

CONTRACT DOCUMENTS

FOR

**GENERATOR IMPROVEMENTS AT
VARIOUS LOCATIONS**

FOR THE

**CITY OF ROBSTOWN
ROBSTOWN, TEXAS 78380**

September 2021



8918 Tesoro Dr STE 555 • San Antonio, Texas 78410 • 361-400-2929
Website: www.rhsitx.com

CONTRACT DOCUMENTS
FOR
GENERATOR IMPROVEMENTS AT VARIOUS LOCATIONS
FOR THE
CITY OF ROBSTOWN
ROBSTOWN, TEXAS 78380
OCTOBER 2021

Prepared by:

R.H. SHACKELFORD, INC. (RHSI)

8918 Tesoro Dr STE 555
San Antonio, Texas 78410
(361) 400-2929

Approved By:



Jerry J. Shoemaker, P.E.
R.H. SHACKELFORD, INC. (RHSI)
Texas Serial No. 97045
Texas Registered Engineering Firm F-9797
Project No. 9797

CITY OF ROBSTOWN, TEXAS

FORMS AND CONDITIONS FOR BID DOCUMENTS/CONSTRUCTION CONTRACTS

1. Advertisement and Invitation for Bids
2. Instruction to Bidders for Construction
3. Bid Schedule
4. Statement of Bidder's Qualifications
5. Non-Collusion Affidavit of Prime Bidder
6. Certification of Bidder Regarding Civil Rights Laws and Regulations
7. Bid Bond
8. Conflicts of Interest – Compliance with Copeland “Anti-Kickback” Act
9. Debarment Certification
10. Certification Regarding Lobbying
11. Disclosure of Lobbying Activities and Instructions
12. Equal Opportunity Guidelines for Construction Contractors
13. Standard Form of Agreement (Construction Contract Agreement Form)
14. General Contract Conditions with Minority/Female Goals
15. Proposed Contract Breakdown (expected subcontractors and labor classifications)
16. Payment Bond
17. Performance Bond
18. Drug Free Workplace Certification
19. Child Support Statement
20. Environmental Conditions
21. Certificate of Liability Insurance
22. Section 504 Certification
23. Davis-Bacon Guidelines
24. Certificate of Completion (COC)
25. Final Payment Affidavit
26. Non-Debarment Search Results
27. Notice of Awarding Agency Requirements & Regulations Pertaining to Reporting
28. Certificate of Interested Parties - 1295 Form

*Items 3-12 are to be provided to and/or completed by all bidders.

Advertisement and Invitation for Bids

The City of Robstown, City Secretary's office will receive bids for the **GENERATOR IMPROVEMENTS AT VARIOUS LOCATIONS – CITY OF ROBSTOWN** until 2:00PM on Wednesday, November 3rd, 2021, at Robstown City Hall, 101 E Main Ave, Robstown, TX 78380. The bids will be publicly opened and read aloud at 2:30PM on Wednesday, November 3rd, 2021, at Robstown City Hall, 101 E Main Ave, Robstown, TX 78380.

Bids are invited for items and quantities of work as follows: The project shall consist of the installation of up to three (3) permanent natural gas-powered generators with associated ATS, electrical, concrete pads and miscellaneous site improvements at various locations for a complete project in place.

The Instructions for Bidders, Bid Form, Specifications, and other Contract Documents may be examined at the Office of the City Secretary at 101 E Main Ave, Robstown, TX 78380, or obtained from by emailing the project engineer at jshoemaker@rhsitx.com. There is no charge to view or download the documents. Addendums and other announcements will be posted on the City of Robstown website for all plan holders.

A bid bond in the amount of 5 percent of the bid issued by an acceptable surety shall be submitted with each bid. A certified check or bank draft payable to the City of Robstown or negotiable U.S. Government Bonds (aspar value) may be submitted in lieu of the Bid Bond.

The successful bidder must ensure that employees and applicants for employment are not discriminated against because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The City of Robstown encourages bids from small, minority, and female owned businesses (HUBs/Historically Underutilized Business). All contractors and subcontractors must be cleared (not suspended, debarred, or otherwise excluded from or ineligible for participation on federal assistance programs) prior to any formal action authorizing the award of a contract to the contractor. Lump sum bids will be rejected. A firm fixed price contract may be awarded to the lowest responsible bidder.

The City of Robstown reserves the right to reject any or all bids, to waive irregularities in the bids and bidding, and reject non-conforming, non-responsive, or conditional bids. The City of Robstown is an equal opportunity employer without regard to race, color, sex, age, religion, national origin, persons with disabilities, or limited English proficiency.

City of Robstown

Gilbert Gomez, Mayor

October 11, 2021

INSTRUCTION TO BIDDERS FOR CONSTRUCTION

The project to be constructed will be financed with assistance from the General Land Office (GLO) under the U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant- Disaster Recovery (CDBG-DR) program and is subject to all applicable Federal and State laws and regulations. The City of Robstown is hereby referred to as City.

1. Use of Separate Bid Forms

These contract documents include a complete set of bid and contract forms which are for the convenience of the bidders and are not to be detached from the contract document, completed, or executed. Separate bid forms are provided for your use.

2. Interpretations or Addenda

No oral interpretations will be made to any bidder. Each request for clarification shall be made in writing to the City or engineer, Jerry J. Shoemaker, P.E. at jshoemaker@rhsitx.com no less than seven (7) days prior to the bid opening. Each interpretation made within 3 business days and will be in the form of an Addendum to the contract documents and will be distributed to all parties holding contract documents no less than seven (7) days prior to the bid opening. It is, however, the bidder's responsibility to make inquiry as to any addenda issued. All such addenda shall become part of the contract documents and all bidders shall be bound by such addenda, whether or not received by the bidders.

If an addendum to the bid package is necessary, it must be distributed to each potential bidder. The distribution of an addendum shall be verified either by statements of receipt or registered/certified mail receipts, which shall be included in the public works construction file. The addendum shall allow adequate time for consideration in bid preparation (usually at least one week). If adequate time is not available, the bid opening date must be extended, and the City must republish the invitation for bids containing the place, time, and date for the new bid opening. Note that any change to the original bid opening date will require republication of the invitation for bids at least once in a locally published newspaper. The republished notice will include the place, time and date for the new bid opening and must be published at least seven days prior to the new bid opening date.

3. Inspection of Site

Each bidder should visit the site of the proposed work and should become acquainted with the existing conditions and facilities, the difficulties and restrictions pertaining to the performance of the contract. The bidder should thoroughly examine and become familiar with the drawings, technical specifications, and all other contract documents. The contractor by the execution of the contract shall in no way be relieved of any obligation under it due to failure to receive or examine any form or legal document or to visit the site or the conditions existing at the site. The City will be justified in rejecting any claim based on lack of inspection of the site prior to the bid.

4. Alternate bid items

Alternate bids or bid items are included and must be priced by all bidders.

5. Bids

- a. All bids must be submitted on the forms provided and are subject to all requirements of the Contract Documents, including the Drawings.
- b. All bids must be regular in every respect and no interlineation, excisions or special conditions maybe made or included by the bidder.
- c. Bid documents, including but not limited to the bid, the bid bond(s), the contractor's certifications, Certification of Bidder Regarding Civil Rights Laws and Regulations, Conflict of Interest Questionnaire, Non-collusion Affidavit of Prime Bidder, Certification Regarding Lobbying, Debarment Certifications, and the Statement of the Bidder's Qualifications, shall be sealed in an envelope and clearly labeled with the words "Bid Documents", the project number, name of bidder and the date and time of bid opening.
- d. The City may consider as irregular any bid on which there is an alteration of or departure from the

bid form and, at its option, may reject any irregular bid.

- e. If a contract is awarded, it will be awarded to a responsible bidder based on the lowest/best bid and the selected alternate bid items, if any. The contract will require the completion of the work in accordance with the contract documents.

6. Bid Modifications Prior to Bid Opening

Any bidder may modify its bid by submitting a modification or supplemental bid at any time prior to the scheduled closing time for receipt of bids, provided such modification or supplemental bid is received by the locality prior to the closing time. The modification or supplemental bid should not reveal the original bid price but should provide only the addition, subtractions, or other modifications to the original bid so that the final prices or terms will not be known by the locality until the sealed bid is open.

7. Bid Bond

- a. A bid bond in the amount of 5% of the bid issued by an acceptable surety shall be submitted with each bid. A certified check or bank draft payable to the locality or negotiable U.S. Government Bonds (aspar value) may be submitted in lieu of the Bid Bond.
- b. The bid bond or its comparable, will be returned to the bidder as soon as practical after the opening of the bids.

8. Statement of Bidders Qualifications

Each bidder shall submit on the form furnished for that purpose a statement of the bidder's qualifications. The City shall have the right to take such steps as it deems necessary to determine the ability of the bidder to perform its obligations under the contract, and the bidder shall furnish the City all such information and data for this purpose as it may request. The right is reserved to reject any bid where an investigation of the available data does not satisfy the City that the bidder is qualified to carry out properly the terms of the contract.

9. Unit Price

The unit price for each of the several items in the bid shall include its pro rata share of overhead so that the sum of the products obtained by multiplying the quantity shown for each item by the unit price bid represents the total bid. Any bid not conforming to this requirement may be rejected as informal. Special attention is drawn to this condition, as the unit prices will be used to determine the amount of any change orders resulting from an increase or decrease in quantities.

10. Corrections

Erasures or other corrections in the bid must be noted over the signature of the bidder.

11. Time for Receiving Bids

Bids received prior to the advertised hour of opening shall be kept securely sealed. The officer appointed to open the bids shall decide when the specified time has arrived and no bid received thereafter will be considered; except that when a bid arrives by mail after the time fixed for opening, but before the reading of all other bids is completed, and it is shown to the satisfaction of the City that the late arrival of the bid was solely due to delay in the mail for which the bidder was not responsible, such bid will be received and considered.

12. Opening of Bids

The City shall, at the time and place fixed for the opening of bids, open each bid, and publicly read it aloud, irrespective of any irregularities therein. Bidders and other interested individuals may be present.

13. Withdrawal of Bids

Bidder may withdraw the bid before the time fixed for the opening of bids, by communicating its purpose in writing to the City. Upon receipt of such notice, the unopened bid will be returned to the bidder. The bid guaranty of any bidder withdrawing his bid will be returned promptly.

14. Award of Contract/Rejection of Bids

- a. The contract will be awarded to the responsive, responsible Bidder submitting the lowest/best bid. The bidder selected will be notified as soon as possible. The locality reserves the right to reject any or all bids and to waive any informality in bids received where such rejection or waiver is in its interest.
- b. The City reserves the right to consider as unqualified to do the work any bidder who does not perform the major portions of the work with his own forces involved in construction of the improvements embraced in this contract.

15. Execution of Agreement/Performance and Payment Bonds

- a. Performance Bonds - Requires all prime contractors which enter a formal contract more than \$100,000 with the State, a county, or a municipality; a department, board, or agency of the state, a county, or a municipality; and a school district or a subdivision thereof, to obtain a Performance Bond in the amount of the contract before commencing with work.
- b. Payment Bonds – Requires all prime contractors which enter a formal contract with the State, a county, or a municipality; a department, board, or agency of the state, a county, or a municipality; and a school district or a subdivision thereof, to furnish to the governmental entity a payment bond in the amount of the contract. The payment bond must be filed within 15 business days from the date of the Notice of Award.
- c. Municipalities: If the contract is more than \$50,000, a payment bond is required. Counties: If the contract is more than \$25,000, a payment bond is required.
- d. The failure of the successful bidder to execute the agreement and supply the required bonds within fifteen (15) business days from the date of the notice of award-or within such extended period as the locality may grant, shall constitute a default and the locality may, at its option either award the contract to the next lowest responsible bidder, or re-advertise for bids. In either case, the locality may charge against the bidder the difference between the amount of the bid, and the amount for which a contract is subsequently executed irrespective of whether this difference exceeds the amount of the bid bond. If a more favorable bid is received through re-advertisement, the defaulting bidder shall have no claim against the locality for a refund.

16. Wages and Salaries

Davis-Bacon Related Acts (DBRA) is applicable. Attention is called to the requirement of paying not less than the prevailing DBRA wage rates specified in the Contract Documents. Refer to <https://sam.gov/wage-determination/TX20210288/0>. These rates are minimums to be paid during the life of the contract. Additionally, contractors must pay wages not less than once a week. It is therefore the responsibility of the Bidder to inform themselves as to local labor conditions. This requirement must be included for all subcontractors for construction services in excess of \$2,000.

17. Contract Work Hours

Contracts in excess of \$100,000 that involve the employment of mechanics or laborers require the Contractor to comply with all applicable standards, orders, or regulations issued pursuant to 40 U.S.C. 3702 and 3704, as supplemented by the Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. of the Act, Contractors are required to compute the wages of every mechanic and laborer on the basis of standard work week of 40 hours. Work in excess of the standard work week is permissible provided the worker is compensated at a rate not less than 1.5 times the basic rate of pay for all hours worked in excess of the 40 hour in the work week.

18. Equal Employment Opportunity

Attention is called to the requirements for ensuring that employees and applicants for employment are not discriminated against because of race, color, religion, sex, sexual identity, gender identity, or national origin, and other civil rights requirements.

19. Certification Regarding Lobbying

Contractors who apply or bid for an award of \$100,000 or more shall provide the required certification that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to

influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 USC § 1352.

20. Clean Air Act

Contracts in excess of \$150,000 require the Contractor to comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387). Violations must be reported to the Regional Office of the Environmental Agency (EPA) and TCEQ.

BID SCHEDULE

PROJECT NAME: GENERATORS IMPROVEMENTS AT VARIOUS LOCATIONS – CITY OF ROBSTOWN				
SCOPE: The project shall consist of the installation of up to three new natural gas-powered generators and associated equipment at various locations for a complete in place project.				
BIDDER NAME:				
ADDRESS:				
PHONE:				
Item #	Item Description (Base Bid)	Quantity	Unit Price (\$)	Total Price (\$)
1	Demolition, removal and disposal of the existing 100KW diesel-powered generator at the Police Dept, including existing pavement for installation of new concrete pad and adjacent site improvements.	1 EA		
2	100KW/125KVA/208/120V Standby Rating 3-Phase Natural Gas Generator including labor, equipment and materials complete in place.	1 EA		
3	Remove and Replace the existing Automatic Transfer Switch (ATS) with a new 400A ATS including labor, equipment and materials complete in place.	1 EA		
4	Electrical work required for Generator in accordance with plans and specifications including, but not limited to, new conduits, new wiring/conductors, modifications to existing wiring and conduit runs, weather-tight wall penetrations, connections to existing utility boxes and controls and proper phasing of installation for limited facility interruption including labor, equipment and materials for a complete installation.	1 EA		
5	Natural Gas connections for the Generator installation in accordance with plans and specifications and proper phasing of installation for limited facility interruption including labor, equipment and materials for a complete installation.	1 EA		
6	Reinforced concrete foundation for new Generator per plans and specifications including, but not limited to anchor bolts/anchoring per manufacturers written installation instruction and all required subgrade preparation and dirt work necessary and labor, equipment and materials for a complete installation.	1 EA		
Item #	Item Description (Alternate No. 1)	Quantity	Unit Price (\$)	Total Price (\$)
1	Remove and Replace the existing ATS with a new 225A Automatic Transfer Switch including labor, equipment and materials complete in place.	1 EA		
Item #	Item Description (Alternate No. 2)	Quantity	Unit Price (\$)	Total Price (\$)
1	Demolition, removal and disposal of the existing 60KW natural gas-powered generator at the Fire Dept, including existing pavement for installation of new concrete pad and adjacent site improvements.	1 EA		
2	60KW/125KVA/208/120V Standby Rating 3-Phase Natural Gas Generator including labor, equipment and materials complete in place.	1 EA		
3	Remove and Replace the existing ATS with a new 225A Automatic Transfer Switch including labor, equipment and materials complete in place.	1 EA		
4	225A Automatic Transfer Switch including labor, equipment and materials complete in place.	1 EA		
5	Electrical work required for Natural Gas Generator in accordance with plans and specifications including, but not limited to, new conduits, new wiring/conductors, modifications to existing wiring and conduit runs, weather-tight wall penetrations, connections to existing utility boxes and controls and proper phasing of installation for limited facility interruption including labor, equipment and materials for a complete installation.	1 EA		

Item #	Item Description (Alternate No. 2) (continued)	Quantity	Unit Price (\$)	Total Price (\$)
6	Natural Gas connections for the 60KW Generator installation in accordance with plans and specifications and proper phasing of installation for limited facility interruption including labor, equipment and materials for a complete installation.	1 EA		
7	Reinforced concrete foundation for new Generator per plans and specifications including, but not limited to anchor bolts/anchoring per manufacturers written installation instruction and all required subgrade preparation and dirt work necessary and labor, equipment and materials for a complete installation.	1 EA		
Item #	Item Description (Alternate No. 3)	Quantity	Unit Price (\$)	Total Price (\$)
1	30KW/27.5KVA/208/120V Standby Rating 3-Phase, Natural Gas Generator per plans and specifications including labor, equipment and materials complete in place.	1 EA		
2	Install new 150A Automatic Transfer Switch including labor, equipment and materials complete in place.	1 EA		
3	Electrical work required for Natural Gas Generator in accordance with plans and specifications including, but not limited to, new conduits, new wiring/conductors, modifications to existing wiring and conduit runs, weather-tight wall penetrations, connections to existing utility boxes and controls and proper phasing of installation for limited facility interruption including labor, equipment and materials for a complete installation.	1 EA		
4	Natural Gas connections for the Generator installation in accordance with plans and specifications and proper phasing of installation for limited facility interruption including labor, equipment and materials for a complete installation.	1 EA		
Project Duration: 120 Calendar Days from Notice to Proceed			Total Base Bid	
			Add Alt. No.1	
			Add Alt. No.2	
			Add Alt. No.3	

Bid Scenarios and order of precedence: (pending available funding and GLO/City approval)

				TOTALS
BASE BID + ADD ALT 1	\$ -	\$ -		\$ -
	(Base Bid) + (Add Alt 1)			
BASE BID + ADD ALT 2	\$ -	\$ -		\$ -
	(Base Bid) + (Add Alt 2)			
BASE BID + ADD ALT 2 + ADD ALT 3	\$ -	\$ -	\$ -	\$ -
	(Base Bid) + (Add Alt 2) + (Add Alt 3)			

SPECIFICATION NOTES

The City of Robstown is installing permanent natural gas-powered generators with new ATS, electrical connections, gas connections, concrete pads, and site work at up to three locations for a complete project in place.

The BIDDER, in compliance with the invitation for bids for Generators Improvement at Various Locations – City of Robstown, having examined the plans and specifications with related documents and the site of the proposed work, and being familiar with all the conditions surrounding the construction of the proposed project, including the availability of materials and labor, hereby proposes to furnish all labor, materials, and supplies in accordance with the contract documents, within the time set forth herein. These price(s) are to cover all expenses incurred in performing the work required under the contract documents, of which this proposal is a part. These price(s) are firm and shall not be subject to adjustment provided this Proposal is accepted within ninety (90) days after the time set for receipt of proposals.

BIDDER hereby agrees to commence work under this contract on or before a date to be specified in a written "Notice to Proceed" to be issued by the City and to substantially complete within **120** consecutive calendar days as stipulated in the specifications. BIDDER further agrees to pay as liquidated damages, the sum of **\$250.00** for each consecutive calendar day beyond the approved contract completion date.

I hereby acknowledge the receipt of the following addenda:

1. _____
2. _____

SUBCONTRACTORS. The undersigned BIDDER proposes that he will be responsible to perform major portions of the work at the project site with his own forces and that specific portions of the work not performed by the undersigned will be subcontracted and performed by the following subcontractors.

Type of Work Subcontracted	Name of Subcontractor

The undersigned hereby declares that they have visited the site and has carefully examined the contract documents relative to the work covered by the above bid.

Bidder Name:	
Address:	
Phone:	
EIN or Tax ID No.:	
Typed Name & Title:	
Signature:	

STATEMENT OF BIDDER'S QUALIFICATIONS

All questions must be answered, and the data given must be clear and comprehensive. If necessary, questions may be answered on separate attached sheets. The Bidder may submit additional information.

