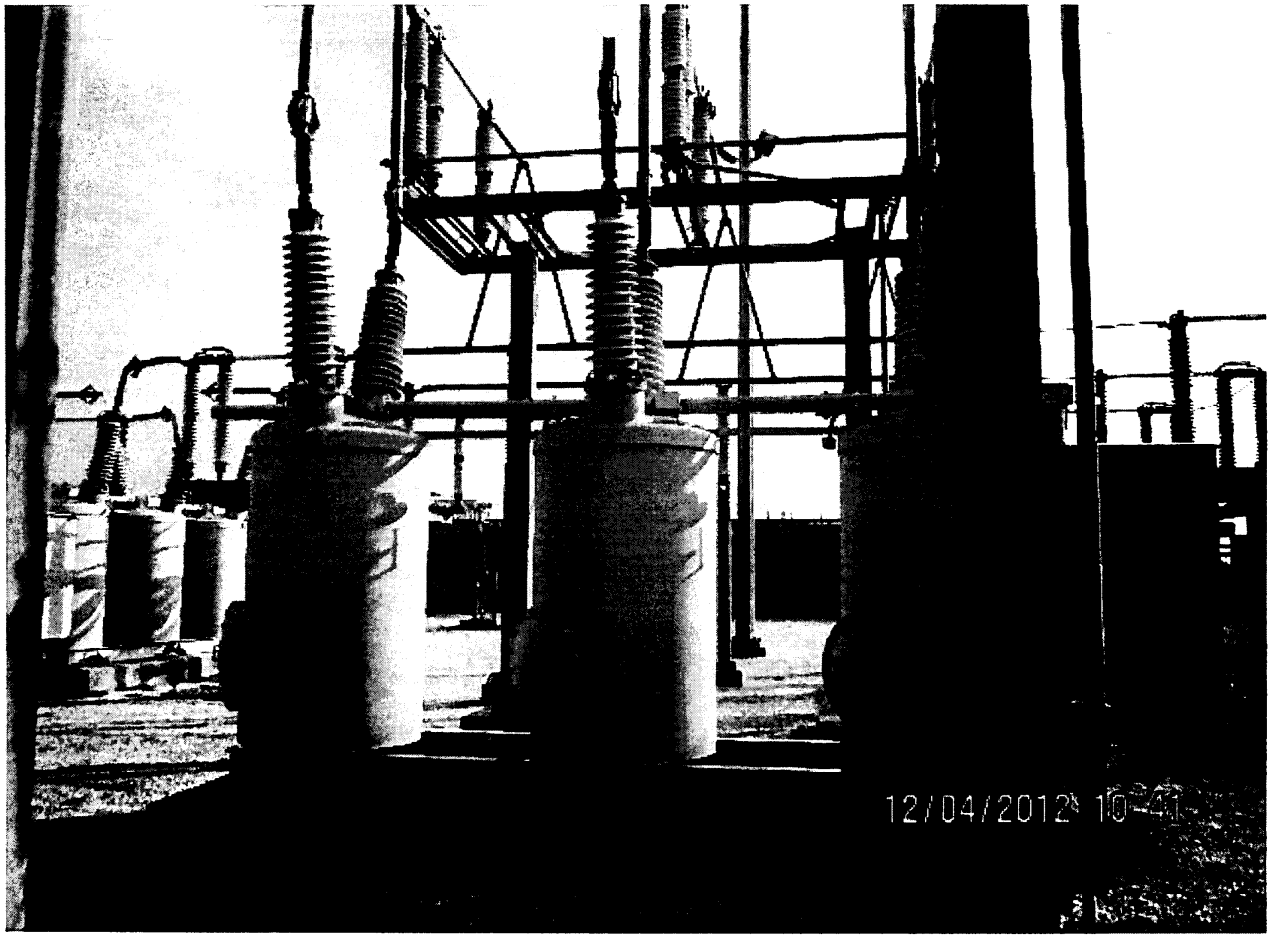
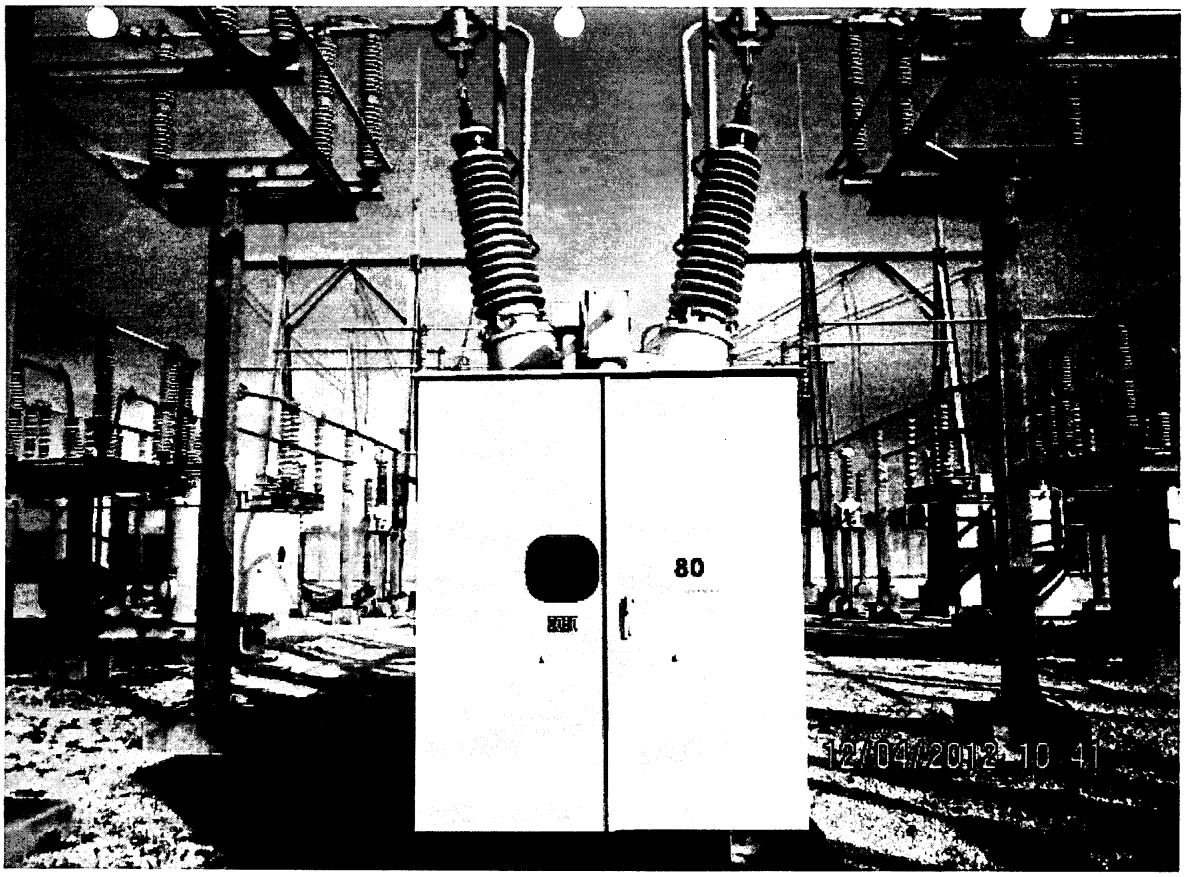