Name of Bidder: _____

Address: _____

Date Organized: _____ Date Incorporated: _____

Number of Years in contracting business under current name: _____

CURRENT CONTRACTS:

Project Name	Project Owner	Contract Amount	Planned Completion Date

Type of work performed by your company: _____

Have you ever been terminated for cause on any contracts or work awarded to you? _____

Have you ever failed to complete a contract? _____

List the relevant projects completed by your firm in the last 5 years (at least 3 required):

Project Name	Contract Amount	Completion Date	References Contact Information (name, phone, email)

Principal In Charge:				
	(Name)	(Title)	(Phone)	(Email)
Project Superintendent:				
	(Name)	(Title)	(Phone)	(Email)

(Attach resume(s) for the principal member(s) of your organization and the proposed superintendent.)

NONCOLLUSION AFFIDAVIT OF PRIME BIDDER

State of _____)

County of _____)

_____, being first duly sworn, deposes and says that:

- (1) He is _____ of _____, the Bidder that has submitted the attached Bid.
- (2) He is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid.
- (3) Such Bid is genuine and is not a collusive or sham Bid.
- (4) Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with another Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix an overhead, profit or cost element of the Bid price or the Bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the _____ (Local Public Agency) or any person interested in the proposed Contract; and
- (5) The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

(Signed) _____

Title

Subscribed and sworn to me this ____ day of ____.

By: _____
Notary Public

My commission expires _____

CONTRACTOR CERTIFICATIONS

CERTIFICATION OF BIDDER REGARDING CIVIL RIGHTS LAWS AND REGULATIONS	
INSTRUCTIONS	
CERTIFICATION OF BIDDER REGARDING Executive Order 11246 and Federal Laws Requiring Federal Contractor to adopt and abide by equal employment opportunity and affirmative action in their hiring, firing, and promotion practices. This includes practices related to race, color, gender, religion, national origin, disability, and veterans' rights.	
NAME AND ADDRESS OF BIDDER (include ZIP Code)	
CERTIFICATION BY BIDDER	
Bidder has participated in a previous contract or subcontract subject to Civil Rights Laws and Regulations. <input type="checkbox"/> Yes <input type="checkbox"/> No	
The undersigned hereby certifies that: <input type="checkbox"/> The <u>Non-Segregated Facilities</u> clause (Section 109 provision) is included in the Contract. No segregated facilities will be maintained as required by Title VI of the Civil Rights Act of 1964. <input type="checkbox"/> The <u>Equal Employment Opportunity</u> clause is included in the Contract (if bid equals or exceeds \$10,000). <input type="checkbox"/> The <u>Affirmative Action for Handicapped Workers</u> clause is included in the contract. <input type="checkbox"/> The Exhibit B – <u>Assurances for Construction Programs</u> is included in the Contract. <input type="checkbox"/> The Exhibit D – <u>State of Texas Assurance</u> is included in the Contract.	
Have you ever been or are you being considered for sanction due to violation of Executive Order 11246 Equal Employment Opportunity, as amended? <input type="checkbox"/> Yes <input type="checkbox"/> No	
NAME AND TITLE OF SIGNER (Please type)	
SIGNATURE	DATE

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we the undersigned, _____ as PRINCIPAL, and _____, as SURETY are held and firmly bound unto _____ hereinafter called the "Owner", in the penal sum of _____ Dollars, (\$ _____), lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the principal has submitted the Accompanying bid, dated _____, for _____ (project).

NOW, THEREFOR, if the Principal shall not withdraw said Bid within the period specified therein after the opening of the same, or, if no period be specified, within thirty (30) days after the said opening, and shall within the period specified therefore, or if no period be specified, within ten (10) days after the prescribed forms are presented to him for signature, enter into a written contract with the Owner in accordance with the Bid as accepted, and give bond with good and sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of such contract; or in the event of the withdrawal of said Bid within the period specified, or the failure to enter into such Contract and give such bond within the time specified, if the Principal shall pay the Owner the difference between the amount specified in said Bid and the amount for which the local Public Agency may procure the required work or supplies or both, if the latter be in excess of the former, then the above obligation shall be void and of no effect, otherwise to remain in full force and virtue.

IN WITNESS THEREOF, the above-bounded parties have executed this instrument under their several seals this _____ day of _____, the name and corporate seal of each corporate party being hereto affixed and these present signed by its undersigned representative, pursuant to authority of its governing body.

_____ (SEAL)

Attest:

By: _____
Affix
Corporate
Seal

Attest:

By: _____
Affix
Corporate
Seal

Attest:

By: _____
Affix
Corporate
Seal

Countersigned

By _____

* Attorney-in-Fact, State of _____

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____, certify that I am the _____, Secretary of the Corporation named as Principal in the within bond; that _____, who signed the said bond on behalf of the principal was then _____ of said corporation; that I know his signature, and his signature thereto is genuine; and that said bond was duly signed, sealed, and attested to, for and in behalf of said corporation by authority of this governing body.

Corporate
Seal

Title: _____

* Power-of-attorney for person signing for Surety Company must be attached to bond.

LOCAL GOVERNMENT OFFICER CONFLICTS DISCLOSURE STATEMENT

FORM CIS

(Instructions for completing and filing this form are provided on the next page.)

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.

This is the notice to the appropriate local governmental entity that the following local government officer has become aware of facts that require the officer to file this statement in accordance with Chapter 176, Local Government Code.

OFFICE USE ONLY

Date Received

1 Name of Local Government Officer

2 Office Held

3 Name of vendor described by Sections 176.001(7) and 176.003(a), Local Government Code

4 Description of the nature and extent of each employment or other business relationship and each family relationship with vendor named in item 3.

5 List gifts accepted by the local government officer and any family member, if aggregate value of the gifts accepted from vendor named in item 3 exceeds \$100 during the 12-month period described by Section 176.003(a)(2)(B).

Date Gift Accepted _____ Description of Gift _____

Date Gift Accepted _____ Description of Gift _____

Date Gift Accepted _____ Description of Gift _____

(attach additional forms as necessary)

6 SIGNATURE

I swear under penalty of perjury that the above statement is true and correct. I acknowledge that the disclosure applies to each family member (as defined by Section 176.001(2), Local Government Code) of this local government officer. I also acknowledge that this statement covers the 12-month period described by Section 176.003(a)(2)(B), Local Government Code.

Signature of Local Government Officer

Please complete either option below:

(1) Affidavit

NOTARY STAMP / SEAL

Sworn to and subscribed before me by _____ this the _____ day of _____, 20 _____, to certify which, witness my hand and seal of office.

Signature of officer administering oath

Printed name of officer administering oath

Title of officer administering oath

OR

(2) Unsworn Declaration

My name is _____, and my date of birth is _____.

My address is _____, _____, _____, _____, _____.
(street) (city) (state) (zip code) (country)

Executed in _____ County, State of _____, on the _____ day of _____, 20_____.
(month) (year)

Signature of Local Government Officer (Declarant)

LOCAL GOVERNMENT OFFICER CONFLICTS DISCLOSURE STATEMENT

Section 176.003 of the Local Government Code requires certain local government officers to file this form. A "local government officer" is defined as a member of the governing body of a local governmental entity; a director, superintendent, administrator, president, or other person designated as the executive officer of a local governmental entity; or an agent of a local governmental entity who exercises discretion in the planning, recommending, selecting, or contracting of a vendor. This form is required to be filed with the records administrator of the local governmental entity not later than 5 p.m. on the seventh business day after the date on which the officer becomes aware of the facts that require the filing of this statement.

A local government officer commits an offense if the officer knowingly violates Section 176.003, Local Government Code. An offense under this section is a misdemeanor.

Refer to chapter 176 of the Local Government Code for detailed information regarding the requirement to file this form.

INSTRUCTIONS FOR COMPLETING THIS FORM

The following numbers correspond to the numbered boxes on the other side.

- 1. Name of Local Government Officer.** Enter the name of the local government officer filing this statement.
- 2. Office Held.** Enter the name of the office held by the local government officer filing this statement.
- 3. Name of vendor described by Sections 176.001(7) and 176.003(a), Local Government Code.** Enter the name of the vendor described by Section 176.001(7), Local Government Code, if the vendor: a) has an employment or other business relationship with the local government officer or a family member of the officer as described by Section 176.003(a)(2)(A), Local Government Code; b) has given to the local government officer or a family member of the officer one or more gifts as described by Section 176.003(a)(2)(B), Local Government Code; or c) has a family relationship with the local government officer as defined by Section 176.001(2-a), Local Government Code.
- 4. Description of the nature and extent of each employment or other business relationship and each family relationship with vendor named in item 3.** Describe the nature and extent of the employment or other business relationship the vendor has with the local government officer or a family member of the officer as described by Section 176.003(a)(2)(A), Local Government Code, and each family relationship the vendor has with the local government officer as defined by Section 176.001(2-a), Local Government Code.
- 5. List gifts accepted, if the aggregate value of the gifts accepted from vendor named in item 3 exceeds \$100.** List gifts accepted during the 12-month period (described by Section 176.003(a)(2)(B), Local Government Code) by the local government officer or family member of the officer from the vendor named in item 3 that in the aggregate exceed \$100 in value.
- 6. Signature.** Signature of local government officer. Complete this section after you finish the rest of this report. You have the option to either: (1) take the completed form to a notary public where you will sign above the first line that says "Signature of Local Government Officer" (an electronic signature is not acceptable) and your signature will be notarized, or (2) sign above both lines that say "Signature of Local Government Officer (Declarant)" (an electronic signature is not acceptable), and fill out the unsworn declaration section.

Local Government Code § 176.001(2-a): "Family relationship" means a relationship between a person and another person within the third degree by consanguinity or the second degree by affinity, as those terms are defined by Subchapter B, Chapter 573, Government Code.

Local Government Code § 176.003(a)(2)(A):

- (a) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:

- (2) the vendor:

(A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds \$2,500 during the 12-month period preceding the date that the officer becomes aware that:

- (i) a contract between the local governmental entity and vendor has been executed; or
- (ii) the local governmental entity is considering entering into a contract with the vendor.

DEBARMENT CERTIFICATION

1. The **CONTRACTOR** certifies to the best of its knowledge and belief that it and its principals:
 - a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal department or agency.
 - b. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or contract under a public transaction, violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statement, or receiving stolen property.
 - c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state, or local) with commission or any of the offenses enumerated in Paragraph 1.b. or this certification.
 - d. Have not within a three-year period preceding this application/proposal had one or more public transactions (federal, state, or local) terminated for cause or default; and
2. Where the **CONTRACTOR** is unable to certify to any of the statements in this certification, such **CONTRACTOR** shall attach an explanation to this certification.

Signature – Company Official

Printed/Typed Firm Name

Printed/Typed Name and Title

Date

CERTIFICATION REGARDING LOBBYING

(To be submitted if the bid or offer exceeds \$100,000)

The undersigned certifies, to the best of his or her knowledge and belief, that:

(a) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(b) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(c) The undersigned shall require that the language paragraph 1 and 2 of this anti-lobbying certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995).

The Contractor, _____, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. § 3801 et seq., apply to this certification and disclosure, if any.

Signature of Contractor's Authorized Official

Printed Name and Title of Contractor's Authorized Official

Date

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether sub-awardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.
2. Identify the status of the covered Federal action.
3. Identify the appropriate classification of this report. If this is a follow-up report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
4. Enter the full name, address, city, State, and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or subaward recipient. Identify the tier of the sub-awardee, e.g., the first sub-awardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
5. If the organization filing the report in item 4 checks "Sub-awardee," then enter the full name, address, city, State, and zip code of the prime Federal recipient. Include Congressional District, if known.
6. Enter the name of the federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.
8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitations for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Included prefixes, e.g., "RFP-DE-90-001."
9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
10. (a) Enter the full name, address, city, State, and zip code of the lobbying registrant under the Lobbying Disclosure Act of 1995 engaged by the reporting entity identified in item 4 to influence the covered Federal action.

(b) Enter the full names of the individual(s) performing services and include full address if different from 10(a). Enter Last Name, First Name, and Middle Initial (MI).
11. The certifying official shall sign and date the form, print his/her name, title, and telephone number.

According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB control Number. The valid OMB control number for this information collection is OMB No. 0348-0046. Public reporting burden for this collection of information is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering, and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, DC 20503

Disclosure of Lobbying Activities

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352(See reverse for public burden disclosure)

<p>1. Type of Federal Action: <input type="checkbox"/> a. contract <input type="checkbox"/> b. grant <input type="checkbox"/> c. cooperative agreement <input type="checkbox"/> d. loan <input type="checkbox"/> e. loan guarantee <input type="checkbox"/> f. loan insurance</p>	<p>2. Status of Federal Action: <input type="checkbox"/> a. bid/offer/application <input type="checkbox"/> b. initial award <input type="checkbox"/> c. post-award</p>	<p>3. Report Type: <input type="checkbox"/> a. initial filing <input type="checkbox"/> b. material change</p>
<p>4. Name and Address of Reporting Entity: <input type="checkbox"/> Prime <input type="checkbox"/> Sub-awardee Tier _____, if Known: Congressional District, if known:</p>	<p>5. If Reporting Entity in No. 4 is Sub-awardee, Enter Name and Address of Prime: Congressional District, if known:</p>	
<p>6. Federal Department/Agency:</p>	<p>7. Federal Program Name/Description: CFDA Number, <i>if applicable</i>:</p>	
<p>7. Federal Action Number, if known:</p>	<p>9. Award Amount, if known: \$</p>	
<p>10. a. Name and Address of Lobbying Registrant <i>(if individual, last name, first name, MI):</i></p>	<p>b. Individuals Performing Services <i>(including address if different from No. 10a)</i> <i>(last name, first name, MI):</i></p>	
<p>11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.</p>	<p>Signature: _____ Print Name: _____ Title: _____ Telephone No.: _____ Date: _____</p>	
<p>Federal Use Only</p>	<p>Authorized for Local Reproduction Standard Form - LLL (Rev. 7-97)</p>	

EQUAL OPPORTUNITY GUIDELINES FOR CONSTRUCTION CONTRACTORS

- 1. What are the responsibilities of the offeror or bidder to insure equal employment opportunity?**
The offeror or bidder must comply with the "Equal Opportunity Clause" and the "Standard Federal Equal Opportunity Construction Contract Specifications."
- 2. Are construction contractors required to insure a comfortable working environment for all employees?**
Yes, it is the construction contractor's responsibility to provide an environment free of harassment, intimidation, and coercion to all employees and to notify all foremen and supervisors to carry out this obligation, with specific attention to minority or female individuals.
- 3. To alleviate developing separate facilities for men and women on all sites, can a construction contractor place all women employees on one site?**
No, two or more women should be assigned to each site when possible.
- 4. Are construction contractors required to make special outreach efforts to minority and female recruitment sources?**
Yes, construction contractors must establish a current list of minority and female recruitment sources. Notification of employment opportunities, including the availability of on-the-job training and apprenticeship programs, should be given to these sources. The efforts of the construction contractors should be kept in file.
- 5. Should records be maintained on the number of minority and females applying for positions with construction contractors?**
Yes, records must be maintained to include a current list of names, addresses and telephone numbers of all minority and female applicants. The documentation should also include the results of the applications submitted.
- 6. What happens if a woman or minority is sent to the union by the Contractor and is not referred back to the Contractor for employment?**
If the unions impede the construction contractor's responsibility to provide equal employment opportunity, a written notice should be submitted to the Texas Division of Emergency Management's Hazard Mitigation Grant Program.
- 7. What efforts are made by construction contractors to create entry-level positions for women and minorities?**
Construction contractors are required to develop on-the-job training programs, or participate in training programs, especially those funded by the Department of Labor, to create positions for women and minorities and to meet employment needs.
- 8. Are any efforts made by the Contractor to publicize their Equal Employment Opportunity (EEO) policy?**
Yes, the construction contractor is responsible for notifying unions and sources of training programs of their equal employment opportunity policy. Unions should be requested to cooperate in the effort of equal opportunity. The policy should be included in any appropriate manuals, or collective bargaining agreements. The construction contractor is encouraged to publicize the equal employment opportunity policy in the company newspaper and annual report. The Contractor is also responsible to include the EEO policy in all media advertisement.
- 9. Are any in-service training programs provided for staff to update the EEO policy?**
At least annually a review of the EEO policy and the affirmative action obligations are required of all personnel employees of a decision-making status. A record of the meeting including date, time, location, persons present,

subject matter discussed, and disposition of the subject matter should be maintained.

10. What recruitment efforts are made for minorities and women?

The construction contractor must notify, both orally and in writing, minority, and female recruitment sources one month prior to the date of acceptance for apprenticeship or other training programs.

11. Are any measures taken to encourage promotions for minorities and women?

Yes, an annual evaluation should be conducted for all minority and female personnel to encourage these employees to seek higher positions.

12. What efforts are taken to ensure that personnel policies are in accordance with the EEO policy?

Personnel policies regarding job practices, work assignments, etc. should be continually monitored to ensure that the EEO policy is carried out.

13. Can women be excluded from utilizing any facilities available to men?

No, all facilities and company activities are non-segregated except for bathrooms or changing facilities to insure privacy.

14. What efforts are made to utilize minority and female contractors and suppliers?

None, however, records are kept of all offers to minority and female construction contractors.

15. If a construction contractor participates in a business-related association that does not comply with affirmative action standards, does that show his/her failure to comply?

No, the construction contractor is responsible for its own compliance.

16. Will a construction contractor be in violation of EEO policy and affirmative action if he sets up one set of goals to include minorities and women?

Yes. There is a separate goal for minorities and a separate single goal for women. The construction contractor is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women both minority and non-minority.

17. Can a construction contractor hire a subcontractor who has been debarred from government contracts pursuant to EEO?

No. The construction contractor must suspend, terminate, or cancel its contract with any Subcontractor who is in violation of the EEO policy.

18. What effort has been taken by the construction contractor to monitor all employment to ensure the company EEO policy is being carried out?

The construction contractor must designate a responsible individual to keep accurate records of all employees that includes specific information required by the government.

STANDARD FORM OF AGREEMENT FOR MATERIALS CONTRACT

THIS AGREEMENT made this the _____ day of _____, _____ by and between _____ (a corporation organized and existing under the laws of the State of _____) (a partnership consisting of _____) (an individual trading as _____) hereinafter called the "Contractor", and City of Robstown hereinafter called the "City".

WITNESSETH, that the Contractor and the City for the considerations stated herein mutually agree as follows:

ARTICLE 1. Statement of Work. The Contractor shall furnish all supervision, technical personnel, labor, materials, machinery, tools, equipment and services, including utility and transportation services, and perform and complete all work required for the construction of the Improvements embraced in the Project; namely, Generator Improvements at Various Locations, for the City of Robstown, project, all in strict accordance with the contract documents including all addenda thereto, numbered ____, dated _____ and _____, all as prepared by The City of Robstown, acting and in these contract documents preparation.

ARTICLE 2. The Contract Price. The City will pay the Contractor for the performance of the Contract in current funds, for the total quantities of work performed at the *unit prices* stipulated in the Bid for the several respective items of work completed subject to additions and deductions in the amount of _____ Dollars (\$ _____).

ARTICLE 3. The Contract. The executed contract documents shall consist of the following components:

- a. This Agreement (pgs. 1-3)
- b. Addenda
- c. Invitation for Bids
- d. Instructions to Bidders
- e. Signed Copy of Bid
- f. General Conditions, Part I
- g. Special Conditions
- h. Technical Specifications
- i. Drawings
- j. Other _____

ARTICLE 4. Performance. Work, in accordance with the Contract dated _____, _____, shall commence on or before as established in an official letter notification to the contractor called "Notice to Proceed" and Contractor shall complete the WORK within **120** consecutive calendar days thereafter. The date of completion of all WORK is therefore established by the Notice to Proceed Letter.

This Agreement, together with other documents enumerated in this ARTICLE 3, which said other documents areas fully a part of the Contract as if hereto attached or herein repeated, forms the Contract between the parties hereto. In the event that any provision in any component part of this Contract conflicts with any provision of anyother component part, the provision of the component part first enumerated in this ARTICLE 3 shall govern, except as otherwise specifically stated.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed in Quadruplicate original copies on the day and year first above written.

(Contractor)

City of Robstown
(City)

By: _____

By: _____

Title: _____

Title: _____

Corporate Certifications

I, _____, certify that I am the _____ of the corporation named as Contractor herein; that _____ who signed this Agreement on behalf of the Contractor, was then _____ of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

Corporate
Seal

(Corporate Secretary)

GENERAL CONTRACT CONDITIONS FOR EQUIPMENT AND MATERIALS

1. Contract and Contract Documents

(a) The project to be constructed will be financed with assistance from the General Land Office (GLO) under the U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant-Disaster Recovery (CDBG-DR) program and is subject to all applicable Federal and State laws and regulations. The project to be constructed pursuant to this contract will be financed with assistance from the Hazard Mitigation Grant Program (HMGP) overseen by the Department of Public Safety and the Texas Division of Emergency Management under the United States Department of Homeland Security Federal Emergency Management Agency (FEMA) and is subject to all applicable Federal and State laws and regulations.

(b) The Plans, Specifications and Addenda shall form part of this contract and the provisions thereof shall be binding upon the parties as if they were herein fully set forth

2. Definitions

Whenever used in any of the Contract Documents, the following meanings shall be given to the terms here undefined:

(a) The term "Contract" means the Contract executed between the City of Robstown, hereinafter called the "City" and _____ (Name of Construction Co.), hereinafter called "Contractor", of which these GENERAL CONDITIONS, form a part.

(b) The term "Project Area" means the area within the specified Contract limits of the Improvements contemplated to be constructed in whole or in part under this contract.

(c) The term "Contract Documents" means and shall include the following: Executed Contract, Addenda (if any), Invitation for Bids, Instructions to Bidders, Signed Copy of Bid, General Conditions, Special Conditions, Technical Specifications, and Drawings (as listed in the Schedule of Drawings).

3. Supervision By Contractor

(a) Except where the Contractor is an individual and personally supervises the work, the Contractor shall provide a competent superintendent, satisfactory to the City, on the work at all times during working hours with full authority to act as Contractor's agent. The Contractor shall also provide adequate staff for the proper coordination and expediting of his work.

(b) The Contractor shall be responsible for all work executed under the Contract. Contractor shall verify all figures and elevations before proceeding with the work and will be held responsible for any error resulting from his failure to do so.

4. Subcontracts

(a) The Contractor shall not execute an agreement with any subcontractor or permit any subcontractor to perform any work included in this contract until Contractor has verified the subcontractor is eligible to participate in federally funded contracts.

(b) No proposed subcontractor shall be disapproved by the City except for cause.

(c) The Contractor shall be as fully responsible to the City for the acts and omissions of his subcontractors, and of persons either directly or indirectly employed by them.

(d) Nothing contained in the Contract shall create any contractual relation between any subcontractor and the City.

5. Fitting and Coordination of Work

The Contractor shall be responsible for the proper fitting of all work and for the coordination of the operations of all trades, subcontractors, or material suppliers engaged upon this Contract.

6. Payments to Contractor

(a) Partial Payments.

1) The Contractor shall prepare the requisition for partial payment as of the last day of the month and submit it, with the required number of copies, to the City for approval. The amount of the payment due the Contractor shall be determined by adding to the total value of work completed to date, the value of materials properly stored on the site and deducting (1) ten percent (10%) of the total amount, to be retained until final payment, and (2) the amount of all previous payments. The total value of work completed to date shall be based on the estimated quantities of work completed and, on the unit prices contained in the agreement. The value of materials properly stored on the site shall be based upon the estimated quantities of such materials and the invoice prices. Copies of all invoices shall be available for inspection of the City.

2) Monthly or partial payments made by the City to the Contractor are advanced for the purpose of assisting the contractor to expedite the work of construction. The Contractor shall be responsible for the care and protection of all materials and work upon which payments have been made until final acceptance of such work and materials by the City. Such payments shall not constitute a waiver of the right of the City to require the fulfillment of all terms of the Contract and the delivery of all improvements embraced in this Contract complete and satisfactory to the City in all details.

(b) Final Payment.

1) After final inspection and the acceptance by the City of all work under the Contract, the Contractor shall prepare the requisition for final payment which shall be based upon the careful inspection of each item of work at the applicable unit prices stipulated in the Contract. The total amount of the final payment due the Contractor under this Contract shall be the amount computed as described above less all previous payments.

2) Before paying the final estimate, City shall require the Contractor to furnish releases or receipts from all subcontractors having performed any work and all persons having supplied materials, equipment (installed on the Project) and services to the Contractor. The City may make payment in part or in full to the Contractor without requiring the furnishing of such releases or receipts and any payments made shall in no way impair the obligations of any surety or sureties furnished under this Contract.

3) Any amount due the City under Liquidated Damages, shall be deducted from the final payment due the contractor.

4) Payments Subject to Submission of Certificates. Each payment to the Contractor by the City shall be made subject to submission by the Contractor of all written certifications required of it and its subcontractors.

(c) Withholding Payments. The City may withhold any payment due the Contractor as deemed necessary to protect the City, and if so elects, may also withhold any amounts due from the Contractor to any subcontractors or material dealers, for work performed or material furnished by them. The foregoing provisions shall be construed solely for the benefit of the City and will not require the City to determine or adjust any claims or disputes between the Contractor and its subcontractors or material dealers, or to withhold any moneys for their protection unless the City elects to do so. The failure or refusal of the City to withhold any moneys from the Contractor shall in no way impair the obligations of any surety or sureties under any bond or bonds furnished under this Contract.

7. Changes in the Work

(a) The City may make changes in the scope of work required to be performed by the Contractor under the Contract without relieving or releasing the Contractor from any obligations under the Contract or any guarantee given pursuant to the Contract provisions, and without affecting the validity of the guaranty bonds, and without relieving or releasing the surety or sureties of said bonds. All such work shall be executed under the terms of

the original Contract unless it is expressly provided otherwise.

(b) Except for the purpose of affording protection against any emergency endangering health, life, limb or property, the Contractor shall make no change in the materials used or in the specified manner of constructing and/or installing the improvements or supply additional labor, services, or materials beyond that actually required for the execution of the Contract, unless in pursuance of a written order from the City authorizing the Contractor to proceed with the change. No claim for an adjustment of the Contract Price will be valid unless so ordered.

(c) If applicable unit prices are contained in the Contract, the City may order the Contractor to proceed with desired unit prices specified in the Contract; provided that in case of a unit price contract the net value of all changes does not increase the original total amount of the agreement by more than twenty-five percent (25%) or decrease the original total amount by eighteen percent (18%) for Counties and 25% for municipalities but only with the contractor's written consent.

(d) Each change order shall include in its final form:

- 1) A detailed description of the change in the work.
- 2) The Contractor's proposal (if any) or a confirmed copy thereof.
- 3) A definite statement as to the resulting change in the contract price and/or time.
- 4) The statement that all work involved in the change shall be performed in accordance with contract requirements except as modified by the change order.
- 5) The procedures as outlined in this Section for a unit price contract also apply in any lump sum contract.

8. Claims for Extra Cost

(a) If the Contractor claims that any instructions by Drawings or otherwise involve extra cost or extension of time, he shall, within ten days after the receipt of such instructions, and in any event before proceeding to execute the work, submit his protest thereto in writing to the City, stating clearly and in detail the basis of his objections. No such claim will be considered unless so made.

(b) Claims for additional compensation for extra work, due to alleged errors in ground elevations, contour lines, or benchmarks, will not be recognized unless accompanied by certified survey data, made prior to the time the original ground was disturbed, clearly showing that errors exist which resulted, or would result, in handling more material, or performing more work, than would be reasonably estimated from the Drawings and maps issued.

(c) Any discrepancies which may be discovered between actual conditions and those represented by the Drawings and maps shall be reported at once to the City and work shall not proceed except at the Contractor's risk, until written instructions have been received from the City.

(d) If, on the basis of the available evidence, the City determines that an adjustment of the Contract Price and/or time is justifiable, a change order shall be executed.

9. Termination, Delays, and Liquidated Damages

(a) Right of the City to Terminate Contract for Convenience

City may at any time and for any reason terminate Contractor's services and work at City's convenience upon providing written notice to the Contractor specifying the extent of termination and the effective date. Upon receipt of such notice, Contractor shall, unless the notice directs otherwise, immediately discontinue the work and placing of orders for materials, facilities, and supplies in connection with the performance of this Agreement.

Upon such termination, Contractor shall be entitled to payment only as follows: (1) the actual cost of the work completed in conformity with this Agreement plus (2) such other costs actually incurred by Contractor as are permitted by the prime contract and approved by City. There shall be deducted from such sums as provided in

this subparagraph the amount of any payments made to Contractor prior to the date of the termination of this Agreement. Contractor shall not be entitled to any claim or claim of lien against City for any additional compensation or damages in the event of such termination and payment.

(b) Right of the City to Terminate Contract for Cause

If any of the provisions of this contract are violated by the Contractor, or by any subcontractors, the City may serve written notice upon the Contractor and the Surety of its intention to terminate the contract. The notices shall contain the reasons for such intention to terminate the contract, and unless such violation or delay shall cease and satisfactory arrangement of correction be made within ten days, the contract shall, upon the expiration of said ten (10) days, cease and terminate. In the event of any such termination, the City shall immediately serve notice thereof upon the Surety and the Contractor. The Surety shall have the right to take over and perform the contract. Provided, however, that if the Surety does not commence performance thereof within ten (10) days from the date of the mailing to such Surety of notice of termination, the City may take over the work and complete the project by bid/contract or by force account at the expense of the Contractor and his Surety shall be liable to the City for any excess cost incurred. In such event the City may take possession of and utilize in completing the work, such materials, appliances, and plant as may be on the site of the work and necessary therefore.

(c) Liquidated Damages for Delays.

If the work is not completed within the time stipulated in the applicable bid for Lump Sum or Unit Price Contract provided, the Contractor shall pay to the City as fixed, agreed, and liquidated damages (it being impossible to determine the actual damages occasioned by the delay) the amount of specified for each calendar day of delay until the work is completed. The Contractor and Contractor's sureties shall be liable to the City for the amount thereof.

(d) Excusable Delays.

- 1) The right of the Contractor to proceed shall not be terminated nor shall the Contractor be charged with liquidated damages for any delays in the completion of the work due to:
- 2) Any acts of the Government, including controls or restrictions upon or requisitioning of materials, equipment, tools, or labor by reason of war, national defense, or any other national emergency.
- 3) Any acts of the City;
- 4) Causes not reasonably foreseeable by the parties to this Contract at the time of execution which are beyond the control and without the fault or negligence of the Contractor, including, but not restricted to, acts of God, terrorism, war, acts of another Contractor in the performance of some other contract with the City, fires, floods, epidemics, quarantine, restrictions, strikes, freight embargoes, and weather of unusual severity such as hurricanes, tornadoes, cyclones and other extreme weather conditions.
- 5) Provided, however, that the Contractor promptly notifies the City within ten (10) days in writing of the cause of the delay. Upon receipt of such notification, the City shall ascertain the facts and the cause and extent of delay. If, upon the basis of the facts and the terms of this contract, the delay is properly excusable, the City shall extend the time for completing the work for a period of time commensurate with the period of excusable delay.

10. Assignment or Novation

The Contractor shall not assign nor transfer, whether by assignment or novation, any of its rights, duties, benefits, obligations, liabilities, or responsibilities under this Contract without the written consent of the City. No assignment or novation of this Contract shall be valid unless the assignment or novation expressly provides that the assignment of any of the Contractor's rights or benefits under the Contract is subject to a prior lien for labor performed, services rendered, and materials, tools, and equipment supplied for the performance of the work under this Contract in favor of all persons, Contractors, or corporations rendering such labor or services or supplying such materials, tools, or equipment.

11. Technical Specifications and Drawings

Anything mentioned in the Technical Specifications and not shown on the Drawings or vice versa, shall be of like effect as if shown on or mentioned in both. In case of difference between Drawings and Technical Specifications, the Technical Specifications shall govern. In case of any discrepancy in Drawings, or Technical Specifications, the matter shall be immediately submitted to the City for review. Contractor shall be liable for any issues or expenses in the event the discrepancy is not submitted to the City.

12. Shop Drawings

(a) All required shop drawings, machinery details, layout drawings, etc. shall be submitted to the Engineer in 3 copies for approval sufficiently in advance of requirements to afford ample time for checking, including time for correcting, resubmitting, and rechecking if necessary. The Contractor may proceed, only at the Contractor's own risk, with manufacture or installation of any equipment or work covered by said shop drawings, etc. until they are approved and no claim, by the Contractor, for extension of the contract time shall be granted by reason on his failure in this respect.

(b) Any drawings submitted without the Contractor's stamp of approval will not be considered and will be returned to him for proper resubmission. If any drawings show variations from the requirements of the Contract because of standard shop practice or other reason, the Contractor shall make specific mention of such variation in his letter of transmittal in order that, if acceptable, suitable action may be taken for proper adjustment of contract price and/or time, otherwise the Contractor will not be relieved of the responsibility for executing the work in accordance with the Contract even though the drawings have been approved.

(c) If a shop drawing is in accordance with the contract or involves only minor adjustment in the interest of the City not involving a change in contract price or time, the engineer may approve the drawing. The approval shall not relieve the Contractor from responsibility to adhere to the contract or for any error in the drawing.

13. Requests for Supplementary Information

It shall be the responsibility of the Contractor to make timely requests of the City for any additional information which should be furnished by the City under the terms of this Contract, and which is required in the planning and execution of the work. Such requests may be submitted from time to time as the need approaches, but each shall be filed in ample time to permit appropriate action to be taken by all parties involved to avoid delay. Each request shall be in writing and list the various items and the latest date by which each will be required by the Contractor. The first list shall be submitted within two weeks after Contract award and shall be as complete as possible at that time. The Contractor shall, if requested, furnish promptly any assistance and information the City may require in responding to these requests of the Contractor. The Contractor shall be fully responsible for any delay in his work or to others arising from his failure to comply fully with the provision of this section.

14. Materials and Workmanship

(a) Unless otherwise specifically provided for in the technical specifications, all workmanship, equipment, materials, and articles incorporated in the work shall be new and the best grade of the respective kinds for the purpose. Where equipment, materials, articles, or workmanship are referred to in the technical specifications as "equal to" any standard, the City Engineer shall decide the question of equality.

(b) The Contractor shall furnish to the City for approval the manufacturer's detailed specifications for all machinery, mechanical and other special equipment, which he contemplates installing together with full information as to type, performance characteristics, and all other pertinent information as required, and shall likewise submit for approval full information concerning all other materials or articles which he proposes to incorporate.

(c) Machinery, mechanical and other equipment, materials, or articles installed or used without such prior approval shall be at the risk of subsequent rejection.

(d) Materials specified by reference to the number or symbol of a specific standard, shall comply with 30

requirements in the latest revision thereof and any amendment or supplement thereto in effect on the date of the Invitation for Bids, except as limited to type, class or grade, or modified in the technical specifications shall have full force and effect as though printed therein.

(e) The City may require the Contractor to dismiss from the work such employee or employees as the City may deem unqualified.

15. Samples, Certificates and Tests

(a) The Contractor shall submit all material or equipment samples, certificates, affidavits, etc., as called for in the contract documents or required by the City, promptly after award of the contract and acceptance of the Contractor's bond. No such material or equipment shall be manufactured or delivered to the site, except at the Contractor's own risk, until the required samples or certificates have been approved in writing by the City. Any delay in the work caused by late or improper submission of samples or certificates for approval shall not be considered just cause for an extension of the contract time.

(b) Each sample submitted by the Contractor shall carry a label giving the name of the Contractor, the project for which it is intended, and the name of the producer. The accompanying certificate or letter from the Contractor shall state that the sample complies with contract requirements, shall give the name and brand of the product, its place of origin, the name and address of the producer and all specifications or other detailed information which will assist the City in making a prompt decision regarding the acceptability of the sample. It shall also include the statement that all materials or equipment furnished for use in the project will comply with the samples and/or certified statements.

(c) Approval of any materials shall be general only and shall not constitute a waiver of the City's right to demand full compliance with Contract requirements. After actual deliveries, the City will have such check tests made ashe deems necessary in each instance and may reject materials and equipment and accessories for cause, even though such materials and articles have been given general approval. If materials, equipment, or accessories which fail to meet check tests have been incorporated in the work, the City will have the right to cause their removal and replacement by proper materials or to demand and secure such reparation by the Contractor as is equitable.

(d) Except as otherwise specifically stated in the Contract, the costs of sampling and testing will be divided as follows:

- 1) The Contractor shall furnish without extra cost, including packing and delivery charges, all samples required for testing purposes, except those samples taken on the project by the City;
- 2) The Contractor shall assume all costs of re-testing materials which fail to meet contract requirements;
- 3) The Contractor shall assume all costs of testing materials offered in substitution for those found deficient;
- 4) The City will pay all other expenses.

16. Permits and Codes

(a) The Contractor shall give all notices required by and comply with all applicable federal and state laws, ordinances, and codes of the Local Government. All construction work and/or utility installations shall comply with all applicable ordinances, and codes including all written waivers. Before installing any work, the Contractor shall examine the drawings and technical specifications for compliance with applicable ordinances and codes and shall immediately report any discrepancy to the City. Where the requirements of the drawings and technical specifications fail to comply with such applicable ordinances or codes, the City will adjust the

Contract by Change Order to conform to such ordinances or codes (unless waivers in writing covering the difference have been granted by the governing body or department) and make appropriate adjustment in the Contract Price or stipulated unit prices.

(b) Should the Contractor fail to observe the foregoing provisions and proceed with the construction and/or install any utility at variance with any applicable ordinance or code, including any written waivers (notwithstanding the fact that such installation is in compliance with the drawings and technical specifications), the Contractor shall remove such work without cost to the City.

(c) The Contractor shall at his own expense, secure and pay for all permits for street pavement, sidewalks, shed, removal of abandoned water taps, sealing of house connection drains, pavement cuts, buildings, electrical, plumbing, water, gas, and sewer permits required by the local regulatory body or any of its agencies.

(d) The Contractor shall comply with applicable local laws and ordinances governing the disposal of surplus excavation, materials, debris, and rubbish on or off the Project Area and commit no trespass on any public or private property in any operation due to or connected with the Improvements contained in this Contract.

(e) The Contractor will be required to make arrangements for and pay the water, electrical power, or any other utilities required during construction.

(f) During construction of this project, the Contractor shall use every means possible to control the amount of dust created by construction. Prior to the close of a day's work, the Contractor, if directed by the City, shall moisten the surrounding area to prevent a dusty condition.

17. Care of Work

(a) The Contractor shall be responsible for all damages to person or property that occur as a result of its fault or negligence in connection with the prosecution of the work and shall be responsible for the proper care and protection of all materials delivered and work performed until completion and final acceptance.

(b) In an emergency affecting the safety of life, limb, or property, including adjoining property, the Contractor, without special instructions or authorization from the City is authorized to act to prevent such threatened loss or injury. Contractor shall follow all instructions of City.

(c) The Contractor shall avoid damage as a result of his operations to existing sidewalks, streets, curbs, pavements, utilities (except those which are to be replaced or removed), adjoining property, etc., and shall be responsible for completely repairing any damage thereto caused by the operations.

(d) The Contractor shall shore up, brace, underpin, secure, and protect as maybe necessary, all foundations and other parts of existing structures adjacent to, adjoining, and in the vicinity of the site, which may be in any way affected by the excavations or other operations connected with the construction of the improvements included in this Contract. The Contractor shall be responsible for the giving of any and all required notices to any adjoining or adjacent property owner or other party before the commencement of any work. The Contractor shall indemnify and save harmless the City from any damages on account of settlements or the loss of lateral support of adjoining property and from all loss or expense and all damages for which the City may become liable in consequence of such injury or damage to adjoining and adjacent structures and their premises.

18. Accident Prevention

(a) No laborer or mechanic employed in the performance of this Contract shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health or safety as determined under construction safety and health standards promulgated by the Department of Labor.

(b) The Contractor shall exercise proper precaution at all times for the protection of persons and property and shall be responsible for all damages to persons or property, either on or off the site, which occur as a result of

his prosecution of the work.