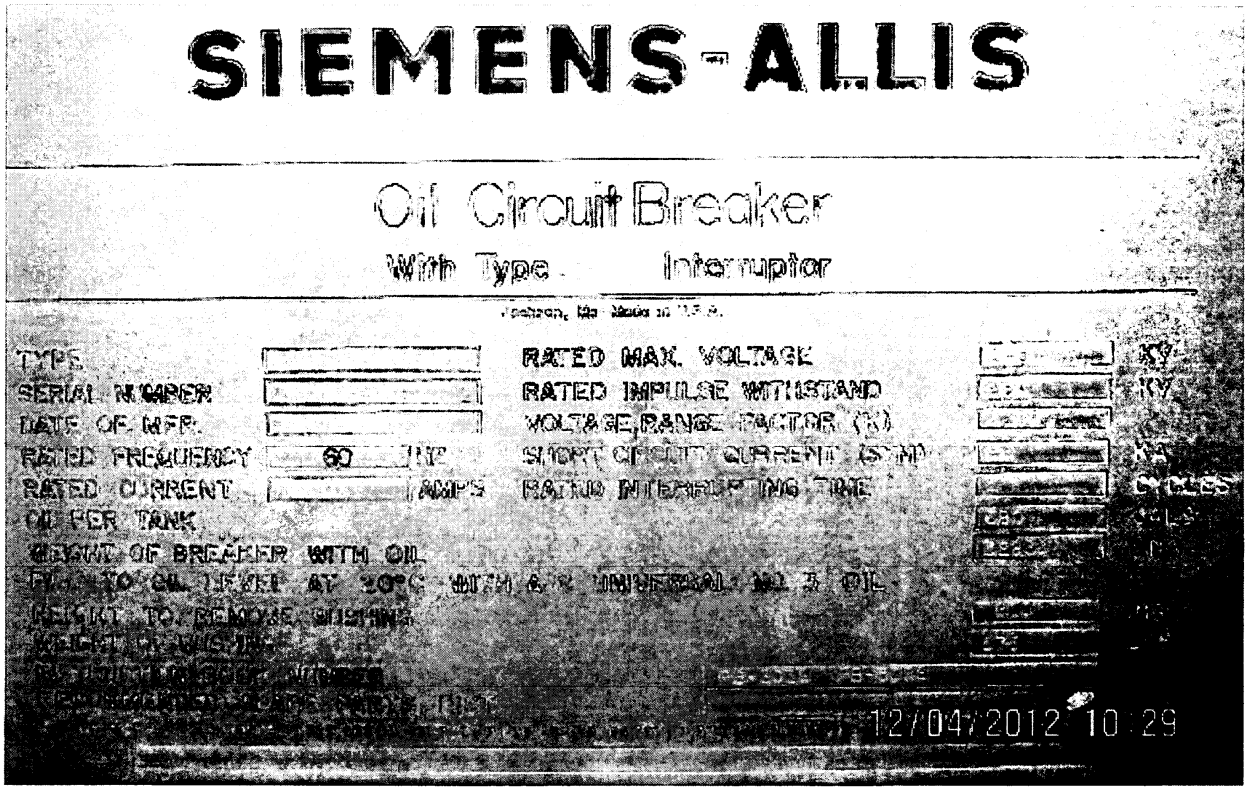