(c) The Contractor shall maintain an accurate record of all cases of death, occupational disease, or injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment on work under the Contract. The Contractor shall promptly furnish the City with reports concerning these matters.

(d) The Contractor shall indemnify and hold harmless the City from any claims for damages resulting from property damage, personal injury and/or death suffered or alleged to have been suffered by any person as a result of any work conducted under this contract.

(e) The Contractor shall provide trench safety for all excavations more than five feet deep prior to excavation. All OSHA Standards for trench safety must be adhered to by the Contractor.

(f) The contractor shall at all times conduct work in such a manner as to ensure the least possible inconvenience to vehicular and pedestrian traffic. At the close of the work each day, all streets where possible in the opinion of the City, shall be opened to the public in order that persons living in the area may have access to their homes or businesses by the use of the streets. Barricades, warning signs, and necessary lighting shall be provided to the satisfaction of the City at the expense of the Contractor.

19. Sanitary Facilities

The Contractor shall furnish, install, and maintain ample sanitary facilities for laborers. As the needs arise, a sufficient number of enclosed temporary toilets shall be conveniently placed as required. Drinking water shall be provided from an approved source, so piped, or transported as to keep it safe and fresh and served from single service containers or satisfactory types of sanitary drinking stands or fountains. All such facilities and services shall be furnished in strict accordance with existing and governing health regulations.

20. Use of Premises

(a) The Contractor shall confine equipment, storage of materials, and construction operations to the contract limits as shown on the drawings and as prescribed by ordinances or permits, or as may be desired by the City and shall not unreasonably encumber the site or public rights of way with materials and construction equipment.

(b) The Contractor shall comply with all reasonable instructions of the City and all existing federal, state, and local regulations regarding signs, advertising, traffic, fires, explosives, danger signals, and barricades.

21. Removal of Debris, Cleaning, Etc.

The Contractor shall, periodically or as directed during the progress of the work, remove, and legally dispose of all surplus excavated material and debris, and keep the Project Area and public rights of way reasonably clear. Upon completion of the work, he shall remove all temporary construction facilities, debris and unused materials provided for work, and put the whole site of the work and public rights of way in a neat and clean condition.

22. Inspection

(a) All materials and workmanship shall be subject to inspection, examination, or test by the City and selected Engineer at all times during manufacture or construction and at any and all places where such manufacture or construction occurs. The City shall have the right to reject defective material and workmanship or require its correction. Unacceptable workmanship shall be satisfactorily corrected. Rejected material shall be promptly segregated and removed from the Project Area and replaced with material of specified quality without charge. If the Contractor fails to proceed at once with the correction of rejected workmanship or defective material, the City may by contract or otherwise have the defects remedied or rejected materials removed from the Project Area and charge the cost of the same against any Monies which may be due the Contractor, without prejudice to any other rights or remedies of the City.

(b) The Contractor shall furnish promptly all materials reasonably necessary for any tests which may be required.

All tests by the City will be performed in such manner as not to delay the work unnecessarily and will be made in accordance with the provisions of the technical specifications.

(c) The Contractor shall notify the City sufficiently in advance of back filling or concealing any facilities to permit proper inspection. If any facilities are concealed without approval or consent of the City, the Contractor shall uncover for inspection and recover such facilities at Contractor's expense, when so requested by the City.

(d) Should it be considered necessary or advisable by the City at any time before final acceptance of the entire work to make an examination of work already completed, the Contractor shall on request promptly furnish all necessary facilities, labor, and material. If such work is found to be defective in any important or essential respect, due to fault of the Contractor or subcontractors, the Contractor shall defray all the expenses of such examination and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the Contract, the actual cost of labor and material necessarily involved in the examination and replacement, shall be reimbursable and if completion of the work of the entire Contract has been delayed, a suitable extension of time will be approved.

(e) Inspection of materials and appurtenances to be incorporated in the improvements included in this Contract may be made at the place of production, manufacture or shipment, whenever the quantity justifies it, and such inspection and acceptance, unless otherwise stated in the technical specifications, shall be final, except as regards to: (1) latent defects, (2) departures from specific requirements of the Contract, (3) damage or loss in transit, or (4) fraud or such gross mistakes as amount to fraud. Subject to the requirements contained in the preceding sentence, the inspection of materials as a whole or in part will be made at the Project Site.

(f) Neither inspection, testing, approval nor acceptance of the work in whole or in part, by the City or its agents shall relieve the Contractor or its sureties of full responsibility for materials furnished, or work performed not in strict accordance with the Contract.

23. Review by City

The City and its authorized representatives and agents shall have access to and be permitted to observe and review all work, materials, equipment, payrolls, personnel records, employment conditions, material invoices, and other relevant data and records pertaining to this Contract, provided, however that all instructions and approval with respect to the work will be given to the Contractor only by the City through its authorized representatives or agents.

24. Final Inspection

When the Improvements included in this Contract are substantially completed, the Contractor shall notify the City in writing that the work will be ready for final inspection on a definite date which shall be stated in the notice. The City will make the arrangements necessary to have final inspection commenced on the date stated in the notice, or as soon thereafter as is practicable.

25. Ownership and Use of Documents

All documents prepared by the Contractor in connection with this Agreement are the property of the City. The contractor will deliver its records and supporting documentation relating to this agreement to the City upon close-out of the projects and the City shall thenceforth be responsible for the maintenance of such records and documents.

26. Deduction for Uncorrected Work

If the City deems it not expedient to require the Contractor to correct work not done in accordance with the Contract Documents, an equitable deduction from the Contract Price will be made by agreement between the Contractor and the City and subject to settlement, in case of dispute, as herein provided.

27. Insurance

The Contractor shall not commence work under this contract until all required insurance under this paragraph 34

has been secured and approved by the City.

(a) **Worker's Compensation Insurance:** The Contractor shall procure and shall maintain during the life of this contract Worker's Compensation Insurance as required by the State of Texas for all of his employees to be engaged in work at the site of the project under this contract and, in case of any such work sublet, the Contractor shall require the subcontractor similarly to provide Worker's Compensation Insurance for all of the employees engaged in such work unless such employees are covered by the protection afforded by the Contractor's Worker's Compensation Insurance.

(b) **Contractor's Public Liability and Property Damage Insurance and Vehicle Liability Insurance.** The Contractor shall procure and shall maintain during the life of this contract Contractor's Public Liability Insurance, Contractor's Property Damage Insurance and Vehicle Liability Insurance in the following amounts:

- 1) CONTRACTOR shall have, (or purchase) and shall maintain in force during the duration of the Work, coverage for the hazard of explosion, collapse and underground shall be included. Coverage for independent contractor's liability, contractual liability, products/completed operations liability, personal injury, and broad form property damage shall also be included. Completed operations liability shall be kept in force for at least one (1) year after the date of final completion. Coverages shall have at least the following limits:

A.	General Aggregate	\$2,000,000
B.	Products-Completed Operations Aggregate	\$1,000,000
C.	Personal and Advertising Injury	\$1,000,000
D.	Each Occurrence	\$1,000,000
E.	Fire Damage	\$ 50,000

- 2) **ADDITIONAL Insured.** ALL POLICIES (Except for Workman's Compensation/Employers Liability) will name **City of Robstown as an additional insured for all insurance requirements**, by policy endorsement, along with **City's Employees and OWNER's Engineer as ADDITIONAL INSURED** and must provide coverage to the maximum extent permitted by law. The additional insured endorsements shall be on the ISO CG2010 11185 form or CG 2010 (10/93) in combination with CG 2037 of CG 2033, or suitable form equivalent.
- 3) **Automobile Liability.** CONTRACTOR shall have (or purchase) and shall maintain in force, for the duration of the Work, coverage cars and trucks owned, rented, hired, or leased, and others of non-ownership nature used by employees in and around or in connection with the Contract. Coverage shall have at least the following limit Combined Single Limit \$1,000,000.
- 4) **Builders Risk Insurance.** CONTRACTOR shall have (or purchase) and shall maintain in force during the duration of the Work, coverage for, but not limited to, fire, lightning, windstorm, tornado, hurricane, and hail. Coverage shall be in the amount of 100 percent complete value basis on the insurable portions of the project for the benefit of OWNER, CONTRACTOR, and all subcontractors, as their interests may appear.
- 5) **Deductible.** No deductible on any coverage more than \$500.00 per occurrence is acceptable.
- 6) In the event OWNER is notified of cancellation of all or any part, OWNER may stop all Work on the Contract or secure insurance at its will and charge CONTRACTOR the cost thereof deducting the cost from CONTRACTOR's funds.

(c) **Proof of Insurance:** The Contractor shall furnish the City with certificates showing the type, amount, class of operations covered, effective dates and date of expiration of policies. Such certificates shall also contain substantially the following statement: "The insurance covered by this certificate will not be canceled or

materially altered except after ten (10) days written notice has been received by the City."

28. Warranty of Title

No material, supplies, or equipment to be installed or furnished under this Contract shall be purchased subject to any chattel mortgage or under a conditional sale, lease-purchase, or other agreement by which an interest is retained by the seller or supplier. The Contractor shall warrant good title to all materials, supplies, and equipment installed or incorporated in the work and upon completion of all work, shall deliver the same, together with all improvements and appurtenances constructed or placed by Contractor, to the City free from any claims, liens, or charges. Neither the Contractor nor any person, firm, or corporation furnishing any material or labor for any work covered by this Contract shall have any right to a lien upon any improvement or appurtenance. Nothing contained in this paragraph, however, shall defeat or impair the right of persons furnishing materials or labor to recover under any law permitting such persons to look to funds due the Contractor. The provisions of this paragraph shall be inserted in all subcontracts and material contracts and notice of its provisions shall be given to all persons furnishing materials for the work when no formal contract is entered into for such materials.

29. Warranty of Workmanship and Materials

Neither the final certificate of payment nor any provision in the Contract nor partial or entire use of the improvements included in this Contract by the City or the public shall constitute an acceptance of work not done in accordance with the Contract or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The Contractor shall promptly remedy any defects in the work and pay for any damage to other work resulting therefrom which shall appear within a period of 12 months from the date of final acceptance of the work.

30. Partial Use of Site Improvements

The City may give notice to the Contractor and place in use those sections of the improvements which have been completed, inspected, and can be accepted as complying with the technical specifications and if in its opinion, each such section is reasonably safe, fit, and convenient for the use and accommodation for which it was intended, provided:

- (a) The use of such sections of the Improvements shall in no way impede the completion of the remainder of the work by the Contractor.
- (b) The Contractor shall not be responsible for any damages or maintenance costs due directly to the use of such sections.

31. Local Program Liaison

For purposes of this Agreement, the City Engineer will serve as the Local Program Liaison and primary point of contact for the Contractor. All required progress reports and communication regarding the project shall be directed to this liaison and other local personnel as appropriate.

32. Equal Opportunity Clause

During the performance of this contract, the Contractor agrees as follows:

- (a) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

(b) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

(c) The Contractor will not discourage or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.

(d) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Contractor's commitments under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(e) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, "Equal Employment Opportunity," and of the rules, regulations, and relevant orders of the Secretary of Labor.

(f) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(g) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(h) The Contractor will include the portion of the sentence immediately preceding paragraph (a) and the provisions of paragraphs (a) through (h) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

33. Debarment and Suspension (Executive Orders 12549 and 12689)

The Contractor certifies, by entering into this Contract, that neither it nor its principals are presently debarred, suspended, or otherwise excluded from or ineligible for participation in federally assisted programs under Executive Orders 12549 (1986) and 12689 (1989). The term "principal" for purposes of this Contract is defined as an officer, director, owner, partner, key employee, or other person with primary management or supervisory responsibilities, or a person who has a critical influence on or substantive control over the operations of the Contractor. The Contractor understands that it must not make any award or permit any award (or contract) at

any tier to any party which is debarred or suspended or is otherwise excluded from or ineligible for participation in Federal assistance programs under Executive Order 12549, "Debarment and Suspension."

34. Affirmative Action for Workers with Disabilities

The Contractor will not discriminate against any employee or applicant for employment because of disability regarding any position for which the employee or applicant for employment is qualified. The Contractor agrees to take affirmative action to employ, advance in employment and otherwise treat qualified individuals with disabilities without discrimination based upon their disability in all employment practices such as the following: employment, promotion, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.

35. Section 109 of the Housing and Community Development Act of 1974

No person in the United States shall on the ground of race, color, national origin, or sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity funded in whole or in part with funds made available under this title.

36. Non-Segregated Facilities

The Contractor certifies that he does not and will not maintain or provide for his employees any segregated facilities at any of his establishments, and that he does not and will not permit his employees any segregated facilities at any of his establishments or permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. As used in this paragraph the term "segregated facilities" means any waiting rooms, work areas, rest rooms and washrooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color, or national origin, because of habit, local custom, or otherwise.

37. Contract Documents and Drawings

The City will furnish the Contractor without charge 3 copies of the Contract Documents, including Technical Specifications and Drawings. Additional copies requested by the Contractor will be furnished at cost.

38. Contract Period

The work to be performed under this contract shall commence within the time stipulated by the City in the Notice to Proceed and shall be fully completed within 120 calendar days thereafter.

39. Liquidated Damages

Since the actual damages for any delay in completion of the work under this contract are impossible to determine, the Contractor and his Sureties shall be liable for and shall pay to the City the sum of Dollars (\$ 250.00) as fixed, agreed, and liquidated damages for each calendar day of delay from the above stipulated time for completion.

40. Age Discrimination Act of 1975

Contractor shall comply with the Age Discrimination Act of 503 which provides that no person in the United States shall on the basis of age be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.

41. Resolution of Program Non-Compliance and Disallowed Costs

In the event of any dispute, claim, question, or disagreement arising from or relating to this Contract, or the breach thereof, including determination of responsibility for any costs disallowed as a result of non-compliance with federal, state or GLO program requirements, the parties hereto shall use their best efforts to settle the dispute, claim, question, or disagreement. To this effect, the parties shall consult and negotiate with each other in good faith within 30 days of receipt of a written notice of the dispute or invitation to negotiate, and attempt to reach a just and equitable solution satisfactory to both parties. If the matter is not resolved by negotiation

within 30 days of receipt of written notice or invitation to negotiate, the parties agree first to try in good faith to settle the matter by mediation administered by the American Arbitration Association under its Commercial Mediation Procedures before resorting to arbitration, litigation, or some other dispute resolution procedure. The parties may enter into a written amendment to this Contract and choose a mediator that is not affiliated with the American Arbitration Association. The parties shall bear the costs of such mediation equally. If the matter is not resolved through such mediation within 60 days of the initiation of that procedure, either party may proceed to file suit.

42. Compliance with Federal Law, Regulations, and Executive Orders

This is an acknowledgement that GLO financial assistance will be used to fund the contract. The contractor will comply with all applicable federal law, regulations, executive orders, policies, procedures, and directives.

43. Program Fraud and False /Fraudulent Statements or Related Acts

The Contractor acknowledges that 21 U.S.C Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the contractor's actions pertaining to this contract.

44. Retention of Records.

(a) The Contractor shall retain all required records for three years after the City makes its final payment and all pending matters are closed.

(b) Contractor shall include the substance of this clause in all subcontracts it awards.

45. Access to Records.

(a) The contractor agrees to provide the City, the Comptroller General of the United States, the Texas State Auditor, GLO, or any of its duly authorized representatives, access to any books, documents, papers, and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts, and transcriptions. The right also includes timely and reasonable access to the non-Federal entity's personnel for the purpose of interview and discussion related to such documents.

(b) Contractor shall include the substance of this clause in all subcontracts it awards.

(c) The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

(d) The contractor agrees to provide the City and GLO or their authorized representatives access to construction or other work.

46. No Obligation by Federal Government

The Federal Government is not a party to this contract and is not subject to any obligations or liabilities to the non-Federal entity, contractor, or any other party pertaining to any matter resulting from the contract.

47. Section 504 Rehabilitation Act of 1973, as amended.

The Contractor agrees that no otherwise qualified individual with disabilities shall, solely by reason of his/her disability, be denied the benefits of, or be subjected to discrimination, including discrimination in employment, under any program or activity receiving federal financial assistance.

48. Gender Neutral - Gender References

When necessary, unless the context clearly requires otherwise, any gender-specific or gender-neutral term in this Contract (for example, he, she, it, etc.) is to be read as referring to any other gender or to no gender.

49. Conflicts of interest.

(a) Governing Body. No member of the governing body of the City and no other officer, employee, or

agent of the City, who exercises any functions or responsibilities in connection with administration, construction, engineering, or implementation of grant award between GLO and the City, shall have any personal financial interest, direct or indirect, in the Contractor or this Contract; and the Contractor shall take appropriate steps to assure compliance.

(b) Other Local Public Officials. No other public official, who exercises any functions or responsibilities in connection with the planning and carrying out of administration, construction, engineering, or implementation of the grant award between GLO and the City, shall have any personal financial interest, direct or indirect, in the Contractor or this Contract; and the Contractor shall take appropriate steps to assure compliance.

(c) The Contractor and Employees. The Contractor warrants and represents that it has no conflict of interest associated with the grant award between GLO and the City or this Contract. The Contractor further warrants and represents that it shall not acquire an interest, direct or indirect, in any geographic area that may benefit from the grant award between GLO and the City or in any business, entity, organization or person that may benefit from the award. The Contractor further agrees that it will not employ an individual with a conflict of interest as described herein.

50. Certification Regarding Lobbying

Certification for Contracts, Grants, Loans, and Cooperative Agreements (See attached certification regarding lobbying).

Contractor shall file the required certification. The undersigned certifies, to the best of his or her knowledge and belief, that:

No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

51. Small and Minority Businesses, Women's Business Enterprises and Labor Surplus Area Firms

The Contractor agrees to take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible. Affirmative steps must include:

(a) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;

(b) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;

(c) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;

- (d) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises;
- (e) Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce; and
- (f) The Contractor shall, if subcontracts are to be let, take the affirmative steps listed in paragraphs (a) through (e) of this section.

52. Assignability.

The Contractor shall not assign any interest on this Contract and shall not transfer any interest in the same (whether by assignment or novation), without the prior written consent of the City thereto: Provided, however, that claims for money by the Contractor from the City under this Contract may be assigned to a bank, trust company, or other financial institution without such approval. Written notice of any such assignment or transfer shall be furnished promptly to the City.

53. Solid Waste Disposal Act

Contractor must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

54. Procurement of Recovered Materials

- (a) In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA- designated items unless the product cannot be acquired:
 - 1) Competitively within a timeframe for compliance with the contract performance schedule;
 - 2) Meeting contract performance requirements; or
 - 3) At a reasonable price.

(b) Information about this requirement, along with the list of EPA-designate items, is available at EPA's Comprehensive Procurement Guidelines web site, <https://www.epa.gov/>

55. Byrd Anti-Lobbying [For Contracts that exceed \$100,000]

Contractor shall file the required certification: The undersigned certifies, to the best of his or her knowledge and belief, that:

(a) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(b) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(c) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

56. Verification No Boycott Israel

As required by Chapter 2270, Government Code, CONTRACTOR hereby verifies that it does not boycott Israel and will not boycott Israel through the term of this Agreement. For purposes of this verification, "boycott Israel" means refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purposes.

57. Foreign Terrorist Organizations.

Pursuant to Chapter 2252, Texas Government Code, [Company] represents and certifies that, at the time of execution of this Agreement neither [Company], nor any wholly owned subsidiary, majority-owned subsidiary, parent company or affiliate of the same (i) engages in business with Iran, Sudan, or any foreign terrorist organization as described in Chapters 806 or 807 of the Texas Government Code, or Subchapter F of Chapter 2252 of the Texas Government Code, or (ii) is a company listed by the Texas Comptroller of Public Accounts under Sections 806.051, 807.051, or 2252.153 of the Texas Government Code. The term "foreign terrorist organization" in this paragraph has the meaning assigned to such term in Section 2252.151 of the Texas Government Code.

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS that:

(Name of Contractor or Company)

(Address)

a _____, hereinafter called Principal,
(Corporation / Partnership)

and _____
(Name of Surety Company)

(Address)

hereinafter called Surety, are held and firmly bound unto

(Name of Recipient)

(Recipient's Address)

hereinafter called OWNER, in the penal sum of \$ _____

Dollars, \$ _____ in lawful money of the United States, for this payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONFIDENTIALITY OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the OWNER, dated the _____ day of __, a copy of which is hereto attached and made a part hereof for the construction of:

(Project Name)

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms, SUB-CONTRACTORS, and corporations furnishing materials for or performing labor in the prosecution of the WORK provided for in such contract, and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such WORK, and all insurance premiums on said WORK, and for all labor, performed in such WORK whether by SUB-CONTRACTOR or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any way affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in _____ counter-parts, each on of (Number) which shall be deemed an original, this the ____ day of _____.

ATTEST: _____
(Principal)

_____ By _____ (s)
(Principal Secretary)

(SEAL)

(Witness as to Principal) (Address)

(Address)

ATTEST: _____
(Surety)

_____ By _____
(Witness as to Surety) (Attorney in Fact)

(Address) (Address)

NOTE: Date of BOND must not be prior to date of Contract. If CONTRACTOR is Partnership, all partners should execute BOND.

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS that:

(Name of Contractor or Company)

(Address)

a _____ hereinafter called Principal, and

(Name of Surety Company)

(Address)

hereinafter called Surety, are held and firmly bound unto

(Name of Grant Recipient)

(Grant Recipient's Address)

hereinafter called OWNER, in the penal sum of \$ _____

Dollars (\$ _____) in lawful money of the United States, for the payment of which sum well and truly to be made we bind ourselves, successors, and assigns, jointly and severally, firmly in these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the OWNER dated the _ day of _____, a copy of which is hereto attached and made a part hereof for the construction of:

NOW THEREFORE, if the Principal shall well, truly and faithfully perform its duties in all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the OWNER, with or without notice to the Surety and during the one year guaranty period, and if he shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the OWNER from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the OWNER may incur in making good any default, then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any way affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the Principal shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in _____ counterparts,
each one of which shall be deemed an original, this the _____ day of ____
_____.

ATTEST: _____
(Principal)

(Principal Secretary) By _____ (s)

(SEAL)

(Witness as to Principal) (Address)

(Address) _____

ATTEST: _____
(Surety)

(Witness as to Surety) By _____
(Attorney in Fact)

(Address) (Address)

NOTE: Date of BOND must not be prior to date of Contract. If PRINCIPAL/CONTRACTOR is Partnership, all partners should execute BOND.

CHILD SUPPORT STATEMENT FOR NEGOTIATED CONTRACTS AND GRANTS

Under Section 231.006, Family Code, the vendor, or applicant certifies that the individual or business entity named in this contract, bid, or application is eligible to receive the specified grant, loan, or payment and acknowledges that this contract may be terminated, and payment may be withheld if this certification is inaccurate.

List below the name and social security number of the individual or sole proprietor and each partner, shareholder, or owner with an ownership interest of at least 25% of the business entity submitting the bid or application.

NAME	ID NUMBER

Section 231.006, Family Code, specifies that a child support obligor who is more than 30 days delinquent in paying child support and a business entity in which the obligor is a sole proprietor, partner, shareholder, or owner with an ownership interest of at least 25% is not eligible to receive payments from state funds under a contract to provide property, materials, or services; or receive a state-funded grant or loan.

A child support obligor or business entity ineligible to receive payments described above remains ineligible until all arrearages have been paid or the obligor is in compliance with a written repayment agreement or court order as to any existing delinquency.

Except as provided by Section 231.302(d), Family Code, a social security number is confidential and may be disclosed only for the purposes of responding to a request for information from an agency operating under the provision of Parts A and D of Title IV of the federal Social Security Act (42 USC Section 601417 and 651-669).

Signature – Company Official

Printed/Type Firm Name

Printed/Typed Name and Title

Date

SECTION 504 CERTIFICATION
POLICY OF NONDISCRIMINATION ON THE BASIS OF DISABILITY

The _____ does not discriminate on the basis of disability status in the admission or access to, or treatment or employment in, its federally assisted programs or activities.

(Name) _____

(Address) _____

City State Zip

Telephone Number () _____ - _____ Voice
() _____ - _____ TDD

_____ has been designated to coordinate compliance all Federal statutes relating to nondiscrimination.

Certificate of Completion

CONTRACTOR'S FINAL PAYMENT AFFIDAVIT

Locality: _____ **TX CDBG No:** _____

Contractor: _____ **Date:** _____

BEFORE ME, THE UNDERSIGNED AUTHORITY, on this day personally appeared _____, who being duly sworn, on oath, says that he is a duly authorized representative of _____; Contractor, and that all terms of the Contract for the completion of certain public works described as _____; City of Robstown, Texas have been satisfactorily completed and that ALL sums of money for payrolls, bills for material and equipment, and other indebtedness connected with the Work for the Owner, or its property might in any way be responsible to the best of my knowledge and belief, have been paid or will be paid or otherwise satisfied within thirty days after receipt of final payment from the Owner, or within the period of time required by Article 601f, Vernon's Civil Statutes. Payments not made in full at the time of this affidavit are listed below.

FINAL PAYMENTS pending as of this date hereof are: _____ **None Pending** _____ **As Listed Below**

Individual/Company Owed	Mailing Address	Amount Owed (\$)

Signature	
Title	

Affidavit must be signed by an individual owner or partner in partnership, or by a person authorized by by-laws or Board of Directors to sign for a corporation. If Contractor is a joint venture or partnership of individuals, either may sign, but if a jointventure in which a corporation is a party, separate affidavits must be executed by each corporation and by each individualowner or partnership. In the event subcontractors, laborers, or material suppliers have not been paid in full, the Contractors shall list here on the amount owed and the name and address of each subcontractor, laborer, or material supplier to whom such payment is owed.

Sworn and Subscribed before me this, the _____ day of _____, 20____

(SEAL)

Notary Public in and for

County, Texas

Date

CERTIFICATE OF INTERESTED PARTIES – FORM 1295

DISCLOSURE OF INTERESTED PARTY FORM:

Effective January 1, 2016, pursuant to Texas Government Code, Section 2252.908 (the Interested Party Disclosure Act), the City may not award a contract to a contractor unless the contractor submits a Certificate of Interested Parties Form 1295 (the Disclosure Form) to the City as prescribed by the Texas Ethics Commission (TEC). In the event that the contractor's quote for the City is the best bid received, the City or its consultant, will promptly notify the contractor. That notification will serve as the conditional verbal acceptance of the bid. Upon this acceptance, the winning contractor must promptly, not later than 5:00 p.m. (CST) on January 19, 2018, file the materials described below.

PROCESS FOR COMPLETING THE DISCLOSURE FORM

The Disclosure Form can be found at <https://www.ethics.state.tx.us/forms/1295.pdf>, and reference should be made to the following information in order to complete it:

- (a) item 2 – Name of City
- (b) item 3 – the identification number (HMGP DR-NO.), and
- (c) item 3 – description of the goods or services assigned to this contract by the City City/

You must:

- 1) complete the Disclosure Form electronically at the TEC's electronic portal, and
- 2) print, sign and deliver a copy (scanned and emailed is fine) of the Disclosure Form and Certification of Filing that is generated by the TEC's electronic portal.

The following link will take you to the electronic portal for filing:
<https://www.ethics.state.tx.us/TECCertInt/pages/login/certLogin.jsf>

Also, a detailed instruction video may be found here:
https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm

Neither the City nor its consultants have the ability to verify the information included in a Disclosure Form, and neither have an obligation nor undertake responsibility for advising any business entity with respect to the proper completion of the Disclosure Form.

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

Complete Nos. 1 - 4 and 6 if there are interested parties.
 Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.

4 Name of Interested Party	City, State, Country (place of business)	Nature of Interest (check applicable)	
		Controlling	Intermediary

5 Check only if there is NO interested Party.

6 UNSWORN DECLARATION
 My name is _____, and my date of birth is _____.
 My address: _____ (street) _____ (city) _____ (state) _____ (zip code) _____ (country).
 I declare under penalty of perjury that the foregoing is true and correct.
 Executed in _____ County, State of _____, on the _____ day of _____, 20____.
 (month) (year)

 Signature of authorized agent of contracting business entity
 (Declarant)

ADD ADDITIONAL PAGES AS NECESSARY

Must file online at www.ethics.state.tx.us/File

TECHNICAL SPECIFICATIONS
FOR
GENERATOR IMPROVEMENTS AT VARIOUS LOCATIONS
FOR THE
CITY OF ROBSTOWN
ROBSTOWN, TEXAS 78380
OCTOBER 2021

Prepared by:

R.H. SHACKELFORD, INC. (RHSI)

8918 Tesoro Dr STE 555
San Antonio, Texas 78410
(361) 400-2929

Approved By:



Jerry J. Shoemaker, P.E.
R.H. SHACKELFORD, INC. (RHSI)
Texas Serial No. 97045
Texas Registered Engineering Firm F-9797
Project No. 9797

DIVISION 1 - GENERAL REQUIREMENTS

SECTION 01025 - APPLICATION FOR PAYMENT REQUIREMENTS

For the CONTRACTOR to receive Progress Payments under the Contract, the following items shall be submitted to ENGINEER for review.

1. An Application for Payment, certified and sworn as correct by CONTRACTOR, in accordance with Article 14.02.A.1 of the General Conditions, unless otherwise amended by the Supplementary Conditions,
2. A sworn certification of no claims and appropriate waivers of liens in accordance with Article 14.02.A.2 of the General Conditions, unless otherwise amended by the Supplementary Conditions.

END OF SECTION

DIVISION 1 - GENERAL REQUIREMENTS

SECTION 01340 - SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

1. GENERAL:

- a. Submit shop drawings, product data and samples required by specification sections.
- b. Shop drawings, product data and samples are not considered a part of Contract Documents.
- c. Schedule submissions at least 10 days before reviewed submittals will be needed.

2. CONTRACTOR RESPONSIBILITIES:

- a. Review shop drawings, project data and samples prior to submission.
- b. Verify:
 - 1) Field measurements.
 - 2) Field construction criteria.
 - 3) Catalog numbers and other data.
 - 4) Conformance with submission requirements.
- c. Coordinate each submittal with Contract Documents and the work requirements to prevent any delay in the work.
- d. CONTRACTOR's responsibility for errors and omissions is not relieved by ENGINEER's review of submittals.
- e. At time of submission and in writing, notify ENGINEER of submittal deviations from Contract Documents.
- f. CONTRACTOR's responsibility for deviations from Contract Documents is not relieved by ENGINEER's review of submittals unless ENGINEER gives written acceptance of specific deviations.
- g. Begin no Work related to submittals until return of submittals with ENGINEER's stamp and initials or signature indicating review.
- h. Distribute copies after ENGINEER's review.

3. ENGINEER'S DUTIES:

- a. Review submittals with reasonable promptness to prevent any delay in the Work.
- b. Review for conformance with:
 - 1) Design concept of project.
 - 2) Contract Documents.
- c. Review of a separate item does not constitute review of an assembly in which the item functions.
- d. Return to CONTRACTOR those submittals which do not meet the requirements and require correction and resubmission.
- e. Affix stamp and initials or signature certifying review of submittal.
- f. Return reviewed submittals to CONTRACTOR for distribution.

4. PREPARATION REQUIREMENTS:

- a. Shop Drawings:
 - 1) Preparation by a qualified detailer.

- 2) Sheet size same as Contract Drawings.
 - 3) Identify details by reference to sheet and detail numbers on Contract Drawings.
 - 4) Include on the drawing all information required for submission or prepare a transmittal letter.
 - 5) Prepare one reproducible transparency and one opaque print of each shop drawing.
- b. Product Data:
- 1) Modify manufacturer's standard schematic drawings to delete or supplement information as applicable.
 - 2) For manufacturer's catalog sheets, brochures, diagrams, schedules, performance charts, illustrations, and other descriptive data:
 - a) Clearly mark each copy to identify pertinent materials, products, or models.
 - b) Show dimensions and clearances required.
 - c) Show performance characteristics and capacities.
 - d) Show wiring diagrams and controls.
 - 3) Include on the data all information required for submission or prepare a transmittal letter.
 - i. Prepare number of copies which the CONTRACTOR requires for distribution plus two copies to be retained by ENGINEER.
- c. Samples:
- 1) Obtain office samples of sufficient size and quantity to clearly illustrate:
 - a) Functional characteristics of products or materials with integrally related parts and attachment devices.
 - b) Full range of color samples.
 - 2) Erect field samples and mock-ups at the project site in an acceptable location. Construct each sample complete, including work of all trades required in finished work.
 - 3) Include on transmittal letter all information required for submission.
 - 4) Prepare the number of samples specified in specification sections.

5. SUBMISSION REQUIREMENTS:

- a. Submit shop drawings, product data and samples in the form and quantity specified.
- b. Accompany submittals with a transmittal letter in duplicate, as required.
- c. Include the following information for each submittal:
 - 1) Date and revision dates.
 - 2) Project title and number.
 - 3) The names of:
 - a) ENGINEER
 - b) CONTRACTOR
 - c) Subcontractor
 - d) Supplier
 - e) Manufacturer

- f) Separate detailer when pertinent.
- 4) Identification of product or material.
- 5) Relation to adjacent structure of materials.
- 6) Field dimensions clearly identified as such.
- 7) Specification section number.
- 8) Applicable standards, such as ASTM number or Federal Specification.
- 9) A blank space, 4" x 4", for ENGINEER's review stamp.
- 10) Identification of deviations from Contract Documents.
- 11) CONTRACTOR's stamp, initialed or signed, certifying review of submittal, verification of field measurements and compliance with Contract Documents.

6. RESUBMISSION REQUIREMENTS:

- a. Shop Drawings:
 - 1) Revise initial drawings as required and resubmit as specified for initial submittal.
 - 2) Indicate on drawings any changes which have been made other than those requested by ENGINEER.
- b. Product Data and Samples:

Submit new data and samples as required for initial submission.

7. DISTRIBUTION AFTER REVIEW:

- a. Distribute copies of shop drawings and product data which carry ENGINEER's stamp to:
 - 1) CONTRACTOR's file
 - 2) Job site file
 - 3) Record document file
 - 4) Other prime CONTRACTORS
 - 5) Subcontractors
 - 6) Supplier
 - 7) Fabricator
- b. Distribute samples as directed. After review, samples may be used in construction.

END OF SECTION

DIVISION 1 - GENERAL REQUIREMENTS

SECTION 01410 - INSPECTION TESTING AND GUARANTEE

1. GENERAL:

These requirements supplement those provided under Article 13 of the General Conditions.

2. INSPECTION:

- a. Inspector: A representative of ENGINEER or OWNER will be assigned authority to observe and inspect the Work.
- b. Working Days: Inspectors are not required to work on Saturdays, Sundays, or legal holidays. If CONTRACTOR plans work on a Saturday, Sunday or legal holiday, prior arrangements should be made for an inspector not later than 2:00 p.m. on the working day before the Saturday, Sunday, or legal holiday.
- c. Uninspected Work: Any Work performed on Saturday, Sunday, or a legal holiday without benefit of any inspection may require removal and replacement if directed by ENGINEER. Removal and replacement will be completed at no additional cost.

3. TESTING:

- a. The cost of preparing and testing, and the cost of other laboratory services required for establishing the concrete mix, and redesigning the mix, if necessary, shall be borne by CONTRACTOR.
- b. CONTRACTOR shall furnish at his own expense, suitable evidence that all the materials he proposes to incorporate into the Work are in accordance with the Specifications. Mill tests for reinforcing steel and cement will be acceptable if it is definite that the test sheets apply to the material being furnished. Manufacturer's or supplier's test results will be acceptable for such items as pipe and fittings, when it is definite that the materials being furnished is that to which the test results apply. Should CONTRACTOR fail to provide the above information, ENGINEER shall have the right to require tests to be made by OWNER's laboratory to obtain the information and the cost therefore shall be borne by CONTRACTOR.
- c. In any event, ENGINEER may have further tests made by commercial laboratory, or may make tests himself, to ensure that the Specifications are complied with by CONTRACTOR. Costs of these tests will be borne by OWNER.

4. GUARANTEE:

- a. CONTRACTOR shall deliver to ENGINEER upon completion of all Work under the Contract his written guarantee, in the form of SECTION 01700 CONTRACT CLOSEOUT REQUIREMENTS, made out to OWNER, guaranteeing all of the Work under the Contract to be free from faulty materials in every particular and free from improper workmanship; and against injury from proper and usual wear; and agreeing to replace or to re-execute without cost to OWNER such Work as may be found to be improper or imperfect; and to make good all damage caused to other Work or materials, due to such required replacement or re-execution. This guarantee shall be made to cover a period of one (1) year from the date of completion of all Work under this Contract, as evidenced by ENGINEER's final certificate. This guarantee must be furnished to ENGINEER and approved by him before acceptance and final payment is made.
- b. CONTRACTOR shall provide OWNER with copies of all guarantees or warranties which have been made to CONTRACTOR by suppliers or subcontractors as required hereunder, together with an assignment of such warranties and guarantees to OWNER; however, such assignment shall not relieve CONTRACTOR of the responsibility (stated in subparagraph a. above) in case of failure of subcontractors or suppliers to fulfill the provisions of such warranties or guarantees.
- c. Neither the final certificate, nor payment, nor any provision in the Contract Documents shall relieve CONTRACTOR of responsibility for neglect of faulty materials or workmanship during the period covered by the guarantee.

END OF SECTION

DIVISION 1 - GENERAL REQUIREMENTS

SECTION 01500 - TEMPORARY FACILITIES

1. FIELD OFFICE: (n/a)

~~If CONTRACTOR is required to provide a Temporary Field Office, said office shall be placed, unless otherwise approved in writing, at a site selected by CONTRACTOR and approved by ENGINEER. The building shall be weatherproof and be provided with doors and locks, electric illumination and adequate ventilation. The floor of the building shall be raised above the ground. A complete set of Contract Drawings and Specifications shall be kept in the temporary office throughout the construction period and shall be accessible for use by OWNER and ENGINEER. The building shall be maintained in a clean condition throughout the Contract period and shall be removed from the site upon completion of all Work.~~

2. SANITARY FACILITIES:

CONTRACTOR shall make all arrangements and furnish all materials required to obtain any needed sanitary facilities and to satisfy the requirements of local or state health authorities, ordinances, and laws.

3. STORAGE OF MATERIALS:

- a. No materials shall be stored, nor shall any equipment be parked on adjacent property without the expressed consent of owner of the property concerned.
- b. Secure and watertight storage facilities of suitable size with floors raised above the ground shall be provided for materials liable to damage from exposure to the weather. Other materials shall be stored on blocks off the ground. Materials shall be so placed as to permit easy access for inspection and identification. Any material which has deteriorated, become damaged, or otherwise unfit for use, shall not be used in the Work, and shall be immediately removed from the site by CONTRACTOR. Upon completion of all Work or when directed, CONTRACTOR shall remove storage facilities from the site.

4. TEMPORARY UTILITIES:

CONTRACTOR shall arrange for and secure all temporary connections for water, electricity, gas, and other services needed by him for the proper execution of his operations. Costs for these services shall be paid for by CONTRACTOR.

5. BARRICADES AND WARNINGS:

- a. The safety of the public shall of primary importance during construction. In all respects provisions for public safety shall be CONTRACTOR's responsibility.
- b. Should conditions be such that the public safety is involved, the Contractor shall provide warning lights which shall be kept burning between the hours of sunset and sunrise. Barricades and warnings shall be in accordance with Item 502, "Barricades, Signs and Traffic Handling" of the Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges, as adopted by the Texas Department of Transportation (June 2004 edition).

END OF SECTION

DIVISION 1 - GENERAL REQUIREMENTS

SECTION 01700 - CONTRACT CLOSEOUT REQUIREMENTS

Before final acceptance by OWNER, the following items must be submitted and accepted by ENGINEER:

- a. Final Inspection completed.
- b. Bound manuals of servicing or operating instructions with recommended lubricants for all equipment.
- c. One (1) set of construction plans, with variations from originals and as-built conditions noted.
- d. CONTRACTOR's Guarantee.

CONTRACTOR shall deliver to OWNER, upon completion of all Work, his written guarantee, found herein as "CONTRACTOR'S GUARANTEE".

This guarantee shall be made to cover a period of one (1) year from the date of completion of all Work, and must be furnished to and approved by OWNER before acceptance and final payment is made.