Southeast Wastewater Treatment Plant Photos of Facility



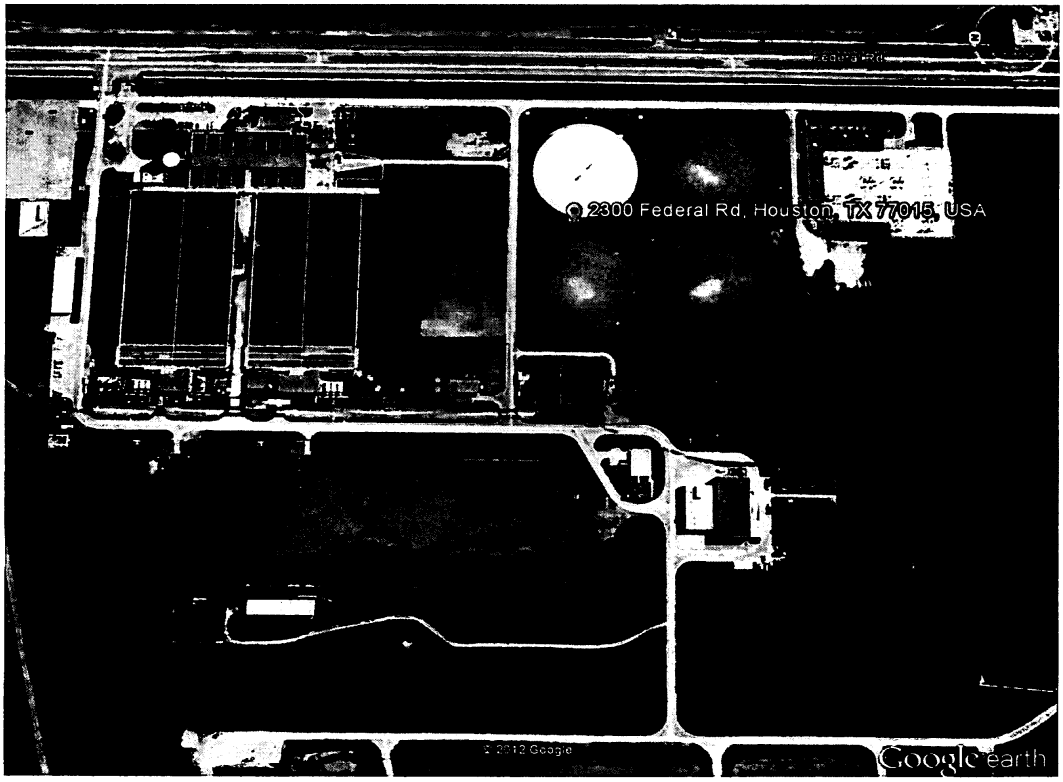
Southeast Wastewater Treatment Plant Photos of Facility




SIEMENS-ALLIS
Oil Circuit Breaker
With Type Interruptor
TYPE
SERIAL NUMBER
DATE OF MFR.
RATED FREQUENCY 60 HZ
RATED CURRENT AMPS
OIL PER TANK
RATED MAX. VOLTAGE KV
RATED IMPULSE WITHSTAND KV
VOLTAGE RANGE FACTOR (K)
SHORT CIRCUIT CURRENT (SYM) KA
RATED INTERRUPTING TIME CYCLES
12/04/2012 10:29

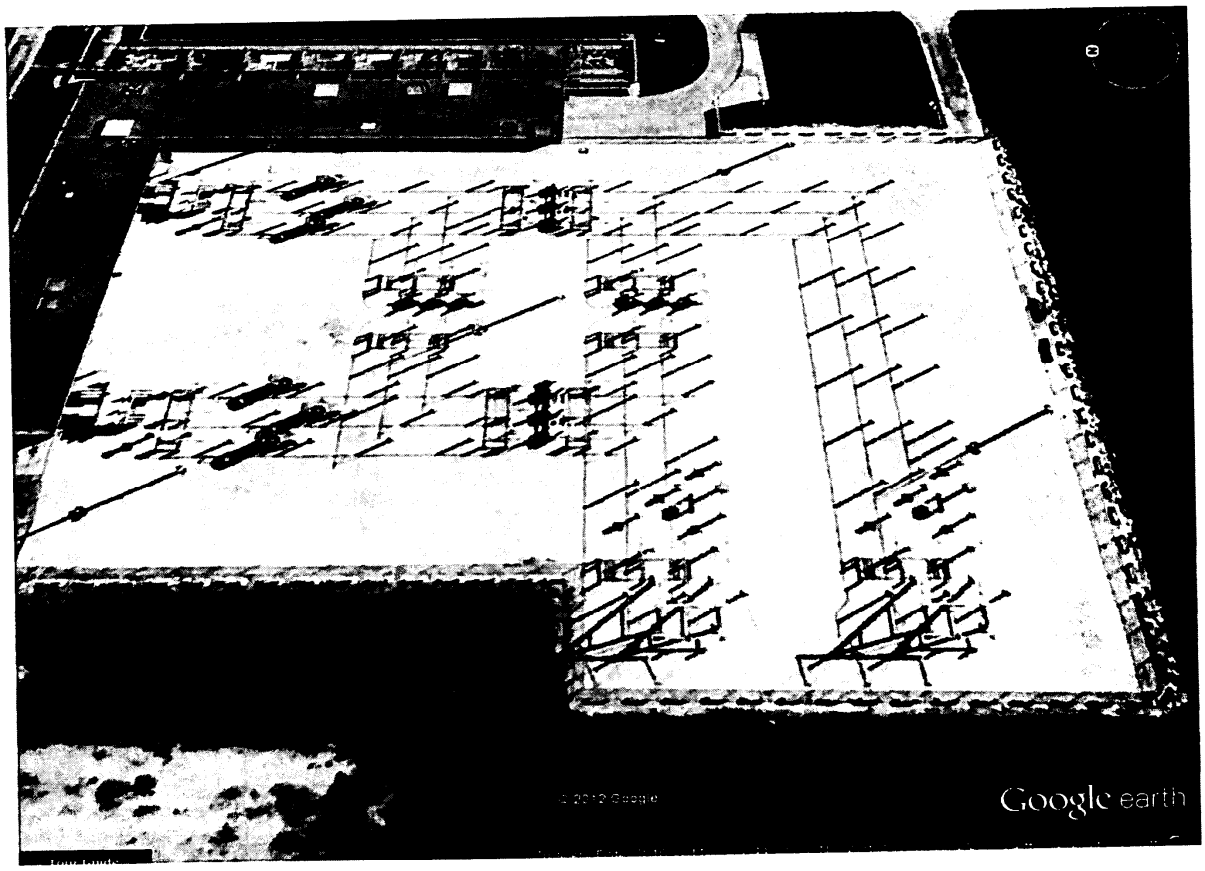
East Water Purification Plant Photos of Facility