Neither the final payment, nor any provision stated above, shall relieve CONTRACTOR of responsibility for neglect of faulty materials or workmanship during the period covered by the guarantee.

- e. All other guarantees and warranties properly assigned to OWNER

CONTRACTOR shall provide OWNER with copies of all guarantees or warranties which have been made to CONTRACTOR by suppliers or subcontractors, together with an assignment of such warranties and guarantees to OWNER; however, such assignment shall not relieve CONTRACTOR of the responsibility (stated in his guarantee) in case of failure of subcontractors or suppliers to fulfill the provisions of such warranties or guarantees.

Neither the final payment, nor any provision stated above, shall relieve CONTRACTOR of responsibility for neglect of faulty materials or workmanship during the period covered by the guarantee.

- f. CONTRACTOR's Final Affidavit and Waiver of Lien

CONTRACTOR shall deliver to OWNER, upon completion of all Work, a final sworn certification of no claims and waiver of liens in accordance with Article 14.07 of the General Conditions, unless otherwise amended by the Supplementary Conditions.

Such certification and waiver shall be found herein as the "CONTRACTOR'S FINAL AFFIDAVIT AND WAIVER OF LIEN", and if applicable, the "SUBCONTRACTOR'S FINAL AFFIDAVIT AND WAIVER OF LIEN".

- g. Final Application for Payment.

CONTRACTOR'S GAURANTEE

I, _____, being _____ of _____ (Hereinafter called "CONTRACTOR"), do hereby make the following statements to the _____ (Hereinafter called "OWNER") in relation to the completed project known as _____.

I guarantee...

That all completed Work is free from faulty materials in every particular,

That all completed Work is free from improper workmanship,

That no injury will occur from proper and usual wear, and

That OWNER has been assigned all guarantees and/or warranties originally made to CONTRACTOR by suppliers and subcontractors, if any. (Such assignment does not relieve CONTRACTOR of the responsibility stated in each guarantee and/or warranty in case of failure of suppliers or subcontractors to fulfill the provisions of such guarantees and/or warranties.)

I agree...

That the execution of the final certificate or the receipt of the final payment does not relieve CONTRACTOR of the responsibility for neglect of faulty materials or workmanship during the period covered by this Guarantee,

To replace or to re-execute without cost to OWNER such Work as may be found to be improper or imperfect, and

To make good all damage caused to other Work or materials, due to such required replacement or re-execution.

This Guarantee is in effect as of the _____ day of _____ 20__, and shall cover a period of ONE (1) Calendar Year from said effective date.

(CONTRACTOR)

Signed By: _____

Print Name/Title: _____

Date: _____

CONTRACTOR’S FINAL AFFIDAVIT AND WAIVER OF LIENS

THE STATE OF _____ §
COUNTY OF _____ §

BEFORE ME, the undersigned authority, on this day _____ (“CONTRACTOR”) personally appeared, _____ (day) of _____ (month), who, being first duly sworn by me, upon oath deposed and said that:

1. Affiant is duly authorized to make this affidavit and agreement on behalf of CONTRACTOR and is fully and personally cognizant of all facts and matters herein stated.

2. Pursuant to the terms of that certain Contract, dated the _____ day of _____ 20__ , (the Contract”), between CONTRACTOR and _____ (“OWNER”), CONTRACTOR agreed to furnish all work and labor, materials, specially fabricated materials, equipment, services and supplies for use in connection with performing all Work incident to completing the construction of the Project known as _____.

3. All bills, debts, claims or accounts now due which CONTRACTOR has incurred to any person, firm or corporation for work or labor performed, for equipment rental, or for materials, specially fabricated materials, services or supplies furnished in connection with the Work under such Contract have been paid, settled or discharged in full or are included in the amount requested in CONTRACTOR’s “Final” payment application, there are no written claims of mechanics’ or materialmen’s liens submitted to CONTRACTOR, CONTRACTOR has no knowledge of any filed mechanics’ or materialmen’s liens with respect to the Project or OWNER, all due and payable bills with respect to the Project and the Work performed thereon and materials supplied thereto have been paid to date or shall be paid from the proceeds of such “final” payment application, there is no basis for the filing of any mechanics’ or materialmen’s liens with respect to the Project or OWNER, and that waivers from all subcontractors constitute an effective waiver of lien under the laws of the jurisdiction in which the Project is located to the extent of payments that have been made or are to be made concurrently with payment pursuant to such “final” application.

4. This agreement constitutes a release and waiver of all liens to which CONTRACTOR may be entitled against the above-described Project, all improvements thereon and any fixtures, chattels, or other property of OWNER thereon on account of all work performed and all materials furnished under such Contract.

5. Affiant understands that this affidavit is made for the purpose of inducing OWNER to make Final Payment under the Contract and that, in making any such payment, OWNER will rely upon the accuracy of the matters stated in this affidavit. CONTRACTOR therefore agrees to indemnify, defend, and hold OWNER and OWNER’s successors and assigns, harmless from any loss, cost or expense incurred by virtue of any claims made against them on account of any unpaid bills for labor heretofore performed or for materials, specially fabricated materials, services, or other supplies furnished under such Contract.

6. CONTRACTOR represents and warrants that the list of subcontractors and materialmen attached hereto and made part hereof for all purposes represent a full and complete list of all subcontractors and suppliers furnishing materials or equipment for the Project as completed.

EXECUTED this _____ day of _____, 20__.

(CONTRACTOR)

Signed By: _____
Print Name: _____
Title: _____

SWORN TO AND SUBSCRIBED by _____, _____ of _____, before me
this _____ day of _____, 20__, to certify which witness my hand and seal of office.

NOTARY PUBLIC, STATE OF TEXAS

seal

SUBCONTRACTOR'S FINAL AFFIDAVIT AND WAIVER OF LIENS

THE STATE OF _____ §

COUNTY OF _____ §

BEFORE ME, the undersigned authority, on this day personally appeared _____ acting for and on behalf of _____ ("Subcontractor"), who, being first duly sworn by me, upon oath deposed and said that:

1. Affiant is duly authorized to make this affidavit and agreement on behalf of Subcontractor and is fully and personally cognizant of all facts and matters herein stated.
2. Subcontractor contracted with _____ ("CONTRACTOR") (which contract between Subcontractor and CONTRACTOR is hereinafter referred to as the "Subcontract") to complete certain work in connection with the Project known as _____.
3. All bills, debts, claims or accounts now due which Subcontractor has incurred to any person, firm or corporation for work or labor performed, for equipment rental, or for materials, specially fabricated materials, services or supplies furnished in connection with work under such Subcontract have been paid, settled or discharged in full or are included in the amount requested in Subcontractor's "final" payment application, and no basis exists for affixation of any lien against the above-described Project and improvements thereon by virtue of any work performed under such Subcontract to and including the payment date. Subcontractor has not received any notice or communication that any subcontractor, materialman, laborer, or other party has not been fully paid for all labor performed or materials heretofore furnished in connection with work performed under such Subcontract.
4. This agreement constitutes a release and waiver of all liens to which Subcontractor may be entitled against _____ ("OWNER"), CONTRACTOR, the above-described Project, all improvements thereon and any fixtures, chattels, or other property of OWNER thereon on account of all work performed and all materials furnished under such Subcontract.
5. Affiant understands that this affidavit is made for the purpose of inducing OWNER to make Final Payment to CONTRACTOR for the final payment to Subcontractor and that, in making any such payment, OWNER will rely upon the accuracy of the matters stated in this affidavit. Subcontractor therefore agrees to indemnify, defend, and hold OWNER and OWNER's successors and assigns, harmless from any loss, cost or expense incurred by virtue of any claims made against them on account of any unpaid bills for labor heretofore performed or for materials, specially fabricated materials, services, or other supplies furnished under such Subcontract to and including the payment date.

EXECUTED this _____ day of _____, 20____

(Subcontractor)

Signed By: _____

Print Name: _____

Title: _____

SWORN TO AND SUBSCRIBED by _____, _____ of _____, before me this _____ day of _____, 20____, to certify which witness my hand and seal of office.

NOTARY PUBLIC, STATE OF TEXAS
seal

**END OF SECTION
END OF DIVISION**

DIVISION 2 - SITE WORK

SECTION 02050 - DEMOLITION

1. GENERAL:

The Work covered under this Section shall be as indicated on the Drawings and as specified herein. Demolition required for this Work includes, but is not limited to:

- a. Constructing temporary barriers around objects designated to remain.
- b. Demolition and removal of structures.
- c. Disconnecting and removing existing utility lines on the site except those designated to remain.
- d. Removal of debris.

2. JOB CONDITIONS:

a. Burning:

On-site burning will not be permitted.

b. Protection:

Use all means necessary to protect existing objects designed to remain and, in the event of damage, immediately make all repairs and replacements necessary to the approval of ENGINEER at no additional cost to OWNER.

3. MATERIALS:

All materials, required for proper completion of the Work of this Section, shall be selected by CONTRACTOR subject to the approval of ENGINEER.

4. PREPARATION:

a. Notification:

Notify ENGINEER at least two full working days prior to commencing the Work of this Section.

b. Site Inspection:

1. Prior to all Work of this Section, carefully inspect the entire site and all objects designated to be removed and to be preserved.
2. Locate all existing utility lines and determine requirements for disconnecting and capping.
3. Locate existing active utility lines traversing the site and determine the requirements for their protection.

c. Clarification:

1. The Drawings do not purport to show all objects existing on the site.
2. Before commencing the Work of this Section, verify with ENGINEER all objects to be removed and all objects to be preserved.

d. Scheduling:

1. Schedule all Work in a careful manner with all necessary consideration for neighbors and the public.
2. Avoid interference with the use of, and passage to and from, adjacent buildings and facilities.

e. Disconnection of Utilities:

Before starting site operations, disconnect or arrange for the disconnection of all utility services designated to be removed; performing all such Work in accordance with the requirements of the utility

company or agency involved.

f. Protection of Utilities:

Preserve in operating condition all active utilities traversing the site and designated to remain.

5. DEMOLITION OF STRUCTURES:

Demolish all buildings designated for demolition, pulling out all foundations and concrete slabs; remove all existing pavement designated to be removed.

6. OTHER DEMOLITION:

Pull out all existing utility lines designated for abandonment, and all other objects to be removed.

7. CONSTRUCTION OF BARRICADES:

a. Materials:

Unless otherwise specifically approved by ENGINEER, use only new and solid lumber of Utility grade (or better) to construct temporary barricades around the objects designated to remain.

b. Layout:

1. At all objects designated to be preserved, construct a temporary barricade.
2. Make barricades at least three (3) feet high, consisting of 2" x 4" (or larger) posts, set at least 18 inches into the ground at not more than six (6) feet on centers, joined at the top by 1" x 6" (or larger) boards firmly nailed to the posts.

c. Protection:

1. Take special care, in setting posts, to not damage tree roots.
2. Do not permit stockpiling of materials or debris within the barricaded area, nor permit the earth's surface to be changed in any way except as specifically approved by ENGINEER.

8. REMOVAL OF DEBRIS:

CONTRACTOR shall be responsible for removal and disposal of all debris from the site, and return the site to the original or better condition. The Contractor shall leave the site in a neat and orderly condition to the approval of ENGINEER.

END OF SECTION

DIVISION 2 - SITE WORK

SECTION 02111 – CLEARING, ROUGH GRADING, COMPACTION AND FINISH GRADING

1. GENERAL:

The Work covered under this section of the Specifications shall include furnishing all labor, materials and equipment and performing all operations necessary to complete all clearing and grubbing, disposal of surplus materials, rough grading, compaction of embankments, finish grading, and the performance of all other miscellaneous sitework operations required to complete the project as shown on the drawings and specified herein.

2. SITE CLEARING:

- a. Clearing: All areas of new construction shall be cleared of all brush, weeds, rubbish, wire, debris and all other objectional matter to a line five (5) feet outside the proposed Work.
- b. Stripping: Remove all topsoil and organic materials within areas to be excavated and/or areas to receive embankment, for a depth of at least six (6) inches, or until bottom of existing topsoil layer is reached. Topsoil material shall be stockpiled separately and spread at locations and finished to grade.
- c. Grubbing: Remove all stumps, roots, etc., within the areas to be excavated to a depth of at least one (1) foot below the existing ground surface. In areas to receive embankment, remove all stumps, roots, etc., to a depth of at least one (1) foot below the existing ground surface. All holes remaining after clearing and grubbing shall be backfilled, and the entire area bladed to prevent ponding of water and to provide drainage, unless otherwise directed.

3. PROCESSING OF CLEARED, STRIPPED AND GRUBBED MATERIAL:

- a. Stockpiling: Excavated material which is to be used for backfilling and grading may be deposited in storage piles at points convenient for rehandling. Location of storage piles shall not endanger the Work, obstruct roads and driveways, or restrict drainage channels, and will be acceptable to ENGINEER. Topsoil to be used for finish grading shall be stockpiled separately from other materials.
- b. Disposal of Excess and Unsuitable Materials: All suitable excavated materials in excess of that needed in the formation of embankments shall be disposed of at designated spoil disposal areas within the limits of the project. Material shall be placed in a uniform layer not to exceed twelve (12) inches thick over the entire designated area, graded and shaped to drain. Unsuitable unclassified excavation shall be known as "waste" and shall be disposed of by CONTRACTOR. The waste shall be disposed of in such manner as to not create a public nuisance, and disposal shall conform to State laws. CONTRACTOR may not utilize any public rights-of-way or public lands for waste disposal.

4. ROUGH GRADING AND COMPACTION:

1. Material

Furnish approved material capable of forming stable fill from required excavation within the agreed mitigation ponding area.

2. Construction

Backfill tree-stump holes or other minor excavations with approved material and tamp. Restore the ground surface, including any material disked loose or washed out, to its original slope. Compact the ground surface by sprinkling in accordance with the current TxDOT Item 204, "Sprinkling," and by rolling using equipment complying with the current TxDOT Item 210, "Rolling" when directed.

Scarify and loosen the unpaved surface areas, except rock, to a depth of at least 6 inches, unless otherwise shown on the plans. Bench slopes before placing material. Begin placement of material at the toe of slopes. Do not place trees, stumps, roots, vegetation, or other objectionable material in the embankment. Simultaneously re-compact scarified material with the placed embankment material. Do

not exceed the layer depth specified in "Compaction" herein.

Earth fill is mainly composed of material other than rock. Construct fill in successive layers, evenly distributing materials in lengths suited for sprinkling and rolling. Construct the fill in layers approximately parallel to the finished grade for the full width of the area, unless otherwise shown on the plans. Construct the fill to the grades shown on the plans. Ensure that each section of the fill conforms to the detailed sections or slopes, if any.

Move the material dumped in piles or windrows by blading or by similar methods and incorporate it into uniform layers. Featheredge or mix abutting layers of dissimilar material for at least 100 ft. to ensure there are no abrupt changes in the material. Break down clods or lumps of material and mix embankment until a uniform material is attained. Apply water free of industrial wastes and other objectionable matter to achieve the uniform moisture content specified for compaction. Roll and sprinkle each layer in accordance with "Compaction" herein.

3. Compaction

Compaction of the material shall be provided by sheep-foot rollers or other approved method. Begin rolling longitudinally at the sides and proceed toward the center, overlapping on successive trips by at least 1/2 the width of the roller. Alternate roller trips to attain slightly different lengths. Do not allow the loose depth of any layer to exceed 8 inches, unless otherwise approved.

Provide a uniform compaction of 95% modified density in accordance with ASTM Standard 1557 at a moisture content between optimum moisture and five (5) percent above optimum moisture.

5. FINISH GRADING:

- a. Grade all areas indicated on drawings or as required to suit construction operations.
- b. Grading shall be carefully finished at elevations shown against building and other structures.
- c. In ungraded areas, backfill shall be placed around outside of structures to approximate level of adjacent ground but modified to assure positive drainage away from structures.
- d. A qualified engineer shall set lines, and grades.
- e. Grading changes shall be even between indicated finish elevations and contours, without sharp breaks, low spots, etc., to provide positive drainage.

6. UNDERGROUND UTILITIES:

Determine location of underground utilities before doing any excavation work. If a live utility line is damaged, the proper utility shall be notified immediately for required action. CONTRACTOR is responsible for repair to the line, at no cost to OWNER.

7. CLEANUP:

Prior to final acceptance of the complete project, CONTRACTOR shall remove all tools, scaffolding, temporary structures and debris from the site and areas of the Work. Any washes, ruts or other depressions that have occurred shall be leveled to give all areas where the Work was accomplished a smooth finish and neat appearance.

END OF SECTION

DIVISION 2 - SITE WORK

SECTION 02220 - STRUCTURAL EARTHWORK

1. GENERAL:

This Work includes furnishing all plant, labor, equipment and materials, and performing of all operations required for proper completion of excavation, backfill, stripping, shoring and bracing as required, dewatering of excavations as required, rough and finish grading, compacting, and disposal of surplus earth, together with all other miscellaneous site work and earthwork operations required to complete the project as shown on drawings and specified herein.

2. PROTECTION OF EXISTING FACILITIES:

Prior to any operations, existing facilities and/or permanent objects including trees and shrubs shall be adequately protected. Any costs resulting from damage to any property due to negligence and/or lack of adequate protection shall be borne by CONTRACTOR.

3. EXCAVATION:

- a. General: Excavation shall be unclassified and includes removal of all types of materials encountered without exception. Make all excavation to lines and grades indicated on drawings. Completed excavations shall be within tolerances hereinafter specified.
- b. Shoring, Bracing and Dewatering: All shoring, bracing, and dewatering of excavations required to properly and safely complete the Work as shown on the drawings, shall be provided by CONTRACTOR. Shoring and bracing shall be provided as required to prevent the excavation from extending beyond the specified or indicated limits and as required to protect workmen. Excavations shall be kept dewatered while construction therein is in progress. Shoring, bracing, and sheeting shall be removed as the excavations are backfilled in a manner to prevent injurious caving.
- c. Excavation for Structures: Excavation shall extend sufficient distance from walls, beams, and footings to allow for placing and removing forms, installation of facilities and for inspection. No excavation shall be made outside vertical plane three (3) feet beyond footing, beam, or wall line, except where specified or shown otherwise on drawings, and no excavation shall be made beyond the lines indicated on drawings. Excavation for slabs, beams or footings that bear on earth shall not be carried below elevation indicated; if carried below indicated elevation, thickness of footing or height of wall shall be increased as directed. Perform excavation of last four (4) inches of material to grade for bottom of slabs, beams, or footings immediately prior to placing compacted sand beds or other base material. Protect open excavations from excessive rainfalls or drying. After completion of excavation and prior to commencement of the Work on structure, excavation will be inspected to ensure that suitable foundation surfaces have been reached and that surfaces have been properly prepared to receive concrete walls, piers, slabs, or other parts of structure.
- d. Stockpiling: Excavated material which is to be used for backfilling and grading may be deposited in storage piles at points convenient for rehandling. Location of storage piles shall not endanger the Work, obstruct roads and driveways, or restrict drainage channels, and will be acceptable to ENGINEER. Topsoil to be used for finish grading shall be stockpiled separately from other materials.
- e. Disposal of Excess and Unsuitable Materials: All suitable excavated materials in excess of that needed in the formation of embankments shall be disposed of at designated spoil disposal areas within the limits of the project. Material shall be placed in a uniform layer not to exceed twelve (12) inches thick over the entire designated area, graded and shaped to drain. Unsuitable unclassified excavation shall be known as "waste" and shall be disposed of by CONTRACTOR.

4. FILL AND BACKFILL:

- a. General: Complete fill and backfill to lines and grades indicated on drawings or elsewhere specified. Fill and backfill shall conform to requirements specified herein. Suspend backfill operations in field during times of inclement weather or other unsatisfactory conditions when desired results cannot be

obtained.

- b. Use of Excavated Materials: Suitable materials from the excavation may be used as fill and backfill except where select materials are indicated on drawings or herein specified. Any objectionable material which may be encountered, such as peat, silt, muck, topsoil, organic materials, debris, or other extraneous material, will be rejected.
- c. Sand Beds: Under slabs shall be a clean bank sand suited to purpose and obtained from an approved off-site source. Material shall be free of clay lumps or other foreign material; plasticity index shall not exceed 3.0 and not more than 10% of the material by weight shall pass the 200-mesh sieve.
- d. Backfill at Structures: Place backfill as far as practicable as the Work progresses. Remove forms, shoring, bracing, etc., before backfilling is started. No backfill shall be placed against concrete until directed. Take care to prevent wedging action of backfill against a structure. Steep slopes bounding excavation or serrate to prevent such wedge action. Place backfill in successive horizontal layers of not more than eight (8) inches when rolling equipment is used and not more than four (4) inches when mechanical hand tampers are used.
- e. Cement Stabilized Material: Material for Cement Stabilized Backfill, where designated, shall be in accordance with the requirements of Item 275, "Cement Treatment (Road-Mixed)" of the Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges, as adopted by the Texas Department of Transportation (June 2004 edition).

5. **COMPACTION:**

- a. General: Place all fill and backfill in uniform layers not to exceed 8" and compact to 95% of Standard Density (ASTM D 698) at not less than 100% of optimum moisture content. Methods to secure the optimum moisture content shall be CONTRACTOR's responsibility and shall be such that uniform density will be obtained over entire area and depth of material being compacted. Fill material shall be thoroughly broken up before being spread into uniform layers.
- b. Compaction Equipment: Compaction equipment shall conform to the requirements of Item 210, "Rolling" of the Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges, as adopted by the Texas Department of Transportation (June 2004 edition).

END OF SECTION

DIVISION 2 - SITE WORK SECTION

02500 - CONCRETE PAVEMENT

1. GENERAL:

This Work includes the furnishing of all plant, labors, equipment, and materials and performing all operations required for placement of concrete pavement as indicated on the drawings and specified herein.

2. MATERIALS:

- a. Concrete: shall be Type 1 Portland Cement with minimum 3500 psi 28-day compressive strength, unless otherwise stated. Ref. Section 03300 - Cast-in-Place Concrete.
- b. Reinforcement: shall be minimum 60 KSI yield strength, ASTM 615 of the sizes as indicated on the plans; all lap splices shall be min. 30 bar diameters unless otherwise approved.
- c. Paving Cap Seal: Greenstreak G-Seal™ 605 or equal. Install per manufacture's recommendations.

3. CONSTRUCTION METHODS:

- a. All concrete construction shall comply with the latest Edition of ACI-318.
- b. Moisture Conditioned Subgrade - Exposed subgrade soils shall be scarified, and moisture conditioned to between optimum and plus four (+4) percentage points of optimum to a depth of at least six (6) inches. The soils shall then be compacted to at least 95% of the maximum laboratory dry density as determined by ASTM D698. The degree of compaction and moisture content shall be maintained until the surface is paved. Density testing and proof rolling shall be performed under the observation of the geotechnical testing personnel to assess insitu density and overall stability prior to continued construction of the pavement section.
- c. Contractor shall verify pavement elevations and obtain approval prior to placement of pavement. Contractor shall notify Engineer immediately with any conflicts or discrepancies noted.
- d. Expansion Joints and Contraction Joints shall be provided at intervals as indicated on the drawings, and in conformance with the recommendations of ACI for joint spacing in reinforced pavements.
- e. The finished surface of the concrete pavement shall be given a "light broom" finish to provide a non-slip surface.

END OF SECTION

DIVISION 2 - SITE WORK

SECTION 02830 - FENCING

1. GENERAL:

This Work includes furnishing all plant, labor, equipment, and materials and performing all operations to complete chain link fencing. Fencing and all parts thereto shall be Cyclone Invincible Chain Link Fence as manufactured by American Steel and Wire Division of United States Steel Corporation, or approved equal. Chain link fabric height shall be as indicated on Drawings, surmounted by vertical extension arms carrying three (3) strands of barbed wire, the topmost of which shall be one foot (1') above the top of the fabric.

2. MATERIALS:

a. Fabric

Fabric shall be No. 9 gauge chain-link wire woven in a 2" mesh to form fabric height as indicated on Drawings. Top and bottom selvages shall have twisted, and barbed finish accomplished by cutting wire on a bias, thus creating sharp points.

b. Line Posts

Line posts shall be tubular steel 1-5/8-inch O.D. galvanized pipe posts weighing 2.27 pounds per foot. Post equipped with 6-gauge galvanized clips on 14" centers.

c. End, Corner, Angle, and Pull Posts

End, corner, angle, and pull posts shall be tubular steel 3" O.D. galvanized pipe post weighing 5.79 pounds per linear foot.

d. Gates

Fabricate gate frames of 2" O.D. galvanized pipe with pressed steel or malleable iron corner ells, securely riveted with 4 rivets per corner, or welded corners hot dipped galvanized after fabrication. Provide internal bracing with 1-5/8" O.D. pipe and 3/8" adjustable truss rods. Provide ball and socket type bottom hinge made of malleable iron and 180° wrap-a-round type top hinge to allow gate to swing 90° or 180°. Provide padlocking device, center rests and semi-automatic catch to secure gates in open position.

e. Top Rails

Top rails shall be tubular steel 1-5/8" O.D. galvanized top rails weighing 2.27 pounds per linear foot. Provide one coupling in every 5 with a heavy spring to take up expansion and contraction of rail. Tie fabric to top rail every 24" with 9-gauge aluminum tie wires.

f. Gate Posts

Gate posts shall be tubular steel 4" O.D. galvanized pipe post weighing 9.1 pounds per linear foot.

g. Bottom Tension Wire

Bottom tension wire shall be 7 gauge "Amersfield" Aluminum Coated Steel, or 7-gauge galvanized coil tension wire, fastened to chain link fabric with all gauges galvanized hog rings on 24" centers.

h. Braces

Suitably brace end, gate, and corner posts with galvanized tubular steel braces 1-5/8" outside diameter, weighing 2.27 pounds per linear foot, spaced midway between top rail and ground extending to first line post. Securely fasten braces to posts by malleable iron or pressed steel connections and provide truss of 3/8" galvanized rod with turnbuckle from intersection of brace and line post back to bottom of end, gate or corner post.

i. Fittings

Fittings shall be cast iron, wrought iron or pressed steel fittings.

j. Fabric Bands

Fasten fabric to line posts with fabric bands spaced approximately 14" apart. Space the tie wires to attach fabric top rail approximately 24" apart.

k. Extension Arms

Fabricate line, end, corner and pull posts extension arms of pressed steel or malleable iron base with pressed steel extension riveted and galvanized after assembly.

l. Barbed Wire

Provide 3 lines of 4-point pattern barbed wire, each composed of 2 strands of 12- 1/2 gauge, galvanized after weave, steel strand wire with 4-point barbs spaced on 5" centers.

m. Gate Hinges, Latches, Stops and Keepers

Furnish as specified in Federal Specifications No. RR-F-183.

n. Locking

Provide approved latch equipped for padlocking.

o. Miscellaneous Items

Provide miscellaneous metal items necessary for complete fence installation, including round center stop, stretcher bars, truss rods, hook bolt, clips, fittings, and bottom reinforcing. Provide one stretcher bar for each gate, pull and end post, and 2 for each corner post.

3. FABRIC COATING:

4. Fabric shall be heavily zinc coated (galvanized) by hot-dip process after weaving sufficient to withstand 6 one-minute dips of the Preece Test. Furnish copies of results of Preece Test to ENGINEER.

5. GALVANIZING:

6. Hot dip galvanize all other parts of fencing after fabrication of each separate part. Galvanizing shall be tested and shall be sufficient to withstand 12 one-minute dips of Preece Test. Furnish copies of results of Preece Test to ENGINEER.

7. POST SPACING:

8. Space posts in line of fence not farther apart than 10 feet center to center.

9. POST SETTING:

10. Set all line posts in a minimum of 24" deep in concrete, corner posts a minimum 36" deep in concrete, and gate posts a minimum 48" deep in concrete of minimum 12" diameter. Round top of footings to drain properly. Concrete for footings shall be as specified in DIVISION 3 - CONCRETE, except 2000 psi may be used.

11. FABRIC CLEARANCE:

12. Bottom edge of fabric shall clear top of ground at all locations, but shall not exceed a clearance of 2".

**END OF SECTION
END OF DIVISION**

02830

DIVISION 3 – CONCRETE

SECTION 03100 - CONCRETE FORMWORK

1. GENERAL:

a. Description

This section shall govern all formwork for cast-in-place concrete with shoring, bracing and anchorage, openings for other work, form accessories and form stripping.

b. References

1. ACI 347, Recommended Practice for Concrete Formwork
2. ACI 301, Specifications for Structural Concrete for Buildings, Chapter 4
3. ACI 318, Building Code Requirements for Reinforced Concrete
4. PS-I, Construction, and Industrial Plywood

c. Design Requirements

Design, engineer, and construct formwork, shoring and bracing to conform to code requirements listed in references; resultant concrete to conform to required shape, line, and dimension.

d. Submittals

1. Submit under provisions of Section 01340, Shop Drawings, Product Data, and Samples.
2. Indicate pertinent dimensions, materials, bracing, and arrangement of joints and ties on Shop Drawings.

e. Quality Assurance

1. Perform Work in accordance with ACI 301,318, and 347.
2. Maintain one copy of each document on site.

f. Regulatory Requirements

Conform to applicable code for design, fabrication, erection, and removal of formwork.

2. PRODUCTS:

a. Wood Form Materials

1. Plywood

Douglas Fir species: APA high density overlaid or APA B-B Plyform Class I Panels; sound, undamaged sheets with clean, true edges.

2. Lumber

Southern Pine species; No. 2 grade; with grade stamp clearly visible.

b. Prefabricated Forms - Preformed Steel Forms

Minimum gage matched, tight fitting, stiffened to support weight of concrete without deflection detrimental to tolerances and appearance of finished surfaces.

c. Formwork Accessories

1. Form Ties

Snap-off type, galvanized metal, adjustable length, cone type, with waterproofing washer, 1 in. back break dimension, free of defects that could leave holes larger than 1/4 in. in the concrete surface; Penta-Tie manufactured by Burke or approved equal.

2. Form Release Agent

Colorless mineral oil which will not stain concrete, absorb moisture, or leave a film which will inhibit subsequent finish work; Burke Release manufactured by Burke or approved equal.

3. Corners

Chamfered, wood strip type; 3/4 x 3/4 in. maximum possible lengths.

4. Nails, Spikes, Lag Bolts, Through Bolts, Anchorages

Sized as required, of sufficient strength and character to maintain formwork in place while placing concrete.

3. EXECUTION:

a. Examination

Verify lines, levels, and centers before proceeding with formwork. Ensure that dimensions agree

with Drawings.

b. Erection - Formwork

1. Erect formwork, shoring, and bracing to achieve design requirements in accordance with requirements of ACI 301 and 347.
2. Provide bracing to ensure stability of formwork. Shore or strengthen formwork subject to over-stressing by construction loads.
3. Arrange and assemble formwork to permit dismantling and stripping. Do not damage concrete during stripping. permit removal of remaining principal shores.
4. Align joints and make watertight. Keep form joints to a minimum.
5. Obtain approval before framing openings in structural members which are not indicated on Drawings.
6. Provide chamfer strips on external corners of pile caps, retaining walls and other exposed corners.

c. Application - Form Release Agent

1. Apply form release agent on formwork in accordance with manufacturer's recommendations.
2. Apply prior to placement of reinforcing steel, anchoring devices, and embedded items.
3. Do not apply form release agent where concrete surfaces will receive applied coverings which are affected by agent. Soak inside surfaces of untreated forms with clean water. Keep surfaces coated prior to placement of concrete.

d. Inserts, Embedded Parts, And Openings

1. Provide form openings where required for items to be embedded in or passing through concrete work.
2. Locate and set in place items which will be cast directly into concrete.
3. Coordinate Work of other sections in forming and placing openings, slots, reglets, recesses, chases, sleeves, bolts, anchors, and other inserts.
4. Install accessories in accordance with manufacturer's instruction, straight, level, and plumb. Ensure items are not disturbed during concrete placement.
5. Provide temporary ports or openings in formwork where required to facilitate cleaning and inspection. Locate openings at bottom of forms to allow flushing water to drain.
6. Close temporary openings with tight fitting panels, flush with inside face of forms, and neatly fitted so joints will not be apparent in exposed concrete surfaces.

e. Form Cleaning

1. Clean and remove foreign matter within forms as erection proceeds.
2. Clean formed cavities of debris prior to placing concrete.
3. Flush with water or use compressed air to remove remaining foreign matter. Ensure that water and debris drain to exterior through clean-out ports.

f. Formwork Tolerances

Construct formwork to maintain tolerances required by ACI 301 and Section 03342, Finishing, Quality Control, Tolerances

g. Field Quality Control

1. Inspect erected formwork, shoring, and bracing to ensure that supports, fastenings, wedges, ties, and items are secure.
2. Do not reuse wood formwork more than three times for concrete surfaces to be exposed to view without written approval from OWNER. Do not patch formwork.

h. Form Removal

1. Do not remove forms or bracing until concrete has gained sufficient strength to carry its own weight and imposed loads.
2. Loosen forms carefully. Do not wedge pry bars, hammers, or tools against finish concrete surfaces scheduled for exposure to view.
3. Store removed forms in such manner that surfaces to be in contact with fresh concrete will not be damaged. Discard damaged forms.
4. Forms and supports shall remain in place under pile caps for at least seven days and on the sides of pile caps, rail pads and walls for at least three days.

END OF SECTION

DIVISION 3 - CONCRETE

SECTION 03200 - CONCRETE REINFORCEMENT

1. GENERAL:

a. Description

This section shall govern the furnishing and placing of all reinforcing steel bars, wire fabric and accessories for concrete incorporated in the Work.

b. References

1. ACE 301, Structural Concrete for Buildings.
2. ACI 318, Building Code Requirements for Reinforced Concrete.
3. ACI SP-66, American Concrete Institute, Detailing Manual.
4. ANSI/ASTM A 82, Cold Drawn Steel Wire for Concrete Reinforcement.
5. ANSI/ASTM A 185, Welded Steel Wire Fabric for Concrete Reinforcement.
6. ANSI/AWS D1.4, Structural Welding Code for Reinforcing Steel.
7. ASTM A 615, Deformed and Plain Billet Steel Bars for Concrete Reinforcement.
8. ASTM A 706, Low-Alloy Steel Deformed Bars for Concrete Reinforcement.
9. ASTM A 775, Epoxy-Coated Reinforcing Steel Bars.
10. CRSI Concrete Reinforcing Steel Institute Manual of Practice.
11. CRSI 63, Recommended Practice for Placing Reinforcing Bars.
12. CRSI 65, Recommended Practice for Placing Bar Supports, Specifications, and Nomenclature.

c. Submittals

1. Submit under provisions of Section 01340, Shop Drawings, Product Data, and Samples.
2. Shop Drawings
Indicate bar sizes, spacings, locations, and quantities of reinforcing steel and wire fabric; bending and cutting schedules; and supporting and spacing devices.
3. Submit mill certificates for each heat of steel to be furnished indicating strength and chemistry.
4. Submit qualified welding procedure for welding of reinforcing steel. Include in submittal all items contained in Appendix A of AWS D1.4.
5. Submit copies of manufacturer's data for bar chairs, bolsters, spacers, etc.

d. Quality Assurance

1. Perform work in accordance with CRSI 63, 65, and Manual of Practice, ACI 301, ACI SP-66, and ACI 318.
2. All welding procedures and welders shall be qualified in accordance with AWS D1.4 by an AWS-certified welding inspector approved by OWNER. Full section tension and macro-etch tests shall be conducted in accordance with AWS D1.4, Chapter 6.
3. Production welding shall not commence until a qualified welding procedure has been established and approved by OWNER.

2. PRODUCTS:

a. Reinforcement

1. Typical Reinforcing Steel

ASTM A 615, 60 ksi, yield grade, deformed steel bars, plain finish.

2. Reinforcing Steel for Welding

ASTM A 706, 60 ksi, yield grade, deformed low-alloy steel bars, plain finish.

3. Epoxy Coating

Scotchkote Brand Fusion Bonded Epoxy Coating 213, manufactured by 3M, St. Paul, Minnesota, applied by electrostatic spray method in strict accordance with ASTM A 775, except that the thickness of the coating shall be not less than 6 mils (150 microns) nor greater than 11 mils (275 microns).

b. Accessory Materials

1. Tie Wire

Minimum 16-gauge, annealed type. Use plastic coated wire with epoxy coated reinforcing.

2. Chairs, Bolsters, Bar Supports, Spacers

Sized and shaped for strength and support of reinforcement during concrete placement conditions.

3. Special Chairs, Bolsters, Bar Supports, and Spacers

Adjacent to Epoxy-Coated Reinforcement or Weather Exposed Concrete Surfaces, use plastic coated, steel type or plastic type; size and shape as required.

a. Fabrication

1. Fabricate concrete reinforcing in accordance with ACI 318.

2. Weld reinforcement in accordance with ANSI/AWS D1.4.

3. No splices in reinforcing, except where specially called for on the drawings, will be permitted without prior written approval from OWNER.

4. Sheared ends of epoxy coated reinforcing and/or epoxy coating that is damages shall be repaired with a compatible epoxy coating conforming to ASTM A 775 in accordance with the manufacturer's recommendations prior to installation.

b. Delivery

1. Bundles of reinforcing bars shall be delivered to the site with tags showing quantity, grade, size, and suitable identification to allow checking, sorting, and placing.

2. Store all reinforcing steel off ground on protective cribbing and protect from oil, grease, dirt, or other deleterious materials.

3. Epoxy coated reinforcing shall be covered after delivery to prevent exposure to sunlight until needed for use.

3. EXECUTION:

a. Placement

1. Place, support, and secure reinforcement against displacement. Do not deviate from required position.

2. Accommodate placement of formed openings.

3. Where epoxy-coated reinforcing is required by the drawings, all handling and hoisting shall be done by nylon lifting slings or padded wire rope slings; bundles of bars shall be lifted to

prevent bar-to-bar abrasion; spreader bars shall be used for lifting bundles, or the bundles shall be lifted at the third points with nylon or padded slings. Bundling bands shall be padded or made of nylon. Coated bars shall be padded or made of nylon. Coated bars shall be stored on padded or wooden cribbing bars or bundles of bars shall not be dragged over the ground or over other bars.

4. Plastic coated tie wire shall be used for tying epoxy coated rebar.
 5. Vertical stirrups shall always pass around the main reinforcement and be attached securely thereto.
 6. Reinforcing steel shall be spaced its required distance from the form surface by means of approved hot dip galvanized metal spacers with plastic coated tips or plastic spacers.
 7. All reinforcing steel shall be tied at all intersections; except that where spacing is less than 1 ft. in each direction, alternate intersections only need be tied.
 8. Reinforcement shall be supported and tied in such a manner that a sufficiently rigid cage of steel is provided. If the cage is not adequately supported to resist settlement or floating upward of the steel, overturning of truss bars or movement in any direction during concrete placement, permission to continue concrete placement will be withheld until corrective measure are taken. Sufficient measurements shall be made during concrete placement to ensure that the reinforcement remains in the proper position.
 9. Mats of wire fabric shall overlap each other sufficiently to maintain a uniform strength and shall be fastened securely at the ends and edges. Lap ends and edges a minimum of one square.
- b. Tolerances
1. Unless otherwise shown on Drawings, dimensions shown for reinforcement are to the centers of the bars.
 2. In the plane of the steel parallel to the nearest surface of concrete, bars shall not vary from plan placement by more than 1/12 of the spacing between bars.
 3. In the plane of the steel perpendicular to the nearest surface of concrete, bars shall not vary from plan placement by more than 1/4 in.
 4. Cover of concrete to the nearest surface of steel shall meet the above requirement but shall never be less than 3 in. unless otherwise shown on Drawings.
- c. Welding
1. All welding of reinforcing steel shall be performed in accordance with AWS D1.4.
 2. Welding process used to place welds shall be either shielded metal arc (SMAW) or flux cored arc (FCAW) welding.
- d. Cleaning Reinforcement
1. Reinforcement shall be cleaned of all rust, mill scale, oil, paint or other deleterious materials prior to placing concrete.
 2. All damaged epoxy coating shall be repaired with a compatible epoxy coating conforming to ASTM A775 prior to pouring concrete.
- e. Field Quality Control
1. Testing
 - a) CONTRACTOR shall provide, at no cost to OWNER, one welded connection sample for full section tension tests in accordance with AWS D1.4 for every 200 production connections. OWNER will pay for all tests which pass. Failure of production weld

samples to meet tension test requirement shall be cause for automatic rejection.