EAST WATER PURIFICATION PLANT & SU' \TION – CITY OF HOUSTON – 2300 FEDERAL ROAD

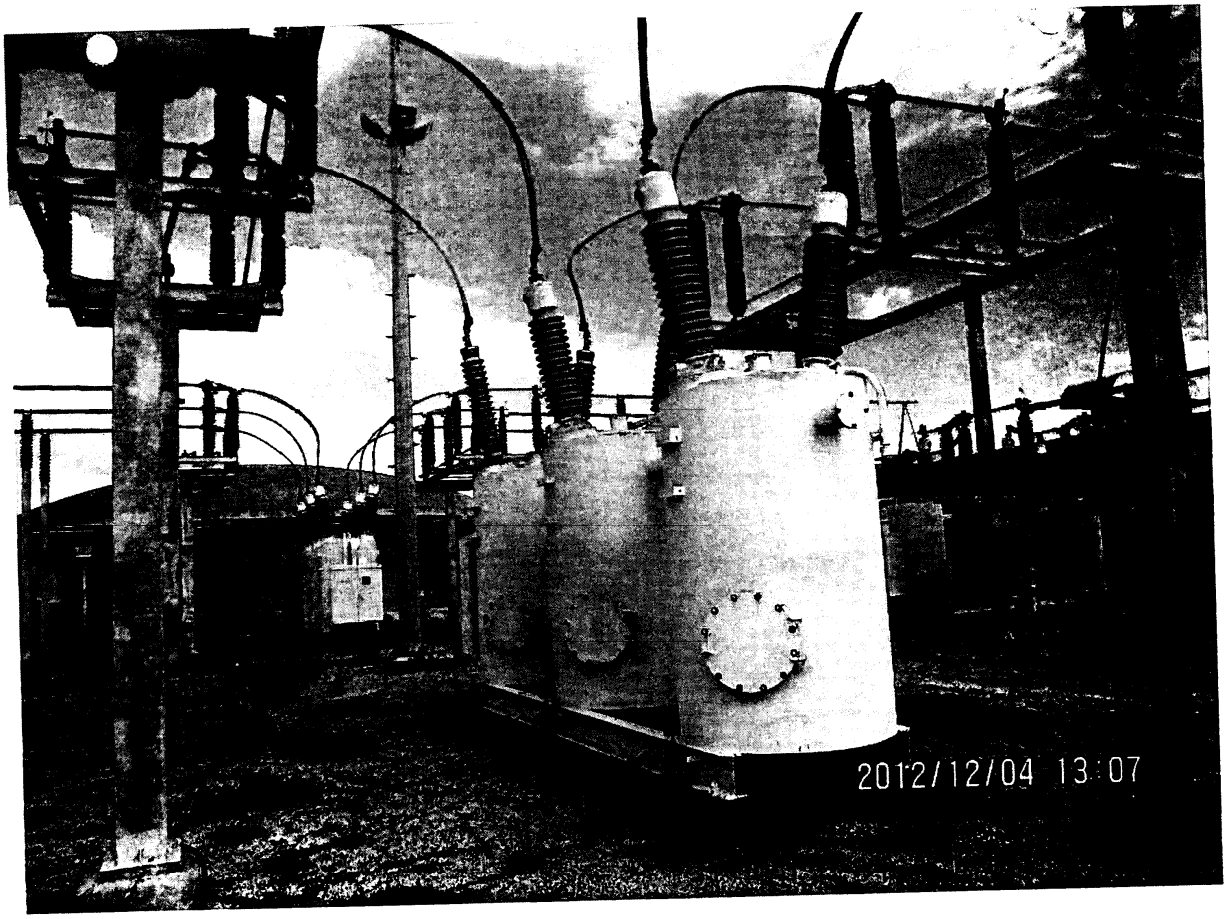


East Water Purification Plant Photos of Facility

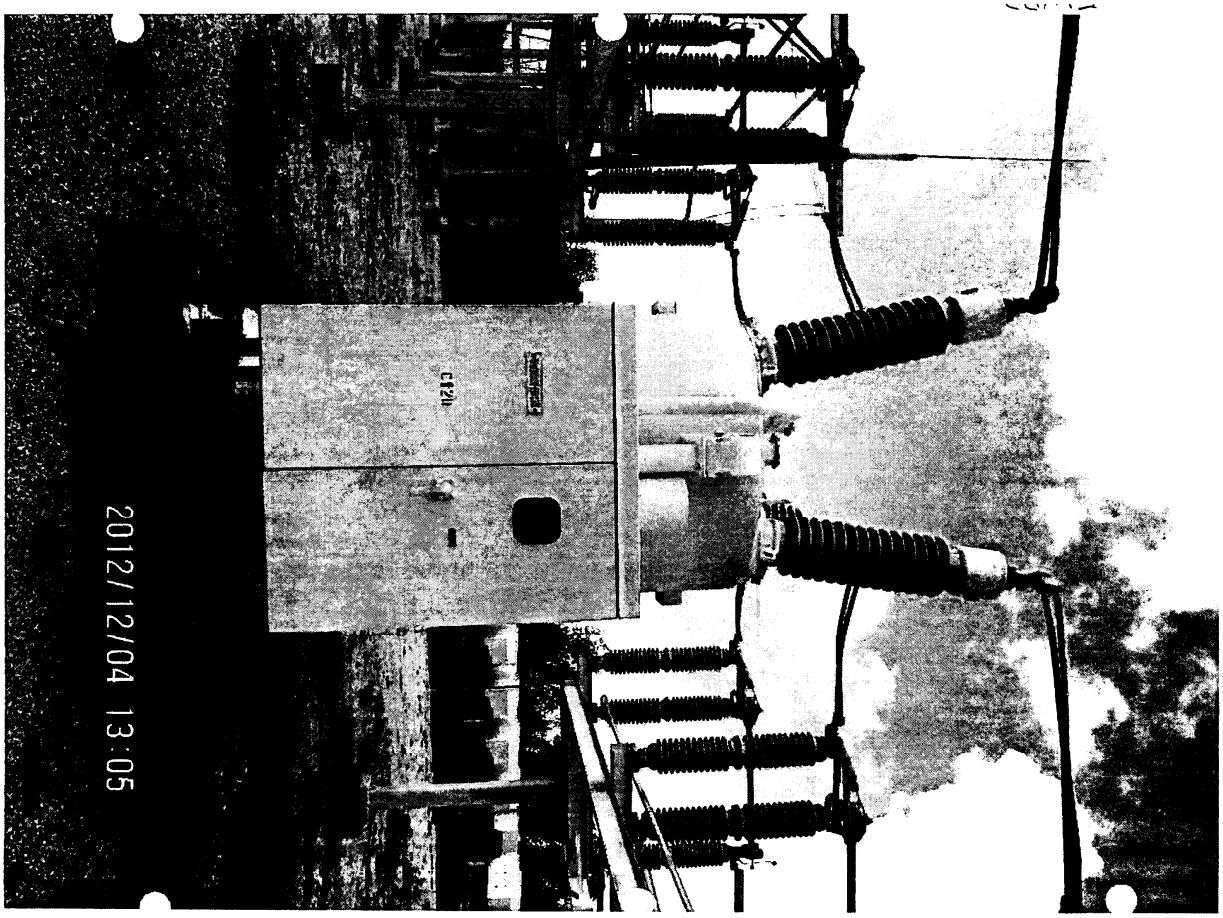
EAST WATER PURIFICATION PLANT & SUI ATION – CITY OF HOUSTON – 2300 FEDERAL ROAD



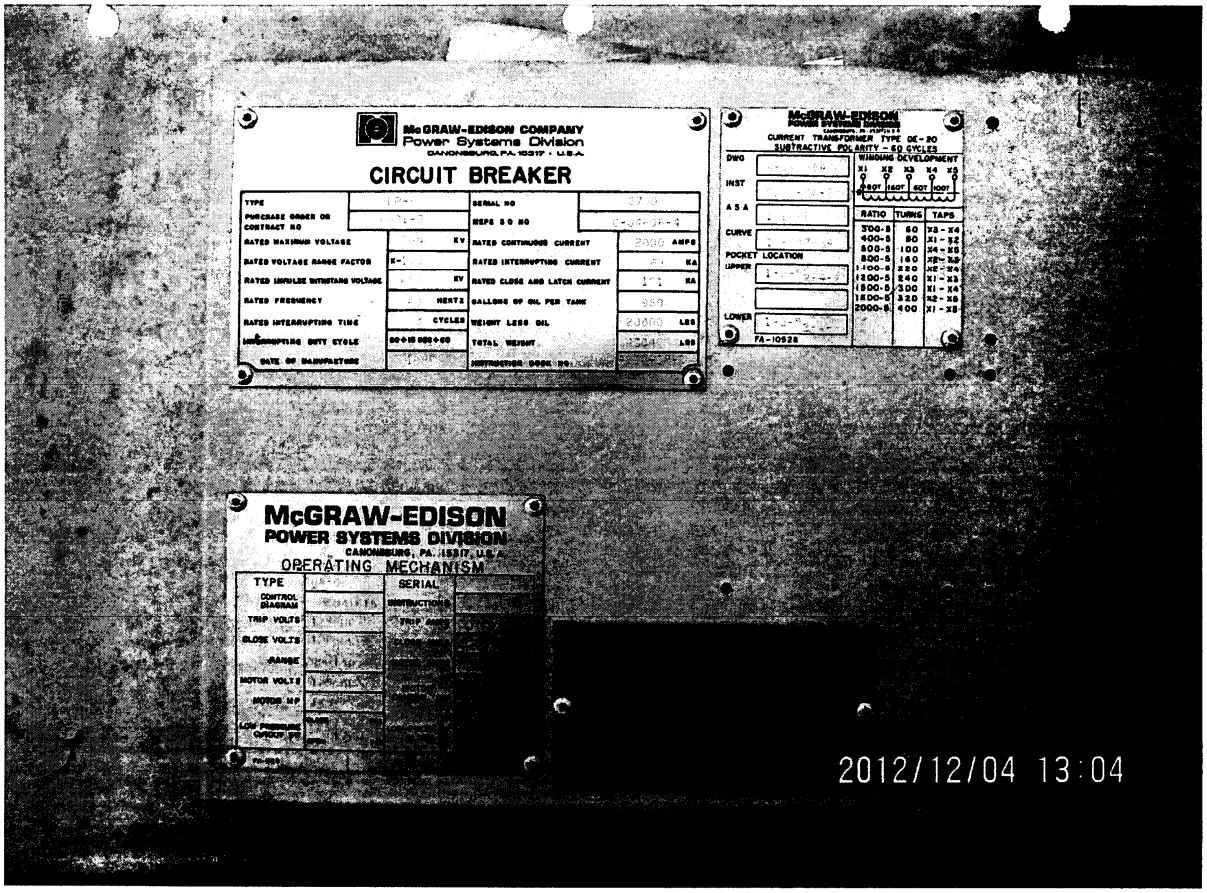
East Water Purification Plant Photos of Facility



East Water Purification Plant Photos of Facility



East Water Purification Plant Photos of Facility



SECTION C
ENGINEERING WAGE SCALE

A PDF version of the 2013 Engineering Wage Scale can be viewed on the following web link
https://purchasing.houstontx.gov/buyer/BidDocumentManager.aspx?id=C24542

BUILDING WAGE DECISSION
A PDF version of the 2013 Building Wage Scale can be viewed on the following web link
https://purchasing.houstontx.gov/buyer/BidDocumentManager.aspx?id=C24542

PW&E POLICY AND PROCEDURES FOR CONTRACTORS
A PDF version of the PW&E Policy & Procedures for Contractors
can be viewed on the following web link
https://purchasing.houstontx.gov/buyer/BidDocumentManager.aspx?id=C24542

Document 00700
GENERAL CONDITIONS
A PDF version of the General Conditions can be viewed on the following web link:
https://purchasing.houstontx.gov/buyer/BidDocumentManager.aspx?id=C24542

Document 00800

SUPPLEMENTARY CONDITIONS

The following Paragraphs amend and supplement the 2011 edition of General Conditions. Unaltered portions of General Conditions remain in effect.

ARTICLE 3 - THE CONTRACTOR

3.5 *LABOR*: *Insert the following Paragraph 3.5.3.1.1.*

3.5.3.1.1 Contractor shall make good faith efforts to comply with the City ordinances regarding Minority and Women Business Enterprises (MWBE) and Persons with Disabilities Business Enterprises (PDBE) participation goals which are as follows:

.1 the MBE goal is "0" percent, and

.2 the SBE goal is "0" percent.

3.28 *CONTRACTOR DEBT*

3.28.1 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 CITY CONTROLLER IN WRITING. IF CITY CONTROLLER BECOMES AWARE THAT CONTRACTOR HAS INCURRED A DEBT, IT SHALL IMMEDIATELY NOTIFY CONTRACTOR IN WRITING. IF CONTRACTOR DOES NOT PAY THE DEBT WITHIN 30 DAYS OF EITHER SUCH NOTIFICATION, 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.

ARTICLE 8 - TIME

8.1 *PROGRESS AND COMPLETION: Delete Paragraph 8.1.6. and replace with the following 8.1.6.*

8.1.6.1 Contractor shall credit the City by Change Order for inspection services for overtime work or work performed on Sundays or Legal Holidays. The amount Contractor credits the City will be **$50.00 per hour** per inspector for inspection services.

ARTICLE 9 - PAYMENTS AND COMPLETION

9.1 *UNIT PRICE WORK*: *Delete Section 9.1 in its entirety and insert the following Section 9.1.*

9.1 References to Unit Prices in individual Specification sections are not applicable to the Contract. Include payment for portions of the Work required by these sections in the Stipulated Price for the Contract.

9.12 LIQUIDATED DAMAGES: Insert the following Paragraph 9.12.1.1.

9.12.1.1 The amount of liquidated damages provided in General Conditions Paragraph 9.12.1 payable by Contractor or Surety for each and every day of delay beyond Contract Time, are $1,000.00 per day.

ARTICLE 11 - INSURANCE AND BONDS

11.2 *INSURANCE TO BE PROVIDED BY CONTRACTOR: Delete Paragraph 11.2.8. and replace with the following 11.2.8.*

11.2.1.4 Contractor shall provide Owners and Contractor's Protective Liability Insurance only if the contractor's bid price is equal to or greater than $100,000.00.

11.2.8 *Endorsement of Primary Insurance:* Each policy except Workers' Compensation Insurance must contain an endorsement that the policy is primary insurance to any other insurance available to additional insured with respect to claims arising under the Contract.

CITY OF HOUSTON -- BIDDER'S BOND

(Must be in an amount at least 10% of the bid. If the bid is upon alternates this bond must be for at least 10% of the highest amount for which the bidder offers to do any or all the work bid upon.)

THE STATE OF TEXAS §
§ KNOW ALL MEN BY THESE PRESENTS:
COUNTY OF HARRIS §

THAT WE, _____ as principal and the other subscriber hereto as Surety, do hereby acknowledge ourselves to be held and firmly bound to the City of Houston, a municipal corporation in the sum of $_____ Dollars ($_____).

The condition of this obligation is that: ---

WHEREAS, the said principal is submitting to the City of Houston its or its bid for the doing for the City of Houston of certain work and construction of which the following is a brief description, to-wit: ---

Bid No. S50-C24542

Remove Oil Circuit Breakers & Associated Eqipment and Furnish & Instal New Gas Circuit Breakers & Associated Equipment for the Public Works and Engineering Department

in accordance with the plans and specifications for such work upon which such bid is made, to which plans and specifications reference is made for a more full description of the work and construction referred to.

NOW, THEREFORE, if the said bidder is awarded the contract for such work, the said bidder will, within the time provided in the specifications, enter into a contract with the City therefore upon the form and to the purpose and intent provided in the specifications, will furnish insurance as required in the specifications and will furnish a good and sufficient construction surety bond executed by said bidder and one corporate surety organized under the laws of the State of Texas or authorized to do business in the State of Texas and having a fully paid up capital stock of not less than $100,000.00 and duly licensed and qualified by the Board of Insurance Commissioners of the State of Texas, which bond shall be for an amount equal to 100 percent of the contract price and shall be conditioned in accordance with the requirements stated in the specifications upon which such bid is being submitted.

In the event said bidder is unable or fails to execute said contract for the work proposed to be done, is unable or fails to furnish insurance as specified or is unable or fails to furnish said construction bond in the amount and condition as aforesaid, the undersigned principal and surety shall be liable to said City of Houston for the full amount of this obligation which is here and now agreed upon and admitted as the amount of the damages which will be suffered by the City of Houston on account of the failure of such bidder to so comply with the terms of this bid.

Executed this _____day of _____, A.D. 2013.

PRINCIPAL

By_____

By_____

_____
Surety

ONE-YEAR MAINTENANCE BOND

THAT WE, _____, as Principal, hereinafter called Contractor, and the other subscriber hereto, _____, as Surety, do hereby acknowledge ourselves to be held and firmly bound to the City of Houston, a municipal corporation, in the sum of $_____, for the payment of which sum well and truly to be made to the City of Houston and its successors, the said Contractor and Surety do bind themselves, their heirs, executors, administrators, successors, jointly and severally.

THE CONDITIONS OF THIS OBLIGATION ARE SUCH THAT:

WHEREAS, the Contractor has on or about this day executed a Contract in writing with the City of Houston for _____ _____, all of such work to be done as set out in full in said Contract documents therein referred to and adopted by the City Council, all of which are made a part of this instrument as fully and completely as if set out in full herein.

NOW THEREFORE, if the said Contractor shall comply with the provisions of Paragraph 11.5.1 of the General Conditions, and correct work not in accordance with the Contract documents discovered within the established one-year period, then this obligation shall become null and void, and shall be of no further force and effect; otherwise, the same is to remain in full force and effect.

Notices required or permitted hereunder shall be in writing and shall be deemed delivered when actually received or, if earlier, on the third day following deposit in a United States Postal Service post office or receptacle, with proper postage affixed (certified mail, return receipt requested), addressed to the respective other party at the address prescribed in the Contract documents, or at such other address as the receiving party may hereafter prescribe by written notice to the sending party.

IN WITNESS THEREOF, the said Contractor and Surety have signed and sealed this instrument on the respective dates written below their signatures and have attached current Power of Attorney.

ATTEST, SEAL: (if a corporation) _____

WITNESS: (if not a corporation)

Name of Contractor

By: _____
Name:
Title:

By: _____
Name:
Title:
Date:

ATTEST/SURETY WITNESS:

(SEAL)

_____
Full Name of Surety

_____
Address of Surety for Notice

_____

_____
Telephone Number of Surety

By: _____
Name:
Title:
Date:

By: _____
Name:
Title: Attorney-in-Fact
Date:

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

_____
Legal Assistant

_____
Date

PERFORMANCE BOND

THAT WE, _____, as Principal, (the "Contractor"), and the other subscriber hereto, _____, as Surety, do hereby acknowledge ourselves to be held and firmly bound to the City of Houston (the "City"), a municipal corporation, in the penal sum of $_____ for the payment of which sum, well and truly to be made to the City, its successors and assigns, Contractor and Surety do bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally.

THE CONDITIONS OF THIS OBLIGATION ARE SUCH THAT:

WHEREAS, the Contractor has on or about this day executed a Contract in writing with the City for _____
_____,
all of such work to be done as set out in full in said Contract documents therein referred to and adopted by the City Council, all of which are made a part of this instrument as fully and completely as if set out in full herein.

NOW THEREFORE, if the said Contractor shall faithfully and strictly perform the Contract in all its terms, provisions, and stipulations in accordance with its true meaning and effect, and in accordance with the Contract documents referred to therein and shall comply strictly with each and every provision of the Contract and with this Bond, then this obligation shall become null and void and shall have no further force and effect; otherwise the same is to remain in full force and effect. Should the Contractor fail to faithfully and strictly perform the Contract in all its terms, including but not limited to the indemnifications thereunder, the Surety shall be liable for all damages, losses, expenses and liabilities that the City may suffer in consequence thereof, as more fully set forth herein.

It is further understood and agreed that the Surety does hereby relieve the City or its representatives from the exercise of any diligence whatever in securing compliance on the part of the Contractor with the terms of the Contract, and the Surety agrees that it shall be bound to take notice of and shall be held to have knowledge of all acts or omissions of the Contractor in all matters pertaining to the Contract. The Surety understands and agrees that the provision in the Contract that the City will retain certain amounts due the Contractor until the expiration of 30 days from the acceptance of the Work is intended for the City's benefit, and the City will have the right to pay or withhold such retained amounts or any other amount owing under the Contract without changing or affecting the liability of the Surety hereon in any degree.

It is further expressly agreed by Surety that the City or its representatives are at liberty at any time, without notice to the Surety, to make any change in the Contract documents and in the Work to be done hereunder, as provided in the Contract, and in the terms and conditions thereof, or to make any change in, addition to, or deduction from the Work to be done hereunder; and that such changes, if made, shall not in any way vitiate the obligation in this Bond and undertaking or release the Surety there from.

It is further expressly agreed and understood that the Contractor and Surety will fully indemnify and save harmless the City from any liability, loss, cost, expense, or damage arising

out of Contractor's performance of the Contract.

If the City gives Surety notice of Contractor's default, Surety shall, within 45 days, take one of the following actions:

1. Arrange for Contractor, with consent of the City, to perform and complete the Contract; or

2. Take over and assume completion of the Contract itself, through its agents or through independent contractors, and become entitled to the payment of the balance of the Contract Price.

If the Surety fails to take either of the actions set out above, it shall be deemed to have waived its right to perform and complete the Contract and receive payment of the balance of the Contract Price and the City shall be entitled to enforce any remedies available at law, including but not limited to completing the Contract itself and recovering any cost in excess of the Original Contract Price from the Surety.

This Bond and all obligations created hereunder shall be performable in Harris County, Texas. This Bond is given in compliance with the provisions of Chapter 2253, Texas Government Code, as amended, which is incorporated herein by this reference.

Notices required or permitted hereunder shall be in writing and shall be deemed delivered when actually received or, if earlier, on the third day following deposit in a United States Postal Service post office or receptacle, with proper postage affixed (certified mail, return receipt requested), addressed to the respective other Party at the address prescribed in the Contract documents, or at such other address as the receiving party may hereafter prescribe by written notice to the sending party.

EXECUTED in multiple originals this_____ day of_____, 20_____.

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

_____
(Name of Principal)

_____
(Address of Principal)

By: _____
Name:
Title:
Date:

By: _____
Name:
Title:
Date:

ATTEST/SEAL
SURETY WITNESS:

_____
(Name of Surety)

_____
(Address of Surety)

By: _____
Name:
Title:
Date:

By: _____
Name:
Title:
Date:

REVIEWED:

This Bond has been reviewed as to form by the undersigned Paralegal and has been found to meet established Legal Department criteria.

_____
Date

_____
Paralegal

STATUTORY PAYMENT BOND

THAT WE, _____, as Principal, hereinafter called Contractor and the other subscriber hereto, _____, as Surety, do hereby acknowledge ourselves to be held and firmly bound unto the City of Houston, a municipal corporation, in the sum of $_____ for the payment of which sum, well and truly to be made to the City of Houston, and its successors, the said Contractor and Surety do bind themselves, their heirs, executors, administrators, successors, jointly and severally.

THE CONDITIONS OF THIS OBLIGATION ARE SUCH THAT:

WHEREAS, the Contractor has on or about this day executed a contract in writing with the City of Houston for _____ _____, all of such work to be done as set out in full in said Contract documents therein referred to and adopted by the City Council, all of which are made a part of this instrument as fully and completely as if set out in full herein;

NOW, THEREFORE, if the said Contractor shall pay all claimants supplying labor and materials to him or a Subcontractor in the prosecution of the Work provided for in the Contract, then, this obligation shall be void; otherwise the same is to remain in full force and effect;

PROVIDED HOWEVER, that this Bond is executed pursuant to the provisions of Chapter 2253, Texas Government Code, as amended, and all liabilities on this Bond shall be determined in accordance with the provisions of said Article to the same extent as if it were copied at length herein.

IN WITNESS THEREOF, the said Contractor and Surety have signed and sealed this instrument on the respective dates written below their signatures and have attached current Power of Attorney.

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

_____
Name of Contractor

By: _____
Name:
Title:

By: _____
Name:
Title:
Date:

ATTEST/SURETY WITNESS:

(SEAL)

_____
Full Name of Surety

_____
Address of Surety for Notice

_____

_____
Telephone Number of Surety

By: _____
Name:
Title:
Date:

By: _____
Name:
Title: Attorney-in-Fact
Date:

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

_____
Legal Assistant

_____
Date