- b) All rebar welds shall be inspected and tested by OWNER before acceptance. CONTRACTOR shall remove all slag from each weld at no cost to OWNER. Any rebar weld which, in the opinion of OWNER, appears faulty shall be removed and the bar rewelded at no cost to OWNER. CONTRACTOR, at his option, may choose to have such rejected welds examined by a certified testing agency. If examination indicates acceptable quality, the defective welds shall be removed and replaced by CONTRACTOR at no additional cost to OWNER.
2. Reinforcement shall be inspected by City Engineer prior to placing concrete. Provide a minimum of 24 hours advance notice of completion of reinforcement placement for scheduling of field inspection.

END OF SECTION

DIVISION 3 - CONCRETE

SECTION 03300 - CAST-IN-PLACE CONCRETE

1. GENERAL:

a. Description

This Section shall govern all work necessary for providing materials, mixing, proportioning, testing, placing, finishing, and curing of all plain and reinforced cast-in-place normal weight concrete.

b. Quality Assurance

Material and Work shall conform to the requirements of standards, codes, and recommended practices required in this Section. In conflicts between industry standards, required standards and this specification or this specification and the local building code, the more stringent requirement shall govern.

c. Applicable Standards and Test Methods

The following documents are referred to in this Section and shall be available at the project site:

1. ACI 301-84(R-88), Specifications for Structural Concrete for Buildings
2. ACI 304 R-85, Guide for Measuring, Mixing, Transporting, And Placing Concrete
3. ACI 305 R-77 (82), Placing Concrete in Hot Weather
4. ACI 306 R-88, Placing Concrete in Cold Weather
5. ACI 309 R-89, Guide for Consolidation of Concrete
6. ACI 318-89 (R-89), Building Code Requirement for Reinforced Concrete
7. ASTM C 31-84, Making and Curing Concrete Test Specimens in TheField
8. ASTM C 33-86, Standard Specifications for Concrete Aggregates
9. ASTM C 39-86, Standard Test Method for Comprehensive Strength of Cylindrical Specimens
10. ASTM C 94-86, Standard Specifications for Ready-Mixed Concrete
11. ASTM C 138-81, Standard Test Method for Unit Weight, Yield, And AirContent (Gravimetric) of Concrete
12. ASTM C 143-78, Standard Test Method for Slump of PortlandCement Concrete
13. ASTM C 150-85, Standard Specification for Portland Cement
14. ASTM C 171-69e1, (Reapproved 1980) Standard Specifications for Sheet Materials for Curing Concrete
15. ASTM C 173-78, Standard Test Method for Air Content of Freshly Mixed Concrete by The Volumetric Method
16. ASTM C 231-81e1, Standard Test Method for Air Content of Freshly Mixed Concrete by The Pressure Method
17. ASTM C 260-86, Standard Specification for Air-Entraining Admixtures for Concrete
18. ASTM C 309-81, Liquid Membrane-Forming Compounds for Curing Concrete
19. ASTM C 494-86, Standard Specification for Chemical Admixtures for Concrete

d. Submittals

1. Concrete Mixing Design

- (a) CONTRACTOR shall submit, at least ten working days in advance of placing concrete, a mix

design for each type and strength of concrete specified which is prepared by a reputable testing laboratory.

- (b) Include copies of test reports showing that the mix has been successfully tested to produce concrete with the properties specified and will be suitable for the job conditions.
2. Submit name and location of sources of cement, aggregates, chemical admixtures, and fly ash propose for use on this project.
3. Submit independent laboratory reports or manufacturer's certification that all other concrete materials proposed for used on this project meet the requirements of Article 2 of this Section.

2. PRODUCTS:

a. Concrete Materials

1) Portland Cement

- (a) Portland cement Type I or Type II conforming to ASTM C 150, including the low alkali provisions of Table IA of that specification. In addition, the tricalcium aluminate content of Type I cement shall not exceed 12 percent.
- (b) Type I or Type II cement, at CONTRACTOR's option, may be used for nonhydraulic above grade structures.
- (c) For all hydraulic and below grade structures and sewers, use Type II cement. At CONTRACTOR's option, fly ash may be used in combination with any cement as long as all requirements of these Specifications are met. The fly ash may be combined at the batch plant or during the production of the cement (Type IP cement). For the combination fly ash and cement, the cement and fly ash shall comply with these Specifications.

2) Fly Ash

- (a) The pozzolan to be used in combination with cement, as previously specified for use in all hydraulic and below grade structures and sewers, or in combination with cement or other structures, shall be Class F fly ash conforming to ASTM C 618-87.
- (b) Pozzolan shall be tested in conformance with ASTM C 311. The analysis shall show those items pertinent to this Specification. Source acceptance shall be at the discretion of ENGINEER based on data submitted. Continuing quality analysis shall be submitted throughout the life of the project from the source approved. Under no circumstances shall the pozzolan source be changed without the retesting and providing of new submittals for ENGINEER's review. The Supplier shall certify that all shipments meet the conditions of this Specification.

3) Aggregates

Aggregates shall conform to ASTM C 33-86, "Standard Specification for Concrete Aggregates".

4) Water shall be clean and free from deleterious materials, drinkable.

5) Air-Entraining Admixtures

- (a) Conforming to the requirement of ASTM C 260-86,
- (b) "Standard Specification for Air-Entraining Admixtures for Concrete", "Micro Air" or "MB-VR", manufactured by Master Builders shall be used.
- (c) The air-entraining admixture shall provide a total air content as specified in Article .02 of this Section.

b. Selection Of Proportions

Concrete shall be composed of Portland cement; fly ash fine aggregate, coarse aggregate, water and, as specified, Master Builders' Micro-Air or MB-VR air- entraining admixture. Proportions of ingredients shall produce concrete that will work readily into comers and angles of forms, bond to reinforcement, without segregation or excessive bleed water forming on the surface. Proportioning of materials shall be in accordance with ACI 211.1-89, "Recommended Practice for Selecting Proportions for Normal and Heavyweight Concrete", except as modified herein.

c. Concrete Qualities Required

- 1) All concrete incorporated in the Work shall have the minimum 28-day compressive strength of 3000 pounds per square inch (PSI). Unless otherwise noted on the drawings.
- 2) Minimum cement or combined cement plus fly ash content when fly ash is used for performance and durability, regardless of design strength, shall be 517 pounds per cubic yard for concrete with 1-1/2-inch maximum size aggregate, 540 pounds per cubic yard for 1-inch maximum size aggregate. CONTRACTOR shall increase cement content or the combined cement plus fly ash content, when fly ash is used, as required to meet strength requirements.
- 3) The amount of fly ash used shall not exceed 25 percent or be less than 15 percent of the total weight of fly ash plus cement.
- 4) Minimum cementitious material requirements shall be as follows:
 - (a) For 4000 PSI (f_c) at 28 days
 - (1) Maximum water/cementitious ratio= .48
 - (2) Minimum cementitious – 517#
 - (b) For 5000 PSI (f_c) at 28 days
 - (1) Maximum water/cementitious ratio= .40
 - (2) Minimum cementitious - 611#
 - (c) For 6000 PSI (f_c) at 28 days
 - (1) Maximum water/cementitious ratio= .40
 - (2) Minimum cementitious – 658#
- 5) Proportions of ingredients shall be selected by past field experience or in lieu of past performance, laboratory trial mixes to produce placability, slump, specified strength and properties specified.
- 6) Determinations of required average strength (f_{cr}) shall be in accordance with ACI 318-89, "Building Code Requirements for Reinforced Concrete", and evaluations of compressive strength results of field concrete shall be in accordance with ACI 214-77 (Reaffirmed 1989), "Recommended Practice for Evaluation of Strength Test Results of Concrete".
- 7) Average strength shall exceed specified compressive strength as required in accordance with ACI 318-89.
- 8) Concrete shall be air entrained, and the total air content required (air entrained and entrapped air) shall be:

Nominal Max.	
Size Coarse Aggregate	Total Air Content
1-1/2"	4-1/2% +/- 1%

NOTE: Air-entrainment shall not be required when Class "F" fly ash is used in the concrete mix design on projects south of

IH-20, Texas Department of Transportation Standard Specifications, Item 420.

- 9) The Concrete shall be proportioned and produced to yield the following slumps when placed:

<u>Type of Construction</u>	<u>Slump</u>	<u>Tolerance</u>
Reinforced Foundation		
Walls & Footings	3 in.	± 1 in.
Columns, Beams, Walls,	2 in.	± 1 in.
Structural Slabs	2 in.	± 1 in.
Slabs-On-Grade Roadways	1½ in.	± ½in.
Heavy Mass Construction	6 in.	± 1 in.
Drilled Piers		

3. EXECUTION:

a. Production Of Concrete

- 1) Concrete shall be ready-mixed, batched, mixed, and transported in accordance with ASTM C 94-86, "Specification for Ready-Mixed Concrete".
- 2) Plant equipment and facilities shall conform to the "Checklist for Certification of Ready-Mixed Concrete Production Facilities" of the National Ready Mixed Concrete Association.

b. Placing

3) Preparation

CONTRACTOR shall provide access for delivery provide sufficient equipment and manpower to rapidly place all concrete.

- (a) Work shall be in accordance with ACI 304R-89 "Recommended Practice for Measuring, Mixing, Transporting, and Placing Concrete".
- (b) Formwork shall be completed, and snow, ice, water, and debris removed from within forms.
- (c) Expansion joint material, anchors, and all embedded items shall have been positioned.
- (d) Subgrades shall be sprinkled sufficiently to eliminate water loss from concrete.
- (e) Concrete shall not be placed on frozen ground.

4) Conveying

Concrete shall be placed rapidly by methods to prevent segregation or loss of quality.

5) Placement

- (a) Concrete shall be deposited continuously or when continuous placement is not possible, construction joints shall be located as approved by OWNER. Concrete shall be placed as nearly as possible to its final position. Avoid rehandling.
- (b) Concrete shall be consolidated by vibration, spading, rodding, or tamping, as stated in ACI 309R-87, "Guide for Consolidation of Concrete". Work concrete around reinforcement, embedded items and into comers; eliminate air or stone pockets and other causes of honeycombing, pitting, or planes of weakness.

c. Weather Conditions

1) Cold Weather

Concrete shall conform to ACI 306R-88 "Standard Specifications for Cold Weather Concreting". A non-chloride accelerator may be used with ENGINEER's approval. Non-chloride accelerator shall be Pozzutec 20, manufactured by Master Builders.

2) Hot Weather

Concrete shall conform with ACI 305R-89 on "Hot Weather Concreting". A maximum concrete temperature of 95 degrees F for normal concrete is specified.

- (a) Provisions shall be made for windbreaks, shading, fog spraying, sprinkling or wet cover when necessary.
- (b) Use an evaporation retardant and finishing aid, "Confilm", by Master Builders.
- (c) Maximum concrete placing temperature when used in a bridge slab or in top slab of a direct traffic culvert shall be 85 degrees F and the maximum concrete placing temperature when used in other applications shall be 95 degrees F, Texas Department of Transportation Standard Specifications, Item 420.

d. Finishing

- 1) Finish concrete materials as specified in Section 03342, Finishing, Quality Control, Tolerances.
- 2) For curing methods, field quality control, and tolerances, refer to Section 03342, Finishing, Quality Control, Tolerances.

END OF SECTION

DIVISION 3 - CONCRETE

SECTION 03342 - FINISHING, QUALITY CONTROL, AND TOLERANCES

1. GENERAL:

a. Description

This Section shall govern all work with respect to finishing, quality control, and tolerances for all concrete surfaces of the type and grade of concrete being placed.

b. Applicable Standards and Test Methods

The following documents are referred to in this Section and shall be available at the project site:

1. ACI 301-84(R-88), Specifications for Structural Concrete for Buildings
2. ACI 318-83 (R-86), Building Code Requirement for Reinforced Concrete
3. ASTM C 31-84, Making and Curing Concrete Test Specimens in The Field
4. ASTM C 39-86, Standard Test Method for Compressive Strength of Cylindrical Specimens
5. ASTM C 138-81, Standard Test Method for Unit Weight, Yield, And Air Content (Gravimetric) Of Concrete
6. ASTM C 143-78, Standard Test Method for Slump of Portland Cement Concrete
7. ASTM C 171-69e1, (Reapproved 1980) Standard Specifications for Sheet Materials for Curing Concrete
8. ASTM C 173-78, Standard Test Method for Air Content of Freshly Mixed Concrete by The Volumetric Method
9. ASTM C 231-81e1, Standard Test Method for Air Content of Freshly Mixed Concrete by The Pressure Method
10. ASTM C 260-86, Standard Specification for Air-Entraining Admixtures for Concrete
11. ASTM C 309-81, Liquid Membrane-Forming Compounds for Curing Compound

2. EXECUTION:

a. General Finish Requirements

1. Unless otherwise specified, the finish of all exposed concrete surfaces shall be what is generally termed a plywood finish, which means a finish which will normally be obtained when well-designed, mortar-tight plywood forms are used. Repairing of surface defects and hand rubbing will be required on all exposed surfaces only where patching of honeycomb is necessary or where form design or construction or general workmanship produce gradual surface defects exceeding 1/4 in. in a 10-ft. straightedge or abrupt defects exceeding 1/8 in. Offsets caused by displaced or misplaced form sheathing or form sections, by loose knots in forms, or by otherwise defective form lumber will be considered as abrupt surface defects.
2. Concrete surfaces, both above and below the backfill, shall have all metal form ties removed not less than 3/4 in. back from the faces of the concrete. The holes shall be cleaned, and wire brushed to remove laitance, form oil, and other foreign material; and then shall be filled with non-shrink grout.
3. Slabs-on-grade shall have a broom finish, unless otherwise specified, and formed sides. This finish shall be applied immediately behind the bull float operation. Curing shall begin immediately after texturing.
4. Dusting freshly placed concrete surfaces with cement or a mixture of sand and cement before or during the finishing operations is strictly prohibited.

b. Pier, Foundation, and Wall Top Finishes

1. Unless otherwise specified, the tops of column piers, small equipment foundations and similar foundations are to be grouted, scored, and all laitance, grease, dirt, or other deleterious materials removed.
2. The surface elevation shall be checked, and additional concrete removed, if necessary, to allow for the specified thickness of grout.
3. The tops of all concrete walls shall be given a wood float finish.
4. In areas where a greater degree of finish is specified; it will be necessary to allow the concrete to begin to set before finishing.

c. Concrete Curing and Protection

1. General

The freshly placed concrete shall be protected from premature drying and excessive cold or hot temperatures. Curing shall start immediately after placing and finishing, and shall continue for not less than 28 days.

2. Curing Methods

- (a) Perform curing of concrete by use of curing compound, by moist curing, by moisture-retaining cover, or by combinations thereof. Material and method of curing shall be approved by ENGINEER.
- (b) Apply curing compound as soon as finish is completed.
- (c) On formed surfaces a curing method shall begin immediately upon form removal.
- (d) Approved methods for Rheoplastic Concrete include ponding or continuous sprinkling, continuous wet mats, sand kept continuously wet and liquid membrane-forming compounds.
 - (1) Application of waterproof sheet material shall conform to ASTM C 171-69 (Reapproved 1986), "Standard Specification for Sheet Materials for Curing Concrete".
 - (2) Applications of membrane-forming compounds shall conform to ASTM C 309-St "Standard Specification for Liquid Membrane-Forming Compounds Curing Concrete".
- (e) The type of curing and procedure utilized shall be verified in the Preconstruction Meeting.

d. Field Quality Control

1. Materials and operations shall be tested and inspected by CONTRACTOR as work progresses. Failure to detect defective work shall not prevent rejection when defect is discovered, nor shall it obligate OWNER for final acceptance.
2. The following testing services shall be performed by a testing service selected by OWNER: All costs associated with these testing services shall be borne by CONTRACTOR unless otherwise noted.
 - (a) Secure composite samples in accordance with "Standard Method of Sampling Fresh Concrete", ASTM C 172-82.
 - (b) Mold and cure four specimens from each test required in accordance with standard "Method of Making and Curing Concrete Test Specimens in the Field", ASTM C 31-85.
 - (c) Test specimens in accordance with "Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens," ASTM C 39-86. Two specimens shall be tested at 28 days for acceptance and two shall be tested at 7 days for information.
 - (d) Make one strength test for each 50-cu.yd. or fraction thereof, and for each mix design of concrete placed in any one day.
 - (e) Determine slump of normal-weight concrete sample for each strength test in accordance with

"Standard Test Method for Slump of Portland Cement Concrete", ASTM C 143-76.

- (f) Determine total air content of normal-weight concrete sample for each strength test in accordance with "Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method", ASTM C 231-82 or "Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method\ ASTM C 173-78.
3. CONTRACTOR shall provide an area of protection for the test specimens free from damage or vibration at the jobsite for the first 24 hours.
 4. CONTRACTOR shall provide an enclosed, insulated box for immediate test cylinder storage after manufacture at the job site.
 5. The manufacturer of (3) 6" X 12" test cylinder may be required by ENGINEER. Utilize procedure for manufacture according to ASTM C 31-84. The time of test and frequency shall be dictated by ENGINEER. These specimens shall be used to perform AASHTO T-277-83, "Standard Method of Test for Rapid Determination of the Chloride Permeability of Concrete".
- e. Tolerances
Formwork shall be constructed in such a manner as to produce concrete surfaces that conform to the established dimensions, grades, and lines within the limits specified in Table below:

TOLERANCE FOR FORMED SURFACES			
Variation from the plumb:			
1.	In the lines and surface of columns, walls and in equipment foundations.	In 10 ft. In any story of 20 ft. max	1/4 in. 3/8 in.
		Max. for entire height	1 in.
2.	For exposed comer columns, control joint grooves, and other conspicuous lines	In 10 ft. In any bay of 20 ft. max.	1/4 in. 1/2 in.
	Variation from the level or from grades shown on Drawings, except for grout caps and slabs	In 10 ft. In any bay of 20 ft. max.	1/4 in. 3/8 in.
		Max. for entire height	3/4 in.
	Variation from the level or from grades shown on Drawings for grout caps.		1/16 in.
	Variation of the linear building lines, or equipment foundations, from established position in plan and related position of columns, walls, and partitions.	In any bay of 20 ft. max.	½ in.
		Max. for entire height	1 in.
	Variation in cross-sectional dimensions of columns and beams, equipment foundations, and in the thickness of slabs and walls.		-1/4 in. +1/2 in.
Footings:			
1.	Variation of plan dimensions	Concrete only. (Does not apply to anchor bolts, dowels, or reinforcing.)	
2.	Misplacement or eccentricity	2% of footing width in the direction of misplacement but not more than 2 in. max. (concrete only). Does not apply to anchor bolts, dowels, or reinforcing.	
3.	Reduction in thickness	Portion of specified -5% thickness.	
	Variation in the sizes and locations of floor openings and wall openings.		+/- ¼ in.

	Variation in location of sleeves, water stops, expansion joints, and other inserts.		+/- 1/4 in.
	Variation in steps:		
	a. In a flight of stairs	Riser	+/- 1/8 in.
		Tread	+/- 1/4 in.
	b. In consecutive steps	Riser	+/- 1/16 in.
		Tread	+/- 1/8 in.

Unless otherwise specified, anchor bolt centers may vary up to 1/8 in. from the locations shown on Drawings; however, the variation in the dimension measured from center to center of any two bolts in an anchor bolt group may not vary more than 1/8 in. An anchor bolt group is defined as the set of anchor bolts which receive a complete equipment base assembly or a single fabricated steel shipping piece.

The location of inserts, such as water stops, and expansion joints, may deviate from that shown on the drawing by 1/4 inch.

Tolerances shown on Drawings shall take precedence over the tolerances specified in this Section.

Permissible surface defects of exposed concrete surfaces are specified in Article 2 this Section and are to be distinguished from the tolerances described above.

**END OF SECTION
END OF DIVISION